



# Lake Ladoga

*The Coastal History of the Greatest Lake in Europe*

Edited by  
Maria Lähteenmäki and Isaac Land

**Studia Fennica**  
Historica

**Studia Fennica**  
Historica 27

THE FINNISH LITERATURE SOCIETY (SKS) was founded in 1831 and has, from the very beginning, engaged in publishing operations. It nowadays publishes literature in the fields of ethnology and folkloristics, linguistics, literary research and history.

The first volume of the *Studia Fennica* series appeared in 1933. Since 1992, the series has been divided into three thematic subseries: *Ethnologica*, *Folkloristica* and *Linguistica*. Two additional subseries were formed in 2002, *Historica* and *Litteraria*. The subseries *Anthropologica* was formed in 2007.

In addition to its publishing activities, the Finnish Literature Society maintains research activities and infrastructures, an archive containing folklore and literary collections, a research library and promotes Finnish literature abroad.

#### STUDIA FENNICA EDITORIAL BOARD

##### Editors-in-chief

Timo Kallinen, Professor, University of Eastern Finland, Finland

Arja Turunen, Title of Docent, University of Jyväskylä, Finland

Karina Lukin, Title of Docent, University of Helsinki, Finland

Sari Katajala-Peltomaa, Title of Docent, Tampere University, Finland

Salla Kurhila, Professor, University of Helsinki, Finland

Viola Parente-Čapková, Professor, University of Turku, Finland

##### Deputy editors-in-chief

Kenneth Sillander, Title of Docent, University of Helsinki, Finland

Eerika Koskinen-Koivisto, Title of Docent, University of Jyväskylä, Finland

Anne Heimo, Professor, University of Turku, Finland

Heini Hakosalo, Professor, University of Oulu, Finland

Suvi Honkanen, PhD, University Lecturer, University of Helsinki, Finland

Saija Isomaa, Title of Docent, University of Tampere, Finland

Tuomas M. S. Lehtonen, Secretary General, Dr. Phil., Finnish Literature Society, Finland

Kirsi Keravuori, Publishing Director, Finnish Literature Society, Finland

Maija Yli-Kätkä, Secretary of the Board, Finnish Literature Society, Finland

[oa.finlit.fi](http://oa.finlit.fi)

Editorial Office

SKS

P.O. Box 259

FI-00171 Helsinki

# Lake Ladoga

The Coastal History of the Greatest Lake  
in Europe

Edited by Maria Lähteenmäki and Isaac Land



## STUDIA FENNICA HISTORICA 27

The publication has undergone a peer review.

The collection of archived publications of the Finnish Literature Society is included in UNESCO's Memory of the World Register.

© 2023 Maria Lähtenmäki, Isaac Land and SKS

Cover Design: Timo Numminen

Design: Markus Itkonen

Layout: Maija Räisänen

EPUB: Tero Salmén

ISBN 978-951-858-628-2 (Print)

ISBN 978-951-858-629-9 (EPUB)

ISBN 978-951-858-630-5 (PDF)

ISSN 0085-6835 (Studia Fennica. Print)

ISSN 2669-9605 (Studia Fennica. Online)

ISSN 1458-526X (Studia Fennica Historica. Print)

ISSN 2669-9591 (Studia Fennica Historica Online)

DOI <https://doi.org/10.21435/sfh.27>

This work is licensed under a Creative Commons BY-NC-ND 4.0 International License, unless otherwise specified. (<https://creativecommons.org/licenses/by-nc-nd/4.0/>)



A free open access version of the book is available at <https://doi.org/10.21435/sfh.27> or by scanning this QR code with your mobile device

BoD – Books on Demand, Norderstedt, Germany 2023

# Table of Contents

Preface 7

## **I Focus on Coastal History**

MARIA LÄHTEENMÄKI

Transnational History of Ladoga 11

ISAAC LAND

Taking Lakes Seriously 28

TUOMAS RÄSÄNEN

Coastal Environmental History: Aims and Perspectives 37

## **II Towards the Eastern Waterways**

THOMAS ROSÉN

Scandinavian Eastern Viking Routes and Settlements 53

KATI PARPPEI

Early Population in the Ladoga Region 69

## **III Industrialization and its Consequences**

PERTTI RANNIKKO & JARMO KORTELAINE

Industrialization of the Jänisjoki River: Hydro-Social Rhythms of Waterways 91

KARL-ERIK MICHELSEN

Industrialization and De-industrialization in Pitkäranta 115

ALFRED COLPAERT & AUGUSTINE-MOSES GBAGIR  
Changing Waters of Lake Ladoga 136

#### **IV Experiences on Littoral Nature**

MARIA LÄHTEENMÄKI & OONA ILMOLAHTI  
Beloved Lady Ladoga: A Multisensory History 151

ISMO BJÖRN  
The Finnish-Russian Sortavala Archipelago in Transition, 1917–2020 173

ALEXANDER OSIPOV  
Environmental Conflict and the Birth of the Russian Ladoga Skerries  
National Park 195

#### **V Postscript**

MARIA LÄHTEENMÄKI & ISAAC LAND  
Multidimensional History of Lake Ladoga 217

List of Contributors 228  
Abstract 230  
Index 231

# Preface

This edited volume examines and analyses the historical changes on the shores of Ladoga, Europe's largest lake, and its drainage basin over a long period of time. The focus of the study is on the Northern Ladoga region, which was an administrative region of Finland from 1812 to 1944. Since the Second World War, the shores of Ladoga have been part of the northwestern border area of the Soviet Union/Russia.

The themes that unite the volume include the interpretations related to the early settlement of the Ladoga region and the definition of the human-nature-relationship in an industrializing and modernizing society. The unifying research approach to the chapters is the *new coastal history*, which has been applied to research on the Great Lake. The chosen approach emphasizes both environmental, socio-economic, and multisensory historical dimensions.

It can be concluded that the multi-level changes of the shores of Ladoga cannot be understood without knowledge of the history of the wider drainage basin, international cross-border trade and settlement history, the changing geopolitics of the regions and climate. On the other hand, the relationship between people and aquatic nature has changed significantly over the last centuries. Purely economic benefit rationales gradually gave way to the principles of sustainable development. In relation to the previous one, the change also applies to the redefinition of the spatial perspective of the Great Lake, as the nationalist ownership of the region has broadened into a global concern about the state of the lake.

The idea of writing an English volume on the history of Ladoga was born after the release of the edited volume "*Laatokka. Suurjärven kiehtova rantahistoria*" (edited by Maria Lähteenmäki) in the spring of 2021. Colleagues interested in coastal history and working in different universities were interested to read it and asked if it was possible to get the volume in English. The selection as a finalist in "The History Book of the Year 2021" by the Finnish Historical Society, and the award "The Best Karelian Research in 2021" which we received in Finland encouraged us to get to work. In contrast to the Finnish volume, we introduce in this edited volume two brand-new chapters introducing new themes (written by Tuomas Räsänen and Thomas Rosén). All other chapters (written by Isaac Land, Kati Parppe, Pertti Rannikko & Jarmo Kortelainen, Karl-Erik Michelsen, Alfred



Colpaert & Augustine-Moses Gbagir, Ismo Björn, Alexander Osipov, Maria Lähteenmäki & Oona Ilmolahti) are partly or totally re-written: Wording has been revised or augmented to accommodate readers who are not familiar with the history of Finnish-Russian border regions.

At the end, we would like to thank the authors of this volume and all our collaborators, such as Director Kirsi Keravuori from the Finnish Literature Society, Editor-in-chief of *Studia Fennica Historica* -series Sari Katajala-Peltomaa, and the peer reviewers for their valuable comments.

In Helsinki and Terre Haute on March 8, 2023

*Maria Lähteenmäki & Isaac Land*

# Focus on Coastal History I



## Transnational History of Ladoga

**P**redrag Matvejević's excellent work *Mediterranski brevijar* (1987, English translation *Mediterranean Breviary*) opens with advice to the reader: "First, we have to choose a starting point: coast or setting, port or event, voyage or story." The starting point for this edited volume is the coast, more specifically the shoreline areas of Europe's largest lake, Ladoga, their settlement patterns, and the history of their northern location. Literary scholars have insightfully observed that the shore, the space on the boundary between water and land, nature, and culture, acts as a producer of contradictory experiences, a landscape of possibilities that holds the seeds of change.<sup>1</sup> In our book, we demonstrate how the shores of Ladoga have changed over the centuries as an historical site of habitation, experience, and social space.<sup>2</sup>

Our volume strengthens a new research genre and methodology alongside sea coastal history research by emphasizing transnational, multidisciplinary, and multimethodological approaches to environmental history and human-nature relations of lakes.<sup>3</sup>

Although lakes are undoubtedly very important objects of study for social, economic, cultural, and environmental historians, they have received surprisingly little attention in academic humanities and social science research. Until recent years, historians have focused more on the economic aspects of onshore resources (fishing, transport, trade) than on the socio-cultural dimensions of the encounters between humans and aquatic nature,

1 Ameal 2018, 73.

2 This chapter has been edited from the chapter published in the Finnish volume *Laatokka. Suurjärven kiehtova rantahistoria*. See Lähteenmäki 2021, 11–31; Thanks to Kate Sotejeff-Wilson who has translated partly the text from Finnish to English; I would like to express my warm thanks also to my colleague, Isaac Land, for the discussions in Chicago and inspiration surrounding the theme.

3 See also Lähteenmäki 2021; the edited volume *Laatokka. Suurjärven kiehtova rantahistoria* published in Finnish (2021) is the first academic history book on Lake Ladoga. The research frame of our English version is similar to that in the Finnish, although some authors are new. The English version has been edited and focused to make it more accessible to international readers.

as in river history classics such as Claudio Magris's brilliant *Danubio* (1986, English *Danube*, 1989).

Coastal history has been a reference point in maritime, harbor, and naval history, coastal urban history and interdisciplinary marine studies,<sup>4</sup> but it is only in the last twenty years that climate change has stimulated environmental humanities<sup>5</sup> practitioners to focus on water, sustainable management of its resources, and multidisciplinary studies.<sup>6</sup> In the process, coastal research has also acquired new historical dimensions.

Biologists have done most of the research into lakes, such as on water quality, especially eutrophication, fauna, and flora. Natural scientists have been particularly interested in the biochemical and ecological processes in lakes.<sup>7</sup> On the boundary between land and water – the shore – where the land is lapped by waves and crushed by ice, there is memory, albeit selective and sometimes very short, says biologist Esko Kuusisto, who has studied Finland's largest lake, Saimaa.<sup>8</sup> As historians, we have evaluated shores primarily as human communities, often taking a more complex view of time than our natural scientist colleagues.

Finns often fondly refer to their home as the land of a thousand lakes. Lake settings are perceived as iconographic, deeply Finnish cultural landscapes and natural heritage. School textbooks, informational literature, and travel advertisements reproduce this stereotypical image of Finland. The waterscape draws from a deep well: the country's 180 000 or so lakes – and a large number of small lakes and ponds – attracted early settlers to their shores and estuaries, first to build family communities, then as the population grew, villages and towns. For centuries, lakesides have been settlements and crossroads for Finns, from where they set off into the hinterland and out onto open water. So, it is surprising that Finland does not make it into the top ten countries with the most lakes in the world: the list includes Sweden and Norway, which have not been as proud of their lakes as Finland.<sup>9</sup> Yet for Finns, these shocking figures do not detract from their identity and desire to be seen as a nation of lakes.<sup>10</sup>

4 Merihistoria 2018; A modern classic in this field is Fernand Braudel's *The Mediterranean World*. First ed. 1948.

5 E.g. DeLoughrey, Didur & Carrigan 2015; The Baltic Sea, Ladoga's "big sister," has been relatively extensively written about and compared to Lake Ladoga. E.g. Klinge 2007; *Itämeren tulevaisuus* 2010; *Baltic Sea Action Group* 2019.

6 E.g. Lehtimäki, Meretoja & Rosenholm 2018, 7–8; Chen, McLeon & Neimanis 2013; AKVA Project 2012–2016; *Euroopan ympäristö, tila ja näkymät* 2015.

7 Messenger et al. 2016.

8 E.g. in geohuman sciences and urban studies in the humanities. Ameel 2018 and Kuusisto 1999.

9 Canada, Russia, the United States, China, Sweden, Brazil, Norway, Argentina, Kazakhstan and Australia have the largest number of lakes. Messenger et al. 2016, Table 1.

10 In 2010, a national brand delegation identified one of Finland's strengths as its close relationship with nature, especially lakes, which had to be made drinkable: water purification is a major national project that can make extensive use of Finnish water expertise. *Tehtävä Suomelle* 2010, 4.

*Ladoga, lake of the northern borderland*

We have chosen to study Ladoga for its size – the largest lake in Europe – but above all for its historical, cultural, and transnational character. Ladoga was on the border between Finland and the Soviet Union from 1812 to 1944. Finland lost direct contact with Ladoga as a result of the Second World War, after which Ladoga and its banks have been a peripheral inland waterway and stopover for the Soviet Union and Russia from Ääninen (Russian Onega) via the Syväri (Svir) to the Neva River and finally to the Gulf of Finland and the Baltic Sea. In her study *Sustaining Lake Superior*, renowned American environmental historian Nancy Langston points out that the great lake between the United States and Canada is enigmatic with its timelessness and diverse ecosystems, and that lakes – like people – have their own life histories.<sup>11</sup> As does Ladoga. Its most densely populated northern and western parts still live on in the memories of Finns, not least the war refugees who fled from there in 1944 to the interior of Finland. This is despite the fact that there few Finns remain who have lived, let alone been born, on the shores of the great lake.

In the 2010s some 145 000 inhabitants lived in the Ladoga region. That is almost an equal number of people as in 1939 (148 000). The central communities are the same as in the Finnish period: Sortavala region, Käkisalme region and Pitkäranta community. The largest communities in the southern Ladoga are still Šlisselburg, Olonets and Novaya Ladoga. Today the inhabitants of the Ladoga region get their living from the forest and mining industries and tourism (see appendix 1).

Dozens of often-repeated images are associated with the Ladoga Karelia, described as a land of sea storms, unspoiled waters, and rocky islands, a lovely home to bards and a sensitive people. This is how the editor of the Finnish magazine *Rajaseutu* characterized the region in 1928.<sup>12</sup> Ladoga itself – a body of water that separated off from the Gulf of Finland – has been commonly described as the Karelian Sea,<sup>13</sup> and no wonder, because despite its saltless fresh water and the Neva estuary, its broad (17 900 km<sup>2</sup>), long (1 570 km) shoreline, beautiful archipelago of more than 500 islands in the north and marine feel<sup>14</sup> make it more like a sea than a lake.<sup>15</sup> In the reflections of its inhabitants, in memoirs, and in landscape photography, Ladoga figures as a sea in its own right, as can be seen in narratives about the world's other great lakes.<sup>16</sup>

Lake Ladoga continues to greatly influence and be influenced by the surrounding drainage basin (276 500 km<sup>2</sup>; Map 1) – and the wider

11 Langston 2017, 2–3.

12 Laatokan Karjala. *Rajaseutu* 1928 2, 41–42.

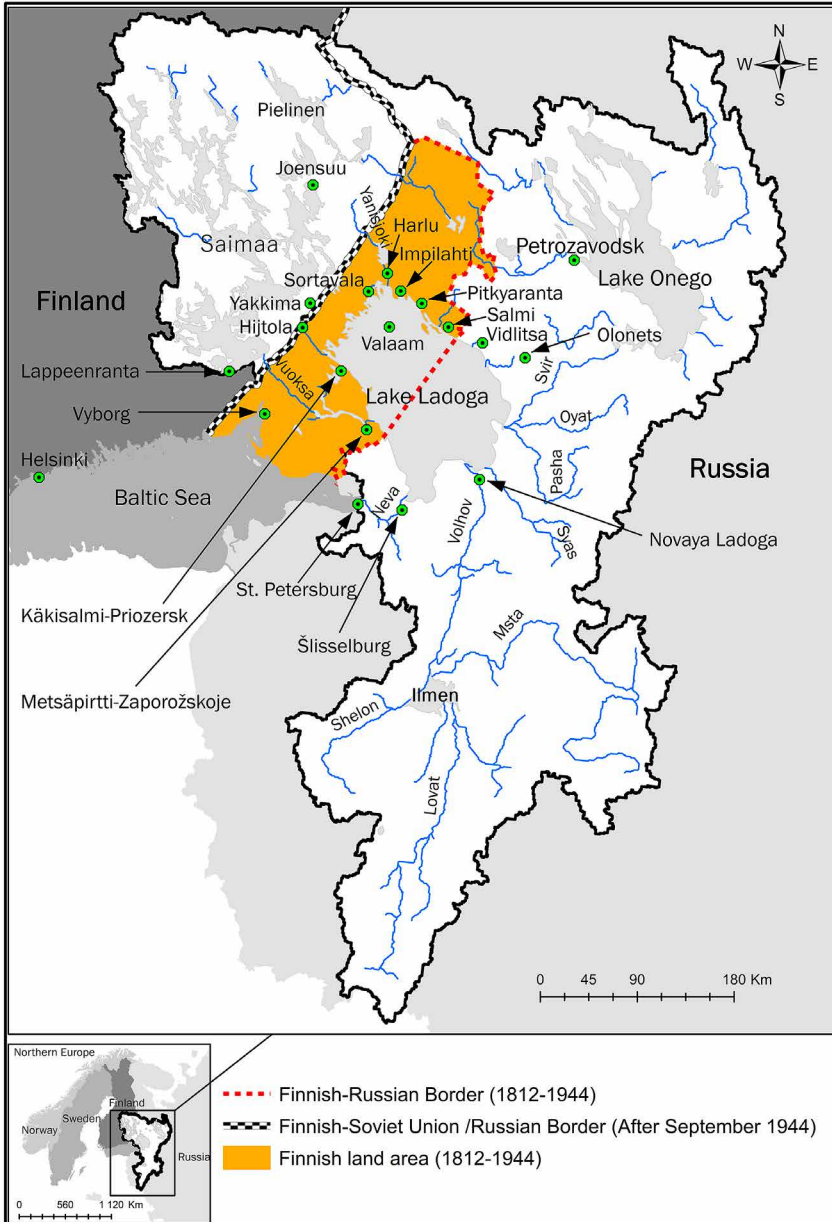
13 E.g. Siilahti 2008, 94–96.

14 Rajaseudun kuvia, kirj. Kehvas. *Rajaseutu* 1931 1, 9.

15 Ladoga is 219 km long and 138 km at its widest point. Its average depth is 100 m and its deepest point, 225 m, is located between the island of Valamo and the coast of Sortavala.

16 *About Our Great Lakes: Great Lakes Basin Facts* 2019; *The Great Lakes An Environmental Atlas and Resource Book* 2019.

Map 1. The Drainage Basin of Lake Ladoga



Map: Augustine-Moses Gbagir & Maria Lähtenmäki 2022.

environment – temperature, seasons, flora, and fauna. The area is generally defined as middle or south taiga, which is characterized by spruce forests with wood sorrel and blueberry, and lush groves. The archipelago is divided into the barren outer islands and leafy inner islands with steep eroding fjords and varying rock vegetation. In the 2010s, the broken shoreline still hosts the richest flora in the Karelia region, including many endangered species

of plants and birds. The northern parts of the lake, “Ladoga’s cliffs,” are rugged and deep, broken up by dark straits and narrow labyrinths of natural channels, while the southern shores are shallow and mostly sandy. In the first half of the twentieth century, Ladoga was wracked by tremendous storms to the rhythm of the seasons, like the Spanish Biscay; the fogs and mirages, but also the blissful summer mists, the sounds of the numerous tugs, steamers, and motorboats,<sup>17</sup> the bells of the monasteries Valaam (Fin. Valamo) and Konevets (Konevitsa), the everyday bustle of the towns and villages, the puffing of the factory chimneys, the clanging of the harbors, and the lowing of cattle. The sounds combined with the scents of human settlements, fish, smoke, vegetation, and farms. There was no shortage of sandy beaches around Ladoga; the shores of Vätiko (Vätikkö) island in the Kurkijoki river were compared to the French Riviera and Sweden’s Marstrand.<sup>18</sup>

The specific “rural Finnish” image of the North Ladoga region was created with determination in the 1920s and 1930s, alongside the regional self-image of Karelia.<sup>19</sup> At the time, the region was characterized by its proximity of the border between capitalist Finland and the Bolshevik Soviet Union; the military-political tension that escalated in the late 1930s, culminated in war between the two countries at the end of November 1939 when the Soviet Union attacked Finland. Before that, Finns made canal plans to link Ladoga with the Gulf of Finland to support the region’s greater independence from the Soviet Union. This would have freed Finland from the Russian-controlled Neva waterway,<sup>20</sup> but it was never dug.

### *Part of the global family of great lakes*

Ladoga is part of a wider chain of lakes in Northern Europe, which I call the northern great lakes region. It includes Onega (Europe’s second largest lake) in the Russian Karelia, Päijänne<sup>21</sup> and Saimaa with its extensive catchment areas in Finland,<sup>22</sup> Vänern, Vättern and Mälaren in Sweden,<sup>23</sup> and Lake Peipsi on the Estonian-Russian border.<sup>24</sup> This is comparable to the great lakes regions in North America and Africa.<sup>25</sup> In this broader context, Ladoga

17 E.g. Konkordia, Karjala, Anna, Janaslahti, Koitto, Sirkka, Vulcan, Lennart, Imatra, Otava, Taimi.

18 *Suomen Matkailijayhdistyksen vuosikirja* 1927 1, 45–60.

19 Lähteenmäki 2009, 276–277; Lähteenmäki 2012, 33–50.

20 E.g. Laatokan-Suomenlahden kanavan tarve. *Hakkapeliitta* 21.7.1928; Kanava Suomenlahteen. Kirj. Antero Rautavaara. *Suomen sotilas* 17.11.1928.

21 On Päijänne, see Hakkari and Saukkonen 1998.

22 Ks. Suur-Saimaa 2020.

23 Sveriges 15 största sjöar 2020.

24 The total water surface area of the northern great lakes is 45 219 km<sup>2</sup> and the coastline 23 491 km (excluding Onega). The largest body of water is Ladoga, followed by Onega, Vänern, Saimaa, Lake Peipsijärvi, Vättern, Mälaren and Päijänne. *World Lake Database* 2019.

25 It includes three great lakes, Victoria, Tanganyika, and Malawi, and seven smaller lakes. The lands bordering the rift valley include Congo, Tanzania, and Uganda in East Africa.





*Boaters on the shore of Honkasalmi island in front of the city of Sortavala. Photo: Finnish Heritage Agency, Helsinki, Finland. CC BY 4.0.*



*Koirinoja village in the northern shore of Ladoga in the 1930s. Photo: Finnish Heritage Agency, Helsinki, Finland. CC BY 4.0.*

is part of a global great lakes family that has a significant impact on the climatic, but also the historical, social, and cultural face of the planet.

Such large, concentrated networks of waterways are particularly common in North America and northern Europe. Yet the lake unanimously recognized as the world's largest is the Caspian Sea, on the border between southern Europe and Asia, followed by Baikal in southern Siberia. After that, the list changes slightly depending on the calculation method. According to one calculation, the next-largest are Tanganyika in Africa and lakes Superior and Huron on the USA-Canadian border, as well as Michigan in the USA and Big Bear Lake on the Canadian side of the same great lakes cluster. Top of the list in Africa are lakes Victoria and Malawi (formerly Lake Nyassa).<sup>26</sup>

Like the world's other great lakes, the shores of Ladoga have been largely spoilt by industrial production and increasing trade and transport since the nineteenth century as we can see from the part II of this volume (Industrialization and its Consequences) written by Rannikko & Kortelainen, Michelsen and Colpaert & Gbagir. Urbanization and the exploitation of natural resources without regard for environmental values have characterized the changes to the lakefront in the twentieth century; harbors have become large marinas, poor people have been expelled from shores that have become valuable, and swimming bans have been imposed on formerly sandy beaches. In northern Ladoga, the main industrial sites

<sup>26</sup> Messenger et al. 2016, Table 1.

are Pitkäranta (Russian Pitkyaranta), the industrial communities of Jänisjoki (Yanisyyoki), Läskele (Lyaskelya) and Käkisalmi (Priozersk), and the estuaries of Olhava (Volhov) and Neva in southern Ladoga. The encounter between the modern, built, and natural environment first gave rise to the people's and national park movement in the nineteenth century, which then grew, through a series of twists and turns, into a green movement from the 1970s and, in the twenty-first century, into a global climate movement.<sup>27</sup>

The first conservation regulations for North America's Great Lakes were defined in the 1970s. In Ladoga, the issue was championed by Finnish and Russian university researchers in the early 1990s,<sup>28</sup> but only after a long process, in 2017, was Ladoga Skerries National Park designated by Russia to protect the Sortavala archipelago. The earliest nature reserve in the Ladoga region in Finland was established on February 18, 1938, when the 385-hectare Hiisjärvi nature reserve and the Kymöle (Rus. Kymölkä) experimental areas near Sortavala were established in the forest management area at Salmi on the eastern shore of Ladoga.<sup>29</sup> Nature conservation and environmental protection are not synonymous strategies, but complementary: the former aims to restore the natural environment, while the latter aims to reduce harmful emissions.<sup>30</sup> In the 1960s, there was a global awareness of the environmental problems in bodies of water, reflected in Finland's new Water Act (1962). NGOs and local water conservation associations played an important role in early conservation.<sup>31</sup>

### *Current and future research directions*

There are nowadays three main types of coastal history research. One of these is the established tradition of oceanic history, which focuses on large port cities, sailors, sea warfare, and ships and wrecks. To counterbalance this dominant line of enquiry, in the last twenty years coastal history research, which is interested in dialogue, not confrontation, between the elements of earth and water, has arisen from a complex, multigendered, and multigenerational waterfront community research. Rowan Jacobsen has aptly pointed out that the interface between land and water is where all life begins: "We were made for, and made by, that thin world where land meets sea."<sup>32</sup> The present compilation sets starting points for this line of enquiry. The third area of research, strengthened in recent years, is multidisciplinary: the leisure meanings and spiritual significance of blue space.

The theoretical framework of our volume is the concept of new coastal history, developed by the US historian Isaac Land, which he uses to emphasize

27 A major inspiration after the war was Rachel Carson's *Silent Spring*, 1962.

28 Particularly in close cooperation with the University of Joensuu, now the University of Eastern Finland, see Simola et al. 1995.

29 Correspondence/Kirjeitä 1924–1979. Valtion luonnonsuojeluvalvojan arkisto. National Archives, Helsinki, Finland; Heikinheimo 1939; Kakkuri 2006.

30 Laakkonen 1999, 209.

31 *Tehtävä Suomelle* 2010, 120.

32 Jacobsen 2009.

the importance of studying the coast alongside the water.<sup>33</sup> Michael Pearson, a historian who specializes in the Indian Ocean, speaks of littoral societies as distinct from aquatic people. Littoral people, even if they do not live near each other, have more in common with each other than with people who live on dry land: Littoral societies are characterized by the symbiosis of earth and water, and a mix of marine and mainland influences. Pearson sees the narrow space where the sea meets the shore as a magical, multifarious place with a flexible border.<sup>34</sup> International coastal research gains a new dimension when it gives voice to paramaritime entities, to use the French historian Gerard Le Bouédec's term, with which he aims to stress the particular identity of coastal zone residents and economic structure between sea and land: these people are engaged in seasonal and marine (fisheries, trade), and mainland (animal husbandry, agricultural) livelihoods.

Not only the focus of coastal historiography, but also the shores themselves have changed significantly over the last century, for geopolitical, economic, environmental, social, and cultural reasons. The availability of anti-malarial measures and the advent of air conditioning has resulted in some shorelines acquiring, almost overnight, a large human population for the first time in their history. As Elsa Devienne has shown, even the founding of something as humble as the Beach Erosion Board in the United States in 1930 illustrates how real estate speculation and changes in popular leisure intersect with – or give rise to – new forms of inquiry in the sciences.<sup>35</sup> This is only one among many possible examples of how the coastal zone has become a hotly contested space for the exercise of power, profit, policymaking, and the production of knowledge. Coastal engineering –once confined to relatively simple activities such as dredging, beach replenishment, and the construction of offshore oil rigs – has proliferated, with ambitious land reclamation projects even provoking accusations of international sand theft. A plethora of new techniques, with astronomical price tags, promise to mitigate storm surge and sea level rise in an era of climate crisis. Meanwhile, controversies over oil spills and the growing phenomenon of vigorous coastal patrols to fend off unwanted seaborne migrants have stretched existing frameworks of litigation and governmentality to – and perhaps beyond – their limits.<sup>36</sup> While nineteenth-century writers often postulated that a view of lapping waves would clear the mind and soothe the spirit, more recently, the waterfront has become a worrisome prospect to many, a reminder of urgent and unresolved issues.<sup>37</sup> The popularity of aquaria and maritime-themed amusement parks has never been higher.<sup>38</sup> At the same time, the percentage of human beings who actually earn their living out on the water declined drastically. Historian John R. Gillis sums up the change by saying that in the past, people lived with the shore, knowing its characteristics; today, they

33 Land 2007; Land 2013a; Land 2013b; Land 2016.

34 Pearson 2006, 353–373.

35 Devienne 2020, 112–115.

36 Land 2021, 613–625.

37 Wheaton 2007, 279–302.

38 Adler 2019; Muka 2023.

live on the shore without knowing their local lake or sea.<sup>39</sup> The shores of the world's great lakes, Ladoga included, may be immune to a few of these trends, but they are fully implicated in many of them.

### *From the seashore to the lakeside*

The conceptual formulations outlined above are specifically concerned with the changing marine environments and humans' relationship to living on the seacoast. As noted in the chapter written by Isaac Land in this volume, it is possible to adapt these to other contexts through useful tools such as the concept of the paramaritime, or through an attentiveness to interstitial watery spaces, which may be classically coastal in some senses, but not in others. To these, we might add a specific lakefront history approach. Lakefront history concerns saltless fresh waters, lakes as well as ponds, which are smaller and shallower than seas, and their shorelines, littoral communities, environment, and unique ecosystems. Another difference is that lakes are usually more national and independent in profile than international seas, which can be distinguished from and combined with several states or whole continents; this affects the concepts and types of source material used in coastal research. Lakefronts and seashores differ in terms of their economic structures, or at least in the scale of phenomena related to the variety within the seafaring professions and fishing practices, the trading and service sectors, the impact of mobility levels on cultural trends and influences, and tidal phenomena specific to seacoasts.

Rivers play a key role in the water systems that link seas and lakes and are an integral part of the new coastal history research. The longest rivers are often transnational in nature; all are freshwater and therefore more suited to lakefront than coastal history. Hydrosocial networks formed by rivers connect the waters of hinterland streams to lakes and lakes to the seas. Despite their differences in size, sweetness, and national or transnational nature, river and lakefront history and new maritime coastal history share the same methodologies and approaches, so they belong to the same research family. They are both international and interdisciplinary, reap the benefits of international environmental history research, and emphasize the relationship between humans and nature, as well as the dialogue between natural and cultural heritage, social change, and sustainable development.

### *Four perspectives on the lakefront history of Ladoga*

The authors of this edited volume are united by their interest in the history of the Ladoga region, which is interwoven not only with the Finnish-Russian borderland of Karelia, but also with the Soviet Cold War narrative, the history of postwar Russia, and the story of Europe's Green Belt. We address the history of the great lake in terms of four large themes: the input of new

39 Gillis 2011; Gillis 2013; Gillis 2014; Gillis & Torma 2015.

coastal history (Part I), multiple interpretations of its settlement (Part II), industrialization of the Ladoga region and its impact (Part III), and the relationship between humans and nature (Part IV).

In the first part of the volume, historian **Isaac Land** points to the broader, global context of coastal history which caused a paradigm shift in the study of river basins, especially the great lakes. Ladoga is not a lonely northern outpost, but part of a global network of great lakes that influences the climate on the whole planet. The processes of change that can be seen in Ladoga can also be seen in the histories of other great lakes around the world. Land demonstrates the importance of research on large water bodies by highlighting individual transboundary research projects, framing the thematic meta-level of the book. Environmental historian **Tuomas Räsänen** examines great lakes in the context of the marine historiography. He discusses the relationship with environmental history and differences from coastal history, as well as the potential of new coastal history to enrich the historical research into aquatic environments.

The second part of this volume focuses more closely on the area around Ladoga. The Swedish linguist **Thomas Rosén** examines the early historical routes and settlement of the Ladoga region, following the routes of the Scandinavian Vikings from around the eighth to the twelfth century, via Ladoga to the Black Sea. In the Normanist controversy about the extent of Scandinavian influence on the foundation of Kievan Rus, the view that the Vikings were key to the formation of the first Russian state has begun to be questioned by Russian politicians who support neonationalist policies and who have deliberately obscured these early developers' ethnic background. Thus, the early history of state formation in the region is highly politicized and vulnerable to undocumented claims.

In Finland, too, archaeologists, historians, and linguists have been working on the region's early migrations. The most significant discovery in Finland – so well-known it is mentioned in schoolbooks – was made in 1913, when a fishing net dating back to around 8500 BCE was excavated from Korpilahti at Antrea on the Karelian Isthmus. Historian **Kati Parppe** reflects on how fragmented and open to interpretation our knowledge of the early settlement of Ladoga's shores is. The very first travelers in the area remain unknown to us, but multidisciplinary research has allowed us to reconstruct sites from the Stone Age onwards, on the basis of findings like that fishing net. Graves and other archaeological finds support the interpretation of pre-Karelian and other early Finno-Ugric settlers, later joined over the centuries by Slavic populations. **Rosén** shows that these communities were likely to be consolidated by the Viking routes opened up through the Ladoga region, which led all the way to the Black Sea and the Arab world (Map 2, page 55). Historical traces of population movement and ethnicity remain in the many peace treaties between Sweden and Novgorod/Russia,<sup>40</sup> which divided

40 The border drawn at the peace of Pähkinäsaari (1323) was the first to divide the Karelian Isthmus into eastern and western parts, a line followed by the border drawn at Tälssinä (1595). The Treaty of Stolbovo (1617) brought the region into Sweden's empire, and the Treaty of Nyland (1721) into Russia's. The border under

the inhabitants of Ladoga into Western and Eastern according to religions, languages, and cultures. The same East/West dichotomy, us/them mindset, and identity discourse was still prevalent and politically expedient in the Ladoga region on the eve of the Second World War.

In the third part of our volume related to industrialization and its consequences, environmental policy researcher **Pertti Rannikko** and geographer **Jarmo Kortelainen** examine the Jänisjoki (Russian Yanisyoki) and the hydrosocial system that extended from this river into the forests in the lowlands of Eastern Finland. The study area of about 4000 km<sup>2</sup> includes the river route early settlers took from south to north. Along the same route, but in the opposite direction, wood was brought from the river mouth to power the sawmills and factories of the nineteenth century, followed by three large hydroelectric power stations on the northern banks of the river (Map 3, page 93). The Jänisjoki connected the forested hinterland villages to the heart of Ladoga, intersecting local and global paths to development. It provided the northern rural villages and southern industrial towns with an access route, a livelihood, and a source of energy, creating an industrial and working-class social image for the whole region that is still partly retained today.

From the perspective of industrial geography, innovation historian **Karl-Erik Michelsen** highlights the industrial community of Pitkäranta (Rus. Pitkyaranta) as a transnational historical process of local development. The region developed in the nineteenth century as raw materials, water routes, labor availability, social networks, trade, and techno-economic interests converged. Pitkäranta was perceived as an industrial community partly due to the area's old mineral resources, unearthed in the sixteenth century. Industrialization was boosted by state support, opening borders, increasing population mobility, the professionalization of labor, and demand across production borders in Finland, Russia, and the European market. Although the border between Finland and the Soviet Union was closed, it did not affect production because of the high demand from other European countries. Pitkäranta, however, was unable to cope with the changes brought about by the Second World War.<sup>41</sup>

Physical geographer **Alfred Colpaert** and climate impact scientist **Augustine-Moses Gbagir** bring a more multidisciplinary perspective to the historical and sociological debate on the Ladoga narrative with satellite imagery. They assess the ecological status of the lake by monitoring changes in phytoplankton levels. In the 1960s, the lake was described as barren, but soon afterwards as eutrophic. In the 1980s, the lake was polluted by nearly 600 industrial plants and 680 farms on its shores, as well as by wastewater from the Vuoksi River (Rus. Vuoksa). Yet in the 1990s, the collapse of the Soviet Union and the resulting decline in industrial production and large-scale agriculture improved the condition of the lake. Finnish-Russian research collaboration has played an important role in raising the lake's

the Treaty of Hamina (1809) transferred the entire Karelian and northern parts of the Ladoga region to autonomous Finland.

41 On the great destruction in the Ladoga region during the Second World War, see Koukkunen 2021, 162–187.

profile. The authors point out that changes in the state of the Ladoga have not only been caused by direct human actions, but also by wider and longer-term climate change.

The final, fourth part of this edited volume focuses on the intangible heritage of Ladoga. Historians **Maria Lähteenmäki** and **Oona Ilmolahti** analyze the memories of Finns who used to live before 1944 on Ladoga's shores from the perspective of multisensory history. The memories include visual, tactile, sound, taste, and olfactory responses to the element of water. Feminine in its conception, Ladoga has been metaphorically experienced not only as a glamorous maiden and a fierce avenger, but also as a mystical landscape, a spiritual space, and a physical provider of livelihood. In the material, Ladoga's close proximity, interaction, and respect for the human-water relationship combine with great nostalgia. These Finns are remembering a lost shore, a homeland, and a childhood that will never return.

Historian **Ismo Björn** enriches the picture of Ladoga by taking the reader to its changing archipelago (Map 4, page 174). There are hundreds of islands on the northern shores of Ladoga, and their strong sense of identity is alive in historical documents: They have been left behind by both local residents and occasional tourists. Björn shows how the self-image of the archipelago, with its specific cultural characteristics, has been strong and rich. Earlier Finnish historians have largely described the islands of Ladoga as a backdrop for the social activities of the city of Sortavala and the surrounding region, and as an admired landscape. The Soviet and Russian narratives continued the emphasis on love of nature and the unique setting, but systematic utilitarianism also entered the picture. During the Soviet era, fishing villages and large farms appeared on the archipelago, and by the 1960s at the latest, the smaller islands were uninhabited. Despite this, the Ladoga archipelago has remained an important leisure destination, a trend reinforced by the rise of nature conservation in the twenty-first century.

In the final chapter before the common overview, historian **Alexander Osipov** assesses conservation efforts in Ladoga today, specifically the Ladoga Skerries National Park, established in late 2017 (Map 5, page 206). He stresses that protecting the shoreline and islands of northern Ladoga from Kurkijoki to Impilahti bay has been a long process. The first national park in the Soviet Union was opened in 1971, quite late compared to Finland (1938), but parks proliferated rapidly during the 1980s, so that by the end of the decade there were 27, with two near the Finnish border. The case for a Ladoga Skerries National Park gained momentum with the impetus to environmentalism in 1989. The project was accelerated by new laws on tourism and natural heritage sites, which underlined the uniqueness of nature in Karelia, as well as by the European Union's financial assistance under TACIS (since 1999). From a local perspective, the process has been confusing. Local people may not know how conservation measures will affect their daily lives in practice in a situation where a national park has been nominally established without any concrete follow-up.

\*\*\*

All this shows that humanities and social science research approaches to Ladoga address highly complex social processes and structures related to the



economic, political, and sociocultural development of the great lake. In this edited volume, we have only begun to tackle some of these issues, and the subject still requires much more basic research. Perhaps the biggest change in just over a century has been a renewed awareness of our relationship with nature and the transformation of values – locally, regionally, and globally. In the nineteenth century, aquatic nature was valued as a valuable natural resource, a building block for society and the state, while the public debate on conservation, which was strengthened in the 1960s, has grown into a global ideology of sustainable development. The history of Lake Ladoga, located in the transnational European Green Belt,<sup>42</sup> is an important part of the story of water and European identity.

### *Appendix 1.*

Population of the Finnish communities in the Ladoga region in 1939 and the Soviet/Russian communities in 1939 and 2010

Community	1939 Finnish communities	1939 Soviet communities	2010 Russian communities
Harlu	7828	-	1387
Hiitola	8265	-	1798
Impilahti (including Pitkäranta/Pitkyaranta)	14190	-	<b>12201</b>
Jaakkima	6395	-	<sup>1</sup>
Kaukola/ Sevastjanovo	4201	-	800
Kurkijoki	10032	-	1585
Käkisalmi/Priozersk	5083	-	<b>18933</b>
Käkisalmi rural municipality	5575	-	<b>19321</b>
Lahdenpohja	1959	-	7813
Lumivaara	5239	-	135
Metsäpirtti/Zaporožskoje	4882	-	2605
Pyhäjärvi/Plodovskoje	8128	-	2589
Sakkola/Gromovo	6395	-	2500
Salmi	14167	-	2864
Sortavala/Sordavala	4710	-	<b>19235</b>
Sortavala rural municipality	21487	-	<b>20734</b>
Olonets/Aunus	-	2668	<b>9056</b>
Novaya Ladoga/Uusi Laatokka	-	5271	8838
Šlisselburg/Pähkinälinna	-	9715	<b>13170</b>
Sum total	130 644	17 654	c. 145 564

1 No data available. Jaakkima is currently part of Lahdenpohja.

Sources: Suomen virallinen tilasto VI. Väestötillasto 93. Väestösuhteet vuonna 1939. SVT VI:93 (The Official Statistics of Finland in 1939); Vserossijaskaja perepis naselenija 2010 goda (The Russian Census of 2010); Vsesojuznaja perepis naselenija 1939 goda. Tšislennost selskogo naselenija SSSR po rajonom, krupnym sselam i selskim naselennym punktam – rajonnym tsentram (The All-Union Census of 1939: Rural Population of the USSR by Districts, Large Villages, and Rural Settlements – District Centers).

42 European Green Belt 2020.

## References

### *Archival sources*

Correspondence/Kirjeitä 1924–1979. Valtion luonnonsuojeluvalvojan arkisto. National Archives of Finland, Helsinki

### *Newspapers and yearbooks*

Kanava Suomenlahteen. Written by Antero Rautavaara. *Suomen sotilas* 17.11.1928.  
 Laatokan Karjala. *Rajaseutu* 1928 2, 41–42.  
*Laatokan seutu* 1937: Laatokan Karjalan maakuntaliiton vuosikirja. Valde Näsi (ed.).  
 Sortavala.  
 Laatokan-Suomenlahden kanavan tarve. *Hackapeliitta* 21.7.1928.  
 Maakunnat esittäytyvät II. Laatokan-Karjala. Written by Valde Näsi. *Rajamme vartija*  
 20.1.1939.  
 Rajaseudun kuvia. Written by Kehvas. *Rajaseutu* 1931 1, 9.  
*Rajaseutu*. Laatokan Karjalan erikoisnumero 1.4.1928.  
*Suomen Matkailijyhdistyksen vuosikirja* 1927 1. Helsinki.

### *Electronic sources*

About Our Great Lakes: Great Lakes Basin Facts, GLERL 2019. About Our Great Lakes – Lake by Lake Profiles: NOAA Great Lakes Environmental Research Laboratory – Ann Arbor, MI, USA Accessed February 10, 2022.  
 AKVA project (*Water as Social and Cultural Space*) 2012–2016. Academy of Finland. AKVA projects selected – Academy of Finland (aka.fi) Accessed February 10, 2022.  
 Baltic Sea Action Group 2019. Our Team – Baltic Sea Action Group (bsag.fi) Accessed February 10, 2022.  
 European Green Belt 2020. <https://www.europeangreenbelt.org/> Accessed January 2, 2022.  
 Merihistoria 2018. Finnish Maritime History Virtual Archive. <http://www.merihistoria.fi> Accessed February 10, 2022.  
 Suur-Saimaa 2020. <http://www.jarviwiki.fi/wiki/Suur-Saimaa> Accessed February 10, 2022.  
 Sveriges 15 största sjöar 2020. Sweden's 15 biggest fjords (varldenshaftigaste.se) Accessed February 10, 2022.  
 Tehtävä Suomelle 2010. a84dd65c-47ea-5c2e-8b83-7d87c4b88fc3 (um.fi) Accessed February 10, 2022.  
 The Great Lakes. An Environmental Atlas and Resource Book 2019. <http://www.epa.gov/glnpo/atlas/index.html> Accessed February 10, 2022.

### *Literature*

Adler, Antony 2019: *Neptune's Laboratory: Fantasy, Fear, and Science at Sea*. Harvard University Press, Cambridge, MA.  
 Ameal, Lieven 2018: Mahdollisuuksien maisema: Helsingin rantaviiva liminaalitulana. In: *Veteen kirjoitettu. Veden merkitykset kirjallisuudessa*. Markku Lehtimäki, Hanna Meretoja & Arja Rosenholm (eds.). Finnish Literature Society, Helsinki, 73–92.  
 Braudel, Fernand [1949] 1976: *The Mediterranean and Mediterranean World in the age of Philip II I–II*. Harper & Row Publishers, New York.

- Carson, Rachel 1962: *Silent Spring*. Houghton Mifflin, Boston.
- Chen, Cecilia, MacLeod, Janine and Neimanis, Astrida (eds.) 2013: *Thinking with Water*. McGill-Queen's University Press, Montreal.
- DeLoughrey, Elizabeth, Didur, Jill, & Carrigan, Anthony (eds.) 2015: *Global Ecologies and the Environmental Humanities. Postcolonial Approaches*. Routledge, London.
- Devienne, Elsa 2020: *La ruée vers le sable: Une histoire environnementale du littoral de Los Angeles au XXe siècle*. Éditions de la Sorbonne, Paris. (Forthcoming in English as *The Sand Rush* from Oxford University Press.)
- Euroopan ympäristö, tila ja näkymät* 2015. Euroopan ympäristökeskus, Kööpenhamina.
- Gillis, John R. 2014: Coastal Cities and Environmental Change. *Environment and History* 20:4, 517–533.
- Gillis, John R. 2013: *The Human Shore. Seacoasts in history*. The University of Chicago Press, Chicago and London.
- Gillis, John R. 2011: Filling the Blue Hole in Environmental History. *RCC Perspectives* 3, The Future of Environmental History: Needs and Opportunities, 16–18.
- Gillis, John R. and Franziska Torma 2015: Fluid Frontiers: New Currents in Marine Environmental History. In: *Fluid Frontiers: New Currents in Marine Environmental History*. John Gillis & Franziska Torma (eds.). White Horse Press, Cambridge, 1–11.
- Hakkari, L. & Saukkonen, S. (eds.) 1998: *Päijänne, suomalainen suurjärvi*. Gummerus, Jyväskylä.
- Heikinheimo, O. 1939: *The Forest Research Institute of Finland and its activities from 1918 to 1938*. Communicationes Instituti Forestalis Fenniae. Metsäntutkimuslaitos, Helsinki.
- Itämeren tulevaisuus*, Saara Bäck, Markku Ollikainen et al. (eds.) 2010. Gaudeamus, Helsinki.
- Jacobsen, Rowan 2009: *The Living Shore: Discovering a Lost World*. Bloomsbury, New York.
- Jarratt, David 2015: Seaside, Sense of Place at a Seaside Resort. In: *Landscapes of Leisure. Space, Place and Identities*. Sean Gammon & Sam Elkington (eds.). Palgrave Macmillan, London, 147–163.
- Jarratt, David & Sharpley, Richard 2017: Tourists at the seaside. Exploring the spiritual dimension. *Tourist studies* 17:4, 349–368.
- Kakkuri, Eero 2006: *Metsäntutkimuslaitoksen tutkimusmetsät ja luonnonsuojelualueet 1922–2005*. Metlan työraportteja 21. Metsäntutkimuslaitos, Helsinki.
- Klinge, Matti 2007: *Itämeren maailma*. Otava, Helsinki.
- Koukkunen, Jarkko, Poltetut rannat: Laatokan rantaseutujen tuhot toisessa maailmansodassa. In: *Laatokka. Suurjärven kiehtova rantahistoria*. Maria Lähteenmäki (ed.). Finnish Literature Society, Helsinki.
- Kurkela, Marja 2008: Laatokan pohjoisosan saariston erityispiirteet. In: *Kultakäkösen kukuntamailla: matka eteläisen Karjalan luontoon ja kulttuuriin*. Paavo Ojanen et al. (eds.). Helsingin yliopiston ekologian laitos, Helsinki, 106–107.
- Kuusisto, E. (ed.) 1999: *Elävä Saimaa*. Tammi, Helsinki.
- Laakkonen, Simo 1999: Harmaat aallot: Ympäristösuojelun tulo Suomeen. In: *Harmaat aallot. Ympäristösuojelun tulo Suomeen*. Finnish Literature Society, Helsinki, 209–227.
- Land, Isaac 2016: Coastal History: Who, What, and Why? April 12, <https://firthsandfjords.com/2016/04/12/coastal-history-who-what-and-why/> Accessed February 10, 2022.
- Land, Isaac 2021: Sea Visibility and the Anxious Coastal Gaze. *Global Environment* 14, 613–625.
- Land, Isaac 2007: Tidal Waves: The New Coastal History. *Journal of Social History* 40:3, 731–743.

- Land, Isaac 2013a: What is the 'coast' in coastal history? The Coastal History Blog 1. October 24. <http://porttowns.port.ac.uk/coastal-history-blog/> Accessed February 10, 2022.
- Land, Isaac 2013b: What Makes Coastal History Distinct? (part 1 of 2). The Coastal History Blog 2. November 4. <http://porttowns.port.ac.uk/coastal-history-blog/> Accessed February 10, 2022.
- Langston, Nancy 2017: *Sustaining Lake Superior. An Extraordinary Lake in a Changing World*. Yale University Press, London.
- Lehtimäki, Markku, Meretoja, Hanna & Rosenholm, Arja 2018: Veteen kirjoitettu – veden kirjoittamia. Kulttuurisen vedentutkimuksen suuntaviivoja. In: *Veteen kirjoitettu. Veden merkitykset kirjallisuudessa*. Markku Lehtimäki, Hanna Meretoja & Arja Rosenholm (eds.). Finnish Literature Society, Helsinki, 7–23.
- Le Bouëdec, Gérard 2009: Small Ports from the Sixteenth to the Early Twentieth Century and the Local Economy of the French Atlantic Coast. *International Journal of Maritime History*, 21:2, 103–126.
- Lähteenmäki, Maria 2021: Laatokka moniulotteisessa raamissaan. In: *Laatokka. Suurjärven kiehtova rantahistoria*. Maria Lähteenmäki (ed.). Finnish Literature Society, Helsinki, 11–31. Laatokka (oopen.org) Accessed February 10, 2022.
- Lähteenmäki, Maria 2009: *Maailmojen rajalla. Kannaksen rajamaa ja poliittiset murtumat 1911–1944*. Finnish Literature Society, Helsinki.
- Lähteenmäki, Maria 2012: The Making of the Border between Two Worlds. The struggle over Finnicization of the border region between Finland and Russia in the 1910s and 1920s. *Eurasia Border Review* 3:1, 33–50. maria.pdf (hokudai.ac.jp) Accessed February 10, 2022.
- Magris, Claudio 1989: *Danube. A Journey through the Landscape, History, and Culture of Central Europe*. Farrar Straus Giroux, New York. [1st edition 1986].
- Matvejevic, Predrag 1999: *Mediteranski brevijar*. [Eng. *Mediterranean Breviary*]. V.B.Z., Zagreb 2006. [1st edition 1987].
- Message, Mathis Loïc, Lehner, Bernhard, Grill, Günther, Nedeva, Irena & Schmitt, Oliver 2016: Estimating the volume and age of water stored in global lakes using a geo-statistical approach. *Nature Communications* 7. Estimating the volume and age of water stored in global lakes using a geo-statistical approach – PubMed (nih.gov) Accessed February 10, 2022.
- Muka, Samantha 2023: *Oceans under Glass: Tank Craft and the Sciences of the Sea*. University of Chicago Press, Chicago.
- Pearson, Michael N. 2006: Littoral Society: The Concept and the Problems. *Journal of World History* 17:4, 353–373.
- Siilahti, Pentti 2008: *Karjalan luonto: Kannas ja Laatokan Karjala*. AtlasArt, Helsinki.
- Simola, H., Viljanen, M., Slepukhina, T. & Murthy, R. 1995: *Abstracts of the First International Lake Ladoga Symposium 1993*. University of Joensuu, Joensuu.
- Suomen virallinen tilasto VI. Väestötilasto 93. Väestösuhteet vuonna 1939. SVT VI:93 (The Official Statistics of Finland in 1939).
- Vserossijaskaja perepis naselenija 2010 goda (The Russian Census of 2010); Vsesojuznaja perepis naselenija 1939 goda. Tšislennost selskogo naselenija SSSR po rajonom, krupnym sjelam i selskim naseljennym punktam – rajonnym tsentram (The All-Union Census of 1939: Rural Population of the USSR by Districts, Large Villages, and Rural Settlements – District Centers).
- Wheaton, Belinda 2007: Identity, Politics, and the Beach: Environmental Activism in Surfers Against Sewage. *Leisure Studies* 26:3, 279–302.

## Taking Lakes Seriously

In the 1980s, when he was researching the book that became *The Late, Great Lakes*, the environmentalist William Ashworth visited the Field Museum of Natural History on Chicago's Lake Michigan waterfront. The Field Museum, as Ashworth notes, contains world-class displays on dinosaurs, archaeology, and asteroids, but when he asked if they had an exhibit on the Great Lakes themselves, he was met with a shrug.<sup>1</sup> One museum's oversight is hardly proof of a pattern, but if we suspect it is symptomatic of a larger problem, maybe it is time to ask: What is at work here?<sup>2</sup>

Naval historians have invented a term "sea blindness" to describe the unwillingness to reckon with the strategic and commercial importance of oceans, or as Duncan Redford has put it, "the inability to connect with maritime issues at either an individual or political level."<sup>3</sup> It is true that maritime labor – especially in our current era of container shipping and automated harbor facilities – manages to keep a remarkably low profile, a problem neatly captured in the title of Rose George's recent book: *Ninety Percent of Everything: Inside Shipping, the Invisible Industry That Puts Clothes on Your Back, Gas in Your Car, and Food on Your Plate*.<sup>4</sup>

This cannot be the whole picture, however. If most of us are prone to "sea blindness," the runaway success of Atlantic History beginning in the 1990s is hard to explain; similarly, preconceptions about a Mediterranean cultural area are so strong that some scholars feel the need to push back against "banal Mediterraneanism."<sup>5</sup> In colloquial American English, a term such as "West Coast", with all its attendant cultural and political associations, is dropped in without justification or explanation, although the exact relationship between

1 Ashworth 1986, 245.

2 This chapter has been edited from the chapter published in *Laatokka. Suurjärven kiehtova rantahistoria* (2021). See Land 2021.

3 Redford 2014, 61–78, quoted page 62.

4 Metropolitan Books, New York 2013.

5 Dieter Haller, *The Cosmopolitan Mediterranean: Myth and Reality*. *Zeitschrift für Ethnologie* 129:1 2004, 29–47; Henk Driessen, *Mediterranean Port Cities: Cosmopolitanism Reconsidered*. *History and Anthropology* 16:1 2005, 129–141; For a different example of the stubbornness and complexity of oceanic "branding," see Marshall 2009, 123–136.

the Pacific Ocean and California's special character would take quite a while to tease out.<sup>6</sup>

Meanwhile, despite the vast physical extent of the Great Lakes, efforts to rebrand the state of Michigan, the city of Chicago or larger portions of the Midwest as the "third coast" or "north coast" of the United States remain semi-ironic and have never gained much traction. Ashworth tried a slightly different tack, suggesting that the Great Lakes were the continent of North America's fifth coast (presumably the third and fourth coasts were the Gulf of Mexico and the Arctic Ocean), but this has not passed into general usage either.<sup>7</sup> The "lake effect" is a familiar term in the Midwest (as well as in upstate New York), referring to the occasional blizzard brought about when the prevailing winds lift moisture from a large lake and deposit it inland in the form of unexpectedly heavy snowfall.<sup>8</sup> Proximity to an ocean can be used as shorthand for a lifestyle, an attitude, or a whole distinct civilization. What does it say about lake visibility – or lake amnesia – if proximity to a lake finds expression only in a complaint about occasional bad weather?

Even the largest lakes suffer from an unstated comparison to ocean-sized bodies of water that leave them looking inconsequential. A chapter in *The Oxford Handbook of Genocide Studies* is entitled "War and Genocide in Africa's Great Lakes since Independence"<sup>9</sup> Considering the subject matter of the chapter is war and genocide, it is not surprising that the lakes themselves are not front and center, but consider the remarkable reference to "Rwanda and Burundi, each tiny, land-locked countries..."<sup>10</sup> Both countries are next to a sizeable lake, and Lake Tanganyika accounts for nearly all of Burundi's western border. Lake Tanganyika is more than four hundred miles long. As the deepest lake in Africa, it is estimated to hold 16 % of the world's fresh water and is the second largest lake by volume in the entire world.<sup>11</sup> There were good reasons to adopt the relatively neutral term "Great Lakes" in an analysis of inter-ethnic violence, to avoid the pitfalls of nation-centered accounts and to refuse to privilege one tragedy (such as Rwanda's in 1994) over others, but it is also disconcerting to see an account of lakes that leaves them, in effect, drained of every drop of actual water.

6 Land 2016, 239–260.

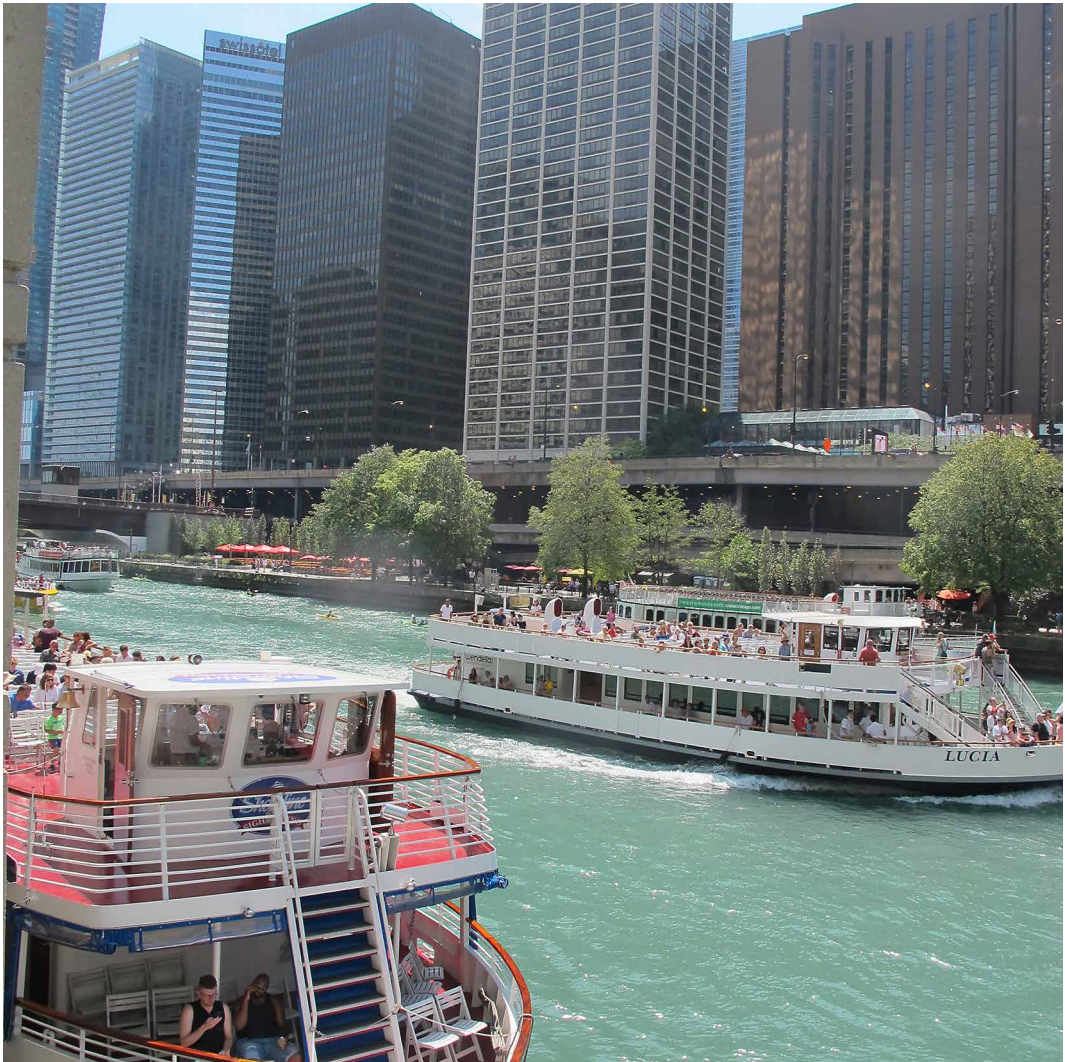
7 Ashworth 1986, 3.

8 A Google search for "lake effect" also turns up tongue-in-cheek references to the blizzards, such as the *Lake Effect* literary journal edited on a college campus located in Erie, Pennsylvania, and the Lake Effect Brewing Company in Chicago, Illinois.

9 McDoom 2010, 550–578; Conventionally, Africa's Great Lakes region refers to the area neighboring Lakes Victoria, Kyoga, Albert, Edward, and Tanganyika, although some definitions include Lake Malawi as well. Stager 2018, 89–114: it contains a rich discussion of these lakes from a scientist's perspective.

10 McDoom 2010, 553.

11 van der Leeden, Troise & Todd 1990, 198–200; Stager 2018, 145: he objects that "much more of Earth's fresh water is frozen, buried, or airborne" than in lakes at all, so strictly speaking we should say that Lake Tanganyika holds 16% of Earth's fresh water *held in lakes*.



*Tourists trace a waterway through Chicago leading to Lake Michigan. Photo: Maria Lähteenmäki 2019.*

A search for exceptionally visible, and prestigious, lakes does turn up some exceptions. In the Andes, Lake Titicaca's status as a sacred lake persisted for centuries.<sup>12</sup> Following a period in which the sun disappeared and the world was left in darkness, a legend related how it re-emerged "with extraordinary radiance" out of a crag on what is still known as the Isla del Sol.<sup>13</sup> Control of the lake and its holy islands constituted a prize for a succession of empires in the region, including eventually the Inca, who expanded southwards in part with an eye toward assimilating the prestige associated with the lake.

12 Dearborn David S. P., Seddon Matthew T. & Bauer Brian S. 1998: The Sanctuary of Titicaca: Where the Sun Returns to Earth. *Latin American Antiquity* 9:3, 240–258.

13 *Ibid.*, 244.

Although the Inca claimed authority as children of the sun, their capital city, Cusco, was not the sun's actual birthplace, so it was desirable to control Lake Titicaca directly. After occupying the area, the Inca undertook an extensive building program on the Isla del Sol. Some traces of it are still visible today, despite centuries of neglect. It is hard to imagine the splendor of the site before the Spanish conquest; the Inca covered many outer walls with "sheets of gold" which, on a sunny day, would have been visible for great distances across the water.<sup>14</sup> Pilgrims could only approach the island after a period of fasting, and access to the site was controlled by priests.<sup>15</sup> On important holidays such as the summer solstice, in an elaborately choreographed ceremony, the Inca elite enjoyed access to the best locations to observe the sunset and the associated rituals, while a larger audience was granted permission to watch from elsewhere on the island.<sup>16</sup> The political and religious significance of Lake Titicaca was such that every Inca ruler made a point of visiting it at least once in his reign.<sup>17</sup>

It is not necessary for a lake to be exceptionally large – or the epicenter of religious symbolism – in order to be rich in meaning and relevance for local people. When Laura Cameron set out to write her Master's thesis, she decided to write about Sumas Lake, a body of water that once stood near her hometown in the Canadian province of British Columbia, before it was drained in the 1920s.<sup>18</sup> All that remained of the lake was a prairie with a highway across it; Cameron's commute to her university campus each day involved driving across the former lakebed, so her study of the lake would require a meticulous reconstruction from archival and published sources. Even determining how large and how deep the lake had been proved unexpectedly challenging. She discovered that "each measurement of the lake comes with its own story"; Sumas Lake varied in size as the seasons changed, a fact that two-dimensional paper maps could not easily capture.<sup>19</sup> Some writers even characterized the area as not a lake at all, but a "marsh" or wet prairie scattered with small trees.<sup>20</sup> Treaties with First Nations groups hinged on the exact locations of the lake's edges, so all of this became politically contentious.

14 Ibid., 249.

15 Ibid., 248.

16 Ibid., 255–256.

17 Ibid., 246–247.

18 Cameron 1997; While the study of drained, extinct lakes might appear tangential to the project of taking lakes seriously, decisions over whether to lower, dam, or drain a lake have been a key feature of the human relationship to lakes in recent centuries; see, for example, Stratigos Michael J., Loch drainage and improvement in Scotland. *Landscape History* 39:2 (2018), 71–89; Similarly, in the era of carbon-fuel-intensive earth-moving equipment, the creation of artificial lakes is a topic of some consequence. Almost all of the numerous lakes visible on a map of the U.S. state of Texas were excavated in the twentieth century as water reservoirs or recreational areas.

19 Cameron 1997, 81.

20 Cameron 1997, 84.



Indeed, Sumas Lake elicited as many divergent interpretations as a Rorschach blot; what people saw in it revealed their background and priorities. An English naturalist who worked for the International Boundary Commission described the lake as a “second Eden”, and a local First Nations chief, praising the fishing, called it was “one of the greatest spawning grounds there is,” whereas a geographer at the University of British Columbia calculated that Sumas Lake was “the great impediment to east-west transportation through the Lower Mainland”.<sup>21</sup> New paradigms of public health led to a reinterpretation of the lake as a dangerous breeding ground for mosquitoes, and in the years following World War I, it suddenly presented itself as the hidden repository of fertile soil that Canada’s returning soldier-heroes deserved to farm. One document summarized the fate of the lake in this way: “The Sumas reclamation project drained thirty thousand marshy acres of the fertile Lower Fraser Valley for mixed and dairy farming”, though as Cameron notes, “to reclaim something is to assume you somehow lost it”.<sup>22</sup>

A similarly rich, multifaceted investigation of a small yet contested pocket of landscape is Geoff Park’s account of Lake Papaitonga in New Zealand.<sup>23</sup> In the 1890s, an area of old-growth forest surrounded this body of water, prized by the Muaūpoko for its eels. The social climber and amateur naturalist Sir Walter Buller coveted the lake as a haven for exotic birds and for its panoramic views, which he imagined would put his new mansion and grounds on par with those of the stately aristocratic homes in England. Buller adopted aggressive negotiating tactics with the Muaūpoko owners, who struggled to at least retain the fishing rights to the eels. New Zealand was changing rapidly, however, and Buller had scarcely begun implementing his plans for Papaitonga when he ran afoul of socialist politicians who despised his robber-baron attitude.<sup>24</sup> Thwarted in their efforts to dispute Buller’s title to the actual estate, they commissioned the construction of a road around the lake to spoil the would-be aristocrat’s views.<sup>25</sup> As with Sumas Lake, the landscape at Papaitonga shuddered under the weight of so many disparate value systems and assignments of meaning. I do not have space here to do justice to Geoff Park’s careful unpacking of Māori vocabulary and belief systems, or his thoughtful discussions of individual plant and animal species that reflect his intimate familiarity with each location he discusses.

Even the most exquisite treatment of lakes in terms of local history does not offer a model for how we should write about lakes that are large enough, and interrelated enough, to serve in some sense as the fulcrum or pivot point for an entire region. Here, I think that the word “paramaritime” suggests a productive name for this approach. In a recent publication, I have offered the first formal definition of the term: “Occurring beside, around, or between maritime areas; containing elements not usually regarded as maritime;

21 Cameron 1997, 82.

22 Cameron 1997, 84, 81.

23 Park 1995, 163–224.

24 Park 1995, 201–203.

25 Park 1995, 218.

analogous or parallel to maritime entities (spaces, cultures, occupations, activities), but separate from or going beyond them.” As I mention in that chapter, the paramaritime is relevant not only for “shallow waters (bays, coves, estuaries, firths, fjords, inlets), but it also speaks to interstitial watery spaces (straits and portages; reticulated systems of lakes, rivers, or inland seas; archipelagoes or island clusters).”<sup>26</sup>

The term “hydrosocial”, also a recent coinage, may also be of interest. Jamie Linton and Jessica Budds defined the hydrosocial as “a socio-natural process by which water and society make and remake each other over space and time.”<sup>27</sup> With their original reference point in the scholarship around irrigation and drinking water supply, the theorists of the hydrosocial are unattached to any particular size, shape, or origin of the water, making their framework more adaptable to lakes than some other approaches. Either a paramaritime or hydrosocial approach could offer a path forward without pedantically insisting that large lakes are exactly equivalent to – or interchangeable with – seas.

Writing from outside academia, William Ashworth anticipated some of these trends decades ago in his *Late, Great Lakes*. It is primarily a book about resource extraction, transport infrastructure, and pollution issues, yet it manages to be much more than the sum of its parts.<sup>28</sup> He is equally comfortable discussing the morphology of an entire lake, but also the smallest manifestations of deterioration, with a whole chapter dedicated to “Algae”, another on “Sludge”, and so forth. Ashworth’s prose blends popular science writing, political journalism, and occasional mind-blowing references to whole geological formations (“Wisconsin’s Door Peninsula, an eighty-mile-long, eight-mile wide sliver of Silurian limestone that juts out into Lake Michigan like the point of a giant Neolithic knife”).<sup>29</sup> *Late, Great Lakes* is an unusually successful marriage of macro-level phenomena and vivid local examples, and it would be a welcome development if at least a few scholars could share their work with a wider public in ways that invited them to appreciate the benefits of a broad, integrative vision.<sup>30</sup>

The one area where lake visibility has achieved a definitive breakthrough – both in the media, and in academic publications – is the topic of lakes as catalysts in the history of environmental activism.<sup>31</sup> It took both Lake Erie and the city of Cleveland, Ohio decades to recover from the scandal associated with the Cuyahoga River fire in June 1969. The fire itself was

26 Land 2020, 177.

27 Jamie Linton & Jessica Budds, The hydrosocial cycle: Defining and mobilizing a relational-dialectical approach to water. *Geoforum* 57, 2014, 170–180, quoted page 175.

28 See, for example, Ashworth 1986, 92–93.

29 Ashworth 1986, 241.

30 For a more recent and academic work, see Langston 2017; Langston takes a close look at the bureaucracy and regulatory regimes that have grown up around the idea of monitoring toxins and measuring environmental risk and degradation.

31 Also, of interest here is Daniel W. Schneider, Local knowledge, environmental politics, and the founding of ecology in the United States: Stephen Forbes and “The Lake as a Microcosm” (1887), *Isis* 91:4 2000, 681–705.

a fairly minor affair that did not even last long enough for photographers to capture an image of it. It was not even the worst instance of an oil slick or polluted stretch of the Cuyahoga catching fire in Cleveland's history. However, the nascent environmental movement was quick to make connections between this disconcerting event, the death of Lake Erie's fish, and the loss of safe swimming and leisure sites. As featured in *Time* magazine and then in *National Geographic*, the story grew in the retelling, until by the 1990s, it was remembered as a disaster of "Biblical" proportions, and widely regarded as the catalyst for the founding of the U.S. government's Environmental Protection Agency, as well as the passing of major federal legislation such as the Clean Water Act.<sup>32</sup> The city of Cleveland, meanwhile, acquired an unforgettable nickname, "the mistake on the lake".<sup>33</sup>

Lakes that catch fire, thankfully, remain rare, but there are other visually arresting and undeniable ways to express environmental degradation. China's Lake Taihu was once famous only for its unusually shaped pieces of weathered and water-polished limestone, the "scholar's rocks" treasured by aristocrats and carried as far away as Beijing to display in the Forbidden City. In the twenty-first century, however, Lake Taihu found itself near the center of one of the world's fastest-growing conglomerations of economic development and urban sprawl, as both Shanghai and Nanjing expanded to its east and north respectively, and the lake itself experienced catastrophic "algae blooms" which suddenly made it no longer a viable source of drinking water.<sup>34</sup>

The phenomenon of lake eutrophication is not, of course, unique to China; an overabundance of nutrients in the form of nitrogen and phosphorus resulting from agricultural runoff has led to explosive growth of cyanobacteria, and visible color changes, in many lakes worldwide in recent decades. The economy of the Lake Tahoe region, straddling the border between Nevada and California, relied heavily on visitors (or real estate investors) drawn to the unique, cobalt-blue color of the lake's waters.<sup>35</sup> Film

32 David Stradling and Richard Stradling, Perceptions of the Burning River: Deindustrialization and Cleveland's Cuyahoga River. *Environmental History* 13:3 2008, 515–535, quoted page 518; For a visual representation of the situation as it appeared to some commentators in the 1980s, see the map "Toxic Substances in the Great Lakes System" in Ashworth 1986, 166–167; Lake Erie, in this rendering, appears almost effaced underneath the names of its many pollutants.

33 To appreciate why this particular humiliation cut so deeply, it is helpful to place it in the larger context of Ohio's inferiority complex as a heavily populated, yet provincial and culturally marginalized location within the United States; the Ohio-born novelist Walter Kirn articulates this neatly in *Buckeye Hate*. *The New Republic*, November 4, 2012, <https://newrepublic.com/article/109623/buckeye-hate> Accessed February 10, 2022.

34 Richard Stone, On Lake Taihu, China Moves To Battle Massive Algae Blooms. *Yale Environment* 360, [https://e360.yale.edu/features/on\\_lake\\_taihu\\_china\\_moves\\_to\\_battle\\_massive\\_algae\\_blooms](https://e360.yale.edu/features/on_lake_taihu_china_moves_to_battle_massive_algae_blooms) Accessed February 10, 2022.

35 The recent changes in Lake Tahoe's color prompted a scientific investigation into the origins of the lake's color, featured here: <https://tahoe.ucdavis.edu/measuring-blueness> Accessed February 10, 2022.

lovers may recognize Lake Tahoe as the lake that featured in Fredo's death scene at the end of *The Godfather, Part Two*. When, in recent years, the lake began to lose this attractive color, this made national headlines; even climate change skeptics and conservative business owners could see a problem here and demand action.<sup>36</sup> Perhaps, when the history of our own era is written, it will become clear that it was the small, self-contained nature of lakes (as compared to oceans) that made them among the earliest visible indicators of environmental crisis, and among the best rallying points for a green – and blue – agenda.

## References

- AghaKouchak, Amir et al. 2015: Aral Sea syndrome desiccates Lake Urmia: Call for action. *Journal of Great Lakes Research* 41:1, 307–311.
- Ashworth, William 1986: *The Late, Great Lakes: An Environmental History*. Knopf, New York.
- Cameron, Laura 1997: *Openings: A Meditation on History, Method, and Sumas Lake*. McGill-Queen's University Press, Montreal.
- Dearborn, David S. P., Seddon, Matthew T. & Bauer, Brian S. 1998: The Sanctuary of Titicaca: Where the Sun Returns to Earth. *Latin American Antiquity* 9:3, 240–258.
- Driessen, Henk 2005: Mediterranean Port Cities: Cosmopolitanism Reconsidered. *History and Anthropology* 16:1, 129–141.
- George, Rose 2013: *Ninety Percent of Everything: Inside Shipping, the Invisible Industry That Puts Clothes on Your Back, Gas in Your Car, and Food on Your Plate*. Metropolitan Books, New York.
- Haller, Dieter 2004: The Cosmopolitan Mediterranean: Myth and Reality. *Zeitschrift für Ethnologie* Bd. 129, H. 1, 29–47.
- Kirn, Walter 2012: Buckeye Hate. *The New Republic*, November 4. <http://newrepublic.com/article/109623/buckeye-bate> Accessed February 10, 2022.
- Lake Tahoe, Measuring Blueness 2020. <https://tahoe.ucdavis.edu/measuring-blueness> Accessed February 10, 2022.
- Land, Isaac 2021: Järvillä on väliä – globaalisti. In: *Laatokka. Suurjärven kiehtova rantahistoria*. Maria Lähteenmäki (ed.). Finnish Literature Society, Helsinki, 32–43.
- Land, Isaac 2016: The Tolerant Coast. In: *Sea Narratives: Cultural Responses to the Sea, 1600–Present*. Charlotte Mathieson (ed.). Palgrave Macmillan, London, 239–260.
- Land, Isaac 2020: Port Towns and the 'Paramaritime'. In: *The Routledge Companion to Marine and Maritime Worlds, 1400–1800*. Claire Jowitt, Craig Lambert, and Steve Mentz (eds.). Routledge, New York, 177–201.
- Langston, Nancy 2017: *Sustaining Lake Superior: An Extraordinary Lake in a Changing World*. Yale University Press, New Haven, 2017.

36 The phenomenon of lakes that are exploited for irrigation to the point of disappearance is another way to represent environmental crisis in terms that capture the imagination of a wider public. See for example the photojournalist Maximilian Mann's work as featured in The Death And Life Of Iran's Lake Urmia. National Public Radio, November 12, 2019, <https://www.npr.org/sections/pictureshow/2019/11/12/751360322/the-death-and-life-of-irans-lake-urmia> Accessed February 10, 2022; Also: Amir AghaKouchak et al., Aral Sea syndrome desiccates Lake Urmia: Call for action. *Journal of Great Lakes Research* 41:1 2015, 307–311.

- Leeden van der Frits, Troise, Fred L. & Todd, David Keith 1990: *The Water Encyclopedia*. Second edition. Lewis Publishers, Chelsea, MI, 198–200.
- Linton, Jamie & Budds, Jessica 2014: The hydrosocial cycle: Defining and mobilizing a relational-dialectical approach to water. *Geoforum* 57, 170–180.
- Mann, Maximilian 2019: The Death and Life of the Iran's Lake Urmia. The Public Radio, 12. November. <https://www.npr.org/sections/pictureshow/2019/11/12/751360322/the-death-and-life-of-irans-lake-urmia> Accessed February 10, 2022.
- McDoom, Omar 2010: War and Genocide in Africa's Great Lakes since Independence. In: *The Oxford Handbook of Genocide Studies*. Donald Bloxham & A. Dirk Moses (eds.). Oxford University Press, Oxford, 550–578.
- Marshall Bill 2009: Nantes's Atlantic Problem. In: *Branding Cities: Cosmopolitanism, Parochialism, and Social Change*. Stephanie Hemelryk Donald et al. (eds.). Routledge, New York, 123–136.
- Park, Geoff 1995: *Ngā Uruora, The Groves of Life: Ecology and History in a New Zealand Landscape*. Victoria University Press, Wellington, 163–224.
- Redford, Duncan 2014: The Royal Navy, Sea Blindness, and British National Identity. In: *Maritime History and Identity: The Sea and Culture in the Modern World*. Duncan Redford (ed.). I. B. Tauris, London, 61–78.
- Schneider, Daniel W. 2000: Local knowledge, environmental politics, and the founding of ecology in the United States: Stephen Forbes and 'The Lake as a Microcosm' (1887). *Isis* 91:4, 681–705.
- Stager Curt 2018: *Still Waters: The Secret World of Lakes*. W.W. Norton, New York.
- Stone, Richard 2011: On Lake Taihu, China Moves To Battle Massive Algae Blooms. *Yale Environment* 360, [https://e360.yale.edu/features/on\\_lake\\_taihu\\_china\\_moves\\_to\\_battle\\_massive\\_algae\\_blooms](https://e360.yale.edu/features/on_lake_taihu_china_moves_to_battle_massive_algae_blooms) Accessed February 10, 2022.
- Stradling, David & Stradling, Richard 2008: Perceptions of the Burning River: Deindustrialization and Cleveland's Cuyahoga River. *Environmental History* 13:3, 515–535.
- Stratigos, Michael J. 2018: Loch drainage and improvement in Scotland. *Landscape History* 39:2, 71–89.

## Coastal Environmental History: Aims and Perspectives

History is a discipline that investigates humans in the past. The subdiscipline of environmental history investigates human encounters with the rest of the natural world in the past. Interestingly, however, for a discipline that studies humans, environmental history has hitherto been more interested in encounters that occur in places that are thinly populated by humans, such as national parks and the wilderness. It has been much less concerned with the environments in which humans actually congregate. Hence, we have forest history as a branch of environmental history, but not coastal environmental history. This is all the more remarkable because coastal areas are sites where human settlement is densest and human impact is heaviest. Moreover, coastal areas not only have a high density of humans, but also other forms of life.

There are numerous environmental historical studies that concern coastal environments. Nonetheless, coastal environments have not been studied as an area of inquiry with distinctive perspectives, questions, and methods. Even though several scholars have undertaken and are still carrying out research on human-nature-relations taking place at coastal settings, they have not and still do not label their work as coastal environmental history.

In this chapter I will posit that it is possible to consider coastal environmental history as a somewhat different discipline than environmental history, which focuses on terrestrial or marine worlds. I will ponder some of the unique possibilities inherent in the study of coastal environmental history. While making these suggestions, I have taken the liberty of labelling some existing research as representing coastal environmental history. If some scholars disagree about this labelling and see themselves otherwise, I would like to apologize to them in advance. This is not a bibliographical essay, and numerous excellent studies have been omitted. The compilation of studies in this essay is somewhat biased towards my home country of Finland.

### *Coastal Environmental History: A Fancy New Name for Marine Environmental History?*

In a seminal essay, Isaac Land presented how the new coastal history was created to complement maritime history. Maritime history, while diversifying in recent decades in its scope to include, for example, social, gender and

lately even interspecific relations,<sup>1</sup> has studied maritime issues from the perspective of ships and their self-contained world. Coastal history, rather than mere studies on the high seas, directs its focus on processes that take place at the seashore, since “more history [is] to be written about the coast than about the deep blue sea”.<sup>2</sup> It is at the coast where strategies for war, trade and the exploitation of the sea are made and where the burden and benefits of these endeavors are felt. Thus, coastal history views the relationship between humans and the sea from a much more complex perspective in terms of scale and actors.

Taking into account the fact that the sea covers more than 70 % of the earth’s surface and that it regulates processes that happen on land and in the air, it is safe to say that environmental historians suffered for a long time from “sea blindness”, to use the concept coined for maritime history.<sup>3</sup> However, I would assert that this concept can be even more suitably applied for the purpose of environmental history. Environmental historians themselves have been the first to admit that the sea was, and in many ways still is, almost a totally empty space on the map of knowledge of environmental history.<sup>4</sup> In recent years, however, the terracentrism of environmental history has been gradually abating. Thus, it is possible to discern a growing interest in marine environmental history, no doubt because of the awakening realization of the marine ecosystemic crisis and the myriad ways the sea determines the functioning of the earth-system.

Marine environmental history has always been interested in examining the processes that take place in coastal areas and even inland. For example, when studying the history of North Sea fishing, Bo Poulsen scrutinized the demand for fish in European cities, which in turn stimulated the Northern Atlantic fisheries.<sup>5</sup> Arthur McEvoy, in his classic study on California fisheries, not only examined fishing at sea, but also studied the management of fisheries. This latter emphasis ensured a focus on legislative procedures enacted in city halls.<sup>6</sup> This is why Michael Pearson’s key characteristic of coastal history as a “mixture of maritime and terrestrial influences” does not make the case for coastal environmental history.<sup>7</sup> It would perhaps work as an appealing catchphrase for a funding application but lacks genuine intellectual and methodological novelty in comparison to existing works within the field of marine environmental history. Instead, if there is a reason to criticize the scope of marine environmental history, it is its overwhelming emphasis on fishing, and particularly deep-sea fishing and to a lesser extent whaling. This is made evident in Bo Poulsen’s excellent bibliographical essay on marine environmental history.<sup>8</sup>

1 See, for example, Druett 1991; Mäenpää 2020; Rediker 1996.

2 Land 2007, 741.

3 Redford 2014, 62.

4 Bolster 2006; Hughes 2006, 111–112.

5 Poulsen 2008.

6 McEvoy 1986.

7 Pearson 2006, 354.

8 Poulsen 2012.

Marine environmental history, rather than focusing only on high seas, has often been constructed as a dialogue between ecologies of the deep sea and economies of the land. From an ecosystemic point of view, the coastline, seashore, and shallow waters have been missing from these treatises. What is more, they have also not made their way into the works of terrestrial environmental history. Thus, Michael Pearson's definition of coastal history as "a symbiosis between land and sea"<sup>9</sup> would also function as a solid guiding principle for coastal environmental history and would enable it to occupy a relevant niche. Coastal environmental history tries to bring history back into the stories we tell about coastal nature. At the same time, it places nature in the stories we tell about coastal cultures, thereby aiming to be a hybrid discipline that is in-between the natural and social sciences.<sup>10</sup> Yet, since the advent of industrialization, and accelerated during the twentieth century by globalized supply chain networks, the symbiosis between humans and the environment (if there ever was truly such a thing) has increasingly turned into the one-sided exploitation of nature and its resources. The logic and effects of overuse, misuse and the destruction of coastal environments are necessarily at the center of coastal environmental history.

Why do we need coastal environmental history since we already have marine environmental history? The simple answer is that coastal environments are not the same as the high seas. Furthermore, the human relationship to shallow waters differs drastically from that of the deep sea. Human activities have always shaped shorelines and have altered water quality in bays and straits, whereas the deep sea remained in many ways in an unaltered natural state (the exception being whale populations that have been declining since the advent of industrialization). Shorelines were lived environments for humans, in which human societies evolved in close contact with nature, whereas humans have mostly been mere visitors on the high seas for most of history. Indeed, in terms of the closeness of the human-nature relationship, coastal environments, in many ways, resemble terrestrial environments more than the high seas. The difference is that the sea dictated everything in the lives of inhabitants, from the rhythms of the seasons to livelihoods and ways of moving.<sup>11</sup>

The coast is a border between two totally different worlds, but it is also a contact zone that is produced and determined by the processes taking place on dry land and in the body of water. These combined processes make coasts unique environments. John Gillis, one of the pioneers of coastal history, emphasized the role of ecotones, where the ecosystems of land and sea meet and where cultures and ecologies blur into a distinctive combination of forms of life, whether human or non-human.<sup>12</sup> In this hybridity lies the rationale for studying its environmental history as a separate field of inquiry, but it

9 Pearson 2006, 354.

10 Jørgensen et al. 2013, 9–10. This definition is intended to describe environmental history in general but has here been adjusted to refer to ideas about coastal environmental history.

11 See, for example, Hastrup & Hastrup 2015, 6, 10.

12 Gillis 2012, 4–5.





*The waters of Lake Ladoga flows to the Finnish Gulf of the Baltic Sea. Pictured here: the landscape of the northern coast of the sea near Helsinki, the capital city of Finland. Photographer Eetu Sorvali. Photo: Espoo City Museum KAMU 2019, Finland.*

also calls for definitions of its scope and its limits: what counts as coastal environmental history and how far inland and offshore do coastal zones extend? Is fishing along the continental shelf a coastal endeavor, even though it often takes place beyond the eyeshot of someone on the shore? What about the logging of coastal forests, even though as an economic activity this may be no different to logging inland? I do not think there are clear and definitive answers to these and other similar questions. Instead, the answers depend in each case on the degree of symbiosis between the land and the sea.

Then there is the question about the size of the waterbody. Most human beings live close to some sort of coast, whether it be the sea, a lake, a river, or a stream, which provides them with a vital water supply. If we accept that coastal environmental history studies every type of coast, all human history would be coastal (environmental) history, which renders the whole concept meaningless. On the other hand, restricting analysis on ocean coasts would be too stringent. I am writing these sentences near the shore of the Baltic Sea, which from an oceanic point of view is hardly a proper sea but a large pool of brackish water with only weak currents and virtually no tides. Yet, this shallow sea, spotted with thousands of islands and islets, has steered the lives of generations of coastal dwellers. The same is true with large inland waters, which have molded the basis for whole cultures, their economies, ways of lives and traditions. Kemijoki, the longest river in Finland, is an

excellent example,<sup>13</sup> and, as the case studies in this book demonstrate, so is Lake Ladoga, the great Karelian Sea and the biggest lake in Europe.

### *Perspectives of Coastal Environmental History*

The fact that marine environmental history has been dominated by the histories of fishing becomes understandable when bearing in mind the place of the sea in the human imagination. Until very recently, the sea was a great void, which was occasionally crossed but it remained a strange and hostile place for all but a few. Besides fishing and whaling, humans had very little to do with the knowledge about the sea that emanated from fishermen and whalers.<sup>14</sup> The coast, on the other hand, has been a lived environment, where people have interacted with nature in myriad ways throughout history. As Linda Nash has justifiably put it, it is questionable whether nature, strictly speaking, has agency, as environmental historians often claim. The point is rather that nature not only constrains and influences human actions, but that “particular environments shape human *intentions*”. Interestingly, she exemplifies this by referring to Mart Stewart’s study on the human-coast interactions in colonial Georgia.<sup>15</sup> Although most likely a coincidence, it is nonetheless difficult to think of another habitat that has influenced humans and their societies more than the coast. For environmental historians, therefore, this opens up possibilities for analysis from numerous different perspectives.

There are several possible approaches when undertaking coastal environmental history. Donald Worster’s pioneering tripartite classification – reconstruction of the past environment, interaction of humans and their environment in history, and the history of environmental ideas and awareness – would be a solid, although somewhat loose, basis for coastal environmental history.<sup>16</sup> A Finnish environmental historian, Simo Laakkonen, for example, has considered different analytical scales for cultural maritime studies: from individuals to global matters and everything in between. This approach could without doubt work similarly with regards to coastal environmental history.<sup>17</sup> Instead of scales, however, in the following pages I will suggest some perspectives and frameworks for coastal environmental history through which to understand the multi-faceted interactions, influences and symbioses between humans and the coast.<sup>18</sup>

13 Vilkuna 1974.

14 Rozwadowski 2005.

15 Nash 2005, 67–68. (Her emphasis).

16 Worster 1990, 1090–1091.

17 Laakkonen 2020.

18 These perspectives are not exclusionary, and a single study can address several of these perspectives at once.

*a) Ideas and Perceptions*

When browsing through travel advertisements, one cannot help but notice that paradise is to be found on the coast. As most historians know, this has not always been the case. Admiration of coastal areas is quite a recent phenomenon. Alain Corbin's classic study on the European perception of the sea demonstrates how coasts were transformed from being perceived as an abandoned space to touristic destinations during the eighteenth century.<sup>19</sup>

Although impressive in terms of the profundity of its analysis, Corbin's work was nevertheless limited to rather a small segment of north-western Europeans. A long leap forward in this sense is the current research project led by Joana Gaspar de Freitas and funded by the EU, which is studying the environmental history of coastal dunes. The project not only focuses on environmental ideas, but also the management of dunes. Interestingly, attitudes towards dunes mirror the same alteration in approaches to the coast: from being viewed as a despicable wasteland to an appreciated landscape.<sup>20</sup>

However, the coast is much more than cliffs over the stormy ocean, eloquently narrated by Corbin, or sand fields and ridges. The coast also incorporates floodlands, mangrove forests, kelp forests, tiny rocky islets and coral reefs, all of which host countless species of animals and plants. Humans, whether they are nearby dwellers or visitors from distant lands, have all developed special feelings, emotions and intellectual valuations to these places and their flora and fauna. We know hardly anything about these interspecific histories. The little we do know often comes from the writings of famous scientists-explorers, such as von Alexander von Humboldt, Charles Darwin or A. E. Nordenskiöld, who visited and brought this kind of nature into the minds of literate Europeans.<sup>21</sup> As for the ideas and perceptions of ordinary folk, let alone those of indigenous people, they are largely forgotten. Although ordinary people did not write famous books, some did leave behind diaries, reminiscences and artifacts, which a scholar can use in order to gain insights into their thoughts and thus enrich our understanding of coastal environmental history.<sup>22</sup>

*b) The Science of Coastal Environments*

Historians have long been studying how explorers – from Christopher Columbus and Ferdinand Magellan to nineteenth-century naturalists – landed on overseas coasts and encountered foreign people and nature. However, since the late nineteenth century and the birth of deep-sea oceanography, historians of science have lost interest in the coast. It was the deep sea that attracted the interest of scholars and lay people alike.

19 Corbin 1994.

20 See the project web pages, Sea, Sand and People. An Environmental History of Coastal Dunes 2018: <https://cordis.europa.eu/project/id/802918> Accessed February 8, 2022.

21 See, for example, Niemi 2018, 39–44.

22 For an excellent example of a study on the environmental ideas of ordinary people, in this case an individual, via an examination of their diaries, see Laine 2020.

A famous U.S. oceanographer Roger Revelle has said that twentieth-century oceanography embodied a new age of exploration.<sup>23</sup> According to environmental historian Gary Kroll, humans in the twentieth century saw ocean depths as the last frontier, and oceanographers descending thousands of meters below the surface were compared to space voyagers.<sup>24</sup> The ocean was a sublime and mysterious space, where heroic men (and increasingly also women) adventured, narrated as such by historians. Research of shallow waters and coastlines lacked all these transcendent qualities.

The coast may have been deemed less interesting than the mysteries of the unfathomable ocean depths, but by preferring the deep sea over the coast I would argue that historians have ignored the latter's importance for human societies. Until very recently it was thought that the ocean was eternally unchangeable.<sup>25</sup> Hydrochemical studies, in contrast, that have been carried out since the late nineteenth century demonstrated that coastal waters nearby big cities were already then heavily affected by municipal and industrial wastewater. This, in turn, had harmful consequences on the health and well-being of coastal inhabitants.<sup>26</sup> In Finland, for example, scientific monitoring of coastal environmental changes indicated that one tenth of Finnish coastal waters had become polluted by the 1960s. At this time, the pollution of open sea waters was only an emerging, nascent subject of study, and as such was disputed by many.<sup>27</sup> These studies never attracted much attention among the wider public, but they have nevertheless been of crucial importance in revealing how humans have polluted their own living environment. Research projects and research reports regarding coastal pollution would offer historians of environmental sciences an endless reservoir of topics and sources. Through such data, we would be better able to understand the impact of human actions, such as fishing, wastewater discharge, tourism and transportation, on the coastal environment in different parts of the globe.

### *c) Destruction of Coastal Ecosystems*

Scientists have not only studied anthropogenic environmental changes in coastal waters, but science has also played a crucial role in advancing the use of coastal natural resources. Fishery science evolved from the necessity of developing better methods to locate and catch more fish. Environmental historians have shown how fishery science promised to bring a rational approach to fishing, but instead it has often resulted in overfishing.<sup>28</sup> The most famous, though by no means the only, example of overfishing that was supported by scientific evidence was the collapse of once abundant cod stocks in the banks off the coast of Newfoundland.<sup>29</sup>

23 Rozwadowski 2005, 217.

24 Kroll 2008, 87–88.

25 It is telling that even the small Baltic Sea, let alone the ocean, was considered unchangeable. See, for example, Luther 1971, 64.

26 See, for example, Mosley 2014; Laakkonen & Laurila 2001.

27 Räsänen 2015, 124; Räsänen 2018.

28 Rozwadowski 2002, 146, 154; Finley and Oreskes 2013.

29 See, for example, Milich 1999.



*Fishermen's huts in the outer archipelago of Ladoga in 1933. Photo: Finnish Heritage Agency, Helsinki, Finland. CC BY 4.0.*

Industrial-scale fishing and fish farming, as well as the exploitation of other resources, have inflicted devastating consequences on coastal ecosystems. The construction of coastal areas for social and economic purposes, as well as environmental changes, such as pollution and climate change, have further destroyed habitats, risked human wellbeing and health and endangered countless species of fauna and flora. These multiple forces of change have affected particularly the coasts in the developed world. In their recent study on the nineteenth and twentieth century northwestern Mediterranean coast, Giacomo Parrinello and his colleagues have analyzed how conflicting valuations and uses of coasts have resulted in the radically modified landscapes, amidst which traditional small-scales fisheries are trying to find ways to co-exist with mass tourism and polluting industries.<sup>30</sup>

Often these anthropogenic processes have also overlapped and enhanced the impact of each other. A case in point is the faith of marine seals in the Baltic Sea during the twentieth century. In the first half of the century hundreds of thousands of seals – grey seals and ringed seals – were culled since they competed for fish with developing fisheries. In the 1970s, when the seal populations had shrunk to a mere few thousand individuals, it was discovered that toxic chemicals had made many female seals sterile. This understandably rang alarm bells for humans, who similarly ate fish from the same sea. In recent decades climate change has made winters warmer and

<sup>30</sup> See, for example, Parrinello et al. 2022.

sea-ice cover less reliable. This has particularly jeopardized the reproduction of ringed seals, a relic from the latest glaciation period in the Baltic Sea, as they give birth on ice.<sup>31</sup>

#### *d) Living with the Coastal Environment*

But not all the use of coastal resources is necessarily unsustainable, and there is more in environmental history than declensionist narratives of doom and gloom. Coastal communities all around the world have developed traditions of small-scale fishing, for example, which have evolved to use natural resources without depleting fish stocks. In contrast to merely residing *on* the coast, as modern settlers do, these people have developed historical relationship *with* the coastal environment.<sup>32</sup> In these communities fishing and the intangible heritage that it involves have functioned as the bedrock for collective identities that knit these communities together. Local communities have also developed an intimate knowledge on the environment – on how to move in the environment by following seasonal rhythms of nature, how to find food in a sustainable manner, how to tell stories of humans and nature as allies, not enemies – that in the best-case scenario can redirect trajectories that have engendered our era of planetary crisis.<sup>33</sup>

However, local communities cannot isolate from socio-ecological processes and the changes they bring about. In the Turku archipelago in southwestern Finland, for example, seine fishing, which has formed the basis for communal life for generations, has been in deep trouble for several decades because of climate change, as the fishing method requires winter ice that has been more seldom in recent years. What is more, industrial fishing has made traditional coastal fishing economically less viable.<sup>34</sup>

Cultural heritage and ways of living with the environment have been more of a playground for anthropologists and environmental ethnologists than historians. However, environmental history has always been interested in grand narratives on a global scale. Thus, environmental historians are in a privileged position in being able to combine a coherent analysis of coastal cultures and the lived environment and their complex relations to external social, economic and ecological forces.

#### *e) Protecting the Coastal Environment*

In the past few decades, states have tried to mitigate the human impact on the coastal environment by enacting laws as well as by negotiating international agreements. However, the concentration of human inhabitations in coastal areas has inevitably led to more difficulties in being able to address coastal environmental problems. Indeed, coastal protection has traditionally meant protecting coasts and beaches from erosion, not protecting their

31 Räsänen 2022.

32 See also, Gillis 2012, 2.

33 Jetoo & Kouri 2021.

34 See, for example, Sonck-Rautio 2018.

fauna and flora. Furthermore, coastal areas continue to be among the most heavily affected and endangered habitats around the globe.<sup>35</sup> Fortunately, progress has been made in protecting many coastal areas that are hot spots for biodiversity or possess extraordinary aesthetic beauty and are therefore important for tourism and recreation. One such place is the Ladoga Skerries National Park that covers parts of the northern shores and islands in Lake Ladoga. The historian Alexander Osipov examines this area in this volume.<sup>36</sup>

There have also been hard-fought battles, where humans have invested an enormous amount of time and resources in trying to save iconic coastal species. Conservationists on the shores of warm seas all around the world, for example, have tried to secure the successful hatching of endangered sea turtles.<sup>37</sup> In the context of northern Europe, the most long-lasting and ultimately successful effort has been the conservation of white-tailed sea eagles. The project to protect eagles began in Sweden in 1971, when, due to killing and toxic chemicals, the population plummeted to a few dozen individuals.<sup>38</sup> In order to protect eagles from human aggression and toxic chemicals, which were ubiquitous in Baltic marine organisms at the time, conservationists invented innovative methods to save the species.<sup>39</sup> Since the 1990s, not least because of these conservation efforts, the eagles have made a comeback and the population has multiplied to thousands and they are even nesting in cities.

Amidst all the discourse of crisis, the stories of conservation efforts and successes, such as those of turtles and sea eagles, bring hope that humans are capable of changing the current collision course with rest of nature and can peacefully co-exist with other species. So far, it has mostly been conservation biologists who have told these stories. Valuable as they are in their own field, they lack the analysis of socio-ecological barriers and the ideological basis of conservation, for example, as well as the contextual framework in which it is built on. These are questions that historians are good at tackling.

## *Conclusions*

This chapter has been born from an uneasiness regarding the scope and subject of marine environmental history. As inner bays and sometimes even catchment areas are considered within the domain of marine environmental history, I feel that the concept has been stretched far too much into an all-inclusive category that is consequently too vague.

Coasts are different from the high seas. It is true that coastal waters are inseparable from deep waters in the sense that what happens in the open seas has an impact on coasts. Just think about oil spills that come ashore. Yet,

35 Charlier 2005; Davis 2005.

36 See also the above-mentioned project on the environmental history of European coastal dunes.

37 Spotila 2011.

38 Helander 1972.

39 Räsänen 2022.

from a human point of view, coastal waters have always been part of the lived environment, while high seas have been seen as external nature, unfamiliar and frightening. It is not a coincidence that nations have claimed that coastal waters fall into their jurisdiction, while the deep sea has belonged to no one.<sup>40</sup> Moreover, human activities far inland have always influenced coasts, since rivers not only refresh coastal waters with their saltless pulse, but also carry waste. The self-purifying capacity of the sea's enormous water mass has ensured that until very recently land-based pollution has also not spoiled the open seas.

Not so long time ago coasts were perceived as largely abandoned places in the European imagination, where only peasants, fishermen and longshoremen toiled for meager livelihoods. Nowadays everyone rushes to the beach to earn profit or to seek refreshment, relaxation, and entertainment. Never has human impact on shores been as profound – and tragic – as today. Never has it been so important to write an environmental history of the coast.

We already have some excellent, though geographically narrow, local histories of coastal environments.<sup>41</sup> In Finland, maybe because of its vast archipelagoes and thousands of lakes, there are nowadays numerous scholars studying coastal communities, some of whom do so from the perspective of environmental humanities. Much more is needed, in Northern Europe and elsewhere in the world, if we want to understand the complex interactions between humans and coastal ecosystems: mechanisms of how coasts have been modified and how coastal inhabitants have tried to mitigate and adapt to these changes. The environmental history of coastal areas still largely awaits scholars to write a story that combines ecosystems with human development. With sea levels rising and coasts turning rapidly into built environments, it would certainly do no harm to understand how we have come to this point.

## References

- Andresen, Tom 2002: *This Fine Piece of Water: An Environmental History of Long Island Sound*. Yale University Press, New Haven.
- Bolster, W. Jeffrey 2006: Opportunities in Marine Environmental History. *Environmental History* 11, 567–597.
- Charlier, Roger H. 2005: History, Coastal Protection. In: *Encyclopedia of Coastal Science*. Encyclopedia of Earth Science Series. M. L. Schwartz (ed.). Springer, Dordrecht, 526–527.
- Corbin, Alain 1994: *The Lure of the Sea: The Discovery of the Seaside in the Western World 1750–1840*. Polity Press, Cambridge.
- Davis, Raymond A. Jr. 2005: Human Impact on Coasts. In: *Encyclopedia of Coastal Science*. Encyclopedia of Earth Science Series. M. L. Schwartz (ed.). Springer, Dordrecht, 530–535.
- Druett, Joan 1991: *Petticoat Whalers: Whaling Wives at Sea, 1820–1920*. Collins Publishers, Auckland.

40 Steinberg 2001.

41 See, for example, Andresen 2002; Sutter & Pressly 2018.



- Finley, Carmel & Oreskes, Naomi 2013: Maximum Sustained Yield: A Policy Disguised as Science. *ICES Journal of Marine Science* 70, 245–247.
- Gillis, John R. 2012: *The Human Shore: Seacoasts in History*. University of Chicago Press, Chicago.
- Hastrup, Kirsten & Hastrup Frida 2015: Introduction. In: *Waterworlds: Anthropology of in Fluid Environments*. Kirsten Hastrup & Frida Hastrup (eds.). New York, Berghahn, 1–22.
- Helander, Björn 1972: Örndata. Project HAVSÖRN under 1971 och 1972. *Sveriges Natur* 63, 287–290.
- Hughes, J. Donald 2006: *What Is Environmental History?* Polity Press, Cambridge.
- Jetoo, Savitri & Kouri, Jaana 2021: Voicing and Visualizing Change: Perceptions of Environmental Heritage in the Baltic Sea Region. *Heritage* 4, 1566–1589.
- Jørgensen, Finn Arne, Unnur, Birna Karlsdóttir, Märald, Erland, Poulsen, Bo & Räsänen, Tuomas 2013: Entangled Environments: Historians and Nature in the Nordic Countries. *Historisk tidsskrift* 92, 9–34.
- Kroll, Gary 2008: *America's Ocean Wilderness: A Cultural History of Twentieth-Century Exploration*. University Press of Kansas, Lawrence.
- Laakkonen, Simo & Laurila, Sari (eds.) 2001: Man and the Baltic Sea. *Ambio* 30, 263–326.
- Laakkonen, Simo 2020: Näkökulmia kulttuuriseen merentutkimukseen. In: *Muutoksen tyrskyt ja kotirannan mainingit – Kulttuurisia näkökulmia merentutkimukseen*. Jaana Kouri, Tuomas Räsänen, & Nina Tynkkynen (eds.). Finnish Literature Society, Helsinki, 261–292.
- Laine, Silja 2020: Sää, meri ja vuodenajat Eva Christina Lindströmin muistikirjassa 1859–1893. In: *Muutoksen tyrskyt ja kotirannan mainingit – Kulttuurisia näkökulmia merentutkimukseen*. Jaana Kouri, Tuomas Räsänen & Nina Tynkkynen (eds.). Finnish Literature Society, Helsinki, 207–230.
- Land, Isaac 2007: Tidal Waves: The New Coastal History. *Journal of Social History* 40, 731–743.
- Luther, Hans 1971: Suomen osuus Itämeren tutkimuksessa. *Luonnon tutkija* 75, 64–65.
- Milich, Lenard 1999: Resource Mismanagement Versus Sustainable Livelihoods: The Collapse of the Newfoundland Cod Fishery. *Society & Natural Resources* 12, 625–642.
- Mosley, Stephen 2014: Coastal Cities and Environmental Change. *Environment and History* 20, 517–533.
- Mäenpää Sari 2020: Merimiehet, eläimet ja luonnon romantisointi 1900-luvun alun suomalaisilla purjelaivoilla.” In: *Muutoksen tyrskyt ja kotirannan mainingit – Kulttuurisia näkökulmia merentutkimukseen*. Jaana Kouri, Tuomas Räsänen & Nina Tynkkynen (eds.). Finnish Literature Society, Helsinki, 128–153.
- McEvoy, Arthur F. 1986: *The Fishermen's Problem: Ecology and Law in the California Fisheries, 1850–1980*. Cambridge University Press, Cambridge.
- Nash, Linda 2005: The Agency of Nature or the Nature of Agency? *Environmental History* 10:1, 67–69.
- Niemi, Seija A. 2018: A Pioneer of Nordic Conservation: The Environmental Literacy of A. E. Nordenskiöld (1832–1901). Dissertation. University of Turku, Turku.
- Parrinello, Giacomo, Bécot, Renaud, Caligari, Marco & Yrigoy, Ismael 2022: Shifting Shores of the Anthropocene: The Settlement and (Unstable) Stabilisation of the North-Western Mediterranean Littoral Over the Nineteenth and Twentieth Centuries. *Environment and History* 28, 129–154.
- Pearson, Michael 2006: Littoral Society: The Concept and the Problems. *Journal of World History* 17, 353–373.
- Poulsen, Bo 2008: *Dutch Herring: An Environmental History, c. 1600–1860*. Amsterdam University Press, Amsterdam.

- Poulsen, Bo 2012: Marine Environmental History. In: *World Environmental History*. Mauro Agnoletti, Elisabeth Johann & Simone Neri Seneri (eds.). EOLSS Publishers, Oxford.
- Redford, Duncan 2014: The Royal Navy, Sea Blindness, and British National Identity. In: *Maritime History and Identity: The Sea and Culture in the Modern World*. Duncan Redford (ed.). I. B. Tauris, London, 61–78.
- Rediker, Marcus 1996: *Between the Devil and the Deep Blue Sea: Merchant Seamen, Pirates, and the Anglo-American Maritime World, 1700–1750*. Cambridge University Press, Cambridge.
- Rozwadowski, Helen M. 2002: *The Sea Knows No Boundaries: A Century of Marine Science under ICES*. International Council for the Exploration of the Sea, Copenhagen.
- Rozwadowski, Helen M. 2005: *Fathoming the Ocean: The Discovery and Exploration of the Deep Sea*. Harvard University Press, Cambridge, Mass.
- Räsänen, Tuomas 2015: Itämeren ympäristökriisi ja uuden merisuhteen synty Suomessa 1960-luvulta 1970-luvun puoliväliin. Dissertation. University of Turku, Turku.
- Räsänen, Tuomas 2018: Alarmism and Denialism in Environmental Science: The Case of the Nutrient Pollution in the Baltic Sea in the 1960s and 1970s. *Scandinavian Journal of History* 43, 646–665.
- Räsänen, Tuomas 2022: Baltic Seals and Changing Marine Frontiers in the Twentieth Century. In: *Cold Waters. Tangible and Symbolic Seascapes of the North*. Markku Lehtimäki, Arja Rosenholm, Elena Trubina & Nina Tynkkynen (eds.). Springer, Berlin, 35–50.
- Räsänen, Tuomas 2022: The Birth of Care Protection: Transforming the Human-Eagle Relationship Through Conservation Technologies. In: *Sharing Spaces: Technology, Mediation, and Human-Animal Relationships*. Finn Arne Jørgensen & Dolly Jørgensen (eds.). Pittsburgh University Press, Pittsburgh. (forthcoming).
- Sea, Sand and People. An Environmental History of Coastal Dunes 2018: <https://cordis.europa.eu/project/id/802918> Accessed February 8, 2022.
- Sonck-Rautio, Kirsi 2018: Adaptation and Cultural Sustainability of the Winter-Seining Community in the Archipelago of Southwestern Finland. In: *Cultural Sustainability and the Nature-Culture Interface – livelihoods, policies, and methodologies*. Inger Birkeland, Constanza Parra, Rob Burton & Katriina Siivonen (eds.). Routledge, New York, 1–12.
- Spotila, James R. 2011: *Saving Sea Turtles: Extraordinary Stories from the Battle against Extinction*. Johns Hopkins University Press, Baltimore.
- Steinberg, Philip E. 2001: *The Social Construction of the Ocean*. Cambridge University Press, Cambridge.
- Sutter, Paul S. & Pressly, Paul M. (eds.) 2018: *Coastal Nature, Coastal Culture: Environmental Histories of the Georgia Coast*. University of Georgia Press, Athens.
- Vilkuna, Kustaa 1974: *Lohi: Kemijoen ja sen lähialueen lohenkalastuksen historia*. Otava, Helsinki.
- Worster, Donald 1990: Transformations of the Earth: Toward an Agroecological Perspective in History. *The Journal of American History* 76, 1087–1106.



# Towards the Eastern Waterways II



# Scandinavian Eastern Viking Routes and Settlements

In September of 2015, the newspaper *Rossiyskaya gazeta*, an official organ of the government of the Russian Federation, reported on an event that took place in the small rural town of Staraya Ladoga (Fin. Vanha Laatokka, Laatokanlinna), situated to the south of Lake Ladoga, on the banks of the Volkhov river (Olhavanjoki). Russia's then minister of culture, Vladimir Medinskiy, inaugurated a bronze monument that stood over sixteen feet (five meters) tall, commemorating two individuals believed to have lived in the ninth century: Rurik and Oleg. The newspaper article explains, "Many scholars are inclined to think that the unification of the Slavic tribes proceeded from the lands of the Ladoga, and that, from there, Russia's history begins". According to the article, Aleksandr Drozdenko, Governor of Leningrad Oblast', had the idea for this monument and a competition was announced in 2012. It resulted in 38 artists competing for the opportunity to create the monument. Oleg Shorov, a sculptor from St. Petersburg, emerged as the winner.<sup>1</sup>

## *Introduction*

The short news article in *Rossiyskaya gazeta* highlights two observations. First, from a contemporary viewpoint, the text demonstrates that politicians in the Russian Federation take a more active interest in the shaping of history and legend than many of their colleagues in other countries. Second, Minister Medinskiy is reluctant to specify Rurik's ethnic background, choosing to present it as unclear: "Historians quarrel a lot about who Rurik was, and whence he came." By making this statement, Minister Medinskiy makes a point of remaining neutral in the long and bitter scholarly debate, known as the *Normanist controversy*.

This chapter aims to provide a brief survey of recent developments in research on the Scandinavian contribution to the (pre)history of Lake Ladoga. Anything resembling a full treatment of the Normanist controversy is therefore out of the question. However, by ignoring it entirely, readers who

1 Cherenëva 2015.

are unfamiliar with eastern Baltic and northern Russian history might get a wrong impression. The account below, which is superficial by necessity, focuses on the bare essentials: the Normanist controversy itself and two closely linked terms, *Rus'* and *Varyag*.

To the English-speaking reader, the adjective “Normanist” may elicit associations of the eleventh-century Norman conquest of Anglo-Saxon Britain. It is plausible that some Normans also travelled east. However, in the East-Slavic context, “Normanist” refers more broadly to Scandinavians.

The Normanist controversy began a long time ago and has involved people of many different political persuasions. To have a pro-Normanist position means to believe that Scandinavians played a prominent role in what is now Western Russia, Belarus and Ukraine during early medieval times. Historically, the pro-Normanist position has been most favored by Western scholars. On the other hand, many Russian and Ukrainian scholars have suggested alternative explanations, including indigenous and even the possibility of Celtic connections. Soviet historiography tended to be anti-Normanist.<sup>2</sup>

Our understanding of the ethnic composition of people in the Ladoga area during various epochs is likely to improve as science-based archeological methods are refined. As a consequence, the far-fetched interpretations of the small number of written sources will become obsolete. However, expressions of pro- or anti-Normanist sentiments are not likely to fade away any time soon as it is too tempting for people to use seemingly oversimplified explanations that have two strong opposing positions with little or no middle position. In reality, however, these models are far from simple. To illustrate this point, let us examine some etymologies.

*Varyag* is the East Slavic word for “Viking” and derives from an Old Norse root meaning “one who has taken an oath, a sworn person” (Swe. *våring*). The nasal *-ing* of the final syllable has been lost in modern East Slavic but was originally a nasal vowel, something like [varɛŋ]. The *Varyagi*, Old Icelandic *væringjar* were Norsemen who, during the Early Middle Ages (10<sup>th</sup>–12<sup>th</sup> centuries) were employed as mercenaries in the Byzantine Empire. Not all *Varyagi* were Scandinavians. Some were Slavs, and some, especially towards the end of the period, were Englishmen.<sup>3</sup> In Greek, the word has the form Βάραγγοι [várangi], and in English it follows the Greek form, *Varangian*.<sup>4</sup>

Of obvious relevance to a discussion of Lake Ladoga, is the “route from the Varangians to the Greeks”, the traditional name for the system of navigable waterways stretching from the Black Sea to the Baltic (Map 2):

“Starting from Greece, this route proceeds along the Dnieper, above which a portage leads to the Lovat'. By following the Lovat', the great lake Il'men' is reached. The Volkhov river flows out of this lake and enters the great lake Nevo [that is Ladoga, T. R.]. The mouth of this lake opens into the Varangian Sea.”<sup>5</sup>

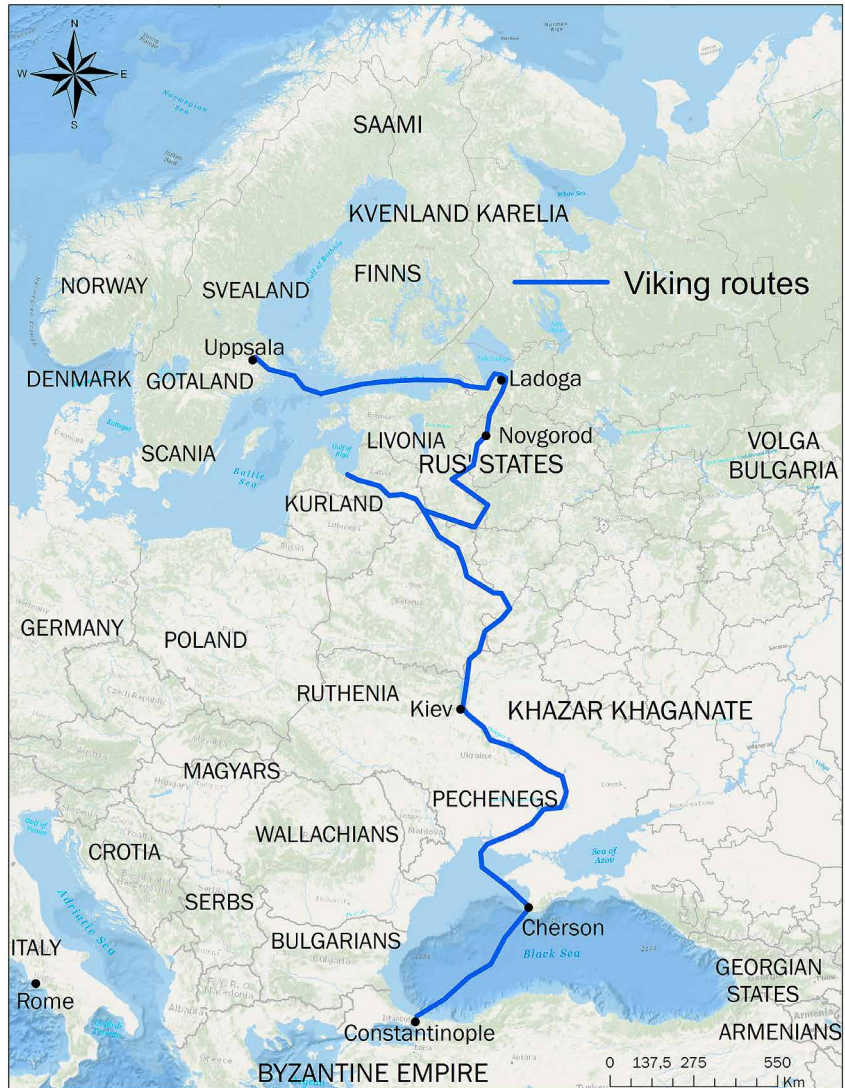
2 Ohlbyn 2001.

3 *Nationalencyklopedin* 2022, *væringar*.

4 Jakobsson 2020; Theotokis 2020..

5 Cross & Sherbowitz-Wetzor 1953, 53. Cf. *Nevo* with *Fi. neva* ‘marsh’.

Map 2. The Northern Viking Route from Scandinavia to the Black Sea



Map: Augustine-Moses Gbagir 2022.

*Rus'* is sometimes employed as a geographical term denoting the medieval settlement area of the Eastern Slavs in what is now Belarus, Russia, and Ukraine (as in *Kyivan*, or *Kievan*, *Rus'*). In non-Russian sources, the word is sometimes written with a ⟨'⟩ and sometimes without, *Rus'* or *Rus*, respectively. The function of the ⟨'⟩ in transliteration of Cyrillic is to indicate palatalization (softness) of a consonant: *Русь* [rusʲ] = *Rus'*. Sometimes *Rus'* is used as an ethnonym, i.e. as a label for a group of people. Depending on context, the origin of *Rus'* is sometimes taken for granted: it is linked to the Finnish and Estonian names for Sweden, *Ruotsi*, and *Rootsi* respectively, and



to the Swedish landscape of *Roden*, north of Stockholm.<sup>6</sup> Other times, the origin of *Rus'* is problematized in great depth.<sup>7</sup>

The most complicated aspect of *Rus'* is its use as an ethnonym. As such, it is first encountered in a Frankish source, the *Annals of St. Bertin*, in 839, when a contingent of such individuals accompanied a Byzantine envoy to the court of Louis the Pious, Charlemagne's son and the Emperor of the Carolingian Empire. The *Rus'* – or *Rhōs*, as they were known in Greek – carried a letter from the Byzantine emperor Theophilus, describing how they had reached Constantinople by an incredibly perilous route. It was later revealed that these *Rhōs* belonged to the people of *Sueones*, or Swedes.<sup>8</sup> The *Sueones*, *Suiones*, or *Svear*, were a Scandinavian tribe inhabiting the Swedish region of Svealand.

In addition to Western, Slavic and Byzantine sources, the term *Rus'*, or *Rūs*, is also encountered in Arabic sources. The best known author among these sources is Ibn Faḍlān, a writer of the early tenth century.<sup>9</sup> The geographer, Mas'ūdī, who wrote in the middle of the tenth century, explains: “There are in this town [the Khazar capital Itil, T. R.] both Moslems, Christians, Jews and pagans ... and of the latter there are various kinds, including Slavs (ṣaqāliba) and Rus (rūs).”<sup>10</sup>

As this brief introduction shows, the interpretation of *Rus'* is complex, and as one reviewer put it “[d]iscussion of all aspects of this topic will undoubtedly continue”<sup>11</sup> Readers wishing a more detailed introduction are recommended to consult the specialized literature.<sup>12</sup>

### *The Deep Roots of the Normanist Controversy*

During the early modern period, sources available for anyone interested in the history of early *Rus'* were very limited. Since archeology did not yet exist as a scholarly domain, sources of knowledge were restricted to chronicles, Icelandic sagas and other oral traditions. In the East Slavic area, the oral traditions included epic songs known as *byliny*. In the Middle Ages, the *byliny* were sung accompanied by the *gusli*, a harp-like instrument.<sup>13</sup> Written in poetic form, the *byliny* had little to offer in terms of historical facts as we understand them today.<sup>14</sup>

The central text is, without a doubt, the chronicle. The Russian Primary Chronicle, sometimes referred to as the Chronicle of Nestor or the Tale of Bygone Years (Ru. *Povest' vremennyh let*), tells the story of the coming of

6 Obolensky 2000, 180; Tarkiainen 2008, 39.

7 Ekbo 1986; Lind 2006; Danylenko 2006; Berezovich 2012.

8 Jarman 2021, 196–197.

9 Hraundal 2014.

10 Vlasto 1970, 238.

11 Orr 2014, 281.

12 Cf., e.g., Franklin 1998; Shepard 2008.

13 Børtnes 2008, 43.

14 Concerning the “genuine oral information” in Icelandic saga literature, cf. Barraclough 2017.

Rurik and his brothers, assumed to have occurred in 860–862. The passage is quoted in its entirety, due to its crucial significance:

“The tributaries of the Varangians drove them back beyond the sea and, refusing them further tribute, set out to govern themselves. There was no law among them, but tribe rose against tribe. Discord thus ensued among them, and they began to war one against another. They said to themselves, ‘Let us seek a prince who may rule over us and judge us according to the Law.’ They accordingly went overseas to the Varangian Russes: these particular Varangians were known as Russes, just as some are called Swedes, and others Normans, English, and Gotlanders, for they were thus named. The Chuds, the Slavs, the Krivichians, and the Ves’ then said to the people of Rus’, ‘Our land is great and rich, but there is no order in it. Come to rule and reign over us.’ They thus selected three brothers, with their kinsfolk, who took with them all the Russes and migrated. The oldest, Rurik, located himself in Novgorod; the second, Sineus, at Beloozero; and the third, Truvor, in Izborsk.”<sup>15</sup>

In 1617, Sweden, then the emerging great power in the Baltic, concluded a peace treaty with Russia, effectively barring the latter from access to the Baltic.<sup>16</sup> The treaty was signed in the village of Stolbovo on the Syas’ river (Fin. Säsjoki), about 40 kilometers south of Lake Ladoga. As a result of this treaty, the presence of Scandinavians on the shores of Lake Ladoga once again became reality. However, peaceful and warlike contacts had been entertained since time immemorial, and in seventeenth-century Sweden, a scholarly interest in these earlier contacts was taking shape.<sup>17</sup>

The treaty of Stolbovo was not the first of its kind. The first “eternal peace” occurred in 1323 at Orekhovets (also Oreshek, Fin. Pähkinälinna; Swe. Nöteborg), on an island at the mouth of the Neva in Lake Ladoga.<sup>18</sup> Yet sagas and chronicles showed that the history went back even further: there were distant, hazy memories of earlier contacts. During the seventeenth century, these fragments of memory became the object of intense speculation. Olof Rudbeck (1630–1702), a Swedish polymath, gave his interpretation of them in the massive *Atlantica*, a propaganda history of Sweden in Latin and Swedish, written in the style of the time.

Analyzing the etymology of the term *varyag*, Rudbeck saw the Swedish word *varg* ‘wolf’ and concluded that it had come about as a result of Swedish piracy in the Baltic. His analysis is an example of folk etymology based on phonetic similarity. Rudbeck wrote:

”Sweriges haf Östersjön kallas och så af Ryssarna Vargehafwet [...] och de Swenske kallas Vargar [...] som vidare skal wijsas af Storfurstarnas i Ryßland Släcktstam utur Sverige, när wij där til komma.”<sup>19</sup>

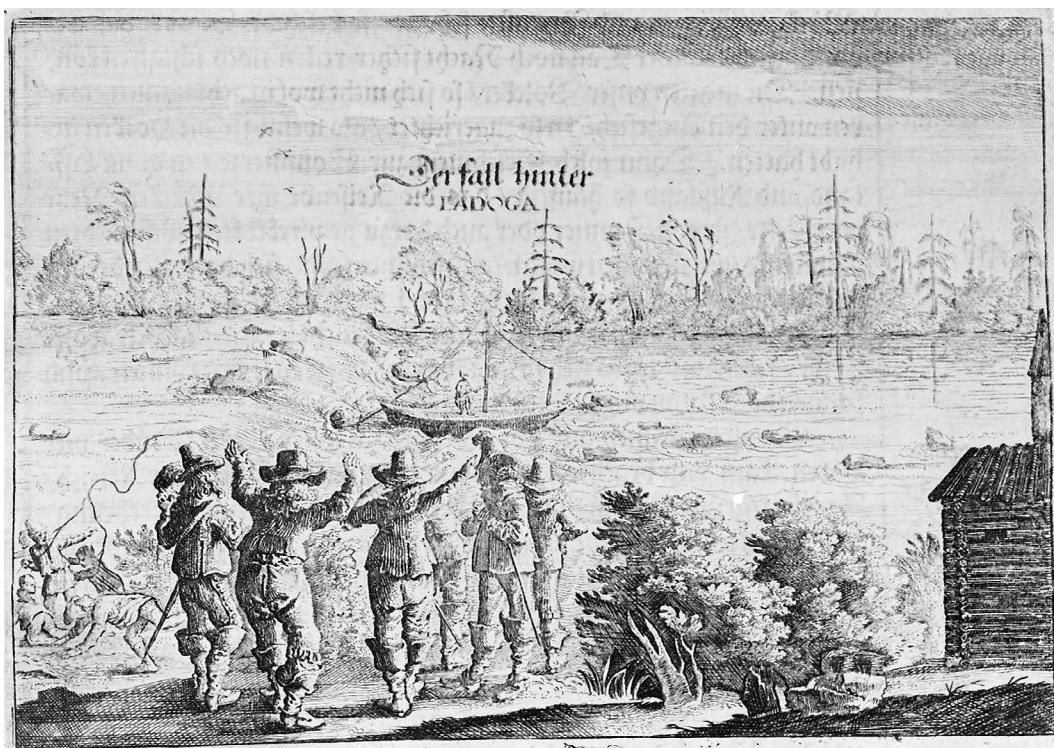
15 Cross & Sherbowitz-Wetzor 1953, 59.

16 E.g. *Encyclopaedia Britannica* 2017.

17 Kovalenko 1995.

18 Harrison 2009, 451–452.

19 Rudbeckius 1679, 518.



“Der fall hinter Ladoga”, the rapids beyond Lake Ladoga. Drawn by Harald Malmgren. Published in 1647. Finnish Heritage Agency, Helsinki, Finland. CC BY 4.0.

“Sweden’s sea, the Baltic, is also called *Vargehafwet* (the Wolf Sea) by the Russians [...] and the Swedes are called *vargar* (wolves) [...] which will be further demonstrated by the genealogy of the Grand Princes in Russia, when we come to that.”<sup>20</sup>

The term that Rudbeck interpreted as “wolf” was actually the Russian term *Varyazhskoye more* (Ru. *Варяжское море*), the *Sea of the Varangians*.

In the 1730s, a discussion of early Scandinavian influence in Rus’ was initiated also in the Russian Empire when the Orientalist and historian Gottlieb Siegfried Bayer (1694–1738) published his treatise *De Varagis* “On the Varangians”, in 1735.<sup>21</sup> In 1749, the Russian imperial historiographer, Gerhard Friedrich Müller (1705–1783), gave a speech on the origins of the Russians. Müller, who told the audience that Kievan Rus’ had been founded by Norsemen, never managed to finish his presentation. He was shouted down by members of the audience who did not like his message.<sup>22</sup> Thus the Normanist controversy was born, and it had two sides: those who liked the idea of Scandinavian influence and those who did not.

20 Rudbeckius 1679, 518.

21 Venelin 1842, 5.

22 Pritsak 1981, 3–4.



*The siege of the Swedish fortress Nöteborg by Russian troops in 1702 on the shores of Lake Ladoga and on the estuary of the Neva river. The illustration was published by Christopher Riegel. Photo: Finnish Heritage Agency, Helsinki, Finland. CC BY 4.0.*

The facts that the controversy is so old and new contributions appear continuously, make it difficult to clearly and succinctly summarize. Essentially, the debate concerns the issue of a Scandinavian presence in the territories inhabited by Finno-Ugric and East Slavic peoples during the early medieval period. The main points of the debate up to the early 1980s are summarized by Pritsak.<sup>23</sup> Later, Simon Franklin, Jonathan Shepard, Gleb Lebedev, Andrii Danylenko, John Lind, Oleksiy Tolochko, Thorir Jonsson Hraundal – just to name a few – have all made important contributions.<sup>24</sup>

As the arguments have flowed back and forth over the years, it is hardly surprising that the image of Rus' in early medieval times has been exposed to the ideologies of the twentieth century. Thus, in the preface to the 1950 edition of the First Novgorod Chronicle, the reader learns that the chronicle "... offers material showing that Rus' was of indigenous, local origin."<sup>25</sup> According to this Marxist-Leninist belief, it was only a matter of time before the Slavic tribes would develop a state of their own, with or without Scandinavian influence. "This teleology", Oleksiy Tolochko explains, "went out of fashion together with the departure of the Marxist sociology from the Slavic studies."<sup>26</sup>

23 Pritsak 1981, 3–7.

24 Franklin & Shepard 1996; Lebedev 2005; Danylenko 2006; Lind 2006; Tolochko 2008; Hraundal 2014..

25 NPL 1950, predislovie.

26 Tolochko 2008, 185.

Today, a more cautious approach has replaced the finite pronouncements of the past. Today it is recognized that the Scandinavian element was a force to be reckoned with in tenth-century Rus'. While the *Rus'* as an ethnic group were Scandinavian – judging from their names – they also included individuals of Slavic, Baltic and Finno-Ugric ethnicities. The narrative of Rurik in the Primary Chronicle must be seen for what it really is “... not a documentary ethnographic description of the tenth century, but a medieval *origo gentis* masterfully constructed by a Christian cleric of the early twelfth century...”<sup>27</sup> Two authors of a recent article on Ladoga archeology conclude that “Sudden eruptions of this discussion [the Normanist controversy, T. R.] are periodically observed today. Their politicization and inevitable biased opinions often does science a disservice.”<sup>28</sup>

A presentation of the controversy and its related issues would not be complete without mentioning works written by those who are vehemently opposed to the idea of any kind of Scandinavian presence, except from “plundering raids”, in what is now Russia between the ninth and eleventh centuries. One such work, purporting to explain the origins of the Russian state, presents the following etymology of the Russian word *varyag* “Viking”:

“There is such an etymology of the word ‘*varyag*’ that is so simple that there can be no doubt as to its veracity. It is enough to take the most common German-Russian dictionary and in it, without much trouble, to words are found: War [sic! – T.R.] ‘ware’ (the words are related) and Jagd ‘hunt’ (hence the Russian word ‘*yagdtash*’). A ‘*varyag*’ is ‘a hunter for goods’. It is striking that M. Vasmer, himself a German, paid no attention to this interpretation. He derived the word ‘*varyag*’ from ‘*varang*’.”<sup>29</sup>

This explanation, and others like it, represent folk etymologies similar to those that Rudbeck produced in the seventeenth century. By modern standards, they are pseudo-scientific in nature and can be dismissed as utter nonsense. The only plausible etymology for the word *varyag* is that it derives from *våring*, as Max Vasmer (1886–1962) correctly concluded: “Entlehnt aus anord. ‘*våringr*, *væringr* von *vár* ‘Treue, Bürgerschaft, Gelübde’, also ‘Verbündete, Eidgenossen.”<sup>30</sup>

### *Lake Ladoga and Eastern Vikings in Icelandic Literature*

In Old Norse poetry and sagas, Ladoga is mentioned some 40 times. In these texts, it is referred to as *Aldeigja/Aldeigjuborg*. The study of Old Norse texts dealing with Eastern Europe has been going on since at least the seventeenth century in the Nordic countries, and more recently in other countries as well. Recent major contributions to this tradition include Eleanor Rosamund

27 Tolochko 2008, 187–188.

28 Platonova & Sankina 2018, 102.

29 Kutuzov 2013, 151.

30 Vasmer 1953, 171.

Barraclough's investigation of travel in Icelandic sagas, and Tatjana N. Jackson's investigation of Eastern Europe in this genre.<sup>31</sup>

In Sweden, the publication of Rudbeck's *Atlantica* in 1679 became an important milestone.<sup>32</sup> In this work, the author mentions the *Hervarar saga*.<sup>33</sup> In Russia during the eighteenth century, scholars realized that Icelandic sagas sometimes mentioned their own country.<sup>34</sup>

The name *Aldeigja*, modern research suggests, is based on a Finnic *Alode-jogi*, meaning 'low river'. As a river name, *Aldeigja* refers to *Ladozhka*, a tributary of the Volkhov, and thus appears to be older than the use of the name for the lake. Today, the river-name *Ladozhka* is challenged by the name *Yelena*, apparently as a result of a bureaucratic mistake in the 1930s.<sup>35</sup> Jackson supports the idea that Scandinavians began settling in the Ladoga area around 750 C.E., prior to the arrival of the Slavs.<sup>36</sup>

According to Icelandic sagas, the role of the settlement Staraya Ladoga seems to be as a "first Station" (seen from the West) on the waterway to the south, a place to change and repair ships. It was also a place from where the Lord of Aldeigjuborg could exercise control over those traveling along the Volkhov river. Furthermore, the sagas mention that *Aldeigjuborg* was burned by Jarl Eiríkr Hákonarson at the end of the tenth century. This information has been corroborated by archeological finds. In his *Heimskringla*, a chronicle of the kings of Norway, Icelandic author Snorri Sturlason (ca. 1179–1241) writes:

"The generous earl, brave and bold,  
Who scatters his bright shining gold,  
Eirik with fire-scattering hand,  
Wasted the Russian monarch's land,—  
With arrow-shower, and storm of war,  
Wasted the land of Valdemar.  
Aldeiga burns, and Eirik's might  
Scours through all Russia by its light."<sup>37</sup>

Finally, the sagas report that Yaroslav the Wise gave Staraya Ladoga as a wedding gift to his wife Ingigerðr in the year 1019.<sup>38</sup>

### *The Archeological Evidence*

So far this survey has been occupied with written sources. We will now turn to the archeological evidence to see what it reveals about the eastern Viking presence in the Ladoga area.

31 Barraclough 2017; Jackson 2019, Ch. 8.

32 Walette & Walette 2018, 834.

33 Rudbeckius 1679, 518; Burrows s.a. 2017.

34 Belaiew 1928–1936.

35 "Ladozhka ili Yelena..."

36 Jackson 2019, 86.

37 *Heimskringla*, King Olaf Tryggvason's Saga, 97. Eiríks Foray on the Baltic Coasts 2009.

38 Jackson 2019, 91.

In 2018, the Institute for the History of Material Culture at the Russian Academy of Sciences published a collection of articles consisting of more than 500 pages, describing recent developments and plans for future archeological excavations in the Ladoga area. The publication also marked the launch of a “Ladoga corpus of archeological sources”.

The volume is a rich source of information on work done by Soviet and Russian scholars. It lists the history of archeological excavations, presents the scholars who were responsible for digging and analyzing finds, provides a bibliography of all the essential publications, and includes a comprehensive summary in English. In the English language, an introduction to the archeology of North-Western Russia, including the Ladoga area, was published a decade earlier by Fjodor Androshchuk.<sup>39</sup>

The results of research carried out during the last decades suggest that the contacts between the Western and Eastern shores of the Baltic Sea go back much further than the Viking period. Until recently, more than 320 archeological sites along the “route from the Varangians to the Greeks” were the object of excavations.<sup>40</sup>

Archeological research has produced thousands of artefacts, including, to take just two examples, Carolingian swords and objects bearing runic inscriptions. The first example are the famous *Ulfberht* blades of which finds have been made in the area south-east of Lake Ladoga (in all, twelve such blades are known from Early Rus’).<sup>41</sup> These swords are thought to have originated in the Rhineland, but were spread widely across the Viking world.<sup>42</sup> As for runic inscriptions, the second example, the database of runic inscriptions maintained by Uppsala University lists two items from Staraya Ladoga: an eighth–ninth-century copper “amulet” with an inscription where only the word “runes” can be safely interpreted. A spindle dated to ca. 800, also bears an enigmatic inscription. The objects are currently housed at the museum in Staraya Ladoga and at the State Hermitage in St. Petersburg, respectively. The inscriptions read:

a) The amulet

*pamup runar is ¶ (o)(m)(u)þalþm(k)fa SB unþruþi(o)þa(t) ¶ haþarnaki(f)a(k)*<sup>43</sup>  
translation: ... runes ....

b) The spindle

... ..(t) ufir uf uariþr hali ual-(r) ri-s fron(m)ona -rot fibulsini bluka<sup>44</sup>

39 Androshchuk 2008.

40 Lebedev 2005, 377.

41 Stalsberg 2017, 266.

42 Kirpichnikov, Thålin-Bergman, Jansson & Sherman 2001.

43 *Runor*, <https://app.raa.se/open/runor/inscription?id=756a0041-ee78-4b83-b043-932cea805790>

44 *Runor*, <https://app.raa.se/open/runor/inscription?id=f2cb28a7-c7fe-4047-8fbd-045e42a5c7f8>

translation: ... (and) steered - surrounded by the slope – down to the fertile pastureground – across the valiant men's neighborhood a great following of plows.

### *Recent Developments*

For a long time, the start of the Age of Vikings was associated with the attack on the Monastery of Lindisfarne, off the coast of Northumberland, in the year 793. Recent work, however, suggests that the beginning of Scandinavian sea voyages began considerably earlier. One researcher calls for greater nuancing of the picture:

“When the archeological evidence is examined, the origin of Scandinavian activity appears to have been more modest and seemingly more connected with trade than raids. The fearsome warlords mentioned in the western chronicles were not trailblazers, but followers of merchants who preceded them by almost half a century.”<sup>45</sup>

Indeed, archaeological discoveries on the island of Saaremaa (*Ösel*) where warrior burial sites have undergone DNA analyses show that the individuals in the graves originated from the area of lake Mälaren in Sweden. The graves in question were dated to 750, i.e. almost half a century earlier than the raid on Lindisfarne.<sup>46</sup> By coincidence or not, dendrochronological data illustrates that Staraya Ladoga as a settlement was founded no later than A.D. 753.<sup>47</sup> Scholars seem to agree that the Slavs arrived in the Ladoga area around this time. Sergej Kuz'min writes:

“L'habitat sur Zemljanoe gorodišče [a section of Staraya Ladoga – T.R.] apparaît comme une colonie de Scandinaves qui ont atteint la côte balte orientale avant l'époque viking et avant la consolidation de la route fluviale vers l'Orient arabe (niveau I). Au milieu ou vers la fin des années 760, la colonie cesse d'exister et est remplacée par une population venant des régions plus au sud, qui peut être parfaitement mise en rapport avec la percée des Slaves vers le nord (niveau II).”<sup>48</sup>

The quotation is in English: “The settlement at Zemljanoe gorodišče [a section of Staraya Ladoga – T.R.] appears to have been a settlement of Scandinavians who reached the eastern Baltic coast before the Viking Age and before the consolidation of the river route to the Arab East (level I). In the mid- or late 760s, the settlement ceased to exist and was replaced by a population originating from more southern regions, which can be related precisely to the breakthrough of the Slavs towards the north (level II).”

Still more recent results suggest that the periodization requires a fundamental reconceptualization. There is no obvious division between

45 Jakobsson 2020, 15.

46 Karlsson 2020.

47 Kirpichnikov 2004; Price, Moiseyev and Grigoreva 2019, 6094.

48 Kuz'min 2000, 139; Juškova 2006.



the Age of Vikings and the period preceding it. In the earlier period, Scandinavians began to trade via a Baltic Finnic trade network stretching from southwestern Finland, through Karelia, to Staraya Ladoga.<sup>49</sup> This trade network seems to have connected to additional networks leading to the south.<sup>50</sup>

Developments in DNA sequencing and in isotopic analyses of strontium in human teeth have also produced interesting results. A recent sequencing of more than 400 Viking skeletons from across Europe (including Russia) suggests that “Many Vikings have high levels of non-Scandinavian ancestry, both within and outside Scandinavia, which suggest ongoing gene flow across Europe.”<sup>51</sup> In Staraya Ladoga, analyses of the isotopic ratios of strontium, oxygen, and carbon in human tooth enamel have been undertaken to also examine the provenience and diet of the early inhabitants of Staraya Ladoga. These analyses support the idea of an important Scandinavian presence at the site.<sup>52</sup> As one scholar puts it: “The new arising community in the North-West of Russia was formed as a multi-ethnic society with Slavic, Finnic, Baltic and Scandinavians components.”<sup>53</sup>

As people moved across Eastern Europe, so did their objects. Because the movement was not unidirectional, but multidirectional, samples of “Ladoga pottery” is common in major excavation sites like Birka and Gamla Uppsala. The items themselves were not always made at Staraya Ladoga, but the manufacturing technique was exported westwards.<sup>54</sup>

Human ideas travel. These may include knowledge of manufacturing techniques, or social identity, or, indeed, ideas about fashion. Archeologists have become interested in the expression of identity through material culture.<sup>55</sup> These ideas have taken root in educational curricula and students now write essays on the topic. One such essay studies the self-identification of women in the Ladoga area, based on the grave goods found during excavations. Scandinavian fibulae, animal shaped Finnic pendants along with jewelry from the Mediterranean and other areas have been found in the same grave. With what group did the woman who wore them identify?<sup>56</sup>

## Conclusions

The written evidence of a Scandinavian presence in the Ladoga area has been known for centuries. The texts have been analyzed repeatedly, and new ideas require them to be reevaluated from time to time. It seems that researchers from different countries now agree on a number of fundamental

49 Roslund 2017.

50 Korpela 2008; 2014; Sindbæk 2017.

51 St John’s College, University of Cambridge 2020, 2; Margaryan, Lawson, Sikora et al. 2020.

52 Price, Moiseyev and Grigoreva 2019, 6093–6094.

53 Juškova 2006, 150.

54 “En bit av Ryssland.”

55 Hedenstierna-Jonsson 2017.

56 Romanova 2010, 27.

points, and this gives reason for cautious optimism. It seems now that the confrontative climate characterizing the Normanist controversy has yielded to a more peaceful and constructive atmosphere, where thoughts and ideas can be exchanged.

Archeology appears to be the most promising field of research for the future study of the (pre)history of the Lake Ladoga area. New methods, including DNA sequencing and isotopic analysis, will allow new and more detailed insights into the ethnic composition of the population in the Ladoga area during the early middle ages. Combined with a better understanding of the cultural and economic interchange between Finnic, Scandinavian and Slavic groups, these archeological studies will offer a better understanding the history of this European region.

## References

### *Internet Sources*

*Runor*. Samnordisk runtextdatabas 2020. Institutionen för nordiska språk, Uppsala universitet. <http://www.nordiska.uu.se/forskn/samnord.htm> Accessed February 8, 2022.

### *Literature*

- (In Russian titles published prior to 1918, the orthography has been modernized)
- Androshchuk, Fjodor 2008: The Vikings in the East. In: *The Viking World*. S. Bring & N. Price (eds.). Routledge, Abingdon, 517–542.
- Barracough, Eleanor Rosamund 2017: Travel. In: *The Routledge Research Companion to the Medieval Icelandic Sagas*. <https://www.routledgehandbooks.com/doi/10.4324/9781315613628.ch16> Accessed February 21, 2022.
- Belaiew, N. T. 1928–1936: Eymundar Saga and Icelandic Research in Russia. *Saga-Book* 11, 93–99.
- Berezovich, Yelena L. 2012: K semantiko-etimologicheskoy interpretacii otponimicheskikh (otetnonimicheskikh) obrazovaniy: na materiale gnezda ‘Rus’, russkii.” In: *Praslovanska dialektizacija v luči etimoloških raziskav: Ob stoti obletnici rojstva akademika Franceta Bezlaja. Zbornik referatov z mednarodnega znanstvenega simpozija v Ljubljani, 16.–18. septembra 2010*. Metka Furland & Alenka Šivic-Dular (eds.). Založba ZRC, Ljubljana, 33–47.
- Burrows, Hannah (ed.) s.a. 2017: Hervarar saga ok Heiðreks. In: *Skaldic Poetry of the Scandinavian Middle Ages*. <https://skaldic.org/db.php?id=23&if=default&table=text> Accessed February 15, 2022.
- Børtnes, Jostein 2008: The literature of Old Russia, 988–1730. In: *The Cambridge History of Russian Literature*. C. Moser (ed.). Cambridge University Press, Cambridge, 1–44. <https://www.cambridge.org/core> Accessed February 15, 2022.
- Chereněva, Vera 2015: “Istoriya v kamne: V Staroy Ladoge ustanovili pamyatnik sobiratelyam russkikh zemel'.” *Rossiyskaya gazeta* September 18. <https://rg.ru/2015/09/18/pamyatnik.html> Accessed April 18, 2021.
- Cross, Samuel Hazzard & Sherbowitz-Wetzor, Olgerd P. (eds.) 1953: *The Russian primary chronicle: Laurentian text*. The Mediaeval Academy of America, Cambridge Mass.

- Danylenko, Andrii 2006: *Slavica et Islamica: Ukrainian in Context*. Sagner, München.
- Ekbo, Sven 1986: Die Etymologie des finnischen Ruotsi, Schweden. *Jahrbücher für Geschichte Osteuropas*, Neue Folge, Bd. 34, H. 3, 354–356.
- “En bit av Ryssland” <http://www.arkeologigamlauppsala.se/Sv/nyheter/2013/Pages/en-bit-av-ryssland.aspx> Accessed March 18, 2021.
- Encyclopædia Britannica* s.a. 2017: Treaty of Stolbovo. Britannica Academic. <https://academic-eb-com.ezproxy.ub.gu.se/levels/collegiate/article/Treaty-of-Stolbovo/69785> Accessed February 14, 2022.
- Franklin, Simon & Shepard, Jonathan 1996: *The Emergence of Rus 750–1200*. Longman, London & New York.
- Franklin, Simon 1998: The Invention of Rus(sia): Some Remarks on Medieval and Modern Perceptions of Continuity and Discontinuity. In: *Medieval Europeans: Studies in Ethnic Identity and National Perspectives in Medieval Europe*. Alfred P. Smyth (ed.). Macmillan Press Ltd, Houndmills, Basingstoke & London, 180–195.
- Harrison, D. 2009: *Sveriges Historia 600–1350*. Norstedts, Stockholm.
- Hedenstierna-Jonsson, Charlotte 2017: Creating a Cultural Expression: On Rus’ Identity and Material Culture. In: *Identity Formation and Diversity in the Early Medieval Baltic and Beyond: Communicators and Communication*. J. Callmer, I. Gustin & M. Roslund (eds.). Brill, Leiden & Boston, 91–106.
- Heimskringla* 2009: King Olaf Tryggvason’s Saga, 97. Eiriks Foray on the Baltic Coasts. Produced by Douglas B. Killings & David Widger. <https://www.gutenberg.org/files/598/598-h/598-h.htm> Accessed February 16, 2022.
- Hraundal, Thorir Jonsson 2014: New Perspectives on Eastern Vikings/Rus in Arabic Sources. *Viking and Medieval Scandinavia* 10, 65–98.
- Jackson, Tatjana N. 2019: Aldeigia/ Aldeigjuborg (Old Ladoga). *Eastern Europe in Icelandic Sagas*. Amsterdam University Press, Amsterdam, 85–91.
- Jakobsson, Sverrir 2020: *The Varangians: In God’s Holy Fire*. Palgrave Macmillan, Cham, Switzerland.
- Jarman, Cat 2021: *River Kings: A New History of the Vikings from Scandinavia to the Silk Roads*. William Collins, London.
- Jušková, M. A. 2006: North-Western Russia before its Settling by Slavs (8th Century BC – 8th Century AD). In: *The Slavization of the Russian north: Mechanisms and chronology*. Juhani Nuorluoto (ed.). Helsinki University Press, Helsinki, 140–153.
- Karlsson, Mats 2020: Vikingens värld mycket äldre än du tror. In: *Forskning och framsteg* 8. <https://fof.se/tidning/2020/8/artikel/vikingens-varld-mycket-aldre-du-tror> Accessed March 21, 2021.
- Kirpichnikov, A. N., Thålin-Bergman, Lena, Jansson, Ingmar & Sherman, Heidi M. 2001: A New Analysis of Viking-Age Swords from the Collection of the Statens Historiska Musser [sic! – T. R.], Stockholm, Sweden. *Festschrift for Thomas S. Noonan. Russian History* 28:1/4, 221–244.
- Kirpichnikov, Anatoliy N. 2004: A Viking period workshop in Staraya Ladoga, excavated in 1997. *Fornvännen* 3, 183–196.
- Korpela, Jukka 2008: *The World of Ladoga: Society, Trade, Transformation and State Building in the Eastern Fennoscandian Boreal Forest Zone c. 1000–1555*. LIT, Berlin.
- Korpela, Jukka 2014: The Baltic Finnic People in the Medieval and Pre-Modern Eastern European Slave Trade. *Russian History* 41:1, 85–117.
- Kovalenko, Gennadiy 1995: *Shveciya i Rossiya v XVII v. Iz istorii politicheskikh i kul'turnykh svyazey*. Forskningsarkivet, Umeå universitet, Umeå.
- Kutuzov, Evgeniy 2013: *Varyagi. Slavyane. Russkie*. Alistorus, S. l.
- Kuz’min, Sergej 2000: Ladoga, le premier centre proto-urbain russe. In: *Les Centres proto-urbains russes entre Scandinavie, Byzance et Orient*. M. Kazanski, A. Necessian & C. Zuckerman (eds.). Éditions P. Lethielleux, Paris, 123–142.
- Ladozhka ili Yelena.V Staroj Ladoge ne mogut opredelit’sya s nazvaniem mestnoy reki. *47 Channel*. [https://47channel.ru/video\\_clip/123404](https://47channel.ru/video_clip/123404) Accessed February 15, 2022.

- Lebedev, Gleb 2005: A Reassessment of the Normanist Question. *Russian History* 32:3/4, 371–385.
- Lind, John 2006: Problems of ethnicity in the interpretation of written sources on early Rus'. *The Slavization of the Russian north: Mechanisms and chronology*. Juhani Nuorluoto (ed.). Helsinki University Press, Helsinki, 246–258.
- Margaryan, A., Lawson, D. J., Sikora, M. et al. 2020: Population genomics of the Viking world. *Nature* 585, 390–396. <https://doi.org/10.1038/s41586-020-2688-8> Accessed February 11, 2022.
- Nationalencyklopedin* 2022, vāringar. <http://www-ne-se.ezproxy.uu.se/uppslagsverk/encyklopedi/lång/vāringar> Accessed February 11, 2022.
- NPL 1950: *Novgorodskaya pervaya letopis' starshego i mladshhego izvoda*. A. N. Nasonov (ed.). Izdatel'stvo Akademii Nauk SSSR, Moskva & Leningrad. <http://litopys.org.ua/novglet/novg.htm> Accessed February 15, 2022.
- Obolensky, Dimitri 2000 [1971]: *The Byzantine Commonwealth*. Phoenix Books, London.
- Ohloblyn, Oleksander 2001: Normanist theory. Internet Encyclopedia of Ukraine. <http://www.encyclopediaofukraine.com/display.asp?linkpath=pages%5CN%5CO%5CNormanisttheory.htm> Accessed April 22, 2022.
- Orr, Robert 2014: Review of *Slavica et Islamica: Ukrainian in Context* by Andreii Danylenko. *Journal of Slavic Linguistics* 22:2, 277–291.
- Platonova, N. I. & Lapshin, V. A. (eds.) 2018: *Novoye v arheologii Staroy Ladogi: materialy i issledovaniya*. Nevskaya knizhnaya tipografiya, Sankt-Peterburg.
- Platonova, N. I. & Sankina, S. L. 2018: "Stratigrafiya verkhnikh gorizontov Zemlyanogo gorodishcha Staroy Ladogi i gruntoviy mogil'nik u tserkvi sv. Klimenta (po materialam raskopok 1938–1940 gg.). In: *Novoye v arheologii Staroy Ladogi: materialy i issledovaniya*. N. I. Platonova & V. A. Lapshin (eds.). Nevskaya knizhnaya tipografiya, Sankt-Peterburg, 66–126.
- Price, T. Douglas, Moiseyev, Vyacheslav & Grigoreva, Natalia 2019: Vikings in Russia: origins of the medieval inhabitants of Staraya Ladoga. *Archaeological and Anthropological Sciences* 11, 6093–6109. <https://doi.org/10.1007/s12520-019-00897-2> Accessed February 21, 2022.
- Pritsak, Omeljan 1981: *The origin of Rus'*. Harvard University Press for the Harvard Ukrainian Research Institute, Cambridge, Mass.
- Romanova, Anna 2010: *Kvinnor och kulturell identitet: Exempel utifrån kvinnogravar med skandinaviska föremål från vikingatiden i Ladogaområdet i Rus'*. Phil. Cand. Essay in Archeology. Stockholm university, Stockholm.
- Roslund, Mats 2017: Bringing "the Periphery" into Focus: Social Interaction between Baltic Finns and the Svear in the Viking Age and Crusade Period. In: *Identity Formation and Diversity in the Early Medieval Baltic and Beyond: Communicators and Communication*. J. Callmer, I. Gustin & M. Roslund, M. Leiden (eds.). Brill, Boston, 168–204.
- Rudbeckius, Olavus 1679: *Atlantica sive Manheim*. Excudit Henricus Curio S. R. M. & Academiæ Upsal. Bibliopola. Upsalæ.
- Shepard, Jonathan 2008: The Viking Rus and Byzantium. *The Viking World*. S. Bring & N. Price (eds.). Routledge, Abingdon, 496–516.
- Sindbæk, Søren M. 2017: A Site of Intersection: Staraya Ladoga, Eastern Silver, and Long-Distance Communication Networks in Early Medieval Europe. In: *Identity Formation and Diversity in the Early Medieval Baltic and Beyond: Communicators and Communication*. J. Callmer, I. Gustin & M. Roslund (eds.). Brill, Leiden & Boston, 76–90.
- Stalsberg, Anne 2017: Swords from the Carolingian Empire to the Baltic Sea and Beyond. *Identity Formation and Diversity in the Early Medieval Baltic and Beyond: Communicators and Communication*. J. Callmer, I. Gustin & M. Roslund (eds.). Brill, Leiden & Boston, 259–280.

- St John's College, University of Cambridge 2020: World's largest DNA sequencing of Viking skeletons reveals they weren't all Scandinavian. *ScienceDaily*. [www.sciencedaily.com/releases/2020/09/200916113544.htm](http://www.sciencedaily.com/releases/2020/09/200916113544.htm) Accessed February 13, 2022.
- Tarkiainen, Kari 2008: *Sveriges österland. Från forntiden till Gustav Vasa*. Svenska litteratursällskapet i Finland, Helsingfors.
- Theotokis, George 2020: The Rus'-Varangian Guard in Byzantium. *Byzantium and Kievan Rus' (882-1240)*. Georgios Th. Kardaras (ed.). National Hellenic Research Foundation, Athens, 57-73.
- Tolochko, Oleksiy P. 2008: The *Primary Chronicle's* 'Ethnography' revisited: Slavs and Varangians in the Middle Dnieper Region and the Origin of the Rus' State. In: *Franks, Northmen, and Slavs: Identities and State Formation in Early Medieval Europe*. Ildar H. Garipzanov, Patrick J. Geary & Przemyslaw Urbańczyk (eds.). Brepols, Turnhout, 169-188.
- Walette, Anna 2004: *Sagens svenskar: Synen på vikingatiden och de isländska sagorna under 300 år*. Diss. Lund University. Sekel Bokförlag, Malmö.
- Walette, A. & Walette, A. 2018: II: 58 Swedish Perspectives. In: *Handbook of Pre-Modern Nordic Memory Studies: Interdisciplinary Approaches*. J. Glauser, P. Hermann, & S. A. Mitchell (eds.). De Gruyter, Berlin & Boston, 834-840. <https://doi.org/10.1515/9783110431360-094> Accessed February 21, 2022.
- Vasmer, Max 1953: *Russisches etymologisches Wörterbuch*. Erster Band: A-K. Carl Winter Universitätsverlag, Heidelberg.
- Venelin, Yuriy 1842: *Skandinavomaniya i ee poklonniki ili stoletniya izyskaniya o varyagakh*. Tipografiya A. Semen, Moskva.
- Vlasto, A. P. 1970: *The Entry of the Slavs into Christendom: An Introduction to the Medieval History of the Slavs*. University Press of Cambridge, Cambridge.

## Early Population in the Ladoga Region

The further we go back in history, the more fragmented is the information available to us. When it comes to the early habitation history of the area of Lake Ladoga, the number of available textual sources is very low. In addition, their informational value has often been questionable and prone to different interpretations according to the values and politics of each time and society.

Historical research in general has tended to be burdened with “national gaze”, which is understandable in a sense that the whole field has its foundation in national ideas. Especially borderlands and frontiers are loaded with competing perceptions defined by different interpretations of the past on each side of the contemporary border. The area of Karelia is not an exception. In Finland, concepts such as Karelia, Karelian or Ladoga bring forth strong images, some of which were originally formed by a nineteenth century national-romanticist movement called Karelianism. After the Second World War, the Finnish image of Karelia has been largely defined by loss and nostalgia, as a large part of the area was ceded to the Soviet Union and some 400 000 Finnic inhabitants of Karelia had to resettle in other parts of Finland.

In Russian imagery of the past of the area of Lake Ladoga, on the other hand, the early Slavic inhabitation has often been emphasized. Moreover, the early connections to Scandinavia have been brought forth, related to the mythistorical narrative of the beginning of the whole Russian realm as we can see from the previous chapter written by Thomas Rosén. How Ladoga’s historical significance in Russia is evaluated depends on the evaluator’s opinion about the so-called Varjag or Norman theory, one of the controversial questions in Russian national history. Those favoring the theory emphasize the role of Scandinavians, who used River Vuoksi (Vuoksa) and Lake Ladoga as their route, in the development of the administrative system in the area of Rus’. Those opposing it claim that the system was created by Slavs, with no influence from Scandinavia.

Archeological findings are valuable and authentic traces of the past, but they, too, have their problematic aspects. They are often quite arbitrary and “mute” in the sense that rather than singular artifacts, only a larger whole provides a possibility to draw reliable conclusions – and even then, the information tends to be fragmentary.

During recent decades, paleoecological research has emerged to complement information about certain human activities on the shores and islands of Ladoga. For example, it has provided quite reliable data concerning the beginning of cultivation of land in the area. Onomatology, too, provides at least some ideas about which groups have inhabited certain areas in each given time. Furthermore, in the future, genetic research will undoubtedly provide information on the early inhabitants of the Ladoga area.

This chapter is a survey of what is currently known – and what is not known – about the inhabitation on the shores of Lake Ladoga from prehistoric times to the sixteenth century, based on the combination of information provided by different fields of scholarly research.<sup>1</sup> In addition, the seventeenth and eighteenth centuries will be briefly examined in the context of habitation history. The focus is on the western and northern sides of Lake Ladoga; the areas called Karelian Isthmus and Ladoga Karelia.

### *What graves tell us – and what they do not*

Human habitation has tended to develop in sheltered places close to water systems; lakes and rivers provided food and a network of transportation already in prehistoric times. Archeological findings tell us that the “proto-Karelians” found good dwelling places on the shores of Lake Ladoga. Excavations have been carried out in the area from the nineteenth century onwards by Russians as well as Finns, but according to present-day standards they have not been very well organized or reported. Furthermore, the findings may have been interpreted in various ways depending on the interpreter’s background, national bias, or the context of the study.<sup>2</sup>

Findings dating to the Stone Age and Bronze Age have been abundant in the area of Karelia. They are quite similar to those found elsewhere in North-eastern Europe. Around Lake Ladoga, the Neolithic dwelling places were located quite far from the current coastal line, because the water level was even ten meters higher than now until the breakthrough of Neva River, which took place about 3300 years ago.<sup>3</sup>

Archeological findings dating from the late Roman to the early Merovingian period (ca. 300–750) in the Karelian area are quite scarce. This may be due to many separate issues, and it does not necessarily mean that there was no inhabitation in the area during that time. Previously, archeological excavations tended to concentrate on metal objects and burials

- 1 A wide array of articles by Finnish multidisciplinary scholars (in Finnish) has been published in the series *Viipurin läänin historia* (History of the Viborg province), parts I 2003, II 2004, III 2010 and IV 2013. These contributions are also referred to in this survey, especially in the context of earlier periods; This chapter has been edited from the chapter published in the Finnish volume of *Laatokka. Suurjärven kiehtova rantahistoria* (2021). See Parppei 2021, 44–68.
- 2 See, e. g., Laakso and Belskiy 2018, 9–14. For Russian archeological studies in the area of Karelia, see M. G. Kosmenko & S. I. Kochkurina (eds.). *Arkheologiya Karelii* 1996.
- 3 Saarnisto 2003, *passim*.

with grave goods, and if these did not play an important part in the culture of the inhabitants, the lack of findings may give a misleading impression.<sup>4</sup>

When it comes to burials and graves, so-called cremation burials represent the older type. In their case, burnt pieces of bone have been scattered over a wide area, and it is impossible to separate the remains of different individuals from each other. Some cremation burials have been discovered in the surroundings of Lake Ladoga. The oldest of these is the burial on the island of Riekkala (Riekkalansaari), by Nukutta bay (Nukuttalahti), which has been dated to the sixth century according to bronze objects associated with the site. On the southern side of Ladoga, a burial which has been interpreted as a cairn burial of multiple individuals, the oldest objects of which have been dated to the eighth century, has been found in Sakkola.<sup>5</sup>

It is not always clear whether some cairn-like stone formations are burials or not. There may have been no remains of burnt bone, or of grave goods on the site. The cairns may have had multiple functions, not just burials.<sup>6</sup> The same holds true for other formations and features in the landscape: due to the lack of supporting findings, it may be impossible for an archeologist to determine whether a stone was used as a sacrifice place, or whether a hill was used as a hill fort or not. There are numerous sites on the shores of Ladoga – especially on the rocky north-western part – that could be interpreted as hill forts, but their exact function is not known. They may have been used for defense as well as relatively safe places to store valuable goods such as pelts, for example.<sup>7</sup>

Inhumation burials, in which the body of the deceased was placed below the ground unburned, began to take place in the area of Karelia rather gradually. On the shores of Ladoga, quite a lot of Early Christian and medieval cemeteries have been discovered.<sup>8</sup> One of them, the cemetery on Kalmistomäki in Kylänlahti, on the north-western shore of Ladoga, was excavated extensively in 2006–2009 by the archeologists Ville Laakso and Stanislav V. Belskiy. They examined almost one hundred graves dating to the fourteenth and fifteenth centuries, thus making the site the most widely investigated medieval cemetery in that part of Karelia which was annexed to the Soviet Union. The archeologists found, for example, indications of cultural connections in many directions, especially to Ingria, which may refer to marital relations between the inhabitants of the areas.<sup>9</sup> Also, a certain continuity of these connections was observed from the early Christian period to the Middle Ages, that is, from the eleventh to the fifteenth century.<sup>10</sup>

Kylälähti was the center of the *pogost*, with wealthy inhabitants and probably more connections in diverse directions than in the surrounding

4 Laakso & Belskiy 2018, 10–11; Uino 2003a, 295–296.

5 Uino 2003a, 298, 307, 309–312.

6 Lavento 2018, 129–131. Uino 1997, 44–49.

7 In the Karelian area, almost one hundred possible hill forts have been discovered altogether. Taavitsainen 2003, 432–434; Uino 1997, 77–91.

8 In Finland the early Christian period refers to the period 1025–1300. The Medieval period in Finland is considered to have lasted until the sixteenth century.

9 Laakso & Belskiy 2018, 300–301, *passim*.

10 Laakso 2014, 22.



areas. Pogost was an administrative unit, referring to a district comprised of variable numbers of villages. Therefore, according to Laakso and Belskiy, one should not make generalized conclusions from the findings made in the cemetery. In order to obtain more information and material for comparison, new excavations would be needed.<sup>11</sup>

Most of the burials examined in the surroundings of Lake Ladoga in general have not included any grave goods, which makes it more challenging to date them properly. Inhumation burials have usually been taken as an indication of the influence of Christianity in the area, but this assumption is by no means unquestionable. The orientation of graves in relation to the points of the compass may tell more: consistently east-west oriented graves refer to Christian burials, and they seem to have been established in the area of Karelia by the beginning of the thirteenth century.<sup>12</sup>

However, the burial habits of the area, revealed by archeological excavations, do not allow us to reach any conclusions on the level of Christianization of the population. This was in any case a long process, in which pre-Christian habits were intertwined with Christian ones still during the nineteenth century and even later. For example, burial goods were installed in graves as late as in the beginning of the fourteenth century. On the other hand, no metal crosses or icons were excavated from the Kylänlahti cemetery, either because these religious items were made of wood, or because it was not a local habit, even though the Orthodox Church was already regulating the ways people were buried.<sup>13</sup>

In general, it is possible that details referring to early Christianization in burials and archeological findings tell us more about the consolidation of ecclesiastic power structures in the area than about changing world views and religious belief systems. The so-called Laurentius Chronicle does mention that Prince Yaroslav organized the baptism of Karelians in 1227, but this claim has not been confirmed by any other source, and it does not withstand critical scrutiny.<sup>14</sup> Also, according to preserved textual sources, in the sixteenth century both Swedish and Muscovite churchmen were worried about the Karelians' pagan habits and their weak commitment to Christianity.<sup>15</sup> What is obvious, however, is that the hold of Novgorod – and along with it, the Orthodox Church – of the area of Ladoga became gradually stronger, whatever the consequences were for the religious life and practices of the inhabitants.

11 Laakso & Belskiy 2018, 300–302, *passim*.

12 See, e. g., Laakso 2014, 131.

13 Laakso 2018, 207–208; Laakso & Belskiy 2018, 300, *passim*; Laakso 2014, 21–23, 129–136. Meanings of metal in Karelian death and burial rituals were strong and multifaceted as late as in the nineteenth and twentieth centuries; for example, metal was used to mark the boundary between temporal life and afterlife, and during that period, at least, installing any metal objects in graves was consciously avoided. See, e.g., Jetsu 2013, 406–407, 417, 420.

14 Lavrentiyevskaya letopis' 1846, 191; Korpela 2004a, 61; Lind 2004, 5; Laakso 2018, 208–210.

15 *Materialy po istorii Karelii* 1941, n:o 52, 127–131; *Materialy po istorii Karelii* 1941, n:o 64, 154–159; Lind 2004, 9; Korpela 2008, 47–49.

Archeological material does not really shed light on the relative strength of eastern and western influences in the area, either. It does however appear that western connections were stronger from the seventh century onwards at the latest, changing gradually to eastern and south-eastern connections around the year 1100.<sup>16</sup> The artifacts found are multicultural – originating, for example, from Scandinavia, the Baltics or Russia, to use contemporary names – but this may be explained by the location of the area alongside trade routes. Furthermore, it is often unclear whether some specific object has been imported or made locally inspired by influences from elsewhere. Traditionally, Karelia is seen as a disputed area between east and west, but even though the artifacts indicate growing eastern influence from the twelfth century onwards, there appears to be no clear distinction between cultures or religions, let alone any drastic changes in the inhabitation. The changes may simply have taken place due to the decline in Scandinavian trade, which reduced the amount of western material. The trade around the Baltic Sea itself did increase, but the changing trade routes left the area of Ladoga aside.<sup>17</sup>

New results in genetic research, investigating material from the ninth to the sixteenth century, add yet another somewhat surprising component to the image formation of the early inhabitation of the Ladoga area. According to the study, the human remains in two cemeteries located in present-day western Finland have revealed genes traditionally connected to hunter-gatherers and found in the contemporary inhabitants of eastern Finland. From three eastern cemeteries – one of which is located in Kylänlahti, see above – genes connected to farmers have been found, nowadays present in the genome of western Finns. These findings indicate relatively active horizontal migration, challenging the previous assumptions. It is likely, however, that small-scale resettling took place gradually over a long time period rather than any major wave of migration.<sup>18</sup> The findings are supported by onomastic studies, according to which Karelian and Tavastian names began to get mixed up in medieval textual sources already before the major migration waves of the seventeenth century.<sup>19</sup>

### *Traces of early farmers*

Paleoecological research has had a significant role in gaining information on the early habitation history of the Karelian area, especially when combined

16 Laakso 2018, 186, 199.

17 Laakso & Belskiy 2018, 300–301, *passim.*; Korpela 2004a, 64. Uino 2003b, 341–343; The position of the historical population of Karelia has depended on the viewpoint and preferences of each researcher. For example, Professor Jalmari Jaakkola (1885–1964) emphasized the voluntary inclination of Karelians towards the Western cultural sphere despite pressure from the east; Professor Heikki Kirkinen (1927–2018), on the other hand, presented a hypothesis about an early independent administration of Karelia, in addition to emphasizing its connections to Byzantium.

18 Översti et al., 2019, *passim.*

19 Katajala 2010, 58; Laakso 2018, 185.

to the methods of archeology and historical studies. Paleoecology studies bottom sediments of lakes and ponds for traces of pollen. Even though the field cannot provide exact answers to many questions, the emergence of grain and other cultivated plants in the research material – as well as the decrease of tree pollen – indicate an increase of human activities in the area.<sup>20</sup>

The early inhabitation of the Ladoga area has been studied by Finnish researchers, who have examined the northern and north-western shores and the archipelago of Valaam (Fin. Valamo) by the northern part of the lake. In the sediments of Kuuppala pond (Kuuppalanlampi) in Kurkijoki, indications of human activities, such as forestry, have been detected from some 4000 years ago, although no signs of contemporaneous agriculture have been found. The earliest indications of at least occasional agricultural activities were detected on Kilpola Island (Kilpolansaari), where they took place in the fourth and fifth centuries. On Riekkala Island (Riekkalansaari), located near the contemporary town of Sortavala, similar signs have been found, combined with indications of more permanent agriculture from the seventh century onwards.<sup>21</sup> In general, agriculture and forestry were established in the area of Ladoga during the period between the eleventh and thirteenth centuries, which is aligned with other findings from the areas known as North Savonia and North Karelia in present-day Eastern Finland.<sup>22</sup>

When it comes to the archipelago of Valaam, paleoecological pollen studies have detected signs of permanent agricultural activities from the thirteenth century onwards. Indications of occasional or temporary farming and inhabitation were found from the sixth and seventh centuries onwards. It also appears that old farming sites were abandoned, and new ones prepared.<sup>23</sup> Relatively scarce signs of agriculture in the areas of Ladoga and Karelia in general may be explained by the small population, for which hunting and fishing provided enough sustenance.<sup>24</sup>

Pollen samples indicating forestry and agriculture refer to permanent inhabitation, even though the slash-and-burn method of farming required some mobility. The samples do not, however, tell us who the early farmers of the Ladoga area were, nor does it clarify who the inhabitants preceding them might have been. Historic place names reveal that the population spoke Finnic languages, but that is about all that can be said about them. The oldest layer of names refers to the Sámi population, representatives of which can be found all over the Karelia. Later layers can be connected more generally to Baltic-Finnic languages, which were so close to each other that making any further distinctions is difficult.<sup>25</sup>

20 See, e. g., Alenius 2004, 288–289; Simola 2003, 94–97; Vuorela 2002, 76–92.

21 Alenius et. al. 2004.

22 Alenius 2004, 289.

23 Simola 2003, 100–110.

24 Huurre 2003, 290.

25 Saarikivi 2004, 216–217; Also: Kochkurina 2004, 99–101; The Karelian language, the eastern dialects of Finnish, the Ludic language spoken on the western shore of Lake Onega, and the Ingrian language spoken in Ingermanland, presumably all derive from a language called proto-Karelian, which may have been in use on the western and northern shores of Ladoga, and also in the neighborhood of Ladoga

Russian researchers have traditionally assumed that Sámi inhabitation and culture prevailed in the area of Karelia relatively long. On the other hand, it is possible that the representatives of the early power structures listed all the hunter-fisher-gatherers of the peripheral wilderness areas and speaking Finnic languages as “Lappish”. There is no source-based information concerning when the other Baltic-Finnic groups replaced the Sámi inhabitants, who migrated to the north. It is probable that this process also took place gradually rather than abruptly.<sup>26</sup>

It is worth noting that the names of ethnic groups of the area can only be found in textual sources preserved from the fourteenth century onwards. Furthermore, these have to be examined in the context of the time of their production. The name is practically always given to a group by others in order to distinguish it from other groups, and it tells us nothing of how the representatives of that group defined themselves. As we shall discuss later on, naming “otherness” was often very pragmatic and depended on each given context.<sup>27</sup> However, names of ethnic groups have been a source of inspiration for numerous interpretations and deductions connected to cultural-political trends of each given society and time.

For example, the settling of Slavs in the areas inhabited by Baltic-Finnic groups has been a disputed question. Especially in Russian research, a common assumption has been that active Slavic settlement took place around Lake Ladoga from the eighth century onwards. Later on, however, this has been challenged by suggesting that Slavs settled primarily in town-like regional centers, such as Ladoga and Novgorod, and then gradually gained more influence in the area. This development would then have reached the surrounding areas, and the language people were using. Apparently, the layer of Slavic loanwords in Finnic languages of the area began to form in the eighth century and was thickened along with the increase in connections between diverse groups. When it comes to archeological findings, Slavic influence became more prominent in the Karelian area only during the period between the eleventh and fifteenth centuries.<sup>28</sup>

### *Trade routes and early towns*

Waterways transported not just people, but also goods. Lake Ladoga became a part of the network of Scandinavian trade routes in the eighth century, together with the Baltic Sea, River Neva and River Vuoksa (Vuoksi). In effect, the lake connected Scandinavia with the Black Sea, Byzantium and the Arabic world.

town and Novgorod some thousand years ago. It also had close connections to proto-Veps language. Sarhima 2017, 28–29.

26 Korpela 2019, 51–52; Katajala 2010, 59; Also: Saarikivi 2006, 294–295.

27 See, e. g., Katajala 2005, 48–54.

28 Laakso 2018, 186, 199; Uino 2003a, 314–315; Uino 2003b, 367–369; Saarikivi 2006, 296.

By the beginning of the tenth century, River Volkhov, running from Lake Ilmen to Lake Ladoga, had become an essential part of Austrvegr, the Eastern Route of the Vikings. Archeological findings such as coins reflect the increase in trading activities along the waterway. Oriental coins found in the area of Ladoga have mostly been dated to the tenth century. They are quite rare finds, unlike western coins, which are from the eleventh century. This reflects the directional bias of the trade in the direction of the Baltic Sea. Findings consisting of luxury items are quite scarce compared to other parts of Europe, which reflects the location of the Ladoga area in the peripheral part of the Eastern Route. The lack of Viking burials in the Karelian Isthmus indicates the lack of permanent Scandinavian inhabitation in the area; this region apparently was mostly only passed through.<sup>29</sup>

This was not the case with the shores of River Volkhov, though. Already in the eighth century, a Scandinavian base was founded near the delta on the side of Lake Ladoga. It developed into the most important trade center of Eastern Europe, called Aldeigjuborg in Scandinavian sources and Ladoga in Slavic ones. The Finnic and Slavic populations of the shores of the river gradually merged into Scandinavian inhabitation, settled in the town. The inhabitants of the nearby regions contributed pelts to the trade, and to a lesser extent game and fish. The town of Ladoga flourished until the thirteenth century, when its role as the center of the area was supplanted by Novgorod, for which Ladoga began to serve as an outer port.<sup>30</sup>

Archeological excavations have revealed that a base was also founded on the western shore of Ladoga in the thirteenth century at the latest. This town-like base, called Korela in Slavic sources and Kexholm in Swedish ones, was possibly preceded by a wooden fortress of some kind.<sup>31</sup> Whilst Ladoga primarily served as a trade center and one of the junctions of a long trade route, Korela was probably a sign of power in the landscape and a way to control the area and its traffic. For the same purpose, Viborg was founded by the Swedes in 1293.

Korela emerges in Slavic textual sources in 1295: it is described how Swedes conquered the fort, but Novgorodians soon took it back, “killing everybody”.<sup>32</sup> In 1314, the inhabitants rebelled against the Novgorodian administration with the assistance of Swedes – the incident may well have been caused by a dispute over taxation – but Novgorod answered with harsh measures and the rebellion was quenched.<sup>33</sup> Later on, in the fourteenth century, Ladoga was a well-established regional center, administered by Novgorod.<sup>34</sup>

In 1323 the fortress of Oreshek, or Nöteborg in Swedish, was founded on an island in Lake Ladoga at the head of River Neva. In the same year, the Treaty of Nöteborg was signed there between Sweden and Novgorod. It is

29 Uino 1997, 202–203; Korpela 2004a, 41–42; Laakso 2018, 197–199.

30 Martin 1995, 125; Uino 2003b, 318–319.

31 Uino 1997, 268; Suhonen 2004, 78–79.

32 Novgorodskaya pervaya letopis' 1841, 66.

33 Novgorodskaya pervaya letopis' 1841, 70.

34 Suhonen 2004, 78–79.



*The Käkisalmi castle (Krepost Korela) on the shore of Ladoga. Photo: SA-Kuva 1941, Helsinki, Finland. CC BY 4.0.*

very likely that the treaty was merely about defining the areas in which each realm was entitled to use resources, and it did not have any significance in the everyday life of the inhabitants of the area. Especially in Finnish national historiography, the “border of the Treaty of Nöteborg” has been emphasized as a more or less concrete borderline between “East” and “West”. It was not marked in the landscape, nor controlled, but was defined quite loosely in the treaty by mentioning some places along the frontier.<sup>35</sup>

<sup>35</sup> Katajala 2012, 23–48; Juhola 2011.

*Information provided by early textual sources*

Despite its location near an important trade route, the area of Ladoga remained peripheral and relatively uninteresting for a long time after secular and ecclesiastic power structures began to be established in the east as well as in the west. This is reflected by scarce mentions of the area in medieval textual sources. Western sources mention the area of Karelia only very occasionally, even though the foundation of Viborg both indicated and increased the interest of Swedes towards the southern part of the region. According to the spirit of the time, this interest was expressed in terms of crusading activities and converting pagans, but the control of the Vuoksa and Neva rivers would obviously have benefitted Sweden quite remarkably due to their role as part of a trade route.<sup>36</sup>

The oldest preserved Novgorodian chronicles date to the 1330s. They describe how Novgorodians campaigned against “Chuds” and “Yems” during the twelfth century. Chuds have often been interpreted as Finno-Ugric groups without any more accurate definition, and Yems as Tavastians, a group of Finns living in the southern part of modern-day Finland.<sup>37</sup> However, as mentioned above, equating names of ethnic groups found in medieval sources with those used today is very risky and often without proper scholarly foundation. While it is not impossible that the Novgorodian chronicles were referring to Tavastia or Tavastians here, there is no hard evidence for that assumption in the sources known to us.<sup>38</sup>

The name “Korela” referring to a group of people can be found in Novgorodian chronicles in an entry from the year 1143. It is described how this group, which we very cautiously may call Karelians, went to campaign against Yems in boats.<sup>39</sup> As noted above, Korela was also the name of a fortress town, so it may have referred to its inhabitants, or those living nearby. In 1191, a chronicle entry describes cooperation between Novgorodians and Karelians when they campaigned against Iems, once again in boats.<sup>40</sup> After the 1250s, descriptions of such joint military campaigns decrease in the chronicles. From the beginning of the fourteenth century onwards the designation “Yem” is not used anymore, being replaced by a general nomination describing Western neighbors, “nemets”.<sup>41</sup>

Chronicle sources describing campaigns to or from the Karelian area often mention prisoners. The reason for taking them was probably the flourishing slave trade and its profits; Northern people were trafficked to the south, where there was a constant demand for slaves.<sup>42</sup>

36 Lind 2001, 142–144; Haggrén 2018, 248–249.

37 See, e. g., Saarikivi 2006, 29.

38 See, e. g., Isoaho 2017, 346–356.

39 Novgorodskaya pervaya letopis' 1841, 9.

40 Novgorodskaya pervaya letopis' 1841, 20.

41 Even though the word “nemets”, meaning mute or dumb, refers to a lack of shared language (in contemporary Russian it means a German), it has implications related to religion, and its increasing use in textual sources may reflect the change in categorizing otherness: instead of ethnicity, religion became a more important criterion. Lind 2001, 137–142.

42 Korpela 2019, passim.

Indirectly, birch bark letters found in Novgorod reflect the growing domination of the city in the area of Ladoga. They refer to some kind of taxation raised by Novgorodian authorities in the fourteenth and fifteenth centuries. No information has been preserved of the details of those taxation procedures. Nevertheless, it is quite probable that Swedes in general were more efficient in collecting taxes. Novgorod was, after all, more interested in trade than in effective administration of large areas.<sup>43</sup>

After the conquest of Novgorod by Moscow in 1478, administration and taxation were developed into a more comprehensive system which reached the faraway areas of the realm. Individuals and families were registered as taxpayers. The tax-book of *Vodskaya pyatina*<sup>44</sup> from the years 1499–1500 includes the area of Karelia, called a district (*uezd*), in the form of lists of taxpayers of each village. The tax-book was compiled by two Muscovite officials.<sup>45</sup>

The tax-book of *Vodskaya pyatina* has often been referred to in studies of Karelian inhabitation and economic history. There are, however, some source-critical problems attached to it. For example, the names listed are exclusively Slavic ones, which may either mean that Finnic names have been translated, or that only Slavic inhabitants were actually listed – and taxed.<sup>46</sup>

Used with caution, the tax-book does contribute to the overall image of the inhabitation of the Ladoga area at the turn of the sixteenth century. In a map drawn by J. V. Ronimus in 1906, based on the toponyms mentioned in the source, it can be seen that the most densely inhabited areas in the area of Ladoga were located along the north-western and south-western shores of the lake.<sup>47</sup> From the same shores many archeological finds and discoveries have been made, so we can assume that these areas provided popular dwelling places for centuries.

### *Monasteries of Ladoga*

One indication of the establishment of power structures was the emergence of Orthodox monasteries on the islands of Lake Ladoga. In the light of current knowledge, it appears that the monasteries of Valaam (Valamo) and Konevets (Konevitsa) were both founded at the turn of the fifteenth century, even though especially the foundation of Valaam has been a disputed issue and claims of the foundation having taking place centuries earlier have been made.<sup>48</sup>

43 Korpela 2008, 235–240; Korpela 2019, 45.

44 An administrative and territorial unit.

45 The tax-book "Perepisnaya okladnaya kniga po Novgorodu Voťskoy pyatiny 7008 goda" can be found printed, for example, in the publications *Vremennik Imperatorskago Moskovskago Obshchestva Istorii i Drevnostey Rossiiskikh, kniga 11* (1851) and *Kniga 12* (1852).

46 Korpela 2004b, 208–209.

47 Ronimus 1906, appendix.

48 On the scholarly discussion concerning the foundation, see Parppei 2011, 81–86.





*The early history of the Valaam Monastery is based on scarce textual material. It was allegedly the first Orthodox monastery in Karelia and became a popular tourist attraction during the nineteenth century, and again after the collapse of the Soviet Union. Photo: SA-Kuva 1941, Helsinki, Finland. CC BY 4.0.*

In the fourteenth and fifteenth centuries, numerous wilderness monasteries were founded in the area nowadays known as Russia. The ideological background for this development was provided by a movement called hesychasm, which emphasized ascetic endeavors in remote places.<sup>49</sup> On the other hand, the monasteries contributed to the consolidation of power structures especially in sparsely populated areas, or – as in the case of Karelia – in competed borderlands. Notably, there was no network of parishes in the areas governed by Novgorod, unlike in Sweden, where such networks emerged relatively early.

49 Crummey 1987, 123–125.

The common goals of ecclesiastic and secular powers are reflected in a manuscript called “The story of Valaam Monastery”, found from an archive in Moscow in 1980. The text, dated to the 1550s–1570s, gives detailed information about the foundation and the early phases of the monastery of Valaam.<sup>50</sup> It describes how the monks Efrem and Sergey arrived at the archipelago of Valaam and were violently confronted by local inhabitants, a pagan people of “Chuds”. Efrem moved on to find another monastery, but Sergey stayed and requested help from the archbishop of Novgorod. The archbishop provided him with both financial and military assistance. The soldiers banished the Chuds – even killing some of them – and Sergey proceeded to found a monastery dedicated to the Transfiguration of the Savior in Valaam. According to the text, his work was continued by monk German.<sup>51</sup>

Obviously, “The story of Valaam Monastery” has to be treated with the same source criticism as any early textual source. With its miracle stories, it appears to have been written primarily to consolidate a founder cult of Sergey and German. However, its surprisingly realistic style suggests that the events have been narrated in the form they were known in the sixteenth century. For example, the violent details concerning the foundation have not been smoothed out to fit in the stereotypical medieval narrative style.

For our theme of inhabitation history, we may conclude the following: “The story of Valaam Monastery” suggests that the archipelago was indeed inhabited even before the foundation of the monastery – a claim also confirmed by palaeoecological studies. The Chuds mentioned in the text probably belonged to the Finno-Ugric language group. On the other hand, the text confirms the assumption that Christianization was a slow process, and pre-Christian habits prevailed; for example, the author of the text describes the strong position of soothsayers in the community of Chuds.<sup>52</sup> Moreover, “The story of Valaam Monastery” in a quite straightforward way affirms that the foundation of the monastery had the support of the authorities, even to the extent that the violent banishment of the original inhabitants from the archipelago was seen as a justifiable act.

“The story of Valaam Monastery” also refers to the foundation of the monastery of Konevets. It mentions how Sergey of Valaam had a brotherly relationship with the founder of Konevets monastery, Arseniy.<sup>53</sup> If the island monasteries of Lake Ladoga were founded at around the same time, it is likely that the founders cooperated in one way or another. The idea of Arseniy having resided in Valaam prior to the foundation of a monastery of his own is, however, a nineteenth century interpolation, connected to efforts to create a historical-hagiographical network of Karelian monasteries in the spirit of Russian national-romanticism. However, several early sources refer to founders of the monasteries of Solovki and Svir, Savvatiy and Aleksandr, living in Valaam before moving on to find their monasteries in other parts of Karelia.<sup>54</sup>

50 Okhotina-Lind 1996, 25–79.

51 Skazaniye o Valaamskom monastyre 1996, 164–175.

52 Skazaniye o Valaamskom monastyre 1996, 160–161.

53 Skazaniye o Valaamskom monastyre 1996, 184–185.

54 Skazaniye o Valaamskom monastyre 1996, 176–177; Parpei 2011, 183–198.

It is known that the island monasteries of Ladoga had some influence and authority in the region. For example, in the fifteenth and sixteenth centuries they had land ownings on the shores of the lake. However, they were not especially wealthy spiritual centers compared, for example, to the monastery of Solovki – located on an island of the White Sea – which owned much more land.<sup>55</sup>

Gradually, the relationship between the monasteries and the inhabitants of the area was consolidated. For example, the locals learned to turn to the monasteries for help. Such cases are described in miracle stories, in which people prayed for the holy founders of the monasteries and after receiving divine assistance, “paid back” by making a pilgrimage or working in the monastery for a while. Of course, the texts were produced in the said monasteries, and it is difficult to say how profoundly the Christian doctrines had actually been embraced by the Karelians. It is quite likely that they had been absorbed into a pragmatic and flexible system of beliefs, in which old and new ideas and perceptions existed side by side.<sup>56</sup>

The monasteries of Valaam and Konevets suffered from borderland warfare from the end of the sixteenth century onwards. The Treaty of Teusina in 1595 brought temporary relief, but in 1617, when the Treaty of Stolbovo confirmed Swedish domination over the area, the monasteries were deserted for a century.

### *Changes in domination and population*

When the western part of the area of Ladoga was annexed by Sweden along with the Treaty of Stolbovo, the local administration and taxation were gradually developed according to the rules of the new host. When it comes to the seventeenth century, the most remarkable change in inhabitation was the migration of Orthodox inhabitants to Russia, and consequently the immigration of Lutherans to fill the void. Traditionally, it has been presented that the main reason for the migration of the Orthodox believers was religious persecution. However, the issue appears to have been more complex. The Swedish authorities did not actually force or even pressure the Orthodox subjects to convert to the Lutheran faith but tolerated their existence in the Swedish realm. Nevertheless, in practice there were attempts to steer them towards Lutheranism, for example by not hiring new Orthodox priests when the previous ones deceased, and when this was not enough for gaining the desired results, measures were taken to “Lutheranize” the Orthodox religious practices.<sup>57</sup>

Simultaneously, the attraction of Russia was increasing: the regions emptied by wars were welcoming new inhabitants. The religious and cultural connections of the Orthodox Karelians to Russia, combined with discrimination and heavy taxation by the Swedish administration, lured

55 See, e. g., Chernyakova 1998, 20.

56 Parppei 2014, 346–353.

57 Laasonen 2005, 25–49; Katajala 2005, 33–34.

them to move to the east. Mass migration to Russia was not something the Swedish authorities wanted, however, because the conquered Karelian areas needed their human resources, whether Orthodox or not.<sup>58</sup> On the other hand, these areas were excluded from military recruitment, which attracted western Lutheran inhabitation.<sup>59</sup>

The tense situation culminated during the Russian war of Swedish king Carl X Gustaf in 1656–1668. In Finland, the war has been called the Rupture War, because many Orthodox farmers fought on the Russian side. When it turned out that Russia was losing the war, they escaped to Russia – some of them returning later on.<sup>60</sup> In any case, in the beginning of the eighteenth century the population of the western shores of Lake Ladoga was much more Lutheran than it used to be.<sup>61</sup>

Another permanent reminder of the Swedish domination in the area of Ladoga was – and still is – the town of Sortavala, founded in the 1640s. An order for founding new towns had been given already in 1632, but Sortavala was the only case in which the town was actually founded and continued to develop into an important regional center.<sup>62</sup>

Domination of the area of Ladoga changed once again in the beginning of the eighteenth century along with the Great Northern War. In the Treaty of Nystad in 1721, the provinces of Viborg and Kexholm were annexed by the Russian empire. The development of the area was now dictated by the foundation of a new capital, Saint Petersburg, in 1703. Whereas previously the surroundings of Lake Ladoga had been peripheral in relation to centers of power, they now formed an important buffer and resource zone near the capital. The importance of “mental fortification” of the frontier area was reflected, for example, by the re-foundation of the monastery of Valaam in 1716 by an imperial order.<sup>63</sup>

Moreover, large amounts of land from the Karelian Isthmus and the shores of Lake Ladoga were donated to merited Russian nobles and societies (these areas are referred to as donated lands in the following sections). For example, the newly founded monastery in Saint Petersburg, dedicated to medieval warrior saint Aleksandr Nevskiy, was endowed landed property in Sortavala, Impilahti and Suistamo in 1730. Even though serfdom was not fully applied in these areas, the owner of land largely regulated the life of farmers and peasants, and they were not, for example, allowed to move somewhere else.<sup>64</sup>

Administration was once again arranged anew. In 1744 the government of Viborg was founded, covering the provinces of Viborg, Kexholm and Kyminkartano. At least in principle, Swedish laws were still applied in the

58 Laasonen 2005, 19.

59 Saloheimo 2010, 33.

60 Saloheimo 2010, 104–112; “Rupture” refers to the conflict having taken place between the Lutheran and Orthodox populations.

61 Saloheimo 2010, 35; Katajala 2005, 34–35.

62 Katajala 2005, 31.

63 Parppei 2011, 38–42.

64 Knapas and Paaskoski 2013, 36–42.

area called “Old Finland”. Taxation was also reformed according to Swedish example.<sup>65</sup>

The natural resources of the area of Ladoga were exploited more effectively during the eighteenth century. For example, sawmills were founded in the areas of Viborg and the Karelian isthmus already in the first decades of the century, and during its second half this activity spread to the shores of Lake Ladoga as well, especially in the donated lands. The demand for sawn timber was high in Saint Petersburg, and even though the new hosts were something of a nuisance for the inhabitants, they welcomed the foundation of sawmills, as the supply chain provided them with new means for earning.<sup>66</sup> Furthermore, in 1765, marble resources were discovered in Ruskeala, and the newly founded quarry was soon producing marble for stately buildings in the capital.<sup>67</sup>

During the eighteenth century, Russian scholars also became interested in Karelia. For example, Nikolay Ozeretskovskiy (1750–1872) published a detailed report in 1792, describing his expedition to lakes Ladoga and Onega. In these kinds of expeditions, the main focus was on charting the natural resources of the area and assessing their usability. Ozeretskovskiy also paid attention to the inhabitation of the donated lands, noting, for example, that even though the peasants did have duties to perform for the landowner, he was not able to sell them like ordinary serfs, and that the same held true to Russians moving to these areas from elsewhere.<sup>68</sup>

The Finnish War in 1808–1809 between Russia and Sweden was concluded with the Treaty of Fredrikshamn (Fin. Hamina). Sweden ceded its eastern provinces, that is, the area of Finland, to Russia, which granted it the status of a Grand Duchy. In 1812 that area was joined with Old Finland, annexed by Russia a century earlier, which came to form the province of Viborg of the Grand Duchy of Finland. Once again, new guidelines were applied to the administration, the re-organization of which also introduced new changes and challenges to the inhabitants of the shores of Lake Ladoga.

## *Conclusions*

When examining a time period of some 2000 years, it would be unwise to try to present any detailed assessment of causalities. However, when examining the image which is formed of the inhabitation of the area of Ladoga by different academic fields, we can make the following remarks.

First, in the light of the new research it appears that any processes were gradual and slow. There are no indications of sudden or drastic changes in inhabitation. Based on diverse remains and sources preserved to our time it is also difficult – often indeed impossible – to conclude who were the people living in the area, what languages they spoke, or how they identified

65 Paaskoski 2013, 43–59; Sihvo 1994, 185–210.

66 Pelkonen 2001, 60–62; Paaskoski 2013, 83.

67 Karonen 2013, 266.

68 Ozeretskovskiy 1792, 13–14; Pashkov 2004, 14, *passim*.

themselves. As noted above, the names of diverse groups found in textual sources are unreliable information, and items found in archeological excavations may have been exported from afar. However, it is safe to assume that for a long time the early inhabitation of the area consisted mainly of groups speaking Finno-Ugric languages.

The location of the shores of Lake Ladoga near trade routes and administrative centers in formation undoubtedly affected economic and cultural development in the area. Nevertheless, in the big picture its location was peripheral and the inhabitation sparse, with the exception of certain *pogosts*. Certain natural resources of wilderness areas, such as pelts, did have their value, but otherwise the area of Ladoga was hardly ever of primary or even secondary importance for medieval or early modern authorities or tradesmen. Only the foundation of Saint Petersburg in 1703 changed the situation, making the area a valuable buffer between the new capital and the neighboring realm.

Putting too much emphasis on the assumed difference between east and west may thus not be very appropriate in case of the inhabitation of Karelia and the shores of Lake Ladoga. There were undoubtedly regional differences, but examination of power structures and inhabitation should be made mostly separately until the end of the Middle Ages. The grip of secular or ecclesiastical authorities on the Karelians was probably not particularly firm, especially in the more peripheral areas. It may be assumed that the people were living their everyday life and adapting to circumstances, regardless of which realm considered itself to be dominant in the area.

Likewise, the process of Christianization appears to have been very gradual. This is indicated by archeological finds as well as textual sources. The latter sources also confirm that pre-Christian habits and traditions prevailed side by side with the Christian doctrines in the area of Karelia.

The ongoing scholarly research conducted in diverse fields either confirms or contradicts earlier findings, conclusions and perceptions. Black-and-white assumptions tend to turn into more colorful and diverse perceptions along with the availability of new information, and simultaneously, new questions may arise. It is very probable that this will also occur in the case of the inhabitation history of the area of Ladoga.

## References

- Alenius, Teija 2004: Siitepölyanalyysi maankäytön ja kasvillisuushistorian tutkimusvälineenä. In: *Viipurin läänin historia II. Viipurin linnaläänin synty*. Jukka Korpela (ed.). Gummerus, Jyväskylä, 288–289.
- Alenius, Teija, Grönlund, Elisabeth, Simola, Heikki & Saksa, Aleksandr 2004: Land-use history of Riekkalansaari Island in the northern archipelago of Lake Ladoga, Karelian Republic, Russia. *Vegetation History and Archaeobotany* 13, 23–31.
- Chernyakova, Irina 1998: *Kareliya na perelome epokh. Ocherki sotsial'noy i agrarnoy istorii XVII veka*. Izdatel'stvo Petrozavodskogo gosudarstvennogo universiteta, Petrozavodsk.
- Crummey, Robert O. 1987: *The Formation of Muscovy 1304–1613*. Longman, London.
- Haggrén, Georg 2018: Keskiäika vuoteen 1570. In: *Rajamaa. Etelä-Karjalan historia I*. Jyrki Paaskoski & Anu Talka (eds.). Edita, Helsinki, 238–337.

- Huurre, Matti 2003: Viipurin läänin kivikausi. In: *Viipurin läänin historia I. Karjalan synty*. Matti Saarnisto (ed.). Gummerus, Jyväskylä, 151–244.
- Isoaho, Mari 2017: Yksityiskohdista kokonaisuuteen – Häme Novgorodin kronikoissa. *Historiallinen Aikakauskirja* 3, 346–356.
- Jetsu, Laura 2013: Elämän päätyminen. In: *Juuret Karjalassa. Karjalainen perhe perinteiden ja muutosten äärellä*. Laura Jetsu et al. (eds.). Tammi, Helsinki, 389–467.
- Juhola, Sulevi 2011: Pähkinäsaaren rauhan raja arkeologian ja raja-alueelle jääneen paikannimistön valossa. *Ennen ja nyt. Historian tietosanomat*. July 7. <https://journal.fi/ennenjanyt/article/view/108463/63471> Accessed January 31, 2022.
- Karonen, Petri 2013: Jaetun alueen talouselämä. In: *Viipurin läänin historia IV. Vanhan Suomen aika*. Yrjö Kaukiainen, Risto Marjomaa and Jouko Nurmiainen (eds.). Otava, Helsinki, 68–107.
- Katajala, Kimmo 2012: Drawing Borders or Dividing Lands? The peace treaty of 1323 between Sweden and Novgorod in a European context. *Scandinavian Journal of History* 37, 23–48.
- Katajala, Kimmo 2010: Viipurin Karjala rajamaakuntana. Viipurin läänin historia 1534–1617. In: *Viipurin läänin historia III. Suomenlahdelta Laatokalle*. Kimmo Katajala, Antti Kujala & Anssi Mäkinen (eds.). Bookwell Oy, Porvoo, 11–214.
- Katajala, Kimmo 2005: *Suurvallan rajalla. Ihmisiä Ruotsin ajan Karjalassa*. Finnish Literature Society, Helsinki.
- Knapas, Rainer & Paaskoski, Jyrki 2013: Viipurin ja Käkisalmen provinssit. In: *Viipurin läänin historia IV. Vanhan Suomen aika*. Yrjö Kaukiainen, Risto Marjomaa & Jouko Nurmiainen (eds.). Otava, Helsinki, 12–42.
- Kochkurina, S. I. 2004: *Narody Karelii. Istorija i kul'tura*. Kareliya, Petrozavodsk.
- Korpela, Jukka 2019: *Slaves from the North: Finns and Karelians in the East European Slave Trade, 900–1600*. Brill, Leiden.
- Korpela, Jukka 2008: *The World of Ladoga. Society, Trade, Transformation and State Building in the Eastern Fennoscandian Boreal Forest Zone c. 1000–1555*. Nordische Geschichte, band 7. LIT Verlag, Berlin.
- Korpela, Jukka 2004a: Vuoksen maailma. In: *Viipurin läänin historia II. Viipurin linnaläänin synty*. Jukka Korpela (ed.). Gummerus, Jyväskylä, 48–110.
- Korpela, Jukka 2004b: Vatjan viidenneksen verokirja. In: *Viipurin läänin historia II. Viipurin linnaläänin synty*. Jukka Korpela (ed.). Gummerus, Jyväskylä, 208–209.
- Kosmenko, M. G. & Kochkurina, S. I. 1996: *Arkheologiya Karelii. Karel'skiy nauchnyy tsentr RAN*, Petrozavodsk.
- Laakso, Ville 2018: Raudan ja pronssin aika (400–1300 jKr.). In: *Rajamaa. Etelä-Karjalan historia I*. Jyrki Paaskoski & Anu Talka (eds.). Edita, Helsinki, 166–215.
- Laakso, Ville and Belskiy, Stanislav 2018: *The Kalmistomäki Cemetery of the Kylälahti Pogost in Hiitola, Karelia. Archeological materials from the excavations in 2006–2009*. Painosalama, Turku.
- Laakso, Ville 2014: *Papinniemi in Uukuniemi and Related Archeological Sites of the Eastern Orthodox Cultural Area in Finland*. Jelgava Printing House, Jelgava.
- Laasonen, Pentti 2005: *Novgorodin imu. Miksi ortodoksit muuttivat Venäjälle Käkisalmen läänistä 1600-luvulla?* Finnish Literature Society, Helsinki.
- Lavento, Mika 2018: Pronssin tuintijat (1900 eKr.–400 jKr.). In: *Rajamaa. Etelä-Karjalan historia I*. Jyrki Paaskoski & Anu Talka (eds.). Edita, Helsinki, 120–165.
- Lavrentievskaya letopis' 1846: *Pol'noye sobraniye russkikh letopisey. Tom I, Lavrentievskaya i troitskaya letopisi*. V tipografii Eduarda Pratsa, Sanktpeterburg.
- Lind, John 2004: The politico-religious landscape of medieval Karelia. *Fennia* 182:1, 3–11.
- Lind, John 2001: Consequences of the Baltic Crusades in Target Areas: The Case of Karelia. In: *Crusade and Conversation on the Baltic Frontier 1150–1500*. Alan V. Murray (ed.). Ashgate, Aldershot, 133–150.

- Martin, Janet 1995: *Medieval Russia 980–1584*. Cambridge University Press, Cambridge.
- Materialy po istorii Karelii XII–XVI v.v.* 1941: V. G. Geiman (ed.). Gosudarstvennoye izdatel'stvo karelo-finskoy SSR, Petrozavodsk.
- Novgorodskaya pervaya letopis' 1841: *Pol'noye sobraniye russkikh letopisey. Tom III, IV Novgorodskiya letopisi*. V tipografii Eduarda Pratsa, Sanktpeterburg.
- Okhotina-Lind, Natal'ya 1996: *Skazaniye o Valaamskom monastyre*. Glagol, Sankt Peterburg.
- Ozeretskovskiy, N. Ya. 1792: *Puteshestviye po ozeram Ladozhskomu i Onezhskomu*. Imperatorskoy Akademii Nauk, Sanktpeterburg.
- Paaskoski, Jyrki 2013: Vakiintuvat olot. In: *Viipurin läänin historia IV. Vanhan Suomen aika*. Yrjö Kaukiainen, Risto Marjomaa & Jouko Nurmiainen (eds.). Otava, Helsinki, 43–67.
- Parppei, Kati 2014: ”Ja pian jo paranivat ja lähtivät terveinä koteihinsa” – pyhiinvaellukset ortodoksisen Karjalan luostareihin. In: *Suomalaisten pyhiinvaellukset keskiajalla*. Sari Katajala-Peltomaa, Christian Krötzl & Marjo Meriluoto-Jaakkola (eds.). Finnish Literature Society, Helsinki, 341–353.
- Parppei, Kati 2021: Laatokan alueen historialliset asutusvirrat. In: *Laatokka. Suurjärven kiehtova rantahistoria*. Maria Lähteenmäki (ed.). Finnish Literature Society, Helsinki, 44–68.
- Parppei, Kati 2011: ”The Oldest One in Russia.” *The Formation of the Historiographical Image of Valaam Monastery*. Brill, Leiden.
- Pashkov, Aleksandr M. 2004: The presentation of Old Finland in the descriptions of Russian travellers and observers from the end of 18th to the beginning of the 20th century. *Fennia* 182:1, 13–22.
- Pelkonen, Harri 2001: *Laatokan Karjalan sahaateollisuuden historiaa*. Viipurin Suomalaisen Kirjallisuusseuran Toimitteita 13, Helsinki.
- ”Perepisnaya okladnaya kniga po Novgorodu Vot'skoy pyatiny 7008 goda” 1851: *Vremennik Imperatorskago Moskovskago Obshchestva Istorii i Drevnostey Rossiiskikh, kniga 11*. V universitetskoy tipografii, Moskva.
- ”Perepisnaya okladnaya kniga po Novgorodu Vot'skoy pyatiny 7008 goda” 1852: *Vremennik Imperatorskago Moskovskago Obshchestva Istorii i Drevnostey Rossiiskikh, kniga 12*. V universitetskoi tipografii, Moskva.
- Ronimus, J. V. 1906: *Novgorodin vatjalaisen viidenneksen verokirja v. 1500 ja Karjalan silloinen asutus*. Academic dissertation. Joensuun kirjapaino-osakeyhtiön kirjapaino, Joensuu.
- Saarikivi, Janne 2006: *Substrata Uralica. Studies on Finno-Ugrian Substrate in Northern Russian Dialects*. Academic dissertation. Substrata Uralica: Studies on Finno-Ugrian Substrate in Northern Russian Dialects — University of Helsinki <https://helda.helsinki.fi/handle/10138/19635> Accessed December 12, 2021.
- Saarikivi, Janne 2004: Karjalan nimistötyypeistä. In: *Viipurin läänin historia II. Viipurin linnaläänin synty*. Jukka Korpela (ed.). Gummerus, Jyväskylä, 261–217.
- Sarhimaa, Anneli 2017: *Vaietut ja vaiennetut. Karjalankieliset karjalaiset Suomessa*. Finnish Literature Society, Helsinki.
- Saloheimo, Veijo 2010: *Entisen esivallan alle, uusille asuinsijoille. Ortodoksikarjalaisten ja inkeroisten poismuutto 1500- ja 1600-luvuilla*. Pohjois-Karjalan historiallinen yhdistys, Joensuu.
- Sihvo, Hannes 1994: Vanhasta Suomesta autonomian ajan Karjalaan. In: *Karjalan kansan historia*. Heikki Kirkinen, Pekka Nevalainen & Hannes Sihvo (eds.). WSOY, Helsinki, 175–291.
- Simola, Heikki 2003: Karjalan luonto ja ihminen. In: *Viipurin läänin historia I. Karjalan synty*. Matti Saarnisto (ed.). Gummerus, Jyväskylä, 81–115.
- Skazaniye o Valaamskom monastyre 1996: In: *Skazaniye o Valaamskom monastyre*. Natal'ya Okhotina-Lind (ed.). Glagol, Sankt Peterburg.



- Suhonen, Mervi 2004: Käkisalmen vanha linna. In: *Viipurin läänin historia II. Viipurin linnaläänin synty*. Jukka Korpela (ed.). Gummerus, Jyväskylä, 78–79.
- Taavitsainen, J.-P. 2003: Karjalan muinaislinnat. In: *Viipurin läänin historia I. Karjalan synty*. Matti Saarnisto (ed.). Gummerus, Jyväskylä, 432–435.
- Uino, Pirjo 2003a: Keskirautakausi n. 300–800 jKr. In: *Viipurin läänin historia I. Karjalan synty*. Matti Saarnisto (ed.). Gummerus, Jyväskylä, 281–312.
- Uino, Pirjo 2003b: Viikinkiaika n. 800–1100 jKr. In: *Viipurin läänin historia I. Karjalan synty*. Matti Saarnisto (ed.). Gummerus, Jyväskylä, 313–382.
- Uino, Pirjo 1997: Ancient Karelia. Archeological Studies. Muinais-Karjala. Arkeologisia tutkimuksia. *Suomalaisen muinaismuistoyhdistyksen aikakauskirja* 104, 76–92.
- Vuorela, Irmeli 2002: Luonnon kerrostumat säilövät menneisyyttä. In: *Ennen, muinoin. Miten menneisyyttämme tutkitaan*. Riho Grünthal (ed.). Finnish Literature Society, Helsinki, 76–92.
- Översti, Sanni et al. 2019: Human mitochondrial DNA lineages in Iron Age Fennoscandia suggest incipient admixture and eastern introduction of farming-related maternal ancestry. *Scientific Reports* 9, 16883. <https://www.nature.com/articles/s41598-019-51045-8> Accessed January 13, 2022.

# Industrialization and its Consequences III



PERTTI RANNIKKO

<https://orcid.org/0000-0002-9529-0383>

JARMO KORTELAINEN

<https://orcid.org/0000-0003-0496-6489>

## Industrialization of the Jänisjoki River: Hydro-Social Rhythms of Waterways

Lake Ladoga gets its water from a huge basin with a water area fifteen times larger than the lake itself. Dozens of larger and smaller rivers (Map 1, page 14) feed water into the lake, connecting large areas as catchment basins. The Jänisjoki (Rus. Yanisyoki) river, the object of this study, is one of Ladoga's four transboundary river basins flowing across the Finnish–Russian border. On the one hand, it affords an example of how deep and extensive the Ladoga's geographical influence has been, both socially and materially. On the other, it reveals the significance of dozens of Ladoga's rivers for the lake's coastal history. Furthermore, it presents an interesting case, because the changes to the Finnish-Russian border have shaped it in various ways over history. Before World War II the entire Jänisjoki river basin belonged to Finland, but after the war, the new border bisected the river, with its downstream becoming part of the Soviet Union. The total area of the Jänisjoki catchment area is nearly 4000 km<sup>2</sup>, of which almost half is on the Russian side.<sup>1</sup>

### *Transboundary river*

River basins are not only products of natural forces; they are hydro-social systems. They were originally created by hydrological forces, and later utilized and transformed by human societies. This relationship has been reciprocal, because rivers have also shaped societies in various ways. In the Ladoga basin, rivers connect successive lakes, forming waterways along which people used to travel, inhabiting increasingly remote areas. Later, industrialization in Finland was largely based on the transportation routes provided by watersheds and the hydropower gained from waterfalls and rapids. The Jänisjoki river played an important role in the early stages of Finland's industrialization. The river provided transportation routes, hydroelectric power, and the raw material resources necessary for the growth of manufacturing. Hydropower

1 Filatov et al. 2016, 784; The theme of this chapter is based on the chapter by Pertti Rannikko in *Laatokka. Suurjärven kiehtova rantahistoria* (2021), but the text has been rewritten. See Rannikko 2021.

stations, dams, factories, and settlements were built along the river to enable production. This changed the river environment and ecosystems, but it also created human communities, making them dependent on the river basin's hydrological pulse. Communities in the Ladoga basin industrialized and prospered by changing the rhythm and tempo of the hydrological cycle into an industrial one.<sup>2</sup> We study these changes by focusing on two regions in the river basin: industrial areas in the lower reaches of the Jänisjoki now belonging to Russia; and Lake Loitimo, and the village of Oskola in the upstream area on the Finnish side.

The Jänisjoki river's main channel starts at Lake Loitimo, and it runs about 50 kilometers through Finland and less than 10 kilometers on the Russian side to Lake Jänisjärvi (Rus. Yanisjarvi), finally continuing for another 20 kilometers to Ladoga. Loitimo collects water from the top branches of the catchment area and its numerous small rivers and lakes. Most of the Finnish parts of the river basin are characterized by extremely sparsely populated areas. An example is the village of Oskola, which grew on the Loitimo's labyrinthine banks and surrounding hills. The village received its first permanent settlers along the Jänisjoki river from the shores of Ladoga. As industrialization intensified in the late nineteenth century, Oskola became a village for loggers and raftsmen, and a timber provider for downstream sawmills and paper mills.

The Jänisjoki basin's densest settlements are in downstream locations on the Finnish-Russian border and on the shores of Ladoga. The settlement structure dates to the industrialization period. At the turn of the nineteenth and twentieth centuries, when the entire Jänisjoki river basin belonged to Finland, power plants, sawmills, and paper mills were built in downstream locations in Hämekoski (Hyamekoski), Leppäkoski (Harlu), and Läskelä (Lyaskelya)<sup>3</sup> (Map 3). The municipality of Harlu was established in 1922 to govern the fast-growing mill towns and their surroundings in the river valley and on the northern shores of Ladoga.

Our research focuses on the early stages of industrialization in the nineteenth century to the present day. The data have been collected from a variety of sources as the research process has progressed, and as research questions have become more specific. The research uses literary sources such as local histories, corporate histories, research articles, village descriptions, statistics, archives, and websites, as well as the researchers' own fieldwork materials and interviews in the Jänisjoki basin. The research belongs to the tradition of locality research, which is concerned with how global processes and local peculiarities mix. The study not only scrutinizes local communities as such; it also focuses on the wider networks of relations that affect local life and redefine places.

2 See Jakobsson 2002.

3 Place names were changed from Finnish to Russian in Ladoga Karelia when it was annexed to Soviet Union in 1944. We use the Russian names when we are writing about Soviet and post-Soviet era, and Finnish place names when we are writing about earlier times. The Russian place names were obtained from Google Maps. Google Maps 2022.

Map 3. The Watershed of the Jänisjoki River



Map: Augustine-Moses Gbagir, Jarmo Kortelainen & Pertti Rannikko 2022.

## *Hydro-social actor network*

There is a long history of research on the human-water-relationship in the social sciences, but the term hydro-social has only been widely used since the early 2000s.<sup>4</sup> The concept is part of a broader academic endeavor to overcome the old nature/society dichotomy, in which nature is an object and a passive context for human agency. An increasing number of thinkers has challenged this, stating that the separation between nature and society is an artificial construct. The real world consists of mixes of materials, organisms, symbols, ideas, and countless other elements which cannot be simply sliced into separate categories of nature and society. Social scientific research on water has striven to overcome the divide with the concept of the hydro-social cycle or circulation, meaning that hydraulic environments are socio-physical constructions, and that both their sociopolitical content and biophysical qualities are actively and historically produced.<sup>5</sup>

Our hydro-social approach is inspired by actor-network theory, which states that the world consists of innumerable coalitions of human and non-human elements. Societies not only modify nature; the non-human world's autonomous forces, resources, and limitations are their active components.<sup>6</sup> In actor-network theory agency is understood as a relational property and studied through the concept of general symmetry. Agency arises from the totality of the relations of the parts, and each human and non-human element of the network is equally important to the network's purpose and operation. Network relations give rise to a collective actor, and agency cannot be understood as individual or merely connected to humans. Elements change when they are enrolled in a network, but they simultaneously affect and change the entire network with their properties. General symmetry means that a researcher should not approach society from the perspective of human actors but should be open and ready to study both human and non-human components as potential key actors in the networks.

In the Jänisjoki river basin, for example, the hydro-social network of industrial production has shaped the watershed in various ways, but at the same time the river's geographical characteristics and hydrological forces have decisively influenced the location of production, sites of settlement, changes in ways of life, and the creation of transportation systems. Water has been as indispensable an element of the forest and metal industry's production network as raw material, machinery, or labor. Waterbodies flowed into production as process water, hydropower, and transportation possibilities. In turn, the industries extended their impact to the entire watershed. Industrial networks spread throughout lakes and rivers, collecting lake ore, floating timber, building hydroelectric plants, setting up factories, employing people, and polluting the waters. The industries and watersheds became symbiotic hydro-social networks in which it was impossible to tell where nature ended, and the economy began. For decades, the rhythm of

4 Ross & Chang 2020.

5 Swyngedouw 2009

6 Latour 2005; Blok et al. 2020, 458.

this network was provided by the hydrological pulse based on the seasonal variation of the waterflow and the physical forms of water.

Actor-network theory is less a theory than it is a heuristic perspective and approach that should be modified according to each studied empirical case and topic. Unlike most “dogmatic” versions of general symmetry, we mainly emphasize the human actors and agency in our empirical case. Our approach is closer to what N. Castree has called a “weak version of actor-network theory”, which especially emphasizes human beings as interactive agents with special qualities and the ability to consciously generate, enhance, and maintain actor networks by enrolling other actors in coalitions.<sup>7</sup> However, we wish to take seriously the independent power of the non-human elements of a watershed. Although different, their properties and forces influence humans, forcing them to adapt to and invest in networks to make them produce projected outcomes. Oftentimes the non-human actors do not accept their assigned roles. This can ruin the entire network, destroying human aspirations. The enrollment of human and non-human actors in extensive hydro-social networks is not an easy task. This requires extensive effort and investment, which change the natural environment but also direct human societies in certain ways.

We study the industrialization and deindustrialization of the Jänisjoki area through the changes of the river basin’s hydro-social landscape and rhythm. In principle, the watershed’s hydrological cycle and material form are produced by water in its various forms, solar energy, gravitation, and terrain shapes, and its basic rhythm is the result of its annually recurring seasonal pulse. During the winter the ice-covered water level is low because water is stored in snow in the catchment area. When the spring comes, meltwater suddenly overflows brooks, rivers, and lakes. After the more stable summer period, the fall rain refills the channels and basins. This cycle repeats itself year after year, still providing the basic annual pulse for the hydro-social river basin. However, human influence and especially industrialization with mills, dams, and channeling have modified the biophysical environment and hydrological rhythm in various ways. Below, we describe and analyze material and rhythmic changes in the Jänisjoki’s hydro-social networks by focusing on industrial development, as well as the changing settlement structure and way of life.

### *Arrival of industry*

The historically changing relationship between the human population and the water environment has created various forms of hydro-social networks in the Jänisjoki basin. For centuries, the mouth of the river provided a valuable transportation route to large areas of Karelia and a safe harbor for fishermen and merchants sailing on Ladoga’s open water. The river was also rich in fish and other sources of livelihood, allowing permanent

7 Castree 2002.



settlement to spread further and further along the river toward the north.<sup>8</sup> When agriculture arrived in the region, the riversides provided inhabitants with flat and fertile farmlands. In the seventeenth century, the first steps in hydropower utilization were taken as mills began to be built on the rapids of the Jänisjoki and its tributaries for the needs of local peasants.<sup>9</sup> However, changes in the river and its banks were modest at that time, water streamed relatively freely, and its rhythm was determined by the annual hydrological pulse. The peasants' way of life in traditional communities followed a similar annual rhythm.

The first industrial operations emerged in the Jänisjoki basin in the eighteenth century, and as industrialization intensified in the nineteenth century, it profoundly changed the river's hydro-social networks. Because electrical transfer systems did not exist, industrial production had to utilize hydropower mechanically, meaning mills had to be built on the rivers. Rapids and waterfalls defined the locations of sawmills, paper mills, and ironworks in Finland and other parts of Northern Europe.<sup>10</sup> Due to its rapids, the Jänisjoki's waterbody was one of the sites where industrialization started in Finland. The 20-kilometer river section descending from the lake of Jänisjärvi to Ladoga had a total of 13 rapids. They began to interest businessmen, and the first sawmills were established by Vyborg traders in the late eighteenth century in Läskelä. In 1860 Nils Ludvig Arppe, who was a key figure in the early industrialization of the Jänisjoki basin and Eastern Finland more generally, bought the closed sawmill, with water rights and forest properties.<sup>11</sup>

Arppe had started industrial activities by acquiring several water-powered sawmills in various parts of Eastern Finland. At the same time, he bought forests and gradually acquired tens of thousands of hectares of land. He also bought a sawmill in Värtsilä (Vyartsilya) (Map 3) in 1836 but moved from sawmilling to the iron industry, because logging and sawing operations were then strictly regulated. In the early 1850s he established an ironworks in Värtsilä, where it was possible to combine human labor, local hydropower, and the lake ore collected from the nearby lakebeds as parts of the hydro-social network of iron production. The metal industry was at the forefront of moving toward large-scale industrial production in Finland. Iron manufacture from lake and bog ore reached its peak in the 1870s, after which improved mountain ore availability began to reduce lake ore processing. After the beginning of the twentieth century, the Värtsilä ironworks began to use foreign rocky ore as its raw material. The share of lake ore declined each year and ceased to be used in 1920. However, production continued with the processing of rocky ore, and the number of workers at the Värtsilä plant increased to 1000, and the population of the community to about 2500 inhabitants in the 1920s.<sup>12</sup>

8 Jääskeläinen 1917, 232–233.

9 Juvonen 1996, 297–307; Saloheimo 1976, 215–217.

10 Kortelainen 2002.

11 Ahvenainen 1984, 71–73, 188–191; Hoving 1949, 59–60.

12 Alho 1949, 93–101; Tennes 1955; Lakio 1975, 146–150; STV 1929, 11.

Logging and sawing regulations were waived in the early 1860s, and Arppe started building a large export sawmill in Läskele. Sawn timber could be transported from Läskele along the watercourse formed by the Jänisjoki river, Ladoga, and Neva to the ports of Saint Petersburg and Kronstadt.<sup>13</sup>

Energy and transportation routes provided by the flowing water also played an important role in the next phase of Finland's industrialization, the rise of the pulp and paper industries. In Germany, a method had been developed in the mid-nineteenth century to convert wood into mechanical pulp, the raw material for cardboard and paper. In Finland, the groundwood pulp industry grew rapidly, becoming an important export industry between 1890 and 1913.<sup>14</sup> Three groundwood mills were established downstream of the Jänisjoki river in these years. The first was built by industrialists and investors from Western Finland in Leppäkoski in 1893 (Map 3). The company acquired a port through which the plant's products were transported along Ladoga to Sortavala railway station. The Karelian railroad running from the western bank of Ladoga to Vyborg was completed in the early years of the 1890s.<sup>15</sup>

The second forest industrial plant was established in Hämekoski, north of Leppäkoski. The rapids interested businessmen from Vyborg, who had established a metal workshop there in 1897. However, five years later the workshop was closed and replaced by a new groundwood and cardboard mill.<sup>16</sup> Läskele was the third site for the region's early paper industry. In 1899, a hydropower station was built there, and it was the second Finnish power plant to transfer electricity along a power line. Advances in power transmission technology enabled the company to convert hydropower into electricity and sell it to an iron mine eight kilometers away. This arrangement was temporary, because energy was needed at the Läskele groundwood mill, which was completed in 1903. Paper machines started in 1906, and the products were mainly sold to Russia.<sup>17</sup>

The old water-powered sawmill was dismantled in Läskele, and a steam sawmill was built at a better transportation location at the mouth of the river in 1897.<sup>18</sup> The steam used by the new sawmill was produced by burning sawing waste unfit for sale. With the move to the Ladoga shoreline, the log acquisition area could be extended to the wider Ladoga waterfront area. A sawn timber harbor and community then known as Joensuu or Läskele's Joensuu (Hijdenselga) developed at the mouth of the river.<sup>19</sup>

In the decades after Nils Ludvig Arppe's death in the early 1860s, the industrial landscape of the Jänisjoki basin was profoundly reorganized. Arppe's heirs continued to operate the Värtsilä iron mill and the Läskele sawmill. In 1898, a new company called Värtsilä was established, and a few

13 Hoving 1949, 59–62; Juvonen 1996, 320–325.

14 Alho 1949, 131–140.

15 Vauramo 1984, 184–187.

16 Hoving 1949, 74–77; Vauramo 1984, 212–214.

17 Hoving 1949, 64–67; Myllyntaus 1991, 47.

18 Ahvenainen 1984, 255.

19 Vauramo 1984, 62–68, 192–194

years later, the production facilities in Läskelä and at the mouth of the Jänisjoki passed into the ownership of the new Läskelä company. The Hämekoski and Leppäkoski mills suffered financial difficulties, falling into the ownership of the Läskelä and Wärtsilä companies. Thus, in the 1920s and 1930s, the Hämekoski plants were owned by Wärtsilä, and the other manufacturing plants in the lower reaches of the Jänisjoki were owned by Läskelä. A sulfate pulp mill was built in Leppäkoski in 1927, and the great majority of the pulp went to the Läskelä company's paper production.<sup>20</sup> A regulating dam was completed at the mouth of the upstream river at Jänisjärvi in 1920 to prevent a lack of water, which was a problem for the mills during dry seasons.

### *Industrialized downstream*

The pulp and paper industry were the major polluter of Finland's rivers and lakes in the nineteenth and twentieth centuries, and this was also the case downstream of the Jänisjoki river and on the shores of Ladoga. Initially, all kinds of untreated solid, organic, and chemical waste were released from the mills into the river. According to a study commissioned by a local merchant the downstream part of the Jänisjoki river was already seriously polluted at the beginning of the twentieth century. Increasing production compounded the problem, which local municipalities and fishery associations raised in a petition sent to the National Board of Agriculture in 1937. They reported that salmon, whitefish, and other fish populations had decreased markedly, and eel had completely disappeared from the river because of dams and noxious industrial emissions. Municipalities and fishery associations called on the authorities to force companies to construct wastewater treatment plants and fish passes to revive migratory fish. However, this was unsuccessful.<sup>21</sup>

Hydroelectric production started to affect the rhythm, flow, and landscape of the Jänisjoki river when power plants were built on different parts of the river. Wärtsilä became more interested in hydroelectric power, because the new transmission technology enabled electric power to be transferred from the rapids to more distant locations. For example, Wärtsilä was interested in Hämekoski, particularly because of its hydropower. To satisfy the growing energy need of the Wärtsilä ironworks, the company built power plants upstream of the river in Saarionkoski in 1908 and in Vääräkoski in 1915 (Map 3).<sup>22</sup>

The hydro-social network of metal processing started the industrialization of the Jänisjoki river in the mid-nineteenth century, and forest industry intensified the transformation at the turn of the twentieth century. Flowing water, hydropower, water transportation, production technologies, upstream timber and ore, and human labor and economic capital were combined as networks that changed the area and tightly connected it with the wider world. By the beginning of the 1890s the river and its banks between Jänisjärvi

20 Hoving 1949, 62–87.

21 Laakkonen & Bolotova 2021, 137–140; Järvi 1912, 96–102.

22 Juvonen 2020, 143–144, 295.



*The log flume of the Läskele paper mill. Photo: O. Varsta 1939. Forest Museum of Lusto, Finland. CC BY 4.0.*

and Ladoga were still dominated by the local self-sufficient economies and traditional rural landscapes in an annual seasonal rhythm. With the exception of the Läskele sawmill traces of human activity were mainly evident in riverside agricultural land and watermills. Within a few years, rapid industrialization took place, and the river basin was dramatically transformed. The Läskele sawmill was replaced by a groundwood and paper mill, and entirely new industrial facilities were established in Leppäkoski, Hämekoski, and at the mouth of the Jänisjoki. The river landscape began to be dominated by regulating dams, power plants, and redbrick factory buildings, and the mouth of the river with a sawmill and a harbor with extensive lumberyards. Roads and bridges appeared along the banks of the river.

In addition to the river landscapes, the Jänisjoki river itself was thoroughly industrialized. Due to the construction of the mills and dams, the rapids were destroyed, the waterflow changed, and the downstream water was polluted. Hydroelectric power at several rapids was combined to increase the height of the waterfall in power plants. After the migration routes were cut, salmon and other migratory fish could no longer swim upstream to their spawning areas.<sup>23</sup> The hydro-social network of industrial society was confronted by the traditional networks of actors, because it collided with existing forms and centuries-long traditions of the human-nature relationship. Fish, and

23 Jääskeläinen 1917, 233; Järvi 1912, 96–97.

especially migratory species, were an important part of the traditional hydro-social systems, livelihood, and everyday diet in the Jänisjoki river basin, and industrial constructions and pollution hugely disturbed them. The dams displaced salmon and other migratory fish from the river basin, and the traditional hydro-social network, with migratory fish as its key actors, was destroyed.

As mentioned above, representatives of municipalities and fishery associations in the lower reaches of the river unsuccessfully raised the problems caused by dams and pollution.<sup>24</sup> The pulp and paper industry and hydroelectric power production were key sectors of Finland's exports and industrialization, which the central government sought to support in every possible way during the early decades of the twentieth century. For example, efficient wastewater purification technologies already existed in the early twentieth century, but the legislation, and especially its application, did not force companies to invest in wastewater treatment.<sup>25</sup> Furthermore, legal reforms facilitated the purchase of sections of rapids and the closure of riverways with dams. In the early stages of industrialization, the exploitation of rapids was made difficult by the ownership of waters in Finland and the other Nordic countries, which differs from most other European countries. Here the watercourses were not public property but the common property of the landowners of the villages, whose permission was needed if anyone wanted to exploit the flowing water. During the initial phase of hydropower utilization this caused confusion and disputes, which were frequently resolved by the courts.<sup>26</sup>

### *Mill communities in the river valley*

The arrival of industry also significantly changed the agriculture and farming landscape of the northwestern and northern shores of Ladoga. The use of more efficient machinery and tools increased the arable land area, and the area of natural grassland and grazing land decreased accordingly. In the Jänisjoki river valley employment linked agriculture to the industrial hydro-social networks. Although the region's fertile shale lands provided good conditions for agriculture, the average arable area of the farms was smaller than in the rest of Ladoga Karelia. This is explained by the income opportunities offered by the nearby mills, because many farmers also worked for the industry.<sup>27</sup>

Agriculture and industry were combined not only through workers; industrial companies also engaged in agriculture. As soon as the industrial production started, companies began clearing farmland and erecting buildings on their own farms in Läskelä, Leppäkoski, and Hämekoski. An integral part of the mill communities' economy consisted of the companies'

24 Laakkonen & Bolotova 2021, 140–145.

25 Kortelainen 1999.

26 Löytöjärvi 2013, 32–36; Myllyntaus 1991, 160–173; Kortelainen 1999.

27 Lintunen et al. 1998, 30–38.



*The aerial tramway/téléphérique of the Leppäkoski pulp mill by the Jänisjoki river. The broad clearcutting riverbank is visible in the background. Photo: SA-Kuva 1944, Finland. CC BY 4.0.*

own farms with stables and cowsheds. They produced groceries for the company's canteen and workers' families.<sup>28</sup>

A key element of the industrialization of the Jänisjoki hydro-social network was the emergence of workers' communities around the mills in the river's lower reaches. Local farms were unable to satisfy the growing need for labor, and employees had to be sought from farther away. The companies built large housing barracks and smaller residential houses to attract workers. Sauna and laundry facilities and other services were available for

28 Vauramo 1984, 184–215; Lintunen et al. 1998, 103.

the staff of the mills. As was then typical of such places, the mill communities had a very hierarchical structure: Clerks and management had their own neighborhoods and saunas. The companies were responsible for medical care and many other basic services in their communities, and the company also had its own vocational school in Läskelä.<sup>29</sup>

The downstream Jänisjoki valley became an important agglomeration of forest industry and industrial settlements. The nearby settlements of Läskelä, Leppäkoski, and Hämekoski were distinctive industrial communities and more densely populated than the surrounding agricultural villages. They were also service centers where the residents of the surrounding villages went to visit shops and do business. The regional importance of the mill communities grew with the number of workers. In the early 1920s the Läskelä groundwood and paper mills had about 400 workers, the sawmill at the river's mouth about 450, the Leppäkoski groundwood and paper mills about 500, and the Hämekoski mills about 200.<sup>30</sup> The growing workforces at the mills and the sawmill vitalized the Jänisjoki valley in several ways. The municipality of Harlu was established in this growing industrial region in 1922, including all the communities mentioned above. The newly established municipality had 5300 inhabitants in 1922 and 7200 at the end of the 1930s.<sup>31</sup>

The construction of the industrial hydro-social networks also triggered processes that fundamentally affected the social and political character of localities. The political climate of industrial Harlu differed significantly from typical agrarian municipalities in Ladoga Karelia. It was the only municipality in the region where a clear majority voted regularly for left-wing parties in parliamentary elections.<sup>32</sup> The breakthrough of the political labor movement took place in the river valley of the Jänisjoki, as in other similar industrial communities in Finland, in the early years of the twentieth century. Labor associations were established in Läskelä, Leppäkoski, Läskelä's Joensuu, and Hämekoski, and trade union activity also took hold in the region at that time.<sup>33</sup>

### *Upstream floating and logging villages*

Human agency had already begun to change the flow and natural state of the river in the upper reaches of the Jänisjoki river before the construction of the downstream mills and power plants. As the importance of animal husbandry began to grow, riverside farms needed more grasslands. In the 1850s farmers in the villages surrounding Loitimo, the largest lake in the upper reaches, decided to lower the water from the lake by channeling the Oskolankoski rapids. In the following decade, excavation work was completed, and the water level was lowered by two meters, providing farmers with fertile new grasslands.<sup>34</sup>

29 Vauramo 1984, 13–94.

30 Suomenmaa 1923, 370–371.

31 STV 1924 and 1940.

32 SVT XXIX A, Parliamentary elections 1924, 1930, 1936, and 1939.

33 Soikkanen 1970, 108–109, 488.

34 Juvonen 1996, 212–217.

Oskola and other upstream villages were enrolled in the hydro-social network of iron production in the mid-nineteenth century. When Nils Ludvig Arppe acquired a sizeable property in the 1830s and 1840s in the Jänisjoki catchment area, he also bought four farms in Oskola with a total of about 2000 hectares of forestland. Arppe originally acquired forests for the Värtsilä sawmill, but as iron melting proved more profitable, the timber was used as charcoal in the ironworks.<sup>35</sup> The iron ore was extracted from lakebeds manually, using long-handled nets and rafts. Most lake ore was collected from Loitimo and drawn to Värtsilä by horses along ice roads made on the frozen waterways and mires. Because it was labor-intensive work, the extraction and transportation provided employment for the nearby villagers.<sup>36</sup>

As the use of lake ore ended, the upstream villages were connected to the hydro-social networks of the forest industry. At that time, the catchment basins defined the timber acquisition areas of forestry companies because timber floating was the only feasible method of roundwood transportation. Timber buyers from the downstream mills emerged on the Loitimo banks and the upper reaches of the Jänisjoki river at the turn of the nineteenth and twentieth centuries. Because companies wanted to secure a continuous supply of raw material, they bought entire farms and forestlands from the peasants. The timber floated in Jänisjoki consisted almost entirely of pine and spruce. Heavy logs were used in sawmills and small-dimensioned wood in pulp and paper production. Remote and isolated peasants were typically ignorant about the real value of their property, which made the acquisition of forests easy and cheap for companies. The forest industry's land purchases, especially in Eastern Finland, were so extensive, and the means so questionable, that the state government began to restrict them with new legislation in 1915. Before then peasants sold numerous agricultural and forest farms to companies in the Jänisjoki watershed.<sup>37</sup>

Lumbering started in the vicinity of the best floatways close to the shoreline of Loitimo and along the Jänisjoki river, but smaller rivers were still inaccessible for floating. In the beginning, each timber buyer took care of floating individually, which resulted in costly rivalry over who got their tree first on the main floatways. In 1913, the companies founded the Jänisjärvi Rafting Association. Jänisjärvi was the center of a vast forest-rich watershed, and timber was floated from upstream of the Jänisjoki river and other rivers descending into the lake.<sup>38</sup>

The longest of the rafting association's floatways was the 120-kilometer stretch of the Jänisjoki waterway, whose central lake was Loitimo, to which logs were floated from a catchment basin extending to the areas of several surrounding municipalities. The association began making the waterways more floatable by clearing rapids from rocks and building dams and log flumes, for example. Rafting equipment such as tugs, horse pontoons, and

35 Tennes 1955, 627–628, 653.

36 Laine 1948, 668–669; Juvonen 1996, 327; Sykkö 1991, 5.

37 Keronen 1989, 160–161; Björn 2006, 334; Juvonen 2020, 126–127.

38 Keronen 1989, 159–160; Oksala 1924, 5–11.



boats also had to be acquired. In the winter, snow and ice made it possible to pull logs with horses to the banks of brooks and small rivers. In the spring, they were floated freely to the main floatways with the aid of meltwater. At Loitimo and Jänisjärvi logs were transported as rafts, which in the early years were moved by horses and later by tugs. Oskolankoski, the head of the rapids where water streamed from Loitimo to the lower reaches of the Jänisjoki river, was the most central floating location, where roundwood was towed over the lake. From there logs continued their journey as loose floating to the lake of Jänisjärvi, where they were again collected in rafts and towed to the mouth of the downstream Jänisjoki river, from where they were floated loosely to the downstream mills and sawmills.<sup>39</sup>

The modification of the waterways and timber floating itself damaged the riverbeds and destroyed spawning areas of various fish species along the Jänisjoki river and Ladoga shoreline. Bark and other particles were rubbed from logs, covering the riverbed and disturbing spawning. Tannin and other chemicals were dissolved from wood, which also caused water pollution in upstream areas. Consequently, fish populations declined significantly, and the traditional source of livelihood was hampered.<sup>40</sup>

The rafting association's workforce was sourced mainly from locals working as lumberjacks during the winter and raftsmen during the spring and early summer. The workforce consisted partly of local farmers, but a large share acquired their main income from forestry and floating. The stages of forestry work and wood transportation closely followed the seasonal hydrological rhythm. Logging had to be carried out during the winter to enable timber floating from upstream locations during the spring, when the brooks and small rivers were full of water from melting snow. Once the upstream trees were driven to the main floatways, most of the workers were laid off, and only some full-time raftsmen continued until the fall.<sup>41</sup>

These operations required a large workforce, and remote villages were characterized by a way of life based on the annual forestry hydro-social rhythm, which brought men to the backwoods in the winter, then to the brooks, rivers, and rapids in the spring, and finally back to villages to cultivate their small farms during the summer. Wages and timber sales revenues also meant a big change for local people, bringing the monetary economy to the upstream villages. A cooperative shop was established in the main village of Oskola, followed in 1922 by a cooperative bank.<sup>42</sup> The village's first school was established as early as 1902, and the pupil count varied between 60 and 90 in its early decades. Unlike many other outlying schools, Oskola school immediately received a long-term and active teacher and became the center of the village's intellectual life. The local youth club was also very active, organizing various courses and regularly publishing its own magazine.<sup>43</sup>

39 Oksala 1924, 19–33; Sykkö 1991, 5.

40 Laakkonen & Bolotova 2021, 143.

41 Oksala 1924, 34; Sykkö 1991, 5.

42 Parpola 2003, 34, 67.

43 Peltonen et al. 1977, 338–341, 500–504.

Income from forestry linked the upstream regions of the Jänisjoki river with the global market economy and its cyclical trends. The growing production in downstream pulp and paper mills increased timber demand and the felling of pulpwood in upstream forests. Companies also bought more and more wood from private forest owners. During the depression that broke out in the late 1920s the production of and demand for timber from the downstream mills collapsed. The Läskele company fell into a financial crisis, and its lender bank transferred the company to the ownership of a bigger company, Kymi Oy, in 1935. The depression meant forest work was scarce in the upstream villages, but the economic boom in the mid-1930s brought timber demand to a record high. Logging and floating continued as before the recession but in the name of the new owner. The boom ended in the fall of 1939, when World War II began, profoundly changing the Jänisjoki's hydro-social network.<sup>44</sup>

### *From Soviet to Russian river valley*

After the war the border between Finland and Russia moved, cutting the Jänisjoki river into two different hydro-social constellations. The hydrological cycle of the river basin continued to carry water to Ladoga as before, but the social components of the socio-hydrological networks were thoroughly transformed. During the war, the entire population of Harlu and Ladoga Karelia was evacuated to other parts of Finland. New inhabitants came from different parts of the Soviet Union, often from completely different circumstances and cultures. Industrial facilities were damaged during the war, but the magnitude of the damage varied. The mill buildings in Hämekoski had collapsed almost completely in the bombings, and only the operation of the power plant continued after the war. The mills and power plants in Leppäkoski and Läskele remained, and after expensive repairs the first of their paper machines were brought into operation by the end of 1945.<sup>45</sup>

Both remaining mills became parts of the same industrial group (*kombinat*) in Soviet times, and the paper mill in Lyaskelya (Fin. Läskele) received pulp from Harlu (Leppäkoski). The Lyaskelya mill survived as a relatively small unit, and production increased little from the level of the second half of the 1930s. Machines were repaired but not modernized. Meanwhile, the Harlu factory was modernized and automated in the 1960s. The production of pulp and paper, as well as the number of workers, was significantly higher than during the Finnish period. However, the plant closed in 1988 when the advent of perestroika saw attention being paid to the environmental problems caused by its extensive wastewater discharges. Sulfite pulp mills such as Harlu used to be the most polluting among the pulp and paper industries. The old port and sawmill village at the river's mouth

44 Hoving 1949, 97–99; Keronen 1989, 162–163.

45 Verigin 2020, 293

has been known as Hijdinselga since the war. The sawmill grew larger in Soviet times than it was before the war.<sup>46</sup>

The socio-political system's shift to socialism was more evident in the agricultural landscape of ceded Karelia than in the mill towns. Individual farms were initially combined in cooperative farms, *kolkhozes*, but a few years later they started to be amalgamated with large state farms, *sovkhoses*. In the Pitkyaranta district to which the area of the former Harlu municipality belonged, all *kolkhozes* were abolished in 1956 and merged with local state farms.<sup>47</sup> A *sovkhos* was established in a village called Yanis in the river valley near Lyaskelya. It also had cowsheds, pigsties, and stables in other villages, and there was a total of about 3000 cows and a hundred workhorses.<sup>48</sup>

The scattered settlements typical of the traditional Finnish rural landscape were unsuitable for the Soviet system's centrally regulated large-scale agriculture. Houses built by Finns began to be dismantled and transferred to densely built central villages. Using remoter fields, grasslands, and pastures was difficult, and their maintenance was abandoned. After the collapse of the Soviet Union the *sovkhos* system unraveled, and agriculture collapsed, further accelerating the decline of agricultural villages and the overgrowing of fields. In the present Yanis village, there is an agricultural company which operates on a much smaller scale than in the past. About one hundred cows remain.<sup>49</sup>

The economic shock following the collapse of socialism paralyzed Russian industries. State-owned forestry industry and logging companies became privately owned joint-stock companies. Many of them proved unprofitable and fell into financial crisis. In the 1980s the Lyaskelya and Harlu mills had employed hundreds of people. Harlu had already been closed during the last years of the Soviet Union for environmental reasons, and Lyaskelya was occasionally closed and under a continuous threat of bankruptcy in the 1990s. It was very difficult to find long-term investors for factories whose machinery and buildings were old. As early as the 1970s instead of newsprint Lyaskelya had begun producing wrapping and wallpaper, which were in demand across the Soviet Union.

The frequent shutdowns and continuous payroll difficulties caused livelihood problems and uncertainty for the plant's 500 workers throughout the 1990s. In 1999, new owners bought the mill and invested somewhat in new machinery. However, the modernization of the old mill would have required much more extensive investment, and the mill's operation ended in 2004. The sawmill on the shore of Ladoga in Hijdinselga has been modernized and automatized, and it currently employs between 30 and 40 workers.<sup>50</sup>

46 Nevalainen 2010, 438; Interview November 19, 2019 with Vladimir Smirnov, a former worker of Lyaskelya mill.

47 Laine 2010, 408–415.

48 Interview with Vladimir Smirnov and Marina Saskova. November 19, 2019.

49 Isachenko 2004; Interview with Vladimir Smirnov and Marina Saskova. November 19, 2019.

50 Nevalainen 2010, 438; Kortelainen & Kotilainen 2003, 392; Interview with Vladimir Smirnov. November 19, 2019.

With the privatization of forest companies, the housing and other services they previously produced were privatized, transferred to the public administration, or discontinued. In recent years the population of Harlu, the former municipal center during the Finnish era, has fallen to less than 900. The population of Lyaskelya has also declined, with about 1500 inhabitants in 2015. The population of Hijdenselga is about the same as Lyaskelya's. The main settlement has moved closer to Ladoga's shoreline, the same area from which the settlers started to spread along the Jänisjoki river a few hundred years ago.<sup>51</sup>

The collapse of the Soviet system and socialist economy ruined most of the remnants of the hydro-social system created during industrialization in the former Harlu area. Deindustrialization had positive effects on the water quality in the lower reaches of the Jänisjoki river, because all the polluting mills were closed by the beginning of the twenty-first century. However, some significant reminders of the industrial past remain, the most striking of them the three currently operating hydropower stations downstream of the Jänisjoki river. The St. Petersburg Nord Hydro repaired the Lyaskelya power station and renewed its turbines a few years ago. Renovations have also been carried out at the power plants in Harlu and Hyamekoski.<sup>52</sup> The river's hydrological power remains undiminished, producing energy for Russian society.

### *Changing meanings of the waterscape*

The changing character and composition of hydro-social networks have frequently transformed the productive role, landscape, and social significance of the Jänisjoki river since the 1890s. The river and its landscape industrialized and shaped the settlement of the riverside, giving rise to distinct localities. The mills established downstream of the river were powered by the rapids, and the river provided a floating route for the transportation of raw material. The products of sawmills and factories were transported via Ladoga to the world market. The transportation of sawn timber from the river mouth in Läskeleä was done by barges towed across Ladoga and through the Neva to the export harbor of Saint Petersburg. Paper products were usually exported along Ladoga to the Karelian railroad.<sup>53</sup>

Ladoga was not the optimal transportation route because storms and winter ice limited operations, and maintaining the fleet brought costs to businesses. After the birth of Soviet Russia and Finland's independence (1917), control of the border tightened on Ladoga. This hampered shipping, although the Tartu Peace Treaty of 1920 had agreed the transit of Finnish

51 The population data are obtained from the official website of the local administrations of Lyaskelya and Harlu. The former Harlu Municipality area is divided today into two local government areas, Harlu and Lyaskelya, which belong to the Pitkyaranta district.

52 Isomäki 2014.

53 Vauramo 1984, 187, 200; Kuujo 1987, 74.

ships on the Neva between Ladoga and the Gulf of Finland.<sup>54</sup> The sawmill at the mouth of the Jänisjoki river tenaciously tried to continue shipping through the Neva, but it was necessary to cease it before the end of the 1920s.<sup>55</sup> Municipalities and industrial companies on the northern side of Ladoga were active in demanding a railway connection, and in 1925 Läskeleä was finally connected to the national rail network, and Hämekoski and Harlu a couple of years earlier.<sup>56</sup> After this Ladoga lost its hydro-social role as a transportation route for the products of the Jänisjoki valley's forest industry.

The Jänisjoki river maintained its central position in roundwood transportation until the Finnish-Soviet Winter War in 1939–1940, but thereafter a new border cut off the floating route, and the transportation of timber to downstream mills ended completely. The transportation of wood shifted gradually to road and rail transportation on both sides of the border. On the Finnish side, the last log raft was floated across Loitimo in 1953, lifted onto trucks, and driven to a sawmill in Finland. Floating ceased completely in the Jänisjoki watershed in the early 1960s, and the rafting association was obliged to remove its floating constructions and restore the floating channels.<sup>57</sup>

The collapse of the Jänisjoki river's importance as a transportation route made its role as an electricity producer more significant on both sides of the border. Finland lost one third of its hydropower in the post-war territorial changes, including power plants in Hämekoski, Leppäkoski, and Läskeleänkoski. On the Finnish side Saario and Vääräkoski, built by the Wärtsilä company in the early twentieth century, continued their electricity production. Wärtsilä exploited the electricity generated by these two plants and built a novel smelter and settlement in New Wärtsilä on the Finnish side to replace the plant and community left on the Soviet side. However, the energy from the two small power plants was insufficient for the smelter, and the company built new power plants on two of Jänisjoki river's rapids, Vihtakoski and Ruskeakoski, in the 1950s. The small and old-fashioned ironworks in New Wärtsilä soon became a burden for a growing company investing mostly in the shipyards and engineering industry. The New Wärtsilä ironworks was closed in 1968, and a few years later Wärtsilä sold the four power plants to a regional energy company *Pohjois-Karjalan Sähkö* (North Karelian Electricity). The long-term dependence on the hydroelectric power of the Jänisjoki river bound Wärtsilä to the region even decades after the corporation had internationalized and focused on other sectors and regions.<sup>58</sup>

The iron smelter was also closed in Vyartsilya on the Russian side, but the factory is still operational, producing steel wire, wire nails, and steel-wire cloth. The "Vyartsilya Metal Products Plant" was amalgamated with the large Russian mining and steel corporation Mechel in 2002, and in 2021, the plant employed 400 people in Vyartsilya.<sup>59</sup>

54 Kuujo 1987, 56–60.

55 Ahvenainen 1984, 338.

56 Vauramo 1984, 228.

57 Keronen 1989, 166–167; Vihervuori 1985, 23–24.

58 Juvonen 2020, 575–580.

59 Vyartsilya Metal Products Plant 2021.

The settlement structure and localities changed dramatically on both sides of the border during the decades following World War II. This was not primarily caused by the changing roles of waterways but by broader transformations of social structures. On the Soviet side of the Jänisjoki river the social system changed, and the decentralized Finnish rural settlement was unsuitable for centrally led large-scale agriculture. On the Finnish side, the end of log raft floating caused deep problems in the Loitimo area. The region did not therefore experience the growth typical of the forest-work-intensive areas of Eastern Finland in the 1950s. The population began to decline immediately after the war, collapsing in the 1960s in a drastic restructuring of agriculture and forestry. The development was strongly influenced by the mechanization of forestry work, which took place very quickly throughout the country. With forestry work no longer available, the foundation of the combination of forestry work and small farming broke down.<sup>60</sup> Around 600 people lived in the area of the village of Oskola in the early twentieth century, 500 in 1950, and fewer than 50 in 2020. Fields have been reforested, roadsides have become overgrown, and open landscapes have disappeared along the Jänisjoki on both sides of the border.<sup>61</sup>

The former municipal centres of Kiihtelysvaara and Tuupovaara are the biggest villages in the Finnish part of the river basin (Map 3). Also, their population is shrinking, and both have almost 500 inhabitants.<sup>62</sup> As the permanent population has declined, the increasing number of people evident along the Jänisjoki river are summer residents, recreational fishermen, or hikers living in other places. The numerous tributaries of the Jänisjoki watershed are especially suitable for river and lake canoeing. On the Finnish side, the forests once owned by the Läskelä company have passed through numerous corporate mergers into the ownership of UPM, a globally operating Finnish forestry corporation. The company is currently selling its land on the Loitimo shorelines as summer house plots. On the Russian side the Jänisjoki delta area belongs to Ladoga Skerries National Park, established in 2017. The Jänisjoki river basin is no longer a workplace or source of income but is more a leisure landscape, source of recreation, and a potential site of nature tourism. On the riverbanks, especially in the upper reaches, there are many peaceful places where people can experience the touch of the wilderness.

Rural researchers have described the transformation of the countryside in recent decades as a shift from productivism to post-productivism.<sup>63</sup> Although these concepts are well equipped to describe the functional change of human society in the region of the Jänisjoki, they say little about the river itself, the rhythm of which is still influenced by industrialization. Hydropower plant and dam permits are very long-lived, almost permanent, as are their critical impacts on river and lake nature. The construction of power plants in the 1950s in the upper reaches of the Jänisjoki river further intensified the river's

60 Oksa & Rannikko 1988, 223–228.

61 Population registers of Kiihtelysvaara, 1890, 1910, 1950, 1955, and 1960.

62 Statistics Finland 2023.

63 Rannikko & Salmi 2018.

industrial rhythm. A waterbody with a natural rhythm has the most water after snowmelts in the spring and during the fall rains. Power plants have an interest in controlling the river to ensure there is as much water as possible during the winter, when the demand and price of electricity are highest. Winter releases reduce the amount of water in the shallow Loitimo, and water levels can be significantly lower than the natural levels, especially in dry summers. The Finnish environmental authorities classify the ecological condition of the Jänisjoki river as a heavily modified waterbody.<sup>64</sup>

The residents of the Jänisjoki river basin have long highlighted diminishing fish stocks and other harmful effects of water rationing, but it was not until the 1980s that the authorities began to pay more serious attention to the problems of river and lake nature. The Water and Environmental Administration's surveys revealed that some of the rationing measures had been taken without the required permits. Control of compliance with environmental permits and monitoring of water quality have been tightened in the Jänisjoki river in recent decades. Obligations concerning the power company's fish plantings have also increased.<sup>65</sup>

### *Rise and remnants of industrial networks*

We have examined how part of the Ladoga catchment area, the Jänisjoki river waterbody, and society are intertwined, producing transforming hydro-social realities. As we have shown, there have been numerous human and non-human actors and actor-networks along the river and its watershed which have been instrumental in the development of the Ladoga region. The interaction between Ladoga and its rivers is an important part of the area's coastal history.

Jänisjoki river's hydro-social industrial networks expanded rapidly with the advent of industrialization. With the new activities and actors, the importance of the waterbody changed and diversified. The iron magnate Nils Ludvig Arppe was able to establish ironworks in Värtsilä and enroll the power of the rapids, lake ore, and waterway transportation as parts of the iron production networks. At the turn of the nineteenth and twentieth centuries the hydropower of the powerful rapids in the lower reaches of the Jänisjoki river, in addition to the floating route afforded by the flowing water, began to attract Finnish businessmen. Products could be transported along Ladoga to the world market. After Finland's independence the Russian market closed, and the products were sold to Western Europe, whence the technology of mills and power plants also originated.

In addition to production facilities, the companies also constructed housing and basic services to enroll and maintain the workforce. The actor networks thus formed around the factories grew into workers' communities to take care of the mills' workforce. The rhythm and way of life was defined by continuous industrial production and the mill whistle. This differed sharply

64 Vihervuori 1985; Sutela et al. 2009.

65 Vihervuori 1985; Sutela et al. 2009.

from the surrounding agrarian communities, where the work and livelihood depended on the seasonal cycle of the natural environment.

In the upstream villages life changed, because they were connected to the hydro-social networks of downstream forest industry companies. Unlike mill workers' communities, life and work in forestry villages were determined by the hydrological cycle and its seasonal rhythm. Logging was carried out in the winter, floating in the spring, and small-scale farming during the summer. Downstream companies established the rafting association to manage the joint floating, and it became a major player in the Jänisjoki river which transformed the previously sporadic company-based floating to a single hydro-social network. As the need for wood increased, the logging and floating network expanded to the tributaries and brooks flowing into the main river. The Jänisjoki river's hydro-social forest industry network was at its largest at the outbreak of World War II.

After the war, the new border cut the Jänisjoki river into two hydro-social entities. The direction of waterflow had for centuries directed the upstream villages towards Ladoga, and forestry-based industrialization intensified the connection. The new border cut off the floating route and accelerated the transfer of timber transportation to the roads, which dismantled the hydro-social forest industry network in the upstream villages. The paper mills in the Jänisjoki valley were detached from the upstream forests and connected with Soviet forestry and wood transportation networks elsewhere. Production continued and even increased until the 1980s, but with the collapse of socialism, the operation of the mills came to an end.

When the Jänisjoki river ceased to function as a transportation route, its role as an electricity producer became more important on both sides of the border. As the transmission technology developed, it became possible to transfer electric power over increasingly long distances. New power plants were also built on the rapids in the Finnish part of the river. Seven power plants currently operate in the Jänisjoki, three on the Russian side and four on the Finnish side. Originally established to power local industrial production, the power plants have been connected to more extensive networks of companies specializing in power generation without a direct connection with local industrial production. The power plants have not employed local people since their construction. Novel hydro-social networks have emerged in Jänisjoki river with the arrival of new actors like canoeists, sports fishermen, and summer cottagers in the riverscape. Recreational opportunities and environmental values have become an important aspect, attracting people to the Jänisjoki river and its banks.

Flowing water was the first source of power for Finnish industry, and electrification meant the exploitation of hydroelectric power. In the country's more southerly rivers like the Jänisjoki small-scale and low-power plants were built. Today the position of hydroelectric power in Finland's electricity generation is no longer dominant. In the late 1960s, nearly 70 % of Finland's electricity was still generated by hydropower; in the 2000s, the share has varied between 12 % and 25 %, depending on the annual water situation. There are 220 hydroelectric power plants in Finland today. Nine have capacities of more than 100 megawatts, and most of them were built in Northern Finland



after World War II. The total capacity of the Jänisjoki river's four power plants on the Finnish side is only 8 megawatts, and of the three plants on the Russian side 10 megawatts.<sup>66</sup> However, the relatively small power plants in the Finnish part of Jänisjoki river are significant electricity producers for the regional power company owned by the local municipalities. Hydropower is also justified today by its role as a renewable, clean, and carbon-free mode of energy production. Hydropower's importance is also emphasized in Russian Karelia, and several power stations have been renovated, and a few new ones built.<sup>67</sup> The river will therefore probably maintain its industrial rhythm for decades to come, despite the harmful effects on the ecological integrity of the river and lake.

## References

### *Archival sources*

National Archive of Finland, Joensuu  
Population registers of Kiihtelysvaara 1890, 1910, 1950, 1955, and 1960

### *Interviews*

Saskova, Marina (born 1963), amateur local historian, interviewed in Lyaskelya.  
November 19, 2019.  
Smirnov, Vladimir (born 1951), lathe operator (retired), interviewed in Lyaskelya.  
November 19, 2019.

### *Published sources*

STV (*Statistical Yearbook of Finland*) 1924, 1929, and 1940. Statistical Office of Finland, Helsinki.  
SVT (*Official Statistics of Finland*) XXXIX A: Parliamentary elections 1924, 1930, 1936, and 1939. Statistical Office of Finland, Helsinki.

### *Literature*

Ahvenainen, Jorma 1984: *Suomen sahteollisuuden historia*. WSOY, Helsinki.  
Alho, K.O. 1949: *Suomen uudenaikaisen teollisuuden synty ja kehitys 1860–1914*. Bank of Finland, Institute for Economic Research, Series B:11, Helsinki.  
Björn, Ismo 2006: *Tuupovaaran historia*. Tuupovaaran ja Ilomantsin historiatoimikunta, Joensuu & Ilomantsi.  
Blok, Anders, Fariás, Ignacio & Roberts, Celia (eds.) 2020: *The Routledge Companion to Actor-Network Theory*. Routledge, London & New York.  
Castree, N. 2002: False antitheses? Marxism, nature and actor networks. *Antipode* 34:1, 111–146.

66 Väisänen & Ahopelto 2016, 37–45; Energy Authority 2021; Isomäki 2014.

67 Isomäki 2014.

- Filatov, N.N., Litvinenko, A. V. & Bogdanov, M. S. 2016: Water Resources of the Northern Economic Region of Russia: The State and Use. *Water Resources* 43:5, 502–514.
- Hoving, Victor 1949: *Kymin osakeyhtiö 1872–1947 II*. Kymin Osakeyhtiö, Kuusankoski.
- Isachenko, Gregory A. 2004: The landscape of the Karelian Isthmus and its imagery since 1944. *Fennia – International Journal of Geography* 182:1, 47–59.
- Jakobsson, Eva 2002: Industrialization of Rivers: A Water System Approach to Hydropower Development. *Knowledge, Technology & Policy* 14:4, 41–56.
- Juvonen, Jaana 1996: *Vanhan Tohmajärven historia*. Tohmajärven kunta, Tohmajärvi.
- Juvonen, Jaana 2020: *Tohmajärven ja Värtsilän historia 1868–2018*. Tohmajärven kunta, Tohmajärvi.
- Järvi, T.H. 1912: Kaksi tehtaista aiheutunutta kalastolle vaurioita aiheuttanutta veden likaantumistapausta. *Suomen Kalatalous* 1, 96–111.
- Jääskeläinen, Viljo 1917: Pohjois-Laatokan kaloista ja kalastuksesta. *Suomen Kalatalous* 4, 231–302.
- Keronen, Eino 1989: Savotan pyörteissä. In: *Etesmutkaisia matkoja Kiihtelysvaaran menneisyyteen*. Sisko Noponen & Toivo Turunen (eds.). Kiihtelysvaara-Seura, Kiihtelysvaara, 155–189.
- Kortelainen, Jarmo 1999: The river as an actor-network: the Finnish forest industry utilization of lake and river systems. *Geoforum* 30:3, 235–247.
- Kortelainen, Jarmo 2002: Forest industry on the map of Finland. *Fennia – International Journal of Geography* 180:1–2, 227–235.
- Kortelainen, Jarmo & Kotilainen, Juha 2003: Ownership Changes and Transformation of the Russian Pulp and Paper Industry. *Eurasian Geography and Economics* 44:5, 384–402.
- Kuujo, Erkki 1987: *Laivat Laatokalla*. Karjalan Kirjapaino Oy, Lappeenranta.
- Laakkonen, Simo & Bolotova, Alla 2021: Ristiaallokossa: Laatokan pilaantumisen ja suojelun ympäristöhistoria. In: *Laatokka. Suurjärven kiehtova ympäristöhistoria*. Maria Lähteenmäki (ed.). Finnish Literature Society, Helsinki, 131–161.
- Laine, Antti 2010: Neuvostovalan alkuvaiheet 1950-luvun ensivuosiin asti. In: *Karjala itärajan varjossa. Viipurin läänin historia VI*. Yrjö Kaukiainen & Jouko Nurmiainen (eds.). Karjalaisen Kulttuurin Edistämisseätiö, Joensuu, 390–416.
- Laine, Evert 1948: *Suomen vuoroitimi 1809–1884. II Ruukit*. Finnish Historical Society, Helsinki.
- Lakio, Matti 1975: *Teollisuuden kehittyminen Itä-Suomessa*. Itä-Suomen Instituutti, Mikkeli.
- Latour, Bruno 2005: *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford University Press, Oxford.
- Lintunen, Petri, Hytönen, Mervi, Ikonen, Kirsi & Kivimäki, Sari 1998: *Laatokan pohjoisrannikon kulttuuriympäristö*. Finnish Environment Institute, Helsinki.
- Löytöjärvi, Marja-Liisa 2013: Vesivoima omaisuutena ja virtavesi elinympäristönä. *Ympäristöjuridiikka* 1, 2013, 30–60.
- Myllyntaus, Timo 1991: *Electrifying Finland: The Transfer of a New Technology into a Late Industrialising Economy*. Macmillan, London.
- Nevalainen, Pekka 2010: Suojasäästä pysähtyneisyyden aikaan. In: *Karjala itärajan varjossa. Viipurin läänin historia VI*. Yrjö Kaukiainen & Jouko Nurmiainen (eds.). Karjalaisen Kulttuurin Edistämisseätiö, Joensuu, 417–461.
- Oksa, Jukka & Rannikko, Pertti 1988: The Social Consequences of the Differentiation of Agriculture and Forestry: A Case Study of Two Villages in Finnish Forest Periphery. *Acta Sociologica* 31:3, 217–229.
- Oksala, Arvi 1924: *Jänisjärven lauttausyhdistys 1913–1923*. Sortavalan Kirjapainon Osakeyhtiö, Sortavala.
- Parpola, Antti 2003: *Turvallisesti vaarojen keskellä. Kiihtelysvaaran Osuuspankki 1903–2003*. Oy Spiritus Historiae Ab, Helsinki.

- Peltonen, Mauri et al. (eds.) 1977: *Kiihtelysvaara ennen ja nyt*. Kiihtelysvaaran kunta and Kiihtelysvaaran seurakunta, Kiihtelysvaara.
- Rannikko, Pertti 2021: Laatokan rannoilta Jänisjoen latvoille. In: *Laatokka. Suurjärven kiehtova rantahistoria*. Maria Lähteenmäki (ed.). Finnish Literature Society, Helsinki, 97–128.
- Rannikko, Pertti & Salmi, Pekka 2018: Towards Neo-Productivism? – Finnish Paths in the Use of Forest and Sea. *Sociologia Ruralis* 58:3, 625–643.
- Ross, Alexander & Chang, Heejun 2020: Socio-hydrology with hydrosocial theory: two sides of same coin? *Hydrological Sciences Journal* 65:9, 1443–1457.
- Saloheimo, Veijo 1976: *Pohjois-Karjalan historia II. 1617–1721*. Karjalaisen Kulttuurin Edistämissäätiö, Joensuu.
- Soikkanen, Hannu 1970: *Luovutetun Karjalan työväenliikkeen historia*. Tammi, Helsinki.
- Suomenmaa 1923: *Maantieteellis-taloudellinen ja historiallinen tietokirja. Viides osa: Viipurin lääni*. Tietosanakirja-Osakeyhtiö, Helsinki.
- Sutela, Tapio, Marttunen, Mika, Aaltonen, Juha, Dubrovin, Tanja, Parjanne, Antti, Riihimäki, Juha, Linjama, Teppo & Kärkkäinen, Janne 2009: *Jänisjoen vesistön säännöstelyn kehittäminen – yhteenvedo ja suositukset*. Reports of the North Karelia Regional Environment Centre 6, Joensuu.
- Swyngedouw, E. 2009: The political economy and political ecology of the hydro-social cycle. *Journal of Contemporary Water Research & Education* 142:1, 56–60.
- Sykkö, Uuno 1991: *Kun kylä elää*. Self-published, Joensuu.
- Tennes, Marjatta 1955: Ruukinpatruuna Nils Ludvig Arppe teollisuuslaitostensa maaomaisuutta kartuttamassa. In: *Historiallinen Arkisto 55*. Finnish Historical Society, Helsinki, 604–676.
- Vauramo, Eino (ed.) 1984: *Harlu. Laatokan-Karjalan nuorin siirtopitäjä*. Harlun pitäjäseura, Pieksämäki.
- Verigin, Sergei 2020: Sortavalan uudet asukkaat. In: *Sortavala. Muutosten ja muistojen kaupunki*. Tapio Hämynen & Hannu Itkonen (eds.). Finnish Literature Society, Helsinki, 282–297.
- Vihervuori, Aune 1985: *Jänisjoen vesistön kala- ja rapukannoille aiheutuneet vahingot ja niiden kompensointi*. Finnish Game and Fisheries Research Institute, Helsinki.
- Väisänen, Sari & Ahopelto, Lauri (eds.) 2016: *Vesivarojen arvo Suomessa*. Reports of the Finnish Environment Institute 23, Helsinki.

## Internet Sources

- Energy Authority, Power Plant Register. <https://energiavirasto.fi> Accessed November 27, 2021.
- Google Maps. <https://www.google.fi/maps/@61.9559914,31.2296995,10.17z?hl=en> Accessed January 13, 2022.
- Isomäki, Eija 2014: Venäjän Karjalan pienet vesivoimalaitokset ja padot. <https://www.fincold.org/post/ven%C3%A4j%C3%A4n-karjalan-pienet-vesivoimalaitokset-ja-padot> Accessed November 23, 2021.
- Official website of the local administration of Harlu (in Russian). <http://www.harluadm.edusite.ru> Accessed December 14, 2019.
- Official website of the local administration of Lyaskelya (in Russian). [www.lyaskela.ru](http://www.lyaskela.ru) Accessed October 26, 2019.
- Statistics Finland 2023. Statistics Finland`s statistical databases. [https://pxdata.stat.fi/PxWeb/pxweb/fi/StatFin/StatFin\\_\\_vaerak/statfin\\_vaerak\\_pxt\\_13vu.px/](https://pxdata.stat.fi/PxWeb/pxweb/fi/StatFin/StatFin__vaerak/statfin_vaerak_pxt_13vu.px/) Accessed April 20, 2023.
- Vyartsilya Metal Products Plant 2021. <https://www.mechel.com/sector/steel/vyartsilskiy-metiznyy-zavod/> Accessed December 2, 2021.

# Industrialization and De-industrialization in Pitkäranta

According to Richard Tilly, “From the late eighteenth until well into the second half of the twentieth century, European economic growth has been closely associated with the process of structural change we call industrialization. Europe was the first continent where the industrialization took off and for a long time, it remained a European monopoly.”<sup>1</sup>

What is industrialization? First, it is necessary to distinguish between industry and industrialization. Industry consists of companies, enterprises, or organizations, which manufacture large quantities of standardized goods or services. Industrialization, on the other hand, is a social, economic, and technological process, which applies useful knowledge to reorganize production with inanimate sources of energy. Industrialization generates fundamental structural changes in society. New institutions and organizations are created and new division of labor shapes social classes. Factories are constructed and they offer salaried jobs for blue- and white-collar workers. Industrialization enhances professionalization and social mobility. It increases the output of inexpensive standardized goods and improves productivity.<sup>2</sup>

## *Industrialization as an unpredictable process*

How to study such a complex phenomenon? The traditional sociological approach to industrialization is framed by the theory of social differentiation and the theory of uneven development. According to Emil Durkheim, industrialization is a process that advances steadily toward powerful machines, greater concentration of forces and capital, and consequently to the extreme division of labor.<sup>3</sup> Karl Marx and Max Weber emphasized the non-linear nature of industrialization. Industrial developments increase the need of specialized and skilled labor, but because of technological

1 Tilly 2010, 3–6.

2 Grübler 1994, 43; This chapter has been edited from the chapter in *Laatokka. Suurjärven kiehtova rantahistoria* (2021). See Michelsen 2021.

3 Hammond 1983, 90–91.

developments, it can also reduce the need of human labor and replace a skilled workforce with advanced machinery. For Marx, industrialization is an uneven and contradictory process. Uneven developments are not random but shaped by economic and social norms. For Max Weber, the uneven developments of industrialization reflect the uneven developments of modern societies.<sup>4</sup>

Historians have coined the concept of “industrial revolution”, which describes the uneven and non-linear process of industrialization. Although the term “revolution” usually refers to a sudden and even violent event, industrial revolutions are slow and long term social, economic, and political processes. They begin when major disruptions in production technologies and methods change industrial processes. The first revolution took place during the latter part of the 18<sup>th</sup> century when steam engines were invented and applied to factories and mines. The second revolution followed the first about a hundred years later, when radical innovations in communication, energy and material productions disrupted industrial processes. The third revolution occurred another hundred years later. Information technology, intelligent machines and processes changed both the structure and function of industrial manufacturing. Currently, the fourth industrial revolution is disrupting industrial processes.

As mentioned above, industrialization is an uneven and unpredictable process. It is difficult, if not impossible, to determine when and where the next industrial revolution takes place. Also, it is difficult to determine, what are the social, economic, and political consequences that industrial revolutions generate. Recent research tries to avoid both technological and social determinism and study industrial revolutions in broad and complex social context.<sup>5</sup>

Because of its complexity, historians have had difficulties in integrating industrialization in the mainstream historical narrative. Industrialization is recognized as an important factor that shapes societies, but what are the short and long term effects of industrialization? Historians pay attention to the beginning of industrialization, but once the process is established, it usually disappears from the historical narrative. As Giorgio Riello and Patrik K. O’Brian have concluded, industrial revolutions have attracted historians’ attention, but industrialization as a long historical process is left in the “black box”. It shapes society, but what is the role of industrialization in the social developments?<sup>6</sup>

Because of this, we know very little about industrialization and what its role in the social developments might be. Most of the studies focus on macro-economic effects of industrialization and especially how national economies and nation building processes have been shaped by industrialization. However, industrialization is seldom, if ever, a national process. As Sidney Pollard has demonstrated, depending on multiple factors, industrialization can become a local phenomenon or spread out to cover wider regions.

4 Walton 1987, 96.

5 Hobsbawm 1968, 1.

6 Riello and O’Brian 2004, 1; Also Gilman 2018, 133–134.

However, even the most industrialized nations are never fully industrialized; rather, industry concentrates on specific types of areas, where factories are supplied by raw-materials, energy resources, labor, logistics and industrial services. In order to become an industrial society, these industrial clusters need to be integrated in the nation-wide network.<sup>7</sup>

This process takes a long time. According to Pollard, during the first and second industrial revolutions, most industrialized clusters or “the islands of modernity”, were enclaves and separated from each other by agricultural regions.<sup>8</sup> They were favorable places for factories, because they were close to the raw-material and energy sources and logistically near customers and markets. The process of industrialization changed the landscape and environment, and altered local social, political, economic and cultural structures. Industrializations improved economic and social conditions, increased the standards of living, and provided new opportunities for residents.

However, the industrialization is not a linear process. Industrialization can begin and advance rapidly, but then slow down and even terminate. Sometime the process restarts, and the industry reappears, but in a different form. Hence, industry is a phenomenon that moves from place to place, establishes itself in favorable locations, but leaves when environmental, political, social, or economic circumstances turn against it.<sup>9</sup>

In order to understand better the process of industrialization and how it evolves over time, it is necessary to focus on industrialization at the local level. What are the forces that shape industry and how does the process interact with the surrounding society? As Wolfgang Littek<sup>10</sup> and Jon Stobart<sup>11</sup> emphasize, industrialization is a non-linear process, and because of this it needs to be studied historically, but also utilizing multidisciplinary methods.

This chapter is located methodologically between history, sociology, and geography. Industrial geography is a branch of geography that deals with the location of industries and the geographic factors that influence the location and development of industries. According to Anders Malmberg, industrial geography studies how the industry shapes local societies and social structures.<sup>12</sup> Olav Sorenson emphasizes a holistic approach when studying the industrialization process and how it depends on time and space.<sup>13</sup>

Transnational history is a new approach that expands historical analysis beyond national borders. According to Pierre-Yves Saunier<sup>14</sup>, transnational history draws attention to phenomena that flow across national borders. Such phenomena could be, for example, free movements of labor, capital, knowledge, and technology, but also industry. As Akira Iriye<sup>15</sup> points out, transnational history does not ignore nation states but considers them as

7 Pollard 1982, 326–360.

8 Pollard 1982, 330–335.

9 de Vries 1994, 249–251.

10 Littek 2015.

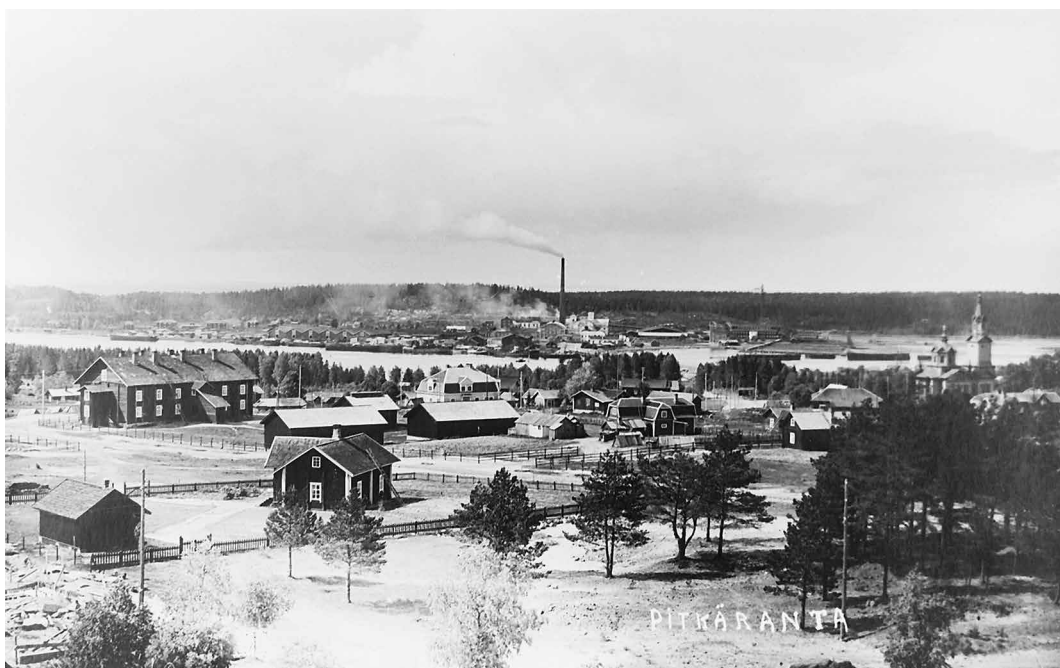
11 Stobart 1996, 685–686.

12 Malmberg 1994, 532–535.

13 Sorenson 2003, 513–527.

14 Saunier 2013, 1–21.

15 Iriye 2004, 215.



*The Pitkäranta industrial community on the shore of Lake Ladoga in the 1930s. Photo: The Finnish Heritage Agency, Helsinki, Finland. CC BY 4.0.*

active or passive actors in historical processes. Therefore, transnational history is a study of movements, forces, ideas and phenomena that flow across national boundaries and nation states can either engage these flows or reject them.

Coastal history, on the other hand, investigates a wide range of subjects and phenomena that take place on the interface between water and land. This adds an important approach to this chapter. When entrepreneurs search for favorable locations for factories, they usually look at river valleys, shores of big lakes or other waterways. An outlet to a major lake or sea provides a major competitive edge for industrial enterprise. Waterways are natural parts of supply chains and necessary infrastructure for transportation of goods to the markets. Isaac Land emphasizes the waterfront as the intersection between maritime and urban space. It is, therefore, a perfect meeting place for producers and customers and a place where commercial transactions take place.<sup>16</sup>

The focus of this chapter is on one village, which has witnessed both the first and the second industrial revolutions. It is located on the shore of the large lake and close to the raw-material and energy sources. It is also strategically located close to the Russian markets and logistically connected to the European markets. Hence, the location is ideal for industrialization. However, as the narrative demonstrates, the process of industrialization is not linear, but shaped by multitude of internal and external forces.

<sup>16</sup> Land 2007, 731–743.

### *Pitkäranta, an industrial community*

Where to find an ideal place for industry? There are different sets of requirements for different industries, but in general, the long historical record brings out a clear pattern. Industries that are depended on natural raw materials tend to locate factories close to the raw materials and energy, labor supply, and water. If we place these requirements in the historical map of Finland, the pattern leads us to the northern shore of Lake Ladoga. There we find a small community named Pitkäranta. Before World War II, it was located about 70 kilometers east from the town of Sortavala and about 100 kilometers away from the Finnish-Russian border. Pitkäranta was only 200 kilometers away, as the crow flies, from St. Petersburg. From the north side, the village is surrounded by the endless Karelian forests, which stretch hundreds of kilometers northbound until they reach the White Sea. Pitkäranta is at the crossroads of several rivers that bring fresh water to the Lake Ladoga. West from the town lies the Vuoksi river, which is the main source of hydro power and a natural waterway to Lake Saimaa and the Finnish lake district. The most important factor, however, is Lake Ladoga. It is a natural waterway for industrial goods to the Russian markets and a supply chain for raw materials and spare parts from Europe. Lake Ladoga is also an eternal source of fresh water for industrial processes.

Typically, the northern shoreline of Lake Ladoga is rough and rocky terraces block access to the shoreline. Long and narrow fjords penetrate through the terrace and provide river-like passages deep into the inland. Fjords have given safe harbors for local residents and fishermen. However, when we move eastbound, the shoreline changes. There are no more rocky terraces, but the landscape is dominated by low meadows and swamps. This is where we find Pitkäranta. Russian academician Nikolai Ozeretskovskii described the scenery at Pitkäranta in 1785 as follows: “In the village of Pitkäranta, the bay of the lake is wide and long and spreads wide behind the village. The Russian name of the village is Dolgi Bereg, which means a long beach. The rocky coastal terrace that surrounds the Lake Ladoga from the town of Käkisalmi until Pitkäranta ends here.”<sup>17</sup>

As mentioned above, from the north, Pitkäranta is surrounded by the Karelian forests, which cover thousands of square kilometers along the border of Finland and Russia. Several large rivers (Läskelä, Uuksu, Tulema and Änä) bring fresh water to the Lake Ladoga and they provide natural logging routes for forest industries and hydro power resources for mines and factories. The real treasure is, however, hidden inside the bedrock underneath of Pitkäranta community. Several precious mineral deposits were discovered in the late 18<sup>th</sup> century and since then systematic explorations have revealed rich veins of copper, iron, tin, silver, and other minerals.<sup>18</sup>

It is, therefore, no surprise to find the first industrial activities taking place in Pitkäranta already during the latter part of the 18<sup>th</sup> century. Since then, the location has attracted entrepreneurs, venture capitalists, private and

<sup>17</sup> See Heninen 1983.

<sup>18</sup> Palmunen 1939, 18–20.



state-owned companies, who have invested in the commercial capabilities of Pitkäranta. Although the village benefits from the ideal natural resources, it is located in the contested territory between Russia and Finland. During the past two hundred years, Pitkäranta has belonged to the Russian Empire, to the autonomous Grand Duchy of Finland, to the independent Finland, to the Soviet Union and currently to the Russian Federation.

This chapter is based on several secondary and semi-primary sources that illuminate the industrial history of Pitkäranta. Its sources cover the detailed histories of Pitkäranta's mining and iron and copper industry, but they also document the evolution of the industrial community since the late 18<sup>th</sup> century up to the Second World War. This chapter is divided in three parts, which follow the evolutionary and non-linear industrialization process at Pitkäranta.

### *First industrial wave*

How did industry come to the northern shore of Lake Ladoga? The sources confirm that the main cause for the first industrial activities were the pieces of prestigious minerals that were discovered at Pitkäranta during the latter part of the 17<sup>th</sup> century. Local peasants, while working in the fields, came across red shimmering “rubies”, which they took to the nearby Valamo Greek Orthodox monastery. The monks realized the esthetic value of the stones and used them to decorate sacred objects in the churches. Later the stones were sent to St. Petersburg, where they decorated icons and religious objects in royal palaces and cathedrals. A century later, Pitkäranta became a target of several geological surveys, which discovered rich deposits of copper and iron ore.

Early attempts to excavate the minerals in the late 18<sup>th</sup> century failed, but the interests towards the natural resources did not go away. When Finland was annexed to the Russian empire in 1809 and the autonomous Grand Duchy of Finland was established, new political situation drove Finland in the acute economic crises. This was partially caused by the disconnection to Sweden, who had supplied Finland with iron and copper and several other strategic materials. Now, this supply chain ended, and autonomous Finland had to find new sources of minerals. There were a couple of small mines at the southwestern part of Finland, but they could not satisfy the domestic demand of iron and copper.

Finnish Senate, who was the highest governmental body in autonomous Finland, organized scientific expeditions to search for potential iron and copper deposits. One of these expeditions, led by geologist and mining engineer Anton Furman, headed to Karelia and to the northern part of Lake Ladoga. In 1810, Anton Furman arrived at Pitkäranta, where he inspected abandoned deposits and collected samples. The results from the survey demonstrated that Pitkäranta deposits had high concentration of iron and copper ore, but Furman was pessimistic about the possibilities of industrial-scale mining. Pitkäranta iron and copper ore veins were fragmented and

spread along the shore of Lake Ladoga. In order to get a full picture of the deposits, more detailed survey and investigation was needed.<sup>19</sup>

Although the Pitkäranta community was small and remote, it was located at the shore of Lake Ladoga and relatively close to the mouth of River Neva and St. Petersburg. This was one of the factors that persuaded Finnish Senate to finance new expedition to Pitkäranta. This time the task was given to Carl Lundström, an experienced mining engineer and geologist. Lundström spent considerable time at Pitkäranta and investigated carefully both old and new mineral veins. He confirmed Furman's findings, but added several new promising deposits, where he found high concentration of copper, iron and tin ore. However, Lundström shared doubts about the profitability of industrial size mining. Pitkäranta lacked modern infrastructure and the community could not support large-scale mining operation with skilled workforce. Hence, without a considerable financial support from the Finnish Senate and from the private investors, the industrial size mining operation at Pitkäranta was not possible.<sup>20</sup>

By now, the news from the potential natural resources had reached St. Petersburg, where three venture capitalists, Mikhail Osvintsov, Yevdokim Branov and Andrei Anisimov, jointly decided to obtain rights to the Pitkäranta mineral deposits in 1814. The first experimental excavations brought promising results and the ore veins were as rich with iron, copper, and tin ore as Lundström had predicted. However, the industrial scale of mining was still far away. Industrial mining required sophisticated technologies, skilled workers, managers, and investors who could sustain the flow of operational capital for number of years ahead. According to Carl Lundström, the Pitkäranta discoveries were promising, but there were too many risks and uncertainties, which needed to be sorted out before the investment decisions were made.<sup>21</sup>

Although the first group of venture capitalists withdrew from the Pitkäranta project, rich mineral resources on the northern shore of Lake Ladoga did not lose its appeal. Pjotr Worobjeff and his partner Alexander Derjabin from St. Petersburg launched the next mining project at Pitkäranta in early 1820s. They followed the same guidelines as the previous effort but turned the attention from iron to copper ore. However, the project met with the same difficulties. Excavating, smelting, and refining copper ore was too expensive and after two years, the project was terminated. Another project that took place farther up in the north, where the British innovator Lionel Lukin had launched a mining operation, met with the same result. Lukin was supported by the Finnish Senate, but again the cost structure of the project proved to be too heavy. As Derjabin and Worobjeff, also Lukin run out of money and his effort was terminated.<sup>22</sup>

After three unsuccessful efforts, the mining of copper and iron ore at Pitkäranta went to a standstill for a decade. Pitkäranta community went back

19 Laine 1950, 5.

20 Laine 1950, 6–7.

21 Thürstedt 1914.

22 Roms 2004, 31–32.

to agriculture and fishing and only excavated holes on the ground remained from the unsuccessful mining efforts. Yet, the Finnish Senate was determined to find ways to bring industrial scale mining at Pitkäranta. The task was handed over to the chief intendant of the Finnish ministry of mining, Dr. Nils Nordenskiöld. He organized another expedition to Pitkäranta and simultaneously tried to find entrepreneurs and venture capitalists, who were willing to engage in the project. In 1830, a Russian entrepreneur Vsevolod Omejanoff agreed to bring enough resources to the project. His pledge was coupled with the promise from the Finnish Senate to allocate privileges and other financial benefits to the project.<sup>23</sup>

Nordenskiöld and Omejanoff activated old mining shafts, purchased new excavation machinery, and built a copper smeltery on the bank of the Koirinjoki river. It was furnished by two calcining furnaces for smelting of copper ore and one for the tin ore. After the ore passed through the smelting process, it was refined in the soaking tanks and transported by sledges or carriages to Pitkäranta harbor and across the Lake Ladoga to the mouth of River Neva and finally to St. Petersburg. All machines were operated by mechanical energy that was produced by the water wheels in the Koirinjoki river.<sup>24</sup>

Investments in the mining technology, smeltery and logistics turned the Pitkäranta mining project profitable. More capital was harvested from St. Petersburg and in 1857 the company was renamed Pitkäranta Company. Between 1852–1856, the company excavated and refined more than 14000 tons of copper ore. This was more than twice as much as the other mines in Finland produced collectively. As the financial situation improved, more capital was invested in the production process. Refinery was upgraded and by the end of the 1850s it was able to produce almost 550 tons of pure copper annually.<sup>25</sup>

Pitkäranta Company operated successfully for more than a decade. However, the fortune turned against the company in the beginning of the 1860s. First, the fire destroyed the Mitrofan smeltery and refinery in 1866 and enforced the company to shut down the production of copper and tin. Although, the factory was rebuilt, the construction work was delayed by a series of unexpected difficulties. Omejanoff turned to the Finnish Senate for financial aid, but the timing was off. Finland was hit by unfavorable weather and as a result, a massive famine travelled through the country killing almost 10 % of the population. The Senate was unable to rescue the Pitkäranta Company and the industrialization process at Pitkäranta came to end.<sup>26</sup>

The first wave of industrialization at Pitkäranta lasted almost a half a century. It was characterized by several short and unsuccessful industrial efforts. Most of the efforts failed, because entrepreneurs had neither experience nor capital resources to operate successful mining industry. The

23 Thürstedt 1914.

24 Palmunen 1939, 26–27.

25 Puustinen 2013, 120–122.

26 Puustinen 2013, 121.

final phase of the process, the Pitkäranta Company, succeeded in building and operating Pitkäranta mines successfully, because the company invested in large-scale production that utilized economies of scale and new division of labor. During the five decades, the industrialization process left the mark in Pitkäranta community and environment. More than 30 mines shafts were excavated, and several factories and industrial facilities were built at Pitkäranta. The community was exposed to transnational flows of capital, technology, and labor, which transformed the remote and traditional agrarian community into industrial village.<sup>27</sup>

The first wave of industrialization failed to sustain industrialization process at Pitkäranta, although the location of community was ideal, and the mineral deposits provided rich source of raw materials for mining industry. However, these positive elements could not compensate the lack of knowledge, capital and organization that was needed to establish profitable industrial mining at Pitkäranta. As a result, Pitkäranta experience both industrialization and de-industrialization processes during the first part of the 19<sup>th</sup> century.<sup>28</sup>

### *Second wave of industrialization*

Second wave of industrialization arrived at Pitkäranta in early 1880s. The wave was a part of the wider economic and political reform that swept through the Grand Duchy of Finland during the latter part of the 19<sup>th</sup> century. Tsar Alexander II initiated the transformation when he announced in 1856 the reform policy, which allowed Finland to develop market economy, issue own currency, and establish commercial banks and limited liability companies. These reforms opened doors to the second industrial revolution, which originated in the United States, spread across the Atlantic Ocean, landed at the western parts of Europe, and travelled north to Scandinavia and Finland.

According to Alfred Chandler, the second industrial revolution was characterized by large-scale industrial enterprises, rapid growth in production capacity, new transportation infrastructure and radical technological innovations, which delivered electric power and communications beyond local and regional boundaries. What separated the second industrial revolution from the first was the scale of industrial centers and the horizontal and vertical integration of factories, power stations, railroads, harbors, residential areas for workers and services. Industrialization process altered the landscape and created artificial environment for the mass production of industrial goods.<sup>29</sup>

After the bankruptcy of Pitkäranta Company, the community of Pitkäranta fell back into a quite rustic existence. It took more than a decade before mining engineer A. J. Shirjajeff arrived at Pitkäranta to investigate the mines and upgrade local geological maps. His report encouraged venture

27 Mononen 2020.

28 Palmunen 1939, 19.

29 Chandler 1977.

capitalists at St. Petersburg to make another effort to launch a full-scale industrialization process at Pitkäranta. The project needed capital and after a series of complex transactions, the shares of Pitkäranta Company finally landed in the hands of the investment bank Mayer & Co. At the price of 28 000 silver rubles Mayer & Co. gained ownership to the mineral deposits, industrial facilities, and privileges at Pitkäranta. Tsar Alexander III confirmed the purchase in 1886.<sup>30</sup>

The principal owner and the CEO of Mayer & Co was the commercial advisor Edvard Mayer, who had come to St. Petersburg from England. The other two partners were Lieutenant Carl Oskar Winberg from Kronstadt and Henrik Theodor Schwartz from Riga, where his father had served as the American consul. For the Pitkäranta project, Mayer & Co. hired mining engineer Hjalmar Furuhjelm as a chief technical advisor.<sup>31</sup>

Hjalmar Furuhjelm arrived at Pitkäranta in 1878. He surveyed the geological data, investigated the mines and shafts, and inspected facilities, which had been empty more than a decade. After this, he organized a tour to Germany and England, where he studied mining technologies and learned how to manage industrial size mining project. From England, he travelled to Falun, Sweden, where he contacted Gustaf Gröndahl, a young mining engineer, who worked at the Falun copper mine. Furuhjelm persuaded Gröndahl to become the technical director at Pitkäranta mines. In addition, he recruited more than 50 skilled miners to work at Pitkäranta.<sup>32</sup>

Back home, Furuhjelm put together a long and detailed report in which he carefully explained the history of the mines, the current status of deposits, and how the mines and facilities could be rebuilt and restructured to serve large-scale mining operation. He did not support intensive mining, but recommended a systematic method, which promised modest, but long-term gains. Latest surveys demonstrated that the bedrock near Pitkäranta had rich sources of copper, iron and tin and the veins continued further out to the inland. Other studies had revealed promising deposits in the near-by parishes. In order to fully enjoy the natural resources, the mining concept at Pitkäranta had to be updated. Previous owners had searched for quick returns and focused only on the highest concentration of ore. This method resulted a network of fragmented and poorly built mine shafts, which were separated from each other. Furuhjelm proposed a new architecture to the mine, where service tunnels integrated mine shafts into comprehensive structure that led to the surface and to the refining facilities. Rough separation of ore from the stone was done by machines in the tunnels and the semi-refined ore was lifted to the surface and transported via overhead conveyers and hangers to the smelteries and refineries.<sup>33</sup>

Mayer & Co. launched the industrialization project at Pitkäranta in 1879. Underground tunnels were reorganized and furnished with new mining machinery that came from Germany and Sweden. Powerful pumps kept the

30 Palmunen 1939, 22.

31 Laine 1955, 18–20.

32 Laine 1950, 20.

33 Laine 1950, 21–22.

groundwater out of the tunnels and allowed miners to drill deeper into the bedrock. Old smelteries and refineries were renovated and equipped with calcining furnaces and washrooms. The most expensive investment was the extraction factory that was built close to the Pitkäranta harbor. Copper ore arrived at the factory crushed and filtered. It was first enriched to reach 10 % concentration and then passed through the smelting ovens. From there the ore travelled through the chemical plant, where silver, copper and iron were separated from the waste. During the summer and autumn, a fleet of special cargo ships took the ore across the lake to the mouth of River Neva and farther down to the steel and metallurgical factories of St. Petersburg. During the winter months, the ore was loaded into sledges and pulled by horses around the lake.<sup>34</sup>

Hjalmar Furuholm died unexpectedly in 1886 and his position was given to Gustaf Gröndahl. He hired geological advisor Otto Trüstedt, who was born in Paris and received his mining education in Stockholm and Freiburg. Trüstedt's practical training took place in Falun. He came to Pitkäranta with a new piece of technology that revolutionized excavation process at Pitkäranta. Diamond drills were developed in the United States, where they were used successfully in large-scale mining operations. Diamond drills allowed miners go deeper in the bedrock and discover new promising mineral veins. As a result, the production of copper and tin almost doubled and after ten years of operations, Mayer & Co. had increased the production of iron ore by 79 % and copper ore by 59 %. In addition, the company broke records in manufacturing of tin and silver.<sup>35</sup>

Hjalmar Furuholm, Gustaf Gröndahl and Otto Trüstedt reshaped the Pitkäranta mining community. Old wooden village was demolished and replaced by modern buildings and dwellings. Pitkäranta attracted skilled and un-skilled workers from the near-by villages, but also farther away from Sweden, Russia, and Denmark. By the turn of the 20<sup>th</sup> century, Pitkäranta had already more than 1000 residents. It was still a small industrial town, but socially and culturally a unique place in autonomous Finland. As Oskar Relander, the rector of Sortavala seminar, described:

“Children attend the Finnish elementary school, both German, Finnish and Swedish children. There are as many as 90 pupils in the school. Just outside the mining and factory area, there are living quarters for workers and engineers. The older dwellings are two store wooden buildings. More recently small individual wooden buildings are built for the workers. They are pleasant looking with a yard and small garden. Wages for workers are relatively good and a miner can earn 3 to 4 marks per day. Wages were paid first in Russian currency, but today the Finnish currency is used. In addition to the factory school, there are facilities for hobbies and cultural needs. The factory has its own sickness fund and the health care center. Workers can use the reading room, where several newspapers are available every day. Company organizes free time activities, for example lottery and other entertainment. In the summer, there are public festivals with popular competitions. The entire population at Pitkäranta mine and factory has increased

34 Palmunen 1939, 30–31.

35 Stigzelius 1987, 1–2; Palmunen 1939, 21–22.

from a handful of workers to 1,000 professional miners. Therefore, we can say it is a small society.”<sup>36</sup>

Mayer & Co. had strong confidence in the future of Pitkäranta mines. Timing was favorable and the markets for metallurgical goods grew rapidly as both Finland and Russia modernized societies. Second industrial revolution opened markets for industrial goods and St. Petersburg, alone, was large enough market for Pitkäranta iron, copper, and tin products. However, free trade, liberal financial policy and the first wave of globalization pushed the price of raw materials and semi-manufacturing goods down. Mayer & Co struggled to maintain market shares as lowering revenues and profits put pressure on future of Pitkäranta mines. Company went through a series of re-organizations and finally consolidated with Alexandrovsky Steel Foundry. It was one of the largest industrial establishments in St. Petersburg. Company had specialized on manufacturing of railroad tracks, but during the latter part of the 19<sup>th</sup> century, the focus moved on military articles, such as armored plates, cannons, and ammunition. The fusion with Pitkäranta mines gave the company a full control over the supply chain that brought valuable raw materials and semi-manufactured goods from close distance to the iron and steel factories located along River Neva.<sup>37</sup>

Fusion with Alexandrovsky Steel Foundry changed the future of Pitkäranta mines. New owner was no longer only a venture capitalist who looked for highest possible profits, but instead of large industrial complex that operated several horizontally and vertically integrated industrial units. This influenced both the structure and function of Pitkäranta mines. Product portfolio was streamlined as side-products were cut off. Pitkäranta community was connected via high tension transmission line to Tulemajoki hydro power station. Copper factory was enlarged to host two big blast furnaces for the production of iron ore. Supply chain from Pitkäranta to St. Petersburg was restructured and the ore and semi-manufactured goods were loaded into barges and pulled across Lake Ladoga by two steam-powered tugboats.

Although Alexandrovsky Steel Foundry had a firm position in Russian markets, the company was unable to control external political and economic circumstances. The dramatic change took place in 1904, when Japan attacked Port Arthur and Russia engaged in the war in the Far East. Long distance, poor preparation and mismanagement led to the catastrophe that escalated into the domestic political chaos. Although the autocratic regime struggled to stay in power, the war demolished the Russian economy. Economic growth came to standstill and the depression slowed down domestic and export markets.

Alexandrovsky Steel Foundry was not prepared for sudden disruptions in the markets. Company had invested heavily not only in Pitkäranta mines and factories, but also to the production capacity in St. Petersburg. Military contracts and large-scale infrastructure projects had fueled the growth, but

36 Relander 1893, 37–40.

37 Laine 1955, 36.

now the war was over, and the company faced serious problems. High interest rates increased financial responsibilities and by 1904, the Alexandrovsky Steel Foundry was taken over by the State Bank of Russia. New owner tried to sell the company to the British United Mining and Finance Corporation, but without success. Next effort was made in 1910 when the State Bank of Russia organized an auction, but no potential buyer came forward and the Alexandrovsky Steel Foundry remained in the hands of the State Bank of Russia.<sup>38</sup>

The war between Japan and Russia ended the second wave of industrialization process at Pitkäranta. During the last three decades of the 19<sup>th</sup> century, the small industrial community went through several fundamental changes. Transnational flows brought technology, labor, management, and capital across the borders to Pitkäranta. Aggressive investments in mining and mineral production changed the landscape and turned Pitkäranta a modern industrial town. The community had modern social, economic, and cultural services and the cosmopolitan mix of skilled workers and managers gave the town distinctive cultural outlook.

There is little doubt that the second industrialization process would have continued at Pitkäranta if the war had not disrupted the Russian markets and reduced the Alexandrovsky Steel Foundry to a desperate state. Although Pitkäranta had nothing to do with the external political crises, it could not resist the negative effects that were caused by the political crises. This resulted from the horizontal and vertical structures of large industrial companies. Integrated industrial units connected supply chains to the complex network, which was vulnerable to external and internal disruptions. Hence, when Alexandrovsky Steel Foundry experienced economic problems, the signal went through the supply chain and halted industrial activities at Pitkäranta. As Anna Strom and Tatiana Kasperski have pointed out, small industrial towns which are dominated by one single company are especially vulnerable to disruptive changes.<sup>39</sup>

### *Third wave of industrialization*

Cristopher Diesen and his two Norwegian partners, Nils A. Strang and Erling Lung, founded Temola Ab company in Vyborg in 1910. Temola leased Juustila sawmill near the mouth of Saimaa canal, but the operation had a short life, because fire destroyed the mill, and the production was terminated. However, insurance covered economic losses and Temola went on to search for new business opportunities at Pitkäranta. The company purchased two sawmills and bailed out Pitkäranta mines and factories from the State Bank of Russia. Next year Temola, (now renamed as Diesen Wood Co.), moved farther eastbound and purchased two more sawmills and an iron work near Tulemajoki. By 1916 Diesen Wood & Co. governed several

38 Laine 1950, 37–38.

39 Strom and Kasperski 2017, 37–38.





*The Diesén Wood Pulp Mill in Pitkäranta in the 1930s. Photo: The Finnish Heritage Agency, Helsinki, Finland. CC BY 4.0.*

sawmills, Pitkäranta mine and factories, and more than 32 000 hectares of forests.<sup>40</sup>

Diesén Wood & Co. introduced a new business plan to Pitkäranta. Instead of concentrating only on the mineral resources, the company put the focus on the vast forest resources, which stretched from the northern shore of Lake Ladoga to the White Sea. There was also a network of rivers, which created a natural logistic route through the forests to the shore of Lake Ladoga. The main market was Russia, where the consumption of timber products was growing especially at the St. Petersburg metropolitan area.

However, Pitkäranta was located at the contested border region between Russia and Finland. As long as Finland belonged as an autonomous Grand Duchy to the Russian Empire, the border was practically non-existent and transparent. However, the First World War broke out in 1914 and Russia engaged in the war against Germany and Austria-Hungary. As mentioned above, the era of free trade had already ended and in 1916, the economic situation in Russia was unstable and volatile. Finland had stayed out of the military actions, but Finland was under martial law and occupied by the Russian army. For Finnish companies, the outbreak of war opened new markets and opportunities to make quick profits, but also major risks.<sup>41</sup>

Although, Diesén Wood & Co. realized the growing geopolitical and geoeconomic risks, the company had confidence that the war would end

40 Pelkonen 2001, 73–74.

41 Hjerpe 1988.

soon, and the Russian Empire would restart the modernization process. These hopes faded away in 1917 when the Russian army suffered fatal blows on the eastern front and the political pressure against the Tsarist regime drove the Empire in political chaos. After several political coups, the Bolsheviks finally seized power in October 1917 and the Romanov Empire collapsed. Finland reacted to the political upheaval and divorced from Russia in December 1917.

Russian revolution changed the geopolitical and geoeconomic situation between Finland and Russia. Almost a century of peaceful co-existence came to end, and now the new neighbors engaged in long and painful political and military struggle. Newly independent Finland was aiming to integrate ethnically and culturally familiar Karelian areas to Finland. The conflict focused on the East-Karelian region that included also areas along the northern shore of Lake Ladoga. Several paramilitary groups from Finland invaded East-Karelia and the fighting against the Red Army continued until 1920 when Finland and Soviet Russia signed the peace treaty at Tartu, Estonia. The border between the neighbors was now officially recognized, but because of the ideological and political differences, the trade between the two countries was practically eliminated.<sup>42</sup>

The outcome of the First World War turned Diesen Wood's business plan upside down. Instead of being ideally located close to the vast forest resources and Russian markets, the company found itself situated in the hostile border territory and behind the giant lake that separated Pitkäranta from the potential customers in Europe.<sup>43</sup> Hence, how to break out from the geoeconomic isolation and how to find new customers in the European markets, where the company had neither experience nor contacts? These questions needed swift answers, because the trade routes were opening and the reconstruction of European cities increased the demand of timber, paper, and pulp. The competition was harsh as forest companies from Finland and Scandinavia rushed to regain market shares in Europe. As Jorma Ahvenainen has demonstrated, during the early 1920's, Finnish forest industry went through a consolidation process in which small and mid-size sawmills were swallowed by a handful of large private and state-owned companies.<sup>44</sup>

Diesen Wood & Co. was a mid-size timber company and a newcomer in the Finnish forest industry family. Diesen Wood & Co. produced approximately 120 000 cubic meters of timber annually, which was far short from the capacities of the main competitors. For example, Enso-Gutzeit's sawmill in Kotka manufactured alone more than 200 000 cubic meters of timber annually. In addition, Diesen Wood was located "behind" Lake Ladoga and the logistic route to the European markets was considerably longer than for the competitors, whose sawmills and paper and pulp factories were situated along the northern coast of the Baltic Sea.

Timber was a low valued industrial good, which was manufactured in large quantities and sold as a bulk product to European markets. The profits

42 Engman 2007.

43 Kuisma 1993.

44 Ahvenainen 1984, 338–339.

per manufactured unit was low and the business was easily disrupted by devaluations of currencies and other economic problems. Pulp and paper were at the next level on the value chain, but the production required technological skills, specialized knowledge, and capital investments in industrial processes. Before the independency, Finnish forest industry had established “a bi-polar market strategy”. Timber was exported to European markets, while paper products were sold to the Russian customers. Pulp was produced almost entirely for in-house use of paper manufacturing. Therefore, when the Russian markets closed, the divided strategy was no longer valid. Paper companies struggled to find new customers in Europe, where the competition was hard, and the markets were dominated by large European paper companies. However, Finnish paper companies succeeded in selling lower quality paper product, for example newsprint and non-bleached wrapping paper to European customers.<sup>45</sup>

This was the market landscape where Diesen Wood & Co. landed in the beginning of the 1920s. The Russian market was closed, and the only option was to move out to the European markets. But how to compete against the bigger and more established Finnish and Scandinavian companies? How to find the niche market and how to compensate for geoeconomical deficiencies? In order to break the dead lock, Diesen Wood & Co. reversed the business plan and looked for potential customers beyond traditional forest industry markets. What the company found was a small, but rapidly growing demand of high-quality printing papers, lithographic and photographic papers, serviettes, and hand towels. This market was dominated by small family-owned paper factories located close to the customers in Europe. These companies imported high quality pulp and other semi-manufactured fiber goods from Scandinavia and from North America. The demand of specialized paper was growing due to the changing consumer habits and rising standards of living in Europe. New technological innovations made photography available for common people and urban lifestyles, new hygiene norms and modern consumption created markets for new paper products.<sup>46</sup>

Diesen Wood & Co. decided to focus on this market niche. However, in order to become a credible supplier of high-quality pulp and fiber products, substantial investments had to be made in production technologies and factories. Diesen Wood & Co. built the sulphate pulp factory, which was integrated to the sawmill, where the excess wood and waste was transported as a raw material by overhead conveyors. Sulphate pulp factory, in turn, was connected to the electrochemical factory, that manufactured bleaching chemicals, chlorine and caustic soda. Sulphate pulp technology and the electrochemical plant came from the United States and the manager, Ole Glöersen, was hired from Norway. Horizontally integrated factories consumed large quantities of electricity and the secure supply was organized via high tension line first from the Tulemajoki hydro power station and later from the Imatra hydro power station. For the timber exports, the company built two large warehouses close to the Vyborg seaport. Logistic networks

45 Kuisma 1993.

46 Pelkonen 2001, 75–76.

from Pitkäranta to the northern coast of the Baltic Sea was improved when the new railroad connection was established from Pitkäranta to Läskelä junction on the Karelian railroad.<sup>47</sup>

Diesen Wood & Co. made a successful turn around and became one of the most modern forest industry company in Finland during the 1920s. It was the only fully integrated sulphate pulp manufacturer, who produced bleached pulp fibers for high-quality paper products. As the company brochure summarized; “prominent paper specialists have carefully studied and tried the Diesen Wood Company A/B’s sulphate pulp, and their investigations have proved that the fiber is unusually strong and soft, a property often of greatest importance in manufacturing of a high-quality paper. By the same specialists it has also been found that there are seldom knots of fiber and pulp, in other words, fibers are separated from one another, which enables a good felting of the paper an even surface and good strength.”<sup>48</sup>

Diesen Wood & Co. business model produced economic results throughout the 1920s, and the company gained and established position in high-quality paper market in Europe. The company tried also to reopen Pitkäranta copper, iron, and tin production, but the efforts failed. During the 1920s the domestic markets changed radically when the Finnish government decided to purchase rights to Outokumpu copper deposits. As a result, Outokumpu became the dominant player in Finland and the state intervention to the field left no room for small players like Diesen Wood & Co.

The first alarming signs of economic slowdown appeared in 1927, when the stock markets hit the record highs in Europe and in the United States. However, speculations about the future faded away as positive expectations and speculations fueled investments in large-scale industries and technological infrastructures. Finnish forest companies enjoyed the benefits of robust economic growth, and several companies were looking for new business opportunities beyond European markets in Africa and South America.<sup>49</sup>

Diesen Wood & Co. had also made several positive years and as the financial situation of the company stabilized, Christopher Diesen and his business partners wanted to clean the company balance sheet from the risky foreign currency loans. However, both the Bank of Finland and the KOP Bank (National Equity Bank) reassured that nothing was threatening the value of the Finnish Mark, which was securely connected to the international gold standard. This reassurance proved to be a fatal mistake. The Great Depression hit Finland in 1929 and the Bank of Finland had to cut the Finnish Mark out of the gold standard. As a result, the currency fell almost 48 % against the dollar and less than 20 % against the sterling. This was a devastating blow to the Diesen Wood & Co. and the company was no longer able to handle its loans. As a result, KOP Bank took over the company and Christopher Diesen and his Norwegian business partners left the company. KOP Bank tried to find new investors and operators for the ailing company

47 Diesen 2013; Also Michelsen 1989, 25–32.

48 Diesen Wood Company.

49 Ahvenainen 1984, 340.

and after renaming Diesen Wood & Co. as Pitkäranta Oy the industrial processes were revitalized. However, the time ran out and in November 1939, Soviet Union attacked Finland. After the Winter War and the Continuation War, Pitkäranta was annexed to the Soviet Union in 1944.<sup>50</sup>

Third wave of industrialization process at Pitkäranta lasted less than three decades. The process began when the first wave of globalization ended, and political and ideological tensions led to the total world war. Diesen Wood & Co. invested in horizontally integrated industrial complex at Pitkäranta and operated successful industrial processes until to the turn of the 1930s when the Great Depression drove the company in the hands of the KOP Bank.

During the 1910s and 1920s, Diesen Wood & Co. demonstrated new qualifications characteristic of the third wave of industrialization. Diesen Wood & Co. did not settle at the low end of the value chain but searched for niche markets and invested in technologies that increased the value and quality of the products. This required new ideas, bold investments in technology, and management and courage to explore new markets far away from the production plants. Transition from the original business plan was dramatic, but it reacted to the changing geopolitical and geoeconomics realities caused by the World War I. Pitkäranta was still an ideal location, but in order to overcome the logistic deficiencies, Diesen Wood & Co. had to restructure its production and business model. Hence, Diesen Wood & Co. escalated industrialization process at Pitkäranta, but the Great Depression and later the Second World War disrupted transnational flows and terminated the industrialization process at Pitkäranta.

## *Conclusions*

This chapter provides an in-depth historical analysis of the industrialization process, which takes place in one industrial community. The choice was made to allow the investigation to go deep in the historical processes in the community, which has been exposed to the industrialization process for almost two centuries. The results from the study are numerous. First, the chapter challenges the common view of the industrialization process as a linear evolution path, which takes off from the industrial revolution and continues into the creation of modern industrial society. The industrial history of Pitkäranta demonstrates how the evolution path is turbulent and disrupted by a multitude of internal and external factors. The industrialization process at Pitkäranta has started several times, been interrupted and redirected, and several times also terminated.

Hence, we have credible historical evidence for the argument that the industrialization process is vulnerable and fragile. It is faced by risks and challenges, which are difficult to detect and manage. Although Pitkäranta was blessed with rich raw material and energy resources, flexible logistic

50 Kuisma 2004, 34; Hjerppe, Ikonen & Valkama 1993; Laine 1950, 5; Guagnini 2004, 598.

routes, and lucrative markets, entrepreneurs and companies failed to sustain industrial activities. Pitkäranta was exposed to the opportunities and risks of transnational flows of capital, labor, materials, energy, knowledge, technologies, and ideologies. As long as the flows were allowed to cross national borders and fertilize industrial activities in Pitkäranta, entrepreneurs and companies were able to invest and contribute to the industrialization process. However, when the flows were disrupted or terminated, the positive evolution of the industrialization process was lost.

Although the industrial history of Pitkäranta studies the evolution of the industrialization process from one geographic location only, the results can be expanded to broader conclusions. First, the role of favorable geographic location seems to be a necessary factor for a successful industrial process. Pitkäranta offered natural resources and logistic opportunities for both mining and forest industries. The community and its intimate connection to Lake Ladoga provided positive incentives for entrepreneurs and venture capitalists, who were searching a place for large-scale industrial investment.

Second, a multicultural environment seems to encourage the growth of large-scale industrial activity. Pitkäranta was located at the crossroads between east and west and the northern shore of Lake Ladoga was during the 19<sup>th</sup> and early 20<sup>th</sup> century “a no-man’s land” or a “Karelian Klondyke”, where aggressive entrepreneurs could make bold investments and gain big profits. The multicultural environment empowered the interplay between technology, capital, and business, which was the key to the successful large-scale manufacturing industry.

Third, a competitive and progressive market economy seems to encourage the growth of large-scale industrial activity. Although Pitkäranta was a small and remote industrial community, it was located in the crossroads of transnational flows, which brought the second industrial revolution to Russia and Finland. This period promoted mass production of inexpensive industrial goods, free trade between nation states and accumulation of capital and wealth. These flows connected Russia and Finland to Europe and to the global markets. Pitkäranta industrial community became one of the connection points, through which these flows circulated and empowered industrial growth.

## References

- Ahvenainen, Jorma 1984: *Suomen sahateollisuuden historia*. WSOY, Porvoo.
- Chandler, Alfred D. Jr. 1977: *The Visible Hand. The Managerial Revolution in American Business*. Harvard University Press, Cambridge (Mass.).
- Diesen, Magnus 2013: Diesen Wood Company (1907–1931). Pitkärännan saha ja sellutehdas. 18.10.2013. <https://docplayer.fi/1154934-Diesen-wood-company-1907-1931-pitkarannan-saha-ja-sellutehdas-magnus-diesen-18-10-2013.html> (accessed February 3, 2022).
- Diesen Wood Company. <https://digi.kansalliskirjasto.fi/pienpainate/binding/347929?page=1> (accessed Feb 3, 2022).
- Engman, Max 2007: *Raja – Karjalankannas 1918–1920*. WSOY, Helsinki 2007.

- Gilman, Nils 2018: Modernization Theory Never Dies. *History of Political Economy* 50:1, 133–151.
- Guagnini, Anna 2004: Technology. In: *History of the University in Europe*. Vol. III. Walter Rüegg (ed.). Cambridge University Press, Cambridge, 594–611.
- Grübler, Arnulf 1994: Industrialization as a historical phenomenon. In: *Industrial Ecology and Global Change*. R. Socolow, C. Andrews, F. Berkhout & V. Thomas (eds.). Cambridge University Press, Cambridge, 43–68.
- Hammond, Michael 1983. The Sociology of Emotion and the History of Social Differentiation. *Sociological Theory* 1, 90–119.
- Heninen.net 1983: Academician Nikolai Ozeretskovski's diary note. See Pitkäranta. [http://heninen.net/pitkaranta/historia\\_f.htm](http://heninen.net/pitkaranta/historia_f.htm) (accessed February 3, 2022).
- Hjerppe, Riitta 1988: *Suomen talous 1860–1985. Kasvu ja rakennemuutos*. Kasvututkimuksia. Suomen Pankki, Helsinki.
- Hobsbawm, Eric 1968: *Industry and Empire. The Economic History of Britain since 1750*. Weidenfeld and Nicolson, London.
- Iriye, Akira 2004: Transnational history. *Contemporary European History* 13:2, 211–222.
- Kuisma, Markku 1993: *Metsäteollisuuden maa. Suomi, metsät ja kansainvälinen järjestelmä*. Finnish Literature Society, Helsinki.
- Kuisma, Markku 2004: *Kahlittu raha, kansallinen kapitalismi. Kansallis-Osake-Pankki 1940–1995*. Finnish Literature Society, Helsinki.
- Laine, Eevert 1950: *Malminetsintä Suomessa 1809–1884. Geoteknillisiä julkaisuja* 49. Geologinen tutkimuslaitos, Helsinki.
- Laine, Eevert 1955: *Neljännesvuosisata maamme kaivostoimintaa, 1885–1910. Geoteknillisiä julkaisuja* 57. Geologinen tutkimuslaitos, Helsinki.
- Land, Isaac 2007: Tidal Waves: The New Coastal History. *Journal of Social History*, 40:3, 731–743.
- Littek, Wolfgang 2015: Labor, Division of. In: *International Encyclopedia of the Social & Behavioral Sciences*. James D. Wright (ed.). Stanford 2015, Second Edition, 156–162.
- Malmberg, Anders 1994: Industrial geography. *Progress in Human Geography*, 18:4, 532–540.
- Michelsen, Karl-Erik 2021: Teollisuus tulee ja menee Pitkärannasta. In: *Laatokka. Suurjärven kiehtova rantahistoria*. Maria Lähteenmäki (ed.). Finnish Literature Society, Helsinki, 71–96.
- Michelsen, Karl-Erik 1989: *Sähköstä ja suolasta syntyneet: Finnish Chemical Oy, Nokia Chemicals 1939–1989*. Nokia Chemicals, Helsinki.
- Mononen, Tuija 2020: *Kaivoskeskustelun käänne*. <https://ilmiomedia.fi/artikkelit/kaivoskeskustelun-kaanne/> (accessed February 3, 2022).
- Palmunen, M. K. 1939: *Pitkäranta. vv. 1934–1938 suoritettujen vuoriteknillisten tutkimusten valossa*. Geoteknillisiä julkaisuja No. 44. Geologinen toimikunta. Helsinki.
- Pelkonen, Harri 2001: *Laatokan Karjalan sahateollisuuden historia*. Viipurin Suomalainen Kirjallisuuden Seura, Helsinki.
- Pollard, Sidney 1982: *Region und Industrialisierung*. In: *Ursachen und Folgen in Internationaler Perspektive* by Carl-Ludwig Holtfrerich. *Ursachen und Folgen in Internationaler Perspektive*. Göttingen 1982.
- Puustinen, Kauko 2013: Laatokan Karjalan historialliset ruukit 1809–1939. *Geologi* 65/2013, 118–125.
- Relander K. A. O. 1893: *Karjalan kuvia: Pitkäranta*, 37–40. [https://www.doria.fi/bitstream/handle/10024/43329/p139\\_07\\_f416190\\_5.pdf?sequence=2](https://www.doria.fi/bitstream/handle/10024/43329/p139_07_f416190_5.pdf?sequence=2) (accessed February 3, 2022).
- Riello, G. and O'Brian, Patrik K. 2004: *Reconstructing the Industrial Revolution: Analyses, Perceptions and Conceptions of Britain's Precocious Transition to Europe's*

- First Industrial Society*. Working Paper 84. London School of Economics, Department of History, London.
- Roms, Jussi 2004: *Bergslagenista Pitkärantaan. Ruotsalaisten vuorimiesten siirtolaisuus Pitkärantaan 1874–1904*. MA Thesis. in History. University of Helsinki, Helsinki. Helsingin yliopisto,
- Saunier, Pierre-Yves 2013: *Transnational History. Theory and History*. Palgrave MacMillan, Basingstoke.
- Sorenson, Olav 2003: Social Networks and industrial geography. *Journal of Evolutionary Economics* 13, 513–527.
- Stobart, Jon 1996: Geography and industrialization: The space and economy of northwest England, 1701–1760. *Transactions of the British Geographers* 21:4, 681–696.
- Strom, Anna & Kasperski, Tatiana 2017: Social Contracts of the Mono-Industrial Town: A Proposed Typology of a Historic Phenomenon and Contemporary Challenge. *The Journal of Industrial of the Society for Industrial Archeology* 43:1/2, 37–46.
- Stigzelius, Herman 1987: Otto Trüstedt and his impact on the Finnish mining industry. *Geological Survey of Finland, Special Paper*, 1–13.
- Tilley, Richard 2010: Industrialization as a Historical Process. EGO History Online 2010-12-03. <http://ieg-ego.eu/en/threads/backgrounds/industrialization/richard-h-tilly-industrialization-as-an-historical-process> (accessed February 3, 2022).
- Thürstedt, Otto 1914: *Lisiä Pitkärannan malmikentän historiaan*. Geoteknillisiä tiedonantoja 2. Helsinki. [http://tupa.gtk.fi/julkaisu/geoteknillinen/gt\\_s\\_002.pdf](http://tupa.gtk.fi/julkaisu/geoteknillinen/gt_s_002.pdf) (accessed February 3, 2022).
- de Vries, Jan 1994: The Industrial Revolution and the Industrious Revolution. *The Journal of Economic History* 54: 2, 249–270.
- Walton, John 1987: Theory and Research on Industrialization. *Annual Review of Sociology* 13, 89–108.



ALFRED COLPAERT

📄 <https://orcid.org/0000-0001-5833-7309>

AUGUSTINE-MOSES GBAGIR

📄 <https://orcid.org/0000-0003-3322-6631>

## Changing Waters of Lake Ladoga

The story of the Great Lake Ladoga begins about 10 000 years ago, when post-glacial uplift isolated Ladoga from the Yoldia Sea. The earliest connection of the lake to the Gulf of Finland was near the present city of Vyborg, through the Vetokallio threshold of the Veštševö (Fin. Heinjoki) river. The land uplift after the last Ice Age, which was, and still is, the fastest in the north, tilted Lake Ladoga so that its southern shallow shore was slowly submerged, and the shoreline moved southwards. This transgression led to the birth of the current River Neva 3300 years ago, when the waters of Lake Ladoga broke through the highest point at Porogi and formed a channel to the Gulf of Finland. When the Neva was formed, the water of Lake Ladoga quickly dropped by about 12 meters, establishing its present outline.<sup>1</sup> For the same reason, 9500 years ago, a connection formed from Lake Onega, which previously drained into the White Sea, to Lake Ladoga via the Svir river (Siväri).

The next upheaval in the Ladoga region occurred in 1818, when a man-made shallow channel was dug in the narrow sandy isthmus that separated Lake Suvanto from Lake Ladoga, allowing the spring flood waters to overflow, causing a catastrophic event that lowered the water level of Lake Suvanto about seven meters in only one day, creating a new river, Burnaya (Taipaleenjoki). For the local population, the draining of Lake Suvanto was a blessing, as a large area of fertile arable land was exposed from the bottom of the lake. In 1857, the Kiviniemi isthmus was punctured, after which the waters of the Vuoksa (Vuoksi) river were diverted towards the Burnaya river, leaving its previous course towards Priozersk (Käkisalmi) as a shallow backwater. Presently, Lake Ladoga receives water from Finland via the western cross-border Vuoksa system through the Burnaya river (Fig. 1), while from the east water pours into the lake through the river of Svir. From the south, water is received from the Syas river (Säsjoki), the waters of Lake Ilmen (Ilmajärvi) flow through the Volkhov river (Olhavanjoki) into Lake Ladoga (Fig. 2). Dozens of smaller rivers are also part of the Ladoga catchment. Ladoga eventually releases its water masses through River Neva into the Gulf of Finland.

1 Saarnisto 2003, 22–63; This chapter has been rewritten from the chapter published in *Laatokka. Suurjärven kiehtova rantahistoria* (2021). See Colpaert & Gbagir 2021.



Figure 1. The banks of the Burnaya river (Taipaleenjoki) in Zaporozhkoje (Metsäpirtti). Photo: Alfred Colpaert 2019.



Figure 2. The low-lying landscape of the Volkhov river near Novaya Ladoga. Photo: Alfred Colpaert 2019.

### *Research framework*

In this chapter, we analyze changes in the ecological state of Lake Ladoga using satellite image derived data. Ecological status here refers to the assessment of the trophic state of lake water, which is studied through changes in the amount of phytoplankton. Conventional water quality monitoring of large water bodies is expensive, requires laboratory equipment and research vessels. However, the rapid development of satellite-based systems in the 21<sup>st</sup> century has greatly improved our abilities to study large water bodies. Satellite images provide reliable global information on sea and lake water quality, such as surface water temperature, turbidity, and phytoplankton levels. Satellite images are now readily available, usually free of charge, and are applicable for a wide range of uses. In simplicity, a satellite image corresponds to the color image of a common digital camera. Usually, satellite

images include not only visible light, but also information about what is (for humans) invisible light, such as infrared and thermal radiation. Modern spectral sensors can produce tens or hundreds of narrowly defined spectral channels, providing increasingly better analytical tools.

Plankton consists of algae, animal and bacterial organisms which drift freely in the water body. Phytoplankton are blue-green microscopic algae found in the upper parts of sea and lake water. Plants, including phytoplankton, contain *chlorophyll molecules*, where the photosynthesis process occurs. Through the photosynthetic process, plants convert atmospheric carbon dioxide into sugars and oxygen. Leaf green pigments, i.e., chlorophyll, are of two types; chlorophyll-a, which uses purple-green and orange-red light, and chlorophyll-b, which best absorbs blue light.<sup>2</sup> Chlorophyll-a correlates well with phytoplankton biomass and, to some degree with phosphorous, and can be easily detected from multi-spectral satellite images,<sup>3</sup> thus remote sensing can be used to assess the amount of chlorophyll by using empirical formulae which establish the relation between purple-green light reflected from water and the (*in-situ*) measured chlorophyll-a amount.

Remote sensing estimates are generally less accurate than in-situ measurement but give a cost-effective and sufficiently reliable regional picture of a spatial phenomenon that is remarkably difficult to obtain by traditional sample point based observation methods (such as ship-based surveys, sampling, and laboratory analysis). In addition, remote sensing methods also provide historical observations on a regular time frame, for example Landsat satellite datasets are available since 1972 and MODIS data from 2000. D. V. Pozdnyakov et al. (2013) used SeaWiFS satellite images to study the water properties of Ladoga from 1998 to 2004.<sup>4</sup>

In this study, we used the CHL-OC5 data, produced by the Copernicus Marine Environmental Monitoring Service (CMEMS). CHL-OC5 data is based on a combination of four satellite systems (SeaWiFS, MERIS, MODIS, VIIRS and OLCI), has a 4 x 4 km resolution and monthly, almost cloud-free images. This CHL-OC5 material is specifically designed and created to measure chlorophyll-a in turbid coastal and lake water,<sup>5</sup> images of the CHL-OC5 product are freely available and updated monthly.

We applied both visual interpretation and geo-statistical methods to evaluate the change in the state of the surface water of Lake Ladoga. The geo-statistical analysis involved a pixel-wise (4 x 4 km) Mann-Kendall time series trend analysis of the chlorophyll-a monthly values, which produces a map showing the degree and direction of change of every single pixel, negative representing less phytoplankton, indicating improvement and positive values indicating deteriorating water quality (more phytoplankton).

One of the first studies describing Ladoga's geographical development is archaeologist Julius Ailio's *Die geographische Entwicklung des Ladogasees*

2 Finch et al. 2014.

3 Cullen 1982, 791–803

4 Pozdnyakov et al. 2013.

5 Garnesson et al. 2019

in *postglazialer* from 1915.<sup>6</sup> More recent work to be mentioned are Irina Delusin's, *A review of the research on the history of Lake Ladoga* (1998),<sup>7</sup> Leonid Rukhovets and Nikolai Filatov, *Ladoga and Onega – Great European Lakes. Observations and Modelling* (2010), and geologist Matti Saarnisto's *Ladoga and Vuoksi's stages* (2014). Significant contributions to Ladoga's natural history and recent development are the results of the Finnish-Russian scientific collaboration of the early 1990s, presented in the publications of four international and multidisciplinary Ladoga symposia. Symposia were held in Joensuu in 1993<sup>8</sup> and in 1996<sup>9</sup>, Petrozavodsk in 1999<sup>10</sup> and Novgorod in 2002.<sup>11</sup>

### *Pollution of the lake*

As stated above, Ladoga is the largest lake in Europe, with a surface area of 18 135 km<sup>2</sup>, average depth of 51 meters and the deepest point reaching 230 meters. The volume of the lake is 908 km<sup>3</sup>, the water retention time is 12.3 years, the shoreline is 1570 km long and the total catchment area is 70 120 km<sup>2</sup>. The deepest points of the lake are in the north and the shallowest (average 13 meters) in the southern parts.<sup>12</sup> The northern shores of the lake are fjord-like rugged with rocky beaches (Fig. 3), while the western, southern, and eastern shores are shallow. On the eastern shore, there are scenic sandy beaches (Fig. 4). Lake Ladoga is home to several relict species like the Lake Ladoga salmon, arctic char, as well as the Ladoga ringed seal.

The water quality of Lake Ladoga has primarily been affected by wastewater from coastal communities, the pulp industry and agriculture. The largest urban communities around the lake are Sortavala, Priozersk (Käkisalme), Šlisselburg (Pähkinälinna), Novaya Ladoga and Pitkyaranta (Pitkäranta) (Fig. 5) with a combined population of approximately 72 000 (see the chapter written by Maria Lähtenmäki in this volume, page 24). Even in the 2010s, urban wastewater was discharged almost untreated into Ladoga.<sup>13</sup> Industrial activities on the shores of Ladoga have traditionally been wood processing, as previous chapters have shown, the Priozersk, Harlu and Lyaskelya (Läskelä) paper and pulp mills were established already during the Finnish era, and their operations were continued by the Soviet Union and Russia until they were closed in the late 1980s. The Pitkyaranta pulp mill was also established in the 1920s and is still functioning. Another working pulp mill is located near the town of Novaya Ladoga, Sjastroi. Here, an accidental discharge occurred in 1998, in which 70 000 cubic meters of toxic sludge spilled into the Syas river, about one kilometer from the Ladoga

6 Ailio 1915, 159.

7 Delusin 1998, 247–258.

8 Simola et al. 1995.

9 Simola et al. 1997.

10 Peltonen et al. 2000.

11 Simola et al. 2003.

12 *World Lake Database* 2020.

13 YLE 2021.



*Figure 3. The north-western Ladoga shoreline near Hijdinselga community (Fin. Hii-denselkä). Photo: Alfred Colpaert 2019.*



*Figure 4. Clean sandy beach near the village of Vidlitsa (Vitele) in Olonets (Aunus). Photo: Alfred Colpaert 2019.*

shoreline.<sup>14</sup> Agricultural fertilizers, mainly phosphorus and nitrogen, have been a major factor affecting the trophic state of Lake Ladoga; however, the influx of fertilizers has decreased after 1990.

14 MTV News 1999.



Figure 5. Satellite image of the Pitkyaranta pulp mill, the circular wastewater treatment ponds are clearly visible. Image: Google Earth 2020. © Google Earth 2020.

### *Gradual improvement of Ladoga*

The change in water quality of Lake Ladoga did not occur suddenly, in the 1950s the ecological state of this great lake was mostly excellent, but the situation changed rapidly in the mid-1960s becoming less favorable.<sup>15</sup> In the beginning of the 1960s, the state of the lake was still characterized as *oligotrophic* (nutrient poor), but already in the 1970s its water was assessed as *mesotrophic* (medium), and in some areas approached *eutrophic* (nutrient rich) levels. Heavy metals, pesticides and other harmful substances had also entered the lake and its sediments. V. G. Drabkova et al. (1996) reported that, due to the large catchment area of the lake which included a total of 594 industrial plants, 680 large agricultural companies, and wastewater from the Vuoksa sub-basin, the annual total load entering the lake during the 1980s was 0.4 km<sup>3</sup>. M. A. Naumenko et al. (2000) found that in the southern Volkhov bay the nitrogen level was still 46 µg/l in the 1950s and in 1960 but increased dramatically more than fourfold in the 1980s to 240 µg/l.<sup>16</sup> However, since the 1990s, concentrations of nitrogen fell to 120 µg/l due

<sup>15</sup> Drabkova et al. 1996, 1–3.

<sup>16</sup> Drabkova et al. 1996, 2.

to the closure of paper mills and the introduction of wastewater treatment. The same declining trend in nutrient levels can also be observed for the whole lake between 1990 and 2000.<sup>17</sup> As a result, primary production of phytoplankton, and phosphorus concentrations, decreased significantly.<sup>18</sup> On the other hand, large amounts of nutrients were already fixed in bottom sediments, from which nutrients are released by currents and wave action.

A major environmental hazard that threatened Lake Ladoga was lying in the Heinäsenmaa (Heinämaa) archipelago of Priozersk. The German Second World War Minelayer *Kit*, which was scuttled in the 1950s, contained radioactive waste of unknown origin. It was not until 1991 that the wreck was removed from Ladoga and transported to the Russian Arctic region of Novaya Zemlja. The amount and quality of radioactive waste is unknown, but the current radiation level around the site is low.<sup>19</sup>

The joint Russian-Finnish field survey of Lake Ladoga in 1992, analyzed a comprehensive set of water quality samples assessing the ecological status of the lake. In particular, the northern shores, near Sortavala and Pitkyaranta were reported to have high nutrient levels: the values of August 1992 for chlorophyll-a (phytoplankton) in Sortavala bay were 26 mg/m<sup>3</sup>. High values were also found in the southwestern corner of Ladoga, near Zaporozhska (Metsäpirtti) (11.9 mg/m<sup>3</sup>) and Novaya Ladoga (20–25mg/m<sup>3</sup>).<sup>20</sup> In contrast, the values for the middle of the lake were low (2 to 7 mg/m<sup>3</sup>).

In addition to the nutrient load produced by coastal communities, also global warming has contributed to the changes in Ladoga's water quality. A. N. Sharov et al. (2014) found that the average temperature range between 1950 and 2010 has increased by around +1.5 C, and the duration of ice-free water has noticeably increased during this period, i.e. from 210 days to 230 days. The chlorophyll-a values (1999–2010) in the Bay of Petrozavodsk in Lake Onega (the most nutrient rich area) have fluctuated between 1 and 7 mg/m<sup>3</sup> (mean between 2 and 3 mg/m<sup>3</sup>) without a clear trend.<sup>21</sup> However, it can be concluded that Lake Onega is considerably cleaner than Ladoga. Unlike Ladoga, Lake Onega's main nutrient load comes only from one major urban community, the city of Petrozavodsk:

To obtain information on the status of water quality, we used the values of chlorophyll-a for the period 1998–2021 from the CHL-OC5 dataset. We selected the July values to illustrate the spatial trends and variability (Fig. 6), as in this month the differences in water quality are most clearly visible. The maps show chlorophyll-a values in July, with shades of green indicating low values of chlorophyll-a (<0.5 mg/m<sup>3</sup>), while orange-red shades indicate high values (20 to 30 mg/m<sup>3</sup>). The maps in figure 6 also show the eastern part of the Gulf of Finland and Lake Onega, land areas appear in black, missing data in gray, missing values are usually caused by cloudiness.<sup>22</sup>

17 Naumenko et al. 2000, 75–87.

18 Letanskaya 2000, 114–121.

19 Gritchenko et al. 1996, 125–128.

20 Holopainen et al. 1996, 9–16.

21 Sharov et al. 2014.

22 For more maps on the monthly values see Gbagir and Colpaert 2020.

In June, the highest phytoplankton values occurred in the shallow southern parts of the lake, and the lowest values in the northern parts of Ladoga. At the same time, the poor state of the Gulf of Finland can be observed, and high chlorophyll-a values in the eastern parts of Onega are also visible. Satellite data also clearly show that chlorophyll-a values in June improved significantly for both Ladoga and Onega. In 2019, almost all values measured in Ladoga except for the narrow littoral zone in the southern part of the lake are less than  $1 \text{ mg/m}^3$ . Locally the observed values no longer exceed the observation threshold in more than a few places.<sup>23</sup>

The chlorophyll-a values in July are already significantly higher than those in June. The impact of the Volkhov river (Olhavanjoki) is obvious, as the river is the main external loader of Ladoga due to its large catchment area. The results for August, the warmest month of the year, again show higher chlorophyll-a values. Although nutrient input for Ladoga generally decreased in the 2000s, algal blooms have appeared abundantly in some years.

As the surface waters cool down in September, chlorophyll-a values start to decline slowly in the northern parts of the lake, while elsewhere they remain high, especially between 2000 and 2007. Lower values in 2008 also appear in the western and central parts of the lake. Chlorophyll-a values in October, just as in June, are again indicating an improvement in water quality. Water temperatures are low in October, reducing phytoplankton, but cloudiness is also noticeable, which increases the amount of missing data. After 2017, the cloudiness in October has been so abundant that only small portions of the lake are visible.

Overall, the 21<sup>st</sup> century was a warm period; in fact, the warmest on record, with the years 2000 and 2015 noted as exceptionally warm. Higher temperatures shorten the duration of winter ice cover, resulting in increased insolation and higher surface water temperature, which in turn increases algae growth.

Figure 6 also shows that years of high chlorophyll-a values usually occur in series, such as 2002–2003, and 2006–2009. Usually, lowest values are seen in the middle of the lake, and the northern and north-western littoral areas, high values occurred mainly on the eastern and southern shores of Ladoga. The reason for this is probably due to the counterclockwise currents in the summer and autumn, which are generated by the prevailing southern and westerly winds and the rotation of the earth, i.e., the Coriolis Effect.

Another phenomenon that influences the dispersion of inflowing nutrients is the so-called thermal bar, which is a characteristic of large lakes and occurs in spring and early summer.<sup>24</sup> In this case, a thermal barrier, from the surface to the bottom, consisting of water of four degrees Celsius is formed between the colder pelagic and the warmer littoral water. The formation of the barrier stems from the physical properties of water, which, at four degrees, is at its densest and is therefore heavier than colder or warmer water. The thermal bar effectively inhibits the mixing of pelagic and littoral

23 Gbagir & Colpaert 2020; Colpaert & Gbagir 2021.

24 See Rukhovets & Filatov 2010.



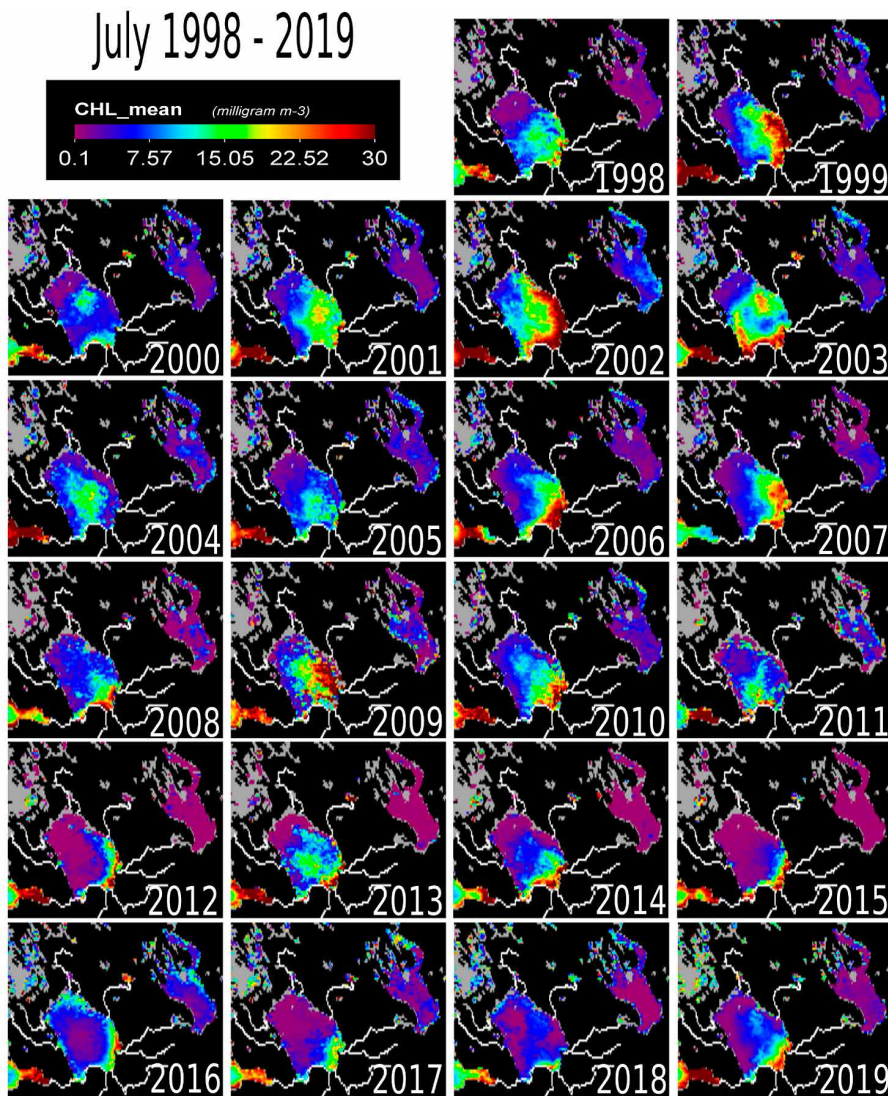


Figure 6. Regional values of chlorophyll-a in Ladoga 1998–2021. Red-yellow-green shades = surface water chlorophyll values, black = land area, gray = no data. In addition to Ladoga, the maps show Lake Onega and the Eastern Gulf of Finland. Source: Copernicus Marine Environmental Monitoring Service 2022.

water masses and can be observed in satellite images.<sup>25</sup> It follows that warm and nutrient rich meltwaters cannot be mixed with cleaner pelagic water, resulting in a typical wind driven, cyclonic littoral current.

We used the Mann-Kendall time series trend analysis on the monthly Ladoga chlorophyll-a data. The result of the Mann-Kendall test (Fig. 7) clearly shows that the central pelagic waters have improved the most, and the littoral

<sup>25</sup> Malm & Jönsson 1993.

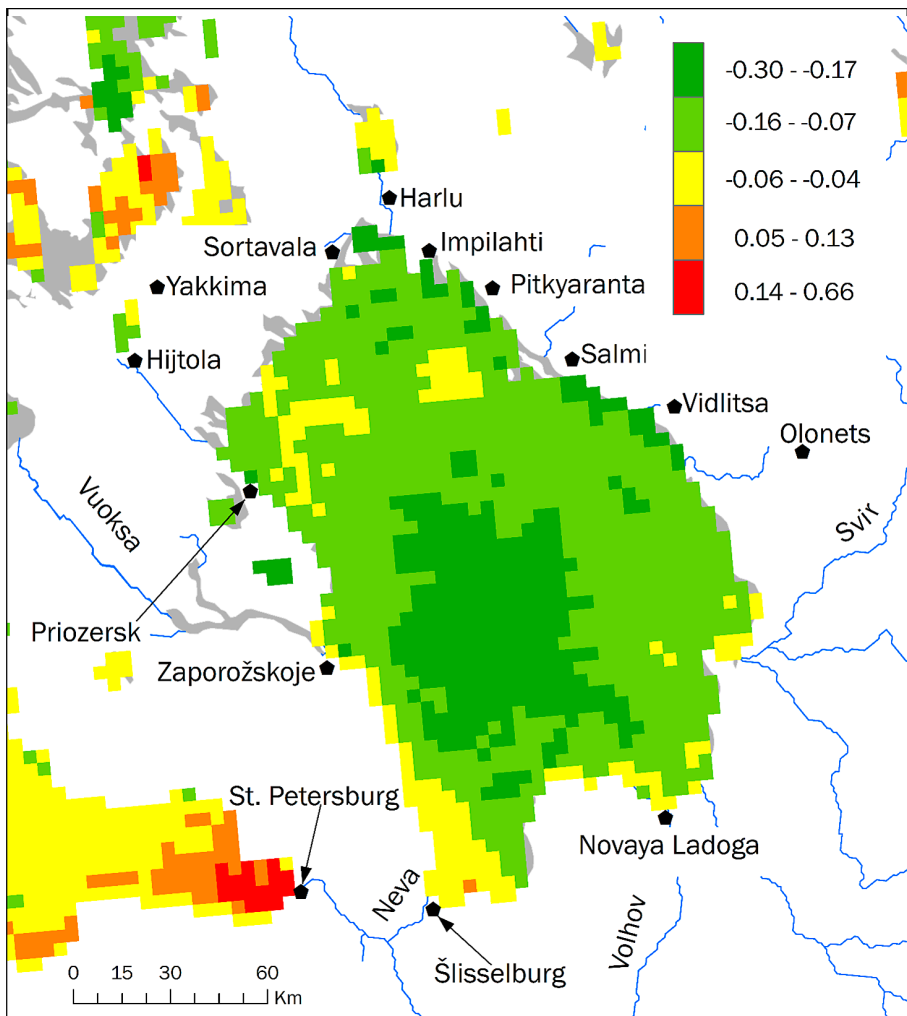


Figure 7. Mann-Kendall Tau values of pixelwise trend analysis of Lake Ladoga. Dark green values indicating improvement are clearly visible in the central areas of the lake, as well as the northern and north-eastern shores. Note the marked improvement near Priozersk, Sortavala and the outlet of the Vuoksa waterway. Yellowish colors near the southern and south-west shoreline indicate areas of limited improvement. Also, the deteriorating situation in the eastern Gulf of Finland near St. Petersburg is clearly visible. Map: Alfred Colpaert & Augustine-Moses Gbagir 2022.

waters the least, especially the southern shores show little improvement. An interesting feature are several points showing high negative values, indicating significant improvement (less algae, clearer water), these points are located near urban areas, probably the result from improved wastewater management, and the outlet of the Vuoksa river, a direct result from the reduced loads from the Finnish part of the watershed. The p-values of the Mann-Kendall test for Lake Ladoga are all significant, indicating meaningful results.

## Conclusions

As far as the ecological status of the Great Lake Ladoga is concerned, the southern and shallow part of the basin is still the most nutrient rich, the growth of phytoplankton is controlled by effluents from the Volkhov basin and nutrients leaching from the bottom sediments, consequently, we cannot observe any visible improvement using remote sensing methods. On the other hand, the situation has not deteriorated and has been stable in the last decade. During the period used in this study, the situation in the deeper and central parts of Ladoga has improved markedly. The northern part has improved slightly, although there are local differences, especially on the north-eastern coastal areas, i.e., near the Pitkyaranta pulp factory area and on the northern shore of Sortavala, due to improved wastewater management. Also, a linear regression analysis of chlorophyll-a values of the entire the lake (1998–2021, June, July, August, September, and October) gives a clear and moderate improving trend. The chlorophyll-a values have decreased, and the average water quality has improved steadily.<sup>26</sup>

The reduction in anthropogenic nutrient load is not immediately reflected in the reduction of phytoplankton, and thus in the quality of Ladoga water, as there seems to be several antagonistic processes. Reduced nutrient input lowers phytoplankton growth, but slow release of nutrients stored in lake sediments can fuel algae growth for a long time to come, and the effects of climate change, mainly warming surface water and reduced ice cover, promotes phytoplankton growth. The impact of climate change on precipitation is less certain, but it is generally assumed that precipitation will increase, which means an increase in the leaching of nutrients from the soil. Forest felling in the watershed also increases the nutrient load on water, as it promotes leaching, and for these reasons, it is uncertain whether the current good trend in the development of water quality in Ladoga will continue. However, it is possible to improve the state of Lake Ladoga by further improving municipal wastewater management, better forest management, reducing the nutrient input from fish farming, and increasing traditional fishing.

## References

- Ailio, J. 1915: Die geographische Entwicklung des Ladogasees in postglazialer Zeit. *Bull. of the Geological Commission of Finland* 45, 159.
- Colpaert, Alfred & Gbagir, Augustine-Moses 2021: Laatokan vesien muuttuvat kuvat. In: Laatokka — Suurjärven kiehtova rantahistoria. Maria Lähteenmäki (ed.). Finnish Literature Society. Helsinki, 188–202. <https://doi.org/10.2307/j.ctv1qp9hft.11> Accessed January 15, 2022.
- Cullen, J. J. 1982: The deep chlorophyll maximum: comparing vertical profiles of chlorophyll-A, *Canadian Journal of Fisheries and Aquatic Sciences* 39, 791–803.
- Delusin, I. 1998: A review of the research on the history of Lake Ladoga. *Fennia – International Journal of Geography* 176:2, 247–258.

<sup>26</sup> Gbagir and Colpaert 2020.

- Drabkova V. G., Rutnyantsev, V. A., Sergeeva, L. V. & Slepukhina, T. D. 1996: Ecological problems of Lake Ladoga: causes and solutions. *Hydrobiologia* 322, 1–7.
- Finch, H. J. S., Samuel, A. M. & Lane G. P. F. 2014: Plants. In: *Lockhart & Wiseman's Crop Husbandry Including Grassland*. 9th edition. H. J. S. Finch, A. M. Samuel & G. P. F. Lane (eds.). Woodhead Publishing, Cambridge, 3–26.
- Garnesson, P., Mangin, A., D'Andon, O.F., Demaria, J. & Bretagnon, M. 2019: The CMEMS GlobColour chlorophyll a product based on satellite observation: Multi-sensor merging and flagging strategies. *Ocean Sci.* 15, 819–830.
- Gbagir, A-M. G. & Colpaert A. 2020: Assessing the Trend of the Trophic State of Lake Ladoga Based on Multi-Year (1997–2019) CMEMS GlobColour-Merged CHL-OC5 Satellite Observations. *Sensors* 20, 6881. <https://doi.org/10.3390/s20236881> Accessed January 10, 2022.
- Gritchenko, Z. G., Ivanova, L. M., Pantelev, Y. A., Tishkova, N. A., Ikäheimonen, T., Ilus, E. & Saxen, R. 1996: Joint Russian-Finnish study of radioactive contamination in the NW part of Lake Ladoga. *Hydrobiologia* 322, 125–128.
- Holopainen, A. L., Huttunen, P., Letanskaya, G. I. & Protopopova E. V. 1996: The trophic state of Lake Ladoga as indicated by late summer phytoplankton. *Hydrobiologia* 322, 9–16.
- Korhonen, J. 2002: Temperature conditions in Finnish waters in the 20th century. (In Finnish). *Finnish Environment* 566. <http://hdl.handle.net/10138/40478> Accessed February 10, 2022.
- Ignatieva, N. V. 1996: Distribution and release of sedimentary phosphorus in Lake Ladoga. *Hydrobiologia* 322, 129–136.
- Letanskaya, G. I. 2000: Phytoplankton monitoring of Lake Ladoga. In: *Proceedings of the Third International Lake Ladoga Symposium 1999*. A. Peltonen, E. Grönlund & M. Viljanen (eds.). Publications of Karelian Institute 129. University of Joensuu, Joensuu, 114–121.
- Malm, J. & Jönsson, L. 1993: A Study of the Thermal Bar in Lake Ladoga Using Water Surface Temperature Data from Satellite Images. *Remote Sensing of Environment* 44, 35–46.
- Naumenko, M. A., Avinsky, V. A. et al. 2000: Current ecological state of the Volkhov Bay of the Ladoga Lake. *Ecological Chemistry* 9, 75–87.
- Pozdnyakov, D. V., Korosov, A., Petrova N. A. & Grassl H. 2013: Multi-year satellite observations of Lake Ladoga's biogeochemical dynamics in relation to the lake's trophic status. *Journal of Great Lakes Research* 39:1, 34–45.
- Peltonen, A., Grönlund, E. & Viljanen M. 2000: *Proceedings of the Third International Lake Ladoga Symposium 1999*. University of Joensuu, Joensuu.
- Rukhovets, N. & Filatov, L. 2010: *Ladoga and Onega – Great European Lakes Observations and Modelling*. Praxis Publishing Ltd., Springer, Berlin & Heidelberg.
- Saarnisto, M. 2003: Karjalan geologia. In: *Viipurin läänin historia 1. Karjalan synty* [Karelia's geology. *Vyborg County History 1. Karelian Birth*]. Matti Saarnisto (ed.). Karjalan Kirjapaino Oy. Joensuu, 22–63.
- Sharov, A. N., Berezina, N. A., Nazarova, L. E., Poliakova, T. N. & Chekryzheva, T. A. 2014: Links between biota and climate-related variables in the Baltic region using Lake Onega as an example. *Oceanologia* 56:2, 291–306.
- Simola, H., Viljanen, M., Slepukhina, T. & Murthy, R. 1995: *Abstracts of the First International Lake Ladoga Symposium 1993*. University of Joensuu, Joensuu.
- Simola, H., Viljanen, M., & Slepukhina, T. 1997: *Proceedings of the Second International Lake Ladoga Symposium 1996*. University of Joensuu. Joensuu.
- Simola, H., Terzhevik, A. Y., Viljanen, M. & Holopainen, I. J. 2003: *Proceedings of the Fourth International Lake Ladoga Symposium 2002*. University of Joensuu, Joensuu.

*Electronic sources*

- MTV News 1999: After-care of the Ladoga environmental disaster (in Finnish) <https://www.mtvuutiset.fi/artikkeli/laatokan-ymparistoonnettomuuden-jalkihoito-hoitamatta/5411468#gs.w30v1a> Accessed February 21, 2022.
- World Lake Database 2020, <https://wldb.ilec.or.jp/> Accessed February 21, 2022.
- YLE 2019. There is still untreated sewage flowing into Lake Ladoga (in Finnish) <https://yle.fi/uutiset/3-10929877> Accessed February 21, 2022.

# Experiences on Littoral Nature IV



MARIA LÄHTEENMÄKI

<https://orcid.org/0000-0001-9142-659X>

OONA ILMOLAHTI

<https://orcid.org/0000-0003-2914-2128>

# Beloved Lady Ladoga: A Multisensory History

The mighty and eerie rocks and grottos of the Great Lake Ladoga, the ruins of old fortresses, the magical groves with their versatile vegetation and the surging waves awake emotions and feelings. The intensely experienced natural environment left permanent marks on the lakefront residents of the early twentieth century. The personified and feminized Lake Ladoga also touched the minds and bodies of tourists as well. The lake was said to control life and death.<sup>1</sup>

## *Research framework*

In the 2000s, history of the senses has established its position within historical studies. As Robert Jütte has argued, with the growth of interest in the body that is such a striking feature of the present everyday culture, the five senses are back in fashion.<sup>2</sup> This paper examines multisensory experiences of Finns who lived on the shores of Lake Ladoga through written reminiscences collected in the 1980s–1990s, as well as lake-oriented writings and vernacular narrations dating from the 1910s to the 1930s. We analyze how the great Finnish-Russian border lake, Ladoga, has been described as a sensory and emotional experience of nature, and what this could tell us about the relationship between humans and nature. Our purpose is to get a deeper understanding of the historical Ladoga through an emphasis on the physical experiences, senses, feelings, and emotions of the lakefront people. What kind of traces has lakefront life left in people's memories, and how they have sensed their natural surroundings?

We analyze the connections between humans and natural waters in the context of sensory history<sup>3</sup> and history of emotions. Mark M. Smith has

1 Marja, Laatokka. *Työläisnaisten urheilulehti* 11–12, 1926, 210; E. Vartiainen, Laatokan pohjoisrannikko. *Finlandia vuosikirja* 1927, 139; E. Vartiainen, Laatikon rannikko. *Suomen Matkailijayhdistyksen vuosikirja* 1, 1925, 166–176; This chapter has been rewritten from the chapter published in *Laatokka. Suurjärven kiehtova rantahistoria* (2021). See Ilmolahti & Lähteenmäki 2021.

2 Jütte 2005, 1, 238–323.

3 E.g. Smith 2010; Classen, Howes & Synnott 1994; Corbin 2005.



written that the senses are historical. They are not universal, but products of place and time, and sensory history provides historians of all persuasions, times, and, places a useful and incisive way to write about the past.<sup>4</sup> Emotional experiences come in many forms – like pleasure, joy, fear, anger, or disgust – and perceptual experience occurs in different modalities corresponding to the different senses.<sup>5</sup> Jan Plamper has argued that emotions include dimensions of appraisal, signification, object-directedness, and consciousness; these can be defined with the term feelings.<sup>6</sup>

The sensory turn in Western humanities occurred in the 1980s, encouraging historians toward new insights into the close link between cognition and emotions, between body and soul. Long before that – since Aristotle, Johan Huizinga, and Lucien Febvre – historians have paid attention to people’s feelings, and to the power of emotions in politics, social movements, and daily life. After the 1990s, feelings, senses, and experiences no longer stand for something irrational or primitive, but they are considered serious elements, indeed primary human motives, especially in social and gender history. As German historian Ute Frevert put it in 2010: history that does not pay attention to human motives is poor history.<sup>7</sup>

Historical research on human experience, sensory history, and history of emotions are closely intertwined, and it has been suggested that historians of emotions and senses should work closely together with social neuroscience. As Roband Boddice and Mark M. Smith have argued, the triangle of world, brain, and body creates a deeper understanding for the historical lived experience.<sup>8</sup> Both experience and senses are also linked in Maurice Merleau-Ponty’s ideas of perception and embodiment: experience is born in bodily interaction with the environment through sensory perception.<sup>9</sup> The deep connection between human experience, body, and senses is why memorizing should be considered as a bodily act connected to sensory episodes in the past.

The reminiscences of earlier Finnish residents of the Ladoga region are deeply nostalgic. Nostalgia or homesickness is often triggered by a sensory experience – a smell, touch, sight, taste, or sound linked to the past. The element of water, experienced through the whole body, can easily transfer oneself back in time. Water can bring back sensory experiences of work and chores connected to an aquatic environment, sensing the weight of water while swimming or hearing the waves hitting the rocky shore. Murray Schafer, the innovator of the concept of soundscape, has written that the “sea is the keynote sound of all maritime civilizations. It is also a fertile sonic archetype. All roads lead back to water. We shall return to the sea.”<sup>10</sup>

4 Smith 2007, 3; Smith 2021; Also, Howes 2005; Saren 2016.

5 Plamper 2010, 237–265.

6 Plamper 2015; On historical research related to emotions since the fifteenth century, see Reddy William M., *Historical Research on the Self and Emotions. Emotion Review* 1:4, 2009, 302–315.

7 Biess Frank, Forum. History of Emotions. *German History* 28:1, 2010, 68.

8 Boddice & Smith 2020, *passim*.; Hoegaerts & Olsen 2021, 375–383.

9 See Merleau-Ponty 1998 [1945], *Phénoménologie de la perception*.

10 Schafer 1994 [1977], 18.



*A woman experiencing the water in the northern shores of Lake Ladoga in 1935. Pietinen Collection. Finnish Heritage Agency, Helsinki, Finland. CC BY 4.0.*

According to Schafer, soundscape is the combination of all the voices heard at certain time in a certain place, produced by humans and nature, the relationship between noise and silence. Voices are also heard as vibration in the body. It has been suggested that voices can deepen emotional attachment to a place. Voices can also be lost, and usually sounds become articulated when they are threatened – otherwise they melt into the ordinariness of everyday life.<sup>11</sup>

The sense of smell also relates to the long-term memory and emotions. Certain smells can improve people's ability to remember what they have experienced in a specific environment with the same odors.<sup>12</sup> Neurologists have shown that the sensory features of the original engram are preserved in the unimodal olfactory cortex, and reactivation of memory traces distributed across modality-specific areas of the brain underpins the sensory qualities of

11 Järviluoma & Wagstaff 2002.

12 Aggleton, John & Waskett, Louise: The ability of odours to serve as state-dependent cues for real-world memories: Can Viking smells aid the recall of Viking experiences? *British Journal of Psychology* 90:1, 1999, 1–7.

episodic memories. Thus, a certain smell can bring back a vivid image of the past with all the feelings linked to the experience. This works the other way around: remembering can recreate former sensory experiences by activating parts of the brain that react to smell.<sup>13</sup>

### *Methods and sources*

As methods we have utilized both thematization<sup>14</sup> and close reading, which resembles the practice of thick description introduced by Clifford Geertz. Thick description means identifying the contexts and finding meanings within complex conceptual structures.<sup>15</sup> In close reading, the texts are read several times, every time possibly finding new observations and interpretations. Using close reading, it is possible to reach both the general narrative and the smaller details of remembering.

The essential source materials in this paper are theme writings, that is, written oral history collections located in the Finnish Literature Society's archives in Helsinki.<sup>16</sup> On the Finnish oral history scene written documents, such as collected reminiscence stories, have been the main sources used by historians. These reminiscence stories, or theme writings, are usually written in response to structured invitations or calls to collect and archive information on a certain theme. Volunteer writers produce stories and send them to the archives. The invitations do not usually have specific questions, but the theme is outlined in advance. The format allows the writer to outline the story more freely than in an oral interview. The writer does not have to please the interviewer and more time can be spent on memorizing and reminiscing. Nevertheless, in theme writing, the narrator is in many ways committed to the unstated expectations of both the collector and the writer's own social reference group, and this has an effect on the structure and content of the narration.<sup>17</sup>

Our most important source material here is the written oral history collection of Karelian biographies gathered in 1983–1984. Our aim has been to examine this material in a new way – open to the senses. The collection was organized and supplemented (1997–1998 and 2000–2001) by associations related to areas that Finland ceded to the Soviet Union in the Second World War.<sup>18</sup> The oral tradition of these lost Karelian territories has been researched

13 Gottfried et al. 2004, 687–695.

14 Thematization progresses from classifying the themes to evaluating them in detail. See Aronson 1994.

15 Geertz founded his method on the ideas of philosopher Gilbert Ryle. See, e.g., Geertz 1973, 3–30.

16 Allen 2017; Pikkanen 2012; Portelli 2006, 50–51.

17 Pöysä 2006, 221–223.

18 The Karelian Biographies (Karjalaiset elämäkerrat) collection was organised by Uudenmaan Karjalaisseurojen piiri (Uusimaa District of Karalian Societies) and Karjalan liitto (Karelian Association). The material was supplemented in 1997–1998 (Karelian Female Biographies, Karelian Association) and 2001–2002 (Karelian Male Biographies).

relatively much, and the memories usually have an established pattern – they picture the unforgettable habitat of childhood and youth, the way of life understood as “Karelian” and the unhappy ending: the evacuations and the never-ending diasporic longing for both the lost place and community.<sup>19</sup> This subjectivity is fruitful for researching imagination, symbols, and desires.<sup>20</sup>

From the Karelian biography collections, we have chosen to scrutinize 42 writings that mention Lake Ladoga and the natural environment around it. These writings are situated almost invariably in the former Finnish municipalities on the northern shores of Lake Ladoga.<sup>21</sup> The main character in the narration is in 22 (52 %) cases a woman, and in 20 (48 %) a man. Over 50 % of the narrators are born in the 1910s or 1920s, 24 % in the 1890s or 1900s, and the other quarter, before and after that. In some cases, the birth year is not mentioned. Narrators wrote most of the “biographies” aged between 60 and 90. In 17 cases the writer was different from the “main character” – in those cases, the story of the writer’s parents and was mixed with the writer’s own childhood memories. Six writings are based on an interview or a text written earlier by someone else. This material, written originally in the form of biographies, is fruitful, because the writers themselves have defined Lake Ladoga and the natural aquatic environment as a fundamental part of their former identity and the key aspect in their nostalgia. The descriptions of the everyday sensory experiences can be used to study the locals’ relationship with the water. From the collections of the Finnish Literature Society, we have also utilized a secondary source: the vernacular narrations collected from the shoreline communities.

### *Living in littoral communities*

Living alongside a lake is different from seashore life,<sup>22</sup> but many similarities arise, especially in the case of large, vast, and deep lakes. The dominant feature in our source writings is the beauty, lushness, and versatility of the Ladoga region, the depth, mysteriousness, and the many-sided nature of the lake in different seasons. Sheltered bays and small but fruitful pieces of land formed the foundation of many narratives, although some also mentioned industrial work, net fishing, and before the Finnish independence (1917) the local trade to St. Petersburg. The lake was a natural thoroughfare, especially in the early twentieth century when road and rail connections were poor. The water road network was connected to the idea of the vast border lake:

- 19 Armstrong 2004, 32–45, Also: Kuusisto-Arponen & Savolainen 2016: The interplay of memory and matter: narratives of former Finnish Karelian child evacuees. *Oral History* 44:2, 2016, 59–68.
- 20 See Portelli 2006, 55–57. “What informants believe is indeed a historical fact (that is, the fact that they believe it), as much as what really happened.”
- 21 The municipalities are Impilahti (24 %), Sortavala rural municipality (24 %), Harlu (10 %), Jaakkima (10 %), Hiitola (10 %), Pyhäjärvi (2 %), Metsäpirtti (2 %) and Salmi (14 %).
- 22 Such as internationality, and socio-economic and cultural consequences of tide, port cities, harbour occupations and traffic.



*Women from the Riekkala village near the town of Sortavala washing their laundry in Lake Ladoga in the early 1930s. Photographer Pekka Kyytinen. Finnish Heritage Agency, Helsinki, Finland. CC BY 4.0.*

water joined more than it separated. The local people invariably called Lake Ladoga their “Karelian Sea,” and it was described as much more rugged and “sealike” than any marine coastline in Finland.<sup>23</sup>

The many-sided way of life in the lakefront villages resemble the *paramaritime* communities described by Gérard Le Bouëdec and Isaac Land, where the livelihood and identity were formed between land and water – literally on the waterfront. Many coastal residents worked seasonally to maintain two livelihoods, both maritime and agricultural. Even though the tempting call of the sea is often romanticized as an irresistible siren song, the livelihood is shaped by the current realities and possibilities, and practice dictates shore living.<sup>24</sup>

Based on our research material, the relationship of the shoreline people with their lake seems to be very similar, regardless of the narrator’s social background. The biggest differences can be found between lake people

23 Warttainen Eliel: Laatokka ja Valamo. *Suomen Urheilulehti* 1.9.1905, 500.

24 Le Bouëdec 2009; Lähtenmäki 2020, passim.

and the people who live on “dry land.” This resonates with the research on seashore communities. Michael Pearson has shown that littoral societies and seashore residents have more in common with each other than with dry-land communities close by, despite their shared nationality. According to Pearson, littoral societies share the ability to combine maritime and mainland features: the shoreline people seem to move naturally between land and water, in terms of both culture and income.<sup>25</sup>

### *Ruthless and revengeful enchanter*

Water is an inseparable element of both creation myths and nature philosophies. Water as a metaphor is present in all human languages and cultures, and personifying nature and waterways is common. At the same time, water is an independent, creative, and destructive element, which cannot be controlled by human reason or actions.<sup>26</sup>

The elements of nature are metaphorized and personified in the descriptions of Lake Ladoga, which is usually described as a living, active creature. The lake is often seen as a feminine figure with mood swings, as an unpredictable element that is either ruthless and gentle depending on nature’s rhythms, the cycle of the month, or season of the year. As a rule, on her best days the lake was dreamy, calm, and sensitive, but in a moment could turn angry and dangerous.<sup>27</sup> This is expressed in a poem written by a Finnish woman born in 1903 on the eastern shore of Ladoga:

“Sometimes your surface is smooth as glass,  
you are the glittering Karelian Sea,  
but you also can be cruel when you take your revenge –  
on whom and why, I do not know  
but in your deep whirlpools  
many lives have ended,  
you calm, in the storm mighty sea.”<sup>28</sup>

The lake’s sensory elements are contrasted with personality traits: she is smooth and calm, but also a stormy whirlpool. As a personified creature Ladoga moved, made sounds – and ate the people on and around her: “Sometimes Ladoga was such a boiling hell that whoever was at the sea rarely made their way home, the water took its own.”<sup>29</sup>

25 Pearson 2006, 353–373.

26 Lehtimäki, Meretoja & Rosenholm 2018, 17–18.

27 A typical feature in the narrations is that both the gentle and dangerous side of the lake are mentioned in the same sentence. See, e.g., SKS KRA KE 93:19335; SKS KRA KE 35:07388; SKS KRA KE 20: 4466–4467; SKS KRA KE 57:12133.

28 SKS KRE 54:12133. Poem written on the 1970s by a woman born in 1903. Translated by Oona Ilmolahti.

29 SKS KRA KE 53:11247.

In the Finnish writings dating from the 1910s–1940s the lake was characterized with words such as moody, stubborn, angry, arrogant, cruel, merciless, fierce, irritated, furious, calm, dreamy, melancholic, kindhearted, explosive, boisterous, appeased, gentle, mighty, dangerous, mysteriously shiny, rampaging, and generous.<sup>30</sup> This twofold good–bad narration is a part of the old perception of the nonrational, feminine nature as a contrast to the masculine world of sense and control.<sup>31</sup> The duality applies particularly well to water and waterways. It has been said that water symbolizes life and rebirth, but also death and perdition; it is a mirror, of which a woman is born and where she vanishes. Especially in early twentieth century literature women and water were firmly linked.<sup>32</sup> In late nineteenth-century European literature and art, aggressive sirens and mermaids were pictured throwing themselves into fishnets or pulling people into the waves. As active and physical creatures, they were believed to symbolize the threatening side of female sexuality.<sup>33</sup>

Finnish feminine mythical creatures living in water include the goddess of water (Vetehinen<sup>34</sup> or Vellamo), water spirits (Fin. *vesihiisi*), and the loud-voiced northern siren (*havruuva*). The latter were strongminded creatures, who took revenge when the balance between nature and human world was disturbed: when getting angry, they could raise a bad weather.<sup>35</sup> During their good days, water spirits could help and give fisherfolk a rich catch. However, the gifts did not come for free. You had to be hard-working and persistent: “Ladoga was generous to industrious fishers.”<sup>36</sup> Different fishing spells lived on in the oral tradition: in order to get fish, one had to win over the water spirits or saints. Different tricks were used to ensure good sailing weather.<sup>37</sup> The belief in personified water or water spirits, which gave and

30 Matkakuvauksia II: Valamo (written by V. J.). *Nuori voima* 1.3.1908, 36–37; Patokoski P.: Karjalan meri. *Toukomies* 1.5.1925, 59; Hämäläinen 2002, 31, 34; Laatokka (written by Maria). *Työläisnaisten urheilulehti* 1.11.1926, 210; Forsman 1894, 14; SKS KRA KA 20:4467; T. Haaranen: Katoavaa Mantsinsaarta. *Laatokka* 11.11.1947; Laatokka, (written by O. R.). *Kylväjä* 15.5.1923, 131; SKS KRA 54:12133; SKS KRA S Lukka, H., 480; Rauha Kuusalo: Lapsuuteni kultamailta. Sinulle – Pitkäranta. *Sisämaa-Laatokka* 4.3.1947; SKS KRA 76: 015741; Laatokka puhuu. *Laivastolehti* 1928, 1.10.1928, 282; Suomen Naisten Liikuntokasvatus Liiton retkeilyllä 6–7 p. kesäk. (written by Pännä). *Laatokka* 6.7.1922; Warttinen Eliel: Laatokka ja Valamo. *Suomen Urheilulehti* 1.9.1905, 501; Härkönen Iivo: Laatokalla. *Kyläkirjaston kuvalehti* 1.12.1912, 151; Laatokka ja sen ympäristöt. *Helsingin kuvalehti* 30.9.1911, 177; Laatokka (written by O. R.). *Kylväjä* 15.5.1923, 131–135; SKS KRA KE 93:19335; Rautavaara Antero: Laatokka. Puolustuksemme paha omatunto. *Suomen sotilas* 17.11.1928, 972; Huomiota Laatokallekin (written by A. L.). *Karjala* 26.8.1928, 230; SKS KRA KE 76: 015741.

31 Dijkstra 1986, 82–83, 237.

32 Etenkin 1900-luvun taitteen kirjallisuudessa vesi ja nainen liitettiin tiukasti yhteen. Parente-Čapková 2006, 189.

33 Dijkstra 1986, 258–271.

34 Vetehinen originates etymologically from the Finnish word ”vesi”, water.

35 Timonen 1988, 31–33; Lauluveikko: Viikon viestit. *Jaakkiman Sanomat* 21.5.1924.

36 SKS KRA KE 76:015741.

37 See, e.g., Sortavala mlk.SKS KRA.Eino Toiviainen b) 53.1936; Impilahti. SKS KRA.

took, rewarded and revenged, was connected to the balance between humans and nature. If one tarnished the water and its people, one could become ill.<sup>38</sup> It was also believed that arrogance before nature and God was punished. In the local tradition there was a story about a rich man, who bragged about his huge fortune. During one fall storm Ladoga destroyed so many of his ships that he became poor in one night.<sup>39</sup>

In the invocations collected from the northern shores of Ladoga the most common water creature was called Vetehinen, more precisely, Vedeneukko (Water Wife, old woman living in water). She could be seen before an accident. She was described as a long-armed, dark character, whose hair was made of long seagrass.<sup>40</sup> In the folklore collections of the Finnish Literature Society a sample from the eastern shore of Ladoga explains that “many places, humans, animals, and water have their own spirits. Water has the Water Wife, who sometimes shows herself.” According to the old male narrator the Water Wife “for sure exists, although natural science knows nothing about it”; he swore he had seen a water spirit, even more than once.<sup>41</sup>

The Ladoga-related folklore sources shows that the folk beliefs related to personified nature and spirits of water and other natural places was still present in the early twentieth century and effect the personal bodily experiences with the lake. Stories of sightings of water spirits, who usually were older women “with long breasts”<sup>42</sup> sitting on a rock washing themselves or brushing their long hair, are quite common in the material.<sup>43</sup> The Water Wives and their cattle are also described as being caught by accident in the fishermen’s nets.<sup>44</sup> The Water Wives are presented mainly as peaceful or neutral. Younger water creatures have been described as more deceitful: in

Sanni Tiensuu b) 442. 1938; Impilahti. SKS KRA Sanni Tiensuu b) 444. 1938; Impilahti. SKS KRA: KRK 155. Vanninen Aino 110. Male, 45 years old; Harlu, Läs-kelänsuu. SKS KRA. Eino Toiviainen b) 672. 1939. Female, born 1921. Sortavala, Putsinlahti. SKS KRA. Eino Toiviainen b) 737. 1939; Juhannustaikoja. Lemmen-taiat, metsästystaiat. *Laatokka* 22.6.1922.

- 38 Impilahti. SKS KRA. Eino Toiviainen 182. 1936. A woman from Aunus, 60 years old; Toiviainen Eino: Totta ja tarua Laatokan Karjalasta. Salaperäiset olennot, haltijat ja henget. Vedenhaltijoista. *Laatokka* 19.10.1946.
- 39 Impilahti. SKS KRA. KRK 155. Vanninen, Aino 120. Female, 65 years old; Impilahti. SKS KRA. Jalmari Haapasalo TK 11:5. 1961; Tolvanen J.: Laatokan merenkulusta. Muistitietoa. *Laatokka* 16.6.1951, 3–4.
- 40 Toiviainen Eino: Totta ja tarua Laatokan Karjalasta. Salaperäiset olennot, haltijat ja henget. Vedenhaltijoista. *Laatokka* 19.10.1946; Also: Haaranen T.: Katoavaa Mant-sinsaarta *Laatokka* 11.11.1947; Impilahti. SKS KRA. Mäkisalo. J. Hautala 1233. 1939. man, 53 years old; Impilahti. KRK 154. Toiviainen, Eino 140.
- 41 Impilahti. KRK 154. Toiviainen, Eino 140 (Antti Kammonen, born 1860).
- 42 Impilahti, Mäkisalo. J. Hautala 1233. 1939.
- 43 She could also be called “Näkki”. Impilahti. KRK 153. Saarela, Niina 17; Sortavala. SKS KRA. Hyvärinen 2700. 1946. Female, born in 1886; Sortavala. SKS KRA. J. Hyvärinen 2725. 1949. Male, born in 1895; Sortavala. SKS KRA. Moilanen, Matti 2560. 1937. Male, 35 years old.
- 44 Impilahti. SKS KRA. KT 131. Lehtonen, Konsta 2. 1938. Female, 67 years old; Impilahti. SKS KRA. KRK 153. Saarela, Niina 16; Sortavala. SKS KRA. Moilanen, Matti 2559.1937. Male, 35 years old.



one story the “water maiden” is beautiful but cruel; a young sailor falls in love with her, and they have a child. When the boy later tries to escape, the maiden tears their child into pieces.<sup>45</sup>

According to the Ladoga folklore, people who tried to cheat the spirits of nature almost always failed. One common legend with various variations<sup>46</sup> is about a hidden treasure in the water, which certain tasks and sacrifices would release to the surface:

“In the Ladoga archipelago a treasure was earlier hidden in the lake, under the condition that a baby girl had to be sacrificed to get it. The child was to be wrapped in rags and thrown into the water. One time a man had tried to get the treasures, located in a chest, by treachery. He made a child out of alder wood, wrapped it in rags, and threw it into the lake. But then an evil spirit shouted from across the lake: ‘Don’t believe, brother deceives! A rag doll leaves!’ The treasure had already tried to rise, but went, after hearing the cry, back to the depths.”<sup>47</sup>

The old beliefs about the water people and the entire underwater world must have affected people’s bodily and sensory contact with the water; the sensations under the water might have been intimidating. One category of folk stories linked to the water concern drowning, which was a relevant and immanent threat for people living on the shores. Children entering the water were advised to take a rock with them or make a noise and shout certain rhymes, such as “the water spirit to the land, me in the water” at the same time splashing water on the ground.<sup>48</sup> The water spirits were said to have pulled people down into the water. The blue “hand marks” on the drowned people’s legs were considered to be proof of this.<sup>49</sup>

The victims – or sacrificial offerings – of Lady Ladoga are described movingly in the narratives. One man lost both parents to the lake; when he was a child, his parents were returning with their neighbors from the town of Sortavala in late fall. As the boat was knocked over by the wind the women sleeping on top of bags of flour drowned immediately, the narrator’s father got ill and died later. Despite this tragic loss, the narrator describes his love for and attachment to the clear waters of Ladoga and writes how he after the war he missed the vast inland lake; there was no substitute for

45 Impilahti. SKS KRA. Jaakko Härkönen a) 10. 1908. Male, 26 years old.

46 Harlu. SKS KRA. KT 127. Juvonen, Edvard 7. 1937. Male, 63 years old; Impilahti. SKS KRA. Härkönen, Jaakko. b) 9. 1906. Male, 36 years old; Impilahti. SKS KRA. Eino Toiviainen 294. 1937. Female, born 1914; Impilahti. SKS KRA. Aino Vanninen TK 116:2. 1961; Impilahti. SKS KRA. Aino Vanninen TK 116:10. 1961; Sortavala. SKS KRA. Matti Moilanen 3689. 1937. Male, 50 years old; Sortavala. SKS KRA. Matti Moilanen 3690. 1937.

47 Sortavala. SKS KRA. Matti Moilanen 3689. 1937. Male, 50 years old. Translated by Oona Ilmolahti.

48 Impilahti. SKS KRA. Lönnbohm, O. A. F. b)1782.1894. Also: Impilahti. SKS KRA. KT 236. Jokio, Joh. 24. 1939. Male, born in 1860.

49 Sortavala. SKS KRA. 3686 Matti Moilanen 1937; Impilahti. SKS KRA. KRK 143, Female, 17 years.

it.<sup>50</sup> Another writer's father never returned from a net fishing trip, and the narrator describes how he waited his father to return in every boat coming to his home island on the archipelago. He also said he was afraid of water after the incident. The aspect of local experience is also mentioned: a fisher next door had warned the men not to go "to sea" that day. Part of the boat and fishing gear were found later, but the deceased were put to rest as sea victims. The key event in the story is the moment when the boat is loosened from its home mooring and the children wave their father goodbye for the last time.<sup>51</sup>

### *Local heroes and tamers of the great waters*

The descriptions of the great storms at Ladoga are tragic, but often heroic stories of miraculous rescues. These narrations are often connected with masculine speech<sup>52</sup> and the idea of a "manly" seaman as the tamer of the great water.<sup>53</sup> The water tamers were considered as real seafarers, who could survive crossing the biggest lake in Europe.<sup>54</sup> In February 1915 a local newspaper described how winter net fishermen from the lakefront community of Salmi had been caught in a storm and left drifting on a braking ice raft. As skillful seafarers, they had made a fire out of their fishing gear. Their family members had already prepared for the worst, but miraculously the men were rescued, although so numbed that they could no longer climb into the rescue boat unaided.<sup>55</sup> In October 1916 three people were left drifting on a barge while their boat sank; the story goes that they remained in the water holding onto a tree trunk for seventeen hours.<sup>56</sup> The previous winter, a man from the shore of Impilahti had been wandering in a snow blizzard on the ice for a day and a half and was saved when he decided to walk home along the shore. His "landlubber" fellow traveler decided to return directly across the ice – with fatal results.<sup>57</sup>

50 SKS KRA KE 99:020811–020832.

51 SKS KRA KE MIEHET V:3270–3282; See also SKS KRA KE 88:1745.

52 In the early 19<sup>th</sup> century British literature, the image of the seamen had been transformed from a rugged seaman to a positive figure: an emotional, responsible, and concerned family man, which matched the ideas of the national imagery of the romantic period. However, by the 1860s the image was again changing: in the Victorian period a masculine seaman was not allowed to express feelings unless they were justified by nationalistic motives. See Begiato 2015; O'Neill 2022.

53 Rautavaara Antero: Laatokka – Puolustusemme paha omatunto. *Suomen Sotilas* 17.11.1928, 972. Also: Hämäläinen 2002, 31.

54 SKS KRA KE MIEHET:018388.

55 Salmilaisia kalastajia tuulijolla Laatokalla. *Sortavalan Sanomat* 27.2.1915; Also: Laatokan kulkijain vaarat. Miehiä ajelehtimassa jäälautoilla. *Karjalan ääni* 02.04.1925; Söivät hevosen jäälautalla nälissään ajelehtiessaan Laatokalla. Neljä venäläisen kalastajan seikkailu. *Käkisalmen Sanomat* 2.3.1937; 4 kalastajaa vaarallisessa seikkailussa Laatokalla. *Käkisalmen Sanomat* 26.2.1938.

56 Äskeinen myrsky Laatokalla. "Georgin" proomuun jääneet pelastuneet. *Sortavalan Sanomat* 26.10.1916.

57 Mies eksynyt pyryssä Laatokalla ja paleltunut kuoliaaksi. *Sortavalan Sanomat* 29.1.1916.

The relationship between Lake Ladoga and the people who lived on its shores was influenced by human humility before nature. It was linked to the boundary between humans and nature, the idea of appeasement, which involved trading with nature inhabited by supernatural forces.<sup>58</sup> The shores of northern Ladoga are rough and rugged, so the locals knew that navigating and fishing along the shoreline and walking on the ice roads in winter took some getting used to. People lived along the shore at the mercy of the winds and the weather. They wrote in the press about local concerns: losing fishing gear in autumn storms, the safety of the ice roads, people getting lost in mists and fogs, and managing livestock taken to the islands.<sup>59</sup> Ice roads were important for transporting firewood and fodder, and mild winters made life difficult for those living in the archipelago with farmland on the mainland.<sup>60</sup> Local newspapers regularly reported on the weather conditions in Ladoga, the weightbearing capacity of the ice, and water traffic.<sup>61</sup>

A female narrator described living on the shores of “moody” Ladoga. She emphasized that drownings were not that common in her village, because the locals knew their water.<sup>62</sup> Local knowledge and recognizing the nature of different seasons defines the relationship with the water in many writings. One could cope with the big lake by intimately knowing it and gaining its trust. The locals were said to be able to interpret the different tones and sounds of the water, forecast the weather from its caterwauling voice, and anticipate the next winter’s conditions based on the mists rising above the lake in the fall.<sup>63</sup>

Another female narrator pictured her relationship with the lake through her childhood experiences. She was bodily attached to the environment and her beloved lake, which she described as familiar and generous, yet a bit intimidating and gloomy:

“I was under ten years old when, with my older sister, I harnessed a horse and went to fetch the fish from the shore. There was already snow and the shores were frozen. It was always exciting to see what the sea had given that day... Sometimes there were big salmon ... boxes full of fresh vendace and all kinds of fish Ladoga had, sometimes also seals. – Soon our load was ready. ... Ladoga stayed behind

58 Stark 2002.

59 E.g., Vahinkoja kalastajille, pyydysten menetyksiä. *Suomen kalastuslehti* 2 1929, 25.

60 Saaristolaiset ja leuto talvi. *Kansan voima* 14.2.1925.

61 Mm. Jääsuhteet Laatokalla. *Jaakkiman Sanomat* 8.2.1911; Laivaliikenne Laatokalla alkanut. *Laatokka* 26.4.1910; Jääsuhteet Laatokalla. *Käkisalmen Sanomat* 28.4.1911; Hiidenselän jää kantaa. *Sortavalan Sanomat* 16.12.1915; Jääsuhteet Laatokalla. *Sortavalan Sanomat* 6.5.1916; Laatokan jääsuhteet ja kalastus. *Sortavalan Sanomat* 11.1.1917; Jääsuhteet Laatokalla. Pohjois-Laatokka vahvassa jäässä. *Karjala* 17.5.1917; Heikot jäät Laatokalla. *Kansan voima* 31.01.1924; Jääsuhteet Laatokalla. *Karjala* 10.4.1925; Laatokan jääsuhteet. Isolla Laatokallakin jäät liikkeessä. *Laatokka* 22.5.1926; Jääsuhteet Laatokalla. *Karjala* 28.4.1927; Laivaliikenne jatkuu Laatokalla. *Laatokka* 13.1.1934; Laatokan jäät repeilevät. *Laatokka* 21.3.1936; Laivaliikenne Laatokalla alkanut. *Käkisalmen Sanomat* 5.5.1936.

62 Dialect specimen, Luatokasta ja sen tavosta. Koljunen Hilda, Jaakkima (15.4.1939). The Word Archive of Finnish Dialects. Institute for the Languages of Finland.

63 SKS KRA S Lukka, H., 481.

sighing in the darkening night, it was a little bit sad in the late fall, defiant and a bit scary, in a big storm one couldn't go fishing, many foolhardy fishermen had been swallowed in the depths of mighty, raging Ladoga."<sup>64</sup>

Ladoga was not only the "strong men's sea"; the women and children of the lakefront villages lived in close bodily interaction with the water. They rowed long distances to do their daily chores and participated in the physically demanding seine fishing.<sup>65</sup> A female narrator described nightly fish-buying trips with her uncle. She steered the boat while her uncle slept in the cabin, and she participated in seine fishing and long fishing journeys.<sup>66</sup> The children learned the ways of Ladoga by observing their elders. A woman born on the western shore of Ladoga reminisced about a rowing trip with her grandfather, where they nearly drowned: they were saved when she instinctually followed the example of an experienced seafarer.<sup>67</sup> In another writing a woman describes how, as a young girl, she was rowing on Ladoga with her grandfather in beautiful, calm weather. The old man predicted that a storm was about to rise. When the little girl asked him how he could know that he answered: "See how the Valamo islands are up, that means a storm is coming." The storm arrived shortly after.<sup>68</sup>

The moody character of the big lake and the local climate was literally felt in everyday life. In autumn and winter, the connection to the water and weather was particularly physical. Schoolchildren shivered in their wet clothes, and their pants could be frozen to the seat of the boat. When the frost came, they walked along the ice road "with shoes full of water, ice sloshing around, and hearts throbbing".<sup>69</sup> Children and young people were more likely to fall from the ice road.<sup>70</sup> A female narrator described her way to work in Läskeä sawmill on the northern shore of Ladoga; first she walked two kilometers to the quay and then travelled four kilometers by boat to the factory. In the fall one had to have thick clothes, as the high waves wetted the back of the boat. The icy clothes had to be pulled off the seat at the shore.<sup>71</sup> Seine fishing during autumn and winter was hard work: the shoreline villagers had to wade in icy water and although their boots and clothes were tarred and oiled, they could not avoid getting wet and cold.<sup>72</sup> In a local dialect specimen from 1939, the narrator describes how four children

64 SKS KRA KE 76: 01574. Translated by Oona Ilmolahti.

65 Mm. SKS KRA KE 30:6308; SKS KRA KE 25: 5223–5224; SKS KRA KE 69:2906–2908, 2911; SKS KRA KE MIEHET II 1035; Picture with the text: Mursulan tormakat naiset lähdössä nuotanvetoon [Tough women of Mursula going to cast their nets] Pitäjä pitäjältä: Impilahti. *Karjala* 39/1973 (annex 21), 8.

66 SKS KRA KE 69:2906–2911.

67 SKS KRA KE 90:18728–18729.

68 SKS KRA KE NAISSET III:1252.

69 Helynen Senja ja Lindruus Sina: Muisteluksia Pitkärannan saaristosta. Pitäjä pitäjältä: Impilahti. *Karjala* 39/ 1973 (annex 21), 12.

70 E.g., SKS KRA KE 88:018408; SKS KRA KE 69:2911–2912.

71 SKS KRA KE NAISSET VII:4782.

72 Mäkisalo (Aarne Penttinen). Impilahteä kylittäin. Pitäjä pitäjältä: Impilahti. *Karjala* 39/1973 (annex 21), 8.

aged 12 to 14 were sent in the fall to fish arctic shor, when their fathers were busy elsewhere. The children sailed to a fisher's hut, where they stayed for weeks fishing with nets, and one time were caught in a storm, which they barely survived.<sup>73</sup>

### *In the gentle arms of Mother Ladoga*

The spiritual and refreshing side of the lake is presented in the vast scenery defined by the color blue. The blue seascape and shoreline were linked to holiness and recovery. David Jarratt, who has studied the relationship between the shoreline and spirituality, has argued that feelings of sublimity are most easily reachable beside a large water system. The large scale and the scenery feel almost limitless, which creates a feeling of continuity. Looking into the distance, the viewer can feel connected to the past.<sup>74</sup>

A key feature of the discussion about Lake Ladoga is the distant horizon, a textbook example of the sense of sublimity evoked by the blue landscape. Water and the sky are seen as one, and the union of the elements creates a vast blue space.<sup>75</sup> One Midsummer outing in that landscape is compared to going to church during a childhood Christmas.<sup>76</sup> Gentleness and recovery were part of life for those who lived on its shores, but always combined with a recognition that such a large body of water could be unpredictable: "Water – well, it's something that demands respect. Open water – it's something that involves devotion and reverence. Have you ever been on Ladoga on a summer night without feeling Sunday soaring in your soul?"<sup>77</sup>

The church metaphors – Sunday and Christmas – illustrate the sacredness ascribed to the lake. Summer nature and water provide respite for the imagination, a break from autumn and winter struggles when nature is more relentless: "Ladoga's capes and bays are reflected in the surface of Ladoga... There, in the wonderful peace of nature, our whole being could rest."<sup>78</sup> The rhythm of life on the shore was determined by the cycle of the year and its influence on the great lake. The deep water was freezing in winter, soothingly cool in summer, but warm for long periods in the fall: temperatures in the huge lake changed slowly and had a tempering effect on their surroundings.<sup>79</sup>

73 Dialect specimen, Rosti Maija, Jaakkima: Nieriin pyytö (arrived 4.4.1939). The Word Archive of Finnish Dialects. Institute for the Languages of Finland.

74 Jarratt has characterized four different categories of the seaside: 1) The picturesque and sublime; 2) dynamic and powerful sea; 3) the sea, vastness and awe; and 4) the timeless sea. Jarratt 2015.

75 E.g., Sepänmaa 2002, 10–12.

76 Pohjois Laatokan saaristossa. Syksyllä 1909 (written by Esko). *Suomen matkailijayhdistyksen vuosikirja 1/1911*, 34–35.

77 Suomen Naisten Liikuntokasvatus Liiton retkeilyllä 6–7 p. kesäk. (written by Pännä). *Laatokka* 6.7.1922. Translated by Kate Sotejeff-Wilson.

78 SKS KRA KA 69:2898. Translated by Kate Sotejeff-Wilson.

79 There could be big differences in the weather between the outer and inner archipelago and the coastline. Vanhatalo 2008, 93; Kurkisalo V. J.: Laatokan-Karjalan luonnosta. Pitäjän pitäjältä: Sortavalan maalaiskunta. *Karjala* 48/1971 annex (21), 8.



*Women enjoying a calm day on Lake Ladoga in 1943. Photographer Pekka Kyytinen. Finnish Heritage Agency, Helsinki, Finland. CC BY 4.0.*

Spring was accompanied by practical changes. Before railways, cars and good roads,<sup>80</sup> Ladoga's waterways formed a network connecting villages. In the winter, people walked along the ice roads to church, school, and work; in spring and summer, their skis were replaced by boats. After the ice had melted, many families swam their animals across the water to islands and to the mainland to forested and cleared plots.<sup>81</sup> As late as the 1930s, the majority of locals still travelled dozens of kilometers in rowing boats, while others gradually acquired motorboats or borrowed one from neighbors.<sup>82</sup> Commuters, holidaymakers, and tourists were transported by steamships that offered locals not only transport, but also work. These included the Janaslahti, Pitkäranta, Otava, Ostro, Sergij, Valamo and Konkordia.<sup>83</sup> The ships even brought monks from Valamo to sell apples and other produce from the monastery garden.<sup>84</sup>

80 A railroad connection was opened from Viborg to Joensuu via Sortavala in 1894, and the rail connection from Ruskeala from Suojärvi (1924) as well as the motorization of the roads, substantially reduced passenger ship traffic. Tolvanen J.: Laatokan merenkulusta. *Laatokka* 16.6.1951, 4.

81 SKS KRA KE 25:5363; SKS KRA KE 99:020816; SKS KRA KE 100:012096.

82 See, e.g., SKS KRA KE 20:1083; SKS KRA KE 54:12093,12097; SKS KRA KE 88:018408; SKS KRA KE 92:019269; SKS KRA KE MIEHET V 3274; SKS KRA KE 13:02829; Also: SKS KRA KE 20:1054.

83 SKS KRA KE 25:5363; SKS KRA KE 54:12088; KE NAISET III:2813.

84 See, e.g., SKS KRA KE 63:13308.

Besides the blue space, the mystery of the northern shore of Ladoga was enhanced by the lake's sheer cliffs, echoes, and sounds; the reflections in the open water, visual and acoustic nuances such as the church bells of Valamo Monastery, which is an integral part of the landscape. From time to time, a mysterious underwater rumbling sound, known as *barantida*, was heard on Lake Ladoga.<sup>85</sup> The appearance and sounds of natural features, such as steep cliffs, have led people to regard them as sacred and meaningful. In premodern cultures, echoes have tended to be personified, and rocks from which the sound reverberates have been seen as the dwellings of spirits. Archaeo-acoustology research on prehistoric rock paintings and Sámi sacred sites in northern Finland has shown that these places have a different soundscape from the surrounding environment. Sacred rocks by the water created a bouncing echo of vibrations from one rock to another, creating the sensation of sound – such as laughter, conversation, or footsteps – coming from two directions at the same time, or even from images painted on the rock.<sup>86</sup> In addition to the soundscape, the mirages<sup>87</sup> caused by the difference between the water and air temperatures in spring and early summer are an important part of the magic that people narrate in their relationships with Ladoga: the landscape was like a kaleidoscope, its parts shifting in the light of the spring day.<sup>88</sup>

The most common frame of reference for happy memories of childhood is summer; narrators recalled the sound of the monastery bells, birdsong, the crackling of a fire, the splashing of water, the smell of lake fish and coffee around a campfire, or the taste of freshly picked berries.<sup>89</sup> Some narrators wrote poems about Ladoga, which echo how children experienced the summer landscape with all their senses.<sup>90</sup> The children tasted forest treats

85 Aggleton, John & Waskett, Louise 1999: The ability of odours to serve as state-dependent cues for real-world memories: Can Viking smells aid the recall of Viking experiences? *British Journal of Psychology*, 90:1, 1–7; Belyakov, A. S., Lavrov, V. S. & Nikolaev, V. V. 2017: Study of acoustic noise on Valaam Island. *Doklady Earth Sciences* 472:2, 208–210. <https://doi.org/10.1134/S1028334X17020106> (Accessed Oct 12, 2021); Also: Kasatkin, Viktor 2011: *Progulki po Ladožskomu ozeru. Veneretket Laatokalla*. [http://www.victorkas.com/www/BOOK/LADOGA\\_fin.php](http://www.victorkas.com/www/BOOK/LADOGA_fin.php) (Accessed Oct 25, 2021).

86 Rainio, Riitta, Lahelma, Antti, Äikäs, Tiina, Lassfolk, Kai & Olkkonen, Jari 2017: Acoustic measurements and digital image processing suggest a link between sound rituals and sacred sites in northern Finland. *Journal of Archaeological Method and Theory* 25:2, 453–474; Reddy, William M. 2009: Historical Research on the Self and Emotions. *Emotion Review* 1:4, 302–315.

87 Vanhatalo 2008, 93.

88 Kangastuksista mm. Laatokka (written by Maria). *Työläisnaisten urheilulehti* 1.11.1926, 210; Warttainen Eliel: Laatokka ja Valamo. *Suomen urheilulehti* 1.9.1905, 499–503; Härkönen Iivo: Matkailijat Viipuri – Vuoksenseudut – Valamo. *Otava: kuvallinen kuukausilehti* 7/1916, 292–293; Laatokka. *Kylväjä* 15.5.1923, 131–135.

89 SKS KRA KE 35: 07381–07382.

90 E.g., SKS KRA KE 76:015737. Poems “Laatokka [Ladoga] ja “Karjala” [Karelia] 1946; SKS KRA KE 54:12133, “Missing Ladoga – Laatokkaa ikävöidessä”, late 1970s; SKS KRA KE 69:2898–2901 [“Laatokka”, several poems].

such as wood and field sorrel, bird cherries, blueberries, and wild strawberries wrapped in maple leaves.<sup>91</sup> Ladoga is described as a relaxing body of water, the sea of childhood summer days. The memoirs speak of the waves as the gentle song of Ladoga,<sup>92</sup> whose music could be heard at other times of the year: the ringing and rattling of the ice, the gales, and other sounds of nature combined with music made by family members.<sup>93</sup> The water carried the sounds so that in calm weather it was possible to hear the neighbors' conversations and movements from the shores far out onto the lake.<sup>94</sup>

The variety of descriptions of Lake Ladoga shows that water and shore life were pleasures for rich and poor alike. Many of the summer activities were livelihood-related, but they were also enjoyable. These included picking berries and mushrooms, collecting willow bark or bird eggs, fishing, and angling. Valuable catches such as whitefish, Arctic char, pike perch, and salmon were often sold, but there was more than enough to feed the folks at home.<sup>95</sup>

Murray Schafer has written that every soundscape has its own specific sounds, which might be unique and representative only for one place. He has called these localized tunes soundmarks, which are culturally and historically significant and worth protecting.<sup>96</sup> Many sounds described in the reminiscence stories appear to be such soundmarks, which have been important for the local self-understanding. In our sources, the relationship between humans and nature, or more precisely, between humans and water, seems to focus on the sensorially experienced *genius loci*, the spirit of the place.

Phenomenological research emphasizes the synesthesia of perception and experience, the experience of place throughout the human body, and the body's capacity to remember. Bodily attachment to the place where one lives creates a sense of bodily interiority, so identity is often defined by "where we are at home in our bodies."<sup>97</sup> A place is seen, heard, and felt. The texture of surfaces, proportions, light and shade, tastes, sounds and smells, its felt qualities, are all an important part of the experience of a place.<sup>98</sup>

91 SKS KRA 81:016981. See also: SKS KRA KE 76:015746.

92 SKS KRA KE 76:015737, 015746.

93 SKS KRA Luonto 2008: Kokko Salme; SKS KRA KE 100:012096 (Vihavainen Kalle). Kevätjäiden soitosta myös O. R.: Laatokka. *Kylväjä* 15.5.1923, 133; Meidän kotikylämme Sinilän rantakylä (written by Sinilän rannan tyttö). Pitäjä pitäjältä: Sortavalan maalaiskunta. *Karjala* 48/1971 (annex 21), 18.

94 KRA KE NAISSET III:1252 (Peltonen).

95 SKS KRA KE 20:4324 (Jalava); SKS KRA KE 99: 020816; SKS KRA KE 69:2913; SKS KRA KE; 76:015741; SKS KRA KE 13:02828.

96 Schafer 1994 [1977], 26.

97 Forss 2007, 95. Translated by Kate Sotejeff-Wilson.

98 Forss 2007, 78–80, 115–119.



## Conclusions

The Finns living on the shores of Lake Ladoga had an intimate sensory relationship with their “sea.” The emotional depth of the interaction between people and nature, the memories carried through centuries, are rooted in human senses and bodily experiences. Water has esthetic qualities connected to its taste, color, smell, temperature, subsurface currents, and soundscape.<sup>99</sup> Water enables essential and pleasant bodily sensations: drinking, washing, the intimate and holistic encounter with the human body.<sup>100</sup> On the one hand, people originate from water, on the other, it is an unfamiliar environment; skills, local knowledge, and preparation are required to interact with it. This was the case with the multifaced and -voiced Lake Ladoga, which in the narrations is reborn as a living creature, Janus-faced woman, family member, friend, or as mother nature.

The people born and raised on the shores of Ladoga emphasize their love for the rich nature, unforgettable childhood scenery, and lost sense of community. They were inspired to write about the esthetic, feminine, and spiritual qualities of the lake, the mirages, water creatures, and the good and bad days of mother nature. Childhood is most prominently linked to the multisensory memory of a beautiful summer day: swimming trips, picnic lunches, shoreline campfires and sunsets. The lost shore life is nostalgized, but sensory memory connects it to reality: smells, voices, tastes, beautiful vast scenery, the feel and pressure of the water in the whole body are as real as they once were. The great lake was also experienced as cruel, ruthless, and harsh toward its people. The nature relationship had a fatalistic side: the water demanded its victims as surely as it gave nourishment for both body and soul.

All in all, the shore people of Lake Ladoga had a respectful relationship with the lake; they saw nature as larger than human. Spirits were one way to construe of and identify “Nature.” What we today understand as sustainability is a value in the way of life described in the narrations. Aquatic nature feeds and nurtures the local community, but only if it is treated with respect. When people cross the line, revenge follows. This coexistence and dependency between humans and the lake is not restricted to nationality or time. The same way of thinking can be found in a text written in 1993, when local women in our research area resisted the building of an oil warehouse on a skerry by the lake. “Ladoga is our nursing mother,” they wrote, describing how, with their family members they fish and swim in the lake, pick berries and mushrooms, grow their gardens, and keep their animals near the shores.<sup>101</sup> At different times, the local community has understood the Lady Ladoga as a family member, giver of nurture and sensory pleasures, something that outsiders will never fully understand. With mutual respect – and occasional offerings – the balance between humans and nature is sustained, providing the locals livelihood and pleasure throughout the cycle of the year.

99 Sepänmaa 2002, 16.

100 Bonsdorff 2002, 222.

101 Timofeev, V. V 1993: Ob’at’iyah neftyanogo d’yavola [In the arms of the Oil Satan]. *Severnnyj kur’er* 20.3.1993, 1–2; See also Osipov 2020, 271.

## References

### *Archival sources*

- The Finnish Literature Society, Archive Materials on Traditional and Contemporary Culture (SKS KRA)  
The Karelian Biographies 1983–1984 (SKRA KRA KE)  
Karelian Female Biographies 1997–1998 (SKS KRA NAISET)  
Karelian Male Biographies 2001–2002 (SKS KRA MIEHET)  
SKS KRA S Hjärdis Lukka  
Oral vernacular tradition index, Harlu, Impilahti, Sortavala rural municipality and Sortavala  
Institute for the Languages of Finland, The Word Archive of Finnish Dialects  
Dialect specimens 11, Ladoga Karelia 1

### *Magazines*

- Finlandia vuosikirja 1927  
*Helsingin kuvalehti* 1911  
*Jaakkiman Sanomat* 1911, 1924  
*Kansan Voima* 1924–1925  
*Karjala* 1917, 1925, 1927–1928, 1971, 1973  
*Karjalan ääni* 1925  
*Kylväjä* 1923  
*Kyläkirjaston kuvalehti* 1912  
*Käkisalmen Sanomat* 1911, 1936–1938  
*Laatokka* 1910, 1922, 1926, 1934, 1936, 1946–1947, 1951  
*Laivastolehti* 1928  
*Nuori Voima* 1908  
*Otava: kuvallinen kuukausilehti* 1916  
*Rajaseutu* 1929  
*Sisämaa-Laatokka* 1947  
*Sortavalan Sanomat* 1915–1917  
*Suomen kalastuslehti* 1929  
*Suomen matkailijayhdistyksen vuosikirja* 1911, 1925, 1927  
*Suomen sotilas* 1928  
*Suomen Urheilulehti* 1905  
*Toukomies* 1925  
*Työläisnaisten urheilulehti* 1926

### *Litterature*

- Aggleton, John & Waskett, Louise 1999: The ability of odours to serve as state-dependent cues for real-world memories: Can Viking smells aid the recall of Viking experiences? *British Journal of Psychology* 90:1, 1–7.  
Allen, Mike 2017: Close Reading. *The sage encyclopedia of communication research methods* (Vols. 1–4). SAGE Publications, Thousand Oaks, CA.  
Armstrong, Karen 2004: *Remembering Karelia. A Family's Story of Displacement during and after the Finnish Wars*. Berghahn Books, New York.  
Aronson, Jodi 1994: A Pragmatic View of Thematic Analysis. *The Qualitative Report* 2:1, 1–3.

- Assinovskaya, B. A. & Nikonov, A. A. 1998: Enigmatic features on Lake Ladoga. *Priroda* 5, 49–53.
- Begiato, Joanne 2015: Tears and the manly sailor in England, c. 1760–1860. *Journal of Maritime Research* 17:2, 117–133.
- Belyakov, A. S., Lavrov, V. S. & Nikolaev, V. V. 2017: Study of acoustic noise on Valaam Island. *Doklady Earth Sciences* 472:2, 208–210. Study of acoustic noise on Valaam Island | SpringerLink Accessed October 12, 2021.
- Biess, Frank 2010: Forum. History of Emotions. *German History* 28:1, 67–80.
- Boddice, Rob & Smith, Mark 2020: *Emotions, Sense, Experience*. Cambridge University Press, Cambridge.
- Bonsdorff, Pauline von 2002: Veden mielikuvitus. In: *Vesi vetää puoleensa*. Yrjö Sepänmaa & Liisa Heikkilä-Palo (eds.). Maahenki, Helsinki, 220–226.
- Corbin, Alain 2005: Charting the Cultural History of the Senses. In: *Empire of the senses. The sensual culture reader*. David Howes (ed.). Berg, Oxford, 128–140.
- Classen, Constance, Howes, David & Synnoth, Anthony 1994: *Aroma. The cultural history of smell*. Routledge, London.
- Dijkstra, Bram 1986: *Idols of Perversity. Fantasies of Feminine Evil in Fin-de-Siècle Culture*. Oxford University Press, Oxford.
- Forsman, A. V. 1894: Tutkimuksia Suomen kansan persoonallisen nimistön alalla I. *Suomi. Kirjoituksia isänmaallisista aineista*. The Finnish Literature Society, Helsinki.
- Forss, Anne-Mari 2007: *Paikan estetiikka. Eletyn ja koetun ympäristön fenomenologiaa*. Gaudeamus, Helsinki.
- Geertz, Clifford 1973: *The Interpretation of Cultures*. Basic Books, New York.
- Gottfried, Jay A., Smith, Adam P. R., Rugg, Michael D. & Dolan, Raymond J. 2004: Remembrance of Odors Past. Human Olfactory Cortex in Cross-Modal Recognition Memory. *Neuron* 42:27, 687–695.
- Hoegaerts, J. & Olsen, S. 2021: The History of Experience: Afterword. In: *Lived Nation as the History of Experiences and Emotions in Finland, 1800–2000*. Ville Kivimäki, Tanja Vahtikari & Sami Suodenjoki (eds.). Palgrave Studies in the History of Experience, Palgrave Macmillan, Cham, 375–383, [https://doi.org/10.1007/978-3-030-69882-9\\_15](https://doi.org/10.1007/978-3-030-69882-9_15) Accessed October 12, 2021.
- Howes, D., (ed.) 2005: *Empire of the Senses: the sensual culture reader*. Berg, Oxford.
- Hämäläinen, Viljo 2002: *Lapsuuden kylät*. Privately published. <http://www.metsapirtti.net/artikkelit/viljohamalainen/Lapsuutenirannat.pdf> Accessed October 9, 2021.
- Ilmolahti, Oona & Lähteenmäki, Maria 2021: Laatokka moniaistisena muistikokemuksena. In: *Laatokka. Suurjärven kiehtova rantahistoria*. Maria Lähteenmäki (ed.). Finnish Literature Society, Helsinki, 205–233.
- Jarratt, David 2015: Seaside. Sense of Place at a Seaside Resort. In: *Landscapes of Leisure*. S. Gammon & S. Elkington (eds.). Palgrave Macmillan, London, 147–163.
- Jütte, Robert 2005: *The History of senses*. Polity Press, Cambridge.
- Järviluoma, Helmi & Wagstaff, Gregg (eds) 2002: *Soundscape Studies and Methods*. The Finnish Society for Ethnomusicology, Helsinki.
- Kasatkin, Viktor 2011: *Progulki po Ladožskomu ozeru. Veneretket Laatokalla*. [http://www.victorkas.com/www/BOOK/LADOGA\\_fin.php](http://www.victorkas.com/www/BOOK/LADOGA_fin.php) Accessed October 25, 2021.
- Kuusisto-Arponen, Anna-Kaisa & Savolainen, Ulla 2016: The interplay of memory and matter: narratives of former Finnish Karelian child evacuees. *Oral History* 44:2, 59–68.
- Le Bouëdec, Gérard 2009: Small Ports from the Sixteenth to the Early Twentieth Century and the Local Economy of the French Atlantic Coast. *International Journal of Maritime History* 21:2, 103–126.
- Lehtimäki, Markku, Meretoja, Hanna & Rosenholm, Arja 2018: Veteen kirjoitettu – veden kirjoittamia. Kulttuurisen vedentutkimuksen suuntaviivoja. In: *Veteen kir-*

- joitettu. Veden merkitykset kirjallisuudessa. Markku Lehtimäki, Hanna Meretoja & Arja Rosenholm (eds.). Finnish Literature Society, Helsinki, 7–23.
- Lähteenmäki, Maria (ed.) 2021: *Laatokka. Suurjärven kiehtova rantahistoria*. Finnish Literature Society, Helsinki.
- Merleau-Ponty, Maurice 1998: *Phenomenology of Perception*. Translated from the French by Colin Smith. Routledge & Kegan, London. [Orig. *Phénoménologie de la perception*, 1945].
- O'Neill, Mary 2021: Fishermen as Model Males in Late-Nineteenth Century British Imagery. In: *Negotiating Masculinities and Modernity in the Maritime World, 1815–1940*. Karen Downing, Jonathan Thayer & Joanne Begiato (eds.), Global Studies in Social and Cultural Maritime History. Palgrave Macmillan, Cham., 77–102, [https://doi.org/10.1007/978-3-030-77946-7\\_13](https://doi.org/10.1007/978-3-030-77946-7_13) Accessed May 2, 2022.
- Osipov, Aleksandr 2020: Ladoga Skerries. Suomen kansallismaisemasta venäläiseksi kansallispuistoksi. In: *Laatokka. Suurjärven kiehtova rantahistoria*. Maria Lähteenmäki (ed.). Finnish Literature Society, Helsinki, 265–295.
- Parente-Čapková, Viola 2006: Narcissuses, Medusas, Ophelias. Water Imagery And Femininity In The Texts By Two Decadent Women Writers. *Wagadu* 3, 189–216, <https://sites.cortland.edu/wagadu/wp-content/uploads/sites/3/2014/02/parente.pdf> Accessed September 13, 2021.
- Pearson, Michael N. 2006: Littoral Society: The Concept and the Problems. *Journal of World History* 17:4, 353–373.
- Pikkanen, Ilona 2012: *CASTING THE IDEAL PAST. A Narratological Close Reading of Eliel Aspelin-Haapkylä's History of the Finnish Theatre Company (1906–1910)*. University of Tampere, Tampere.
- Plamper, Jan 2010: The history of emotions: An interview with William Reddy, Barbara Rosenwein, and Peter Stearns. *Theory and History* 49:2, 237–265.
- Plamper, Jan 2015: *The History of Emotions: An Introduction*. Oxford University Press, Oxford.
- Portelli, Alessandro 2006: What makes oral history different. In: *The Oral History Reader*. Robert Perks & Alistair Thomson (eds.). Routledge, London, 63–74.
- Pöysä, Jyrki 2006: Kilpakirjoitukset muistitietotutkimuksessa. In: *Muistitietotutkimus – Metodologisia kysymyksiä*. Outi Fingerroos, Riina Haanpää, Anne Heimo & Ulla-Maija Peltonen (eds.). Finnish Literature Society, Helsinki, 221–244.
- Rainio, Riitta, Lahelma, Antti, Äikäs, Tiina, Lassfolk, Kai & Olkkonen, Jari 2017: Acoustic measurements and digital image processing suggest a link between sound rituals and sacred sites in northern Finland. *Journal of Archaeological Method and Theory* 25:2, 453–474.
- Reddy, William M. 2009: Historical Research on the Self and Emotions. *Emotion Review* 1:4, 302–315.
- Saren, Ann Reid 2016: *Sensory history at the water's edge: an historical and cultural analysis of Australian urban waterfronts in Perth and Cairns*. University of Western Australia. <https://research-repository.uwa.edu.au/en/publications/sensory-history-at-the-waters-edge-an-historical-and-cultural-ana> Accessed December 15, 2021.
- Sepänmaa, Yrjö 2002: Veden ja vesiluonnon kauneus. In: *Vesi vetää puoleensa*. Yrjö Sepänmaa & Liisa Heikkilä-Palo (eds.). Maahenki, Helsinki, 9–17.
- Schafer, Murray R. 1994 [1977]: *Our Sonic Environment and the Soundscape – the Tuning of the World*. Destiny Books. Rochester, Vt.
- Smith, Mark M. 2007: *Sensing the Past: Seeing, Hearing, Smelling, Tasting, and Touching in History*. University of California Press, Berkeley.

- Smith, Mark M. 2010: Looking Back: The explosion of sensory history. *The Psychologist* 23:10, 860–863.
- Smith, Mark M. 2021: *A Sensory History Manifesto*. Pennsylvania State University Press, Philadelphia.
- Stark, Laura 2002: *Peasants, Pilgrims, and Sacred Promises. Ritual and the Supernatural in Orthodox Karelian Folk Religion*. Finnish Literature Society, Helsinki. <https://oa.finlit.fi/site/books/m/10.21435/sff.11/> Accessed October 15, 2021.
- Timofeev, V. V 1993: Ob'atyah neftyanogo d'yavola [In the arms of the Oil Satan]. *Severnyj kur'er* 20.3.1993, 1–2.
- Timonen, Eija 1988: *Vedehaltijat*. Finnish Literature Society, Helsinki.
- Uimonen, Heikki 2019: Evening of sounds: auditory cultures in radio call-in programmes. In: *Sound, Media, Ecology*. M. Droumeva & R. Jordan (eds.). Palgrave Macmillan, Cham, [https://doi.org/10.1007/978-3-030-16569-7\\_14](https://doi.org/10.1007/978-3-030-16569-7_14), 261–284 Accessed January 20, 2022.
- Vanhatalo, Anni 2008: Laatokka ekosysteeminä. In: *Kultakäkösen kukuntamailla. Matka eteläisen Karjalan luontoon ja kulttuuriin*. Paavo Ojanen et al. (eds.). University of Helsinki, Helsinki, 91–100.

## The Finnish-Russian Sortavala Archipelago in Transition, 1917–2020

The following chapter portrays the demographical and social transition that occurred before and after the Second World War in the former Finnish Ladoga coastal communities.

During the Finnish period, there were several villages on the islands of the Sortavala Archipelago (Map 4) on the northern shores of Lake Ladoga. For example, the island of Tulolansaari had some 2000 inhabitants in the 1930s, and 14 villages of the neighboring island of Riekkalansaari. However, the situation has changed dramatically over the last eighty years: on Riekkalansaari, there is nowadays only one permanent settlement with 200 inhabitants. The archipelago has been transformed from a predominantly agricultural community to a recreation area with dozens of dachas (*datša*), several holiday villages, and various conservation and restricted areas.<sup>1</sup>

Especially, times of war have had a tragic effect on the islands, and notably, the inhabitants of the archipelago changed four times during World War II. At first, the Finns had to flee from their homes during the Finnish-Russian Winter War (from November 1939 to March 1940). Following this, the victorious Soviet Union inhabited the largest islands, and new settlers came from the southern Astrakhan region of Kazakhstan. However, Finnish troops reoccupied the region in autumn 1941, and this time the Russians were evacuated, and the Finns returned to the islands and lived there to the summer of 1944. But after the end of the war, the population changed again, this time people from Belarus, were settled on the islands.

The social and natural utilization systems of the islands changed with the coming of new inhabitants. Nevertheless, despite the political and economic differences of the Soviet Union compared with the more western Finland, the natural conditions of the archipelago and the variations in the seasons went unchanged. For both old and new residents, the archipelago was above all a framework for an everyday life, which was bordered by Lake Ladoga,

1 Riekkalansaari island 41 km<sup>2</sup>, Tulolansaari 26 km<sup>2</sup>, Sammatsaari 9,5 km<sup>2</sup> and Orjatsaari 8,5 km<sup>2</sup>; This chapter has been edited from the chapter published in *Laatokka. Suurjärven kiehtova rantahistoria* (2021). See Björn 2021.

Map 4. The Sortavala Archipelago



Map: Augustine-Moses Gbagir & Ismo Björn 2022.

the nearby Valaam archipelago, and its monastery. During the Soviet era, the Valaam islands had civilian settlements. Geographically, the Sortavala archipelago separated the mainland and the city of Sortavala from an unpredictable element, Lake Ladoga, whose waters change shape according to weather conditions. In contrast to this local perspective, as early as the 1920s–1930s, outsiders have come to appreciate the Sortavala archipelago as a nature and hiking paradise, which it remains today.

### *Research frame*

In my empirical chapter, I will analyze the differences between the archipelago’s permanent year-round residents, villa settlements and occasional tourists, in relation to lifestyle and the islands’ environment over the last hundred years, from the 1910s to the 2010s. The key concept here is an archipelago-islander life, and I define this concept as a factor that unites and shapes

the inhabitants of the archipelago.<sup>2</sup> Furthermore, it is possible to analyze the meanings of archipelago life by examining the relationship between the islanders and outsiders, the island, and the mainland.

For Finns, the town of Sortavala and its archipelago is nowadays a lost place – a part of the Finnish national memory. In recent years, Finnish historians have even written about the Sortavala region without a national emphasis, but these texts still include memories,<sup>3</sup> and the islands have been seen as a background for other activities, such as the city life of Sortavala and the Valaam monastery. The Finnish historiography has long been dominated by the national story of the economic and cultural rise of Ladoga Karelia in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. This story has included the teachers' training collage of Sortavala with singing and playing festivals, as well as the reforms that took place in industry, business and agriculture.<sup>4</sup> In this context, the archipelago has been seen as a landscape for spiritual and patriotic excursions. But as a national landscape, the Sortavala archipelago has presented a romantic image of Karelia, and in photographs, the archipelago landscape is often framed by the domes of the Valaam Monastery and has an everlasting summer.<sup>5</sup>

The Sortavala archipelago has also been presented as a unique nature paradise both in Finnish memoirs, and later in novels, travel guides, and nature literature. Russian descriptions of the Sortavala archipelago and entire Lake Ladoga region during the Soviet-Russian era are as emotional as was the case among the Finns, as we can clearly see from the chapter by Maria Lähteenmäki and Oona Ilmolahti. Recent Russian writings have highlighted the bedrock and rocks of the region, and stone from the Sortavala region has been used for hundreds of statues and monuments in Russia. Especially, stone mined from the shores of Lake Ladoga can be seen in dozens of public buildings and metro stations in Moscow and St. Petersburg, and in this way, the stone seems to bind the Sortavala region and the earlier Finnish Karelia into contemporary Russia.<sup>6</sup>

An attitude shared among previous and present writing is the way that the life of the archipelago is depicted as being dated and regressed. However, the modern world has in fact reached the archipelago and is displacing its past livelihoods and ways of exploiting nature. However, the change has had consequences for the archipelago's landscape, and with the end of grazing and mowing, the regions fields and meadows are slowly disappearing.<sup>7</sup> Essentially, a renunciation of the old is a key theme in Russian Karelian literature, and the Ladoga archipelago is presented to the modernizing world as an open-air museum, a protected area, and a temple of science and art,

2 See Lettinen 1994; Nerdrum 1998; Suutala 2008.

3 Heikkilä 2008, 8–10; Röyhkä 2011, 7, 22; Björn 2018, 79, 88; Itkonen 2018, 50–60.

4 Mäkinen 1956; Karttunen 1979; Pajamo 1985; Lintunen et al. 1998; Huovinen et al. 2007; Björn 2018.

5 Suomi 1923, 424; Siilahti 2008, 24, 227; Myllylä 2010, 124; Mikkola 2012, 114; Borisov 2014a, 89.

6 Borisov 2014a, 203–204, 213; Borisov 2014b, 217; Borisov 2014c, 112–113; Borisov 2014d, 129–131.

7 Siilahti 2008, 87.



which those outside wanted to protect. But the people who live on islands describe themselves as being self-sufficient and independent.<sup>8</sup>

The islander life is characterized by perceptions of scarcity, self-sufficiency, living at the mercy of nature, and having one's own customs and rights. These kinds of discussions have also presented themselves among the archipelago people themselves. The outer islands are considered more as places of "archipelago people" than the large inner islands near the mainland. Inhabitants must struggle through the winter for their own supplies, because on Ladoga, the surface only freezes enough to bear the weight of a horse or car every three years or so. As a consequence, the outer islands have always been seen as insular in the stronger sense of the term.<sup>9</sup>

The ground material of my study is comprised of three main sources of data. The first comes from digitized newspaper and magazine articles published in Finland from the 1910 to the 2010s. The second contains the Finnish-language *Punalippu* (Red Flag) and *Carelia* magazines and the *Karjalan Sanomat* (Karelian News) newspaper, which have been published in Petrozavodsk in Soviet and Russian Karelia. My third utilized material consisted of print sources related to the Sortavala archipelago, such as travel guides, nature books, picture collections, and memories published in Finland, the Soviet Union, and Russia. In recent years, useful photographs from the Soviet era have been featured in the *Cerdobol* magazine, as well as in various museum exhibitions.<sup>10</sup> I will also use my diaries and notes from my travels and fieldwork as research material, and I have visited transnational Karelia, and especially Sortavala, every year for twenty years and myself noticed a change in the region.<sup>11</sup>

The theoretical frame of the paper is based on archipelago studies<sup>12</sup> and coastal history. As Maria Lähteenmäki<sup>13</sup> has written, coastal communities are connected by a symbiosis of land and water. The coast is never permanent and neutral. Rather, it is formed and changed over time, and is socially built. The archipelago also has its own special identity-shaping effect and determines the relationship with outsiders. The determinants of archipelago life are a self-sufficient life, mobility, and an independence from the rest of (continental) society. Inherently, the archipelago constructs a unique economic structure that includes livelihoods reliant on both water and land.

### *Leisure summer*

Newspapers and other texts show that in Finnish times, the Sortavala archipelago was a recreational and leisure area for the inhabitants of the city

8 Sortavalan maalaiskunta 1953, 307; Lettinen 2004, 135.

9 See Pelkonen 1961; Rekimies 1966, 15; Lintunen et al. 1998, 68–69, 73; Siivonen 2008, 53, 156–157, 206; Kasatkin 2011, 14, 24; Lavrov & Kuleshevits 2014, 87.

10 The National Museum of The Republic Karelia, Petrosavodsk, North Ladoga Republican Museum, Sortavala, Olonets Museum of Livvi-Karelians, Olonets.

11 Björn 2001, 2002, 2017a, 2018, and 2019.

12 See Nerdrum 1998; Lettinen 2004; Suutala 2008.

13 Lähteenmäki 2021, 12.

of Sortavala. The small island of Kukkassaari in front of the city of Sortavala was seen as a traditional excursion destination for the townspeople, and the site of many gatherings. In Finnish times, the island had a small open-air restaurant, and during the Soviet era, the island was connected to the mainland by way of a long footbridge, and the use of the island as a kind of local recreation area continued. Next to Kukkassaari is the island of Pormestarinsaari, which was known in Soviet times as the ‘Island of Love’, as it was customary for a young couple to spend the night on the island after their marriage.

During the Finnish period, the wealthiest townspeople built villas on the islands, and less wealthy maintained weekend houses. Private summer hotels in the archipelago such as the Jamilahti and Louhela hotels promised rest and recreation to their summer guests. In addition to the radio and a gramophone, there were opportunities for swimming, tennis, and enjoying the “Sortavala Natural Wonder Archipelago”. Particularly, Jamilahti’s summer hotel was marketed especially to “hard-working” primary school teachers.<sup>14</sup>

The most attractive villas in the archipelago were the Tarulinna villa owned by Dr. Hannes Winter from Sortavala, and Kirjavalhti villa owned by pharmacist Tauno Jääskeläinen from Helsinki. Tarulinna was designed by the world-famous Finnish architect Eliel Saarinen, who later moved to the United States. Winter’s villa also became known in Finnish times as Turkama’s villa, according to its next owner, pharmacist Väinö Turkama from Sortavala. Opposite Winter’s villa on Riekkalansaari Island was the Mairutlahti villa, also designed by Eliel Saarinen, and built for Hannes Saarinen, Eliel Saarinen’s older brother, who was the manager of the Sortavala National Equity Bank. The rocky Kirjavalhti villa was designed by Finnish architect Pauli Blomstedt. Dying at just 35, Blomstedt designed several reputable buildings, as well as furniture items that are still in production. In addition to the Federal Bank house, among Blomstedt’s best-known works are the current World Trade Center in Helsinki, which was once considered the most modern house in Europe, with its façade featured in advertisements and on book covers. Another well-known Blomstedt building was the funk-style Pohjanhovi hotel in Finnish Lapland in Rovaniemi, which was burnt down by the Germans at the end of World War II.<sup>15</sup>

Lasse Pöysti (born in 1927 in Sortavala, died in 2019 in Helsinki) was a famous Finnish actor and professor. He describes summer life in one of the Sortavala archipelago’s villas on the island of Haavus in his memoirs and television documentaries. The memoirs show how the villa did not need a well because clean drinking water was taken directly from Ladoga. Pöysti tells about boat trips, adventures, and visits to the Valaam Monastery and discussions with the monks. The highpoints of the villa life were the smoke sauna and Lake Ladoga itself, the nearby flowers, the playhouse built by his father, the sandy beach, butterflies, shore fishes, nets, motorboats, rowing, and swimming. The villa had two strawberry fields, a raspberry and cherry

14 Suomen Matkailijayhdistys 1938, 11; *Kaikille* January 1, 1929, 1.

15 Björn 2017b.



*One of the hundreds of summer cottages with the Finnish flag in the Sortavala archipelago. Photo: A. Pietinen 1938. The Finnish Heritage Agency, Helsinki, Finland. CC BY 4.0.*

orchard, a vegetable, and potato field, as well as grapes and tomatoes. So, there was enough food in the summer, and some for storage in the fall.<sup>16</sup>

Like Pöysti's villa and many other villas in the Sortavala archipelago, doctors, managers, merchants, timber store owners, mayors, and various businessmen had time and could afford to care for even things like an Italian garden such as the one maintained by the pharmacist Winter and built favorite paths around their properties. As described in villas such as that belonging to the pharmacist Jääskeläinen, it was possible to stroll through ruined gardens built of natural stone and sit in the Karelian-style cabin of a stone castle. The dozens of villas that arose in the archipelago came to form a network, and villa people catered to both summer guests and other vacationers. They enjoyed ice cream, sipped cold drinks, and ate strawberries that were always at their succulent best, at least in later memories. There was also time to take care of the vegetable gardens and eat wonderful fish, even if the catch had not always come out of the lake.

For these villa dwellers, actual farm work such as plowing and threshing was in fact a form of play, and their livelihood was not dependent on results. In the life of the villas and in their remembrance, there is always the sense of an eternal summer. There was no spring, no autumn and thunderstorms, no winter, no ice or snow. In their depictions, people might fish themselves, or they might involve the fishing of farmers or fishermen in the neighborhood.

<sup>16</sup> Pöysti 1990, 7–37; Seppänen 1960, 57–58.



*Finnish tourists in the Sortavala archipelago in the 1920s. Photo: The Finnish Heritage Agency, Helsinki, Finland. CC BY 4.0.*

For the farmers and fishermen who were the permanent residents of the archipelago, experiencing the success or failure of the catch, lowering nets and patching gear was a recurring daily job and a necessary livelihood. But for the villa dwellers, it was simply an exciting and memorable single excursion.

The inhabitants of the villa occupied the sunny and sheltered shores of the archipelago. They built piers and saunas, came to fishing grounds, and fished for fun. There was time to lie down inside the villa during any rain and storm, but the permanent residents of the archipelago who made their livelihoods from fishing had to go out regardless of the weather. Their constant activity was never motivated by the pursuit of leisure, but rather it was part of their way of living and ensuring sustenance, whether this took the form of fishing, haymaking, berry or mushroom picking, or other gathering activities.

In Finnish times, the sale of villa plots and the construction of villas brought money to the farms that owned land on the shores of Lake Ladoga, and money was also reflected in the external prosperity of the archipelago houses. But the increase in wealth disparities inevitably affected the internal relations of the islanders, where the value of land ownership was highlighted and the gap in living standards between the landless and those well endowed

with real estate widened. At the same time, fishing rights were increasingly tied to land ownership, so landless people lost their access rights, especially in the inland archipelago. In Finland, as a landowner you also own water and have the rights to fish on common waters.

### *Fishermen's archipelago*

For the inhabitants of the archipelago, Lake Ladoga was not a leisure playground but a way of life, and for the inhabitants of the outer archipelago in particular, it was what they relied upon for subsistence. Almost every permanent resident of the archipelago earned at least part of their livelihood directly from Lake Ladoga. According to one survey (1917), there were almost a thousand houses in the Sortavala archipelago where fishing was either the main or a significant secondary source of living.<sup>17</sup> Fish was eaten every day, and the most common food was salted vendace. Researcher Jukka Sihvonen has told how his grandmother lived in island often sighed, "Well, if there is even a one such morning, there is no need to clean vendace".<sup>18</sup> But for the people of the archipelago, going to Lake Ladoga meant fishing first and foremost. Whitefish and vendace were the most caught, but there were also other fish such as shellfish, perch, pike, pikeperch, mackerel, and bream. To catch them, fishermen used self-woven salmon, vendace and whitefish nets and longlines.<sup>19</sup>

The professional fishermen of the outer archipelago caught fish all year round, so they spent most of their waking hours on the lake, either in their boats or on the islets. Fishing was most profitable in the autumn. Fishermen from a wide area gathered in the fishing saunas of the outer archipelago. However, the fish sauna on the island of Kotiluoto was only approximately four square meters in size, with a height of one and a half meters, and during whitefish fishing season there were often three boats with four men each.

The farmers in the inner archipelago who farmed the land in summer and cared for the cattle, also fished in the winter when Ladoga was covered in ice. The farmers gathered together to acquire large nets which were used to catch whitefish. Again, cooperation was needed, as ten men were needed to pull the net out of the water onto the ice. This all-winter hauling began as soon as the ice became strong enough to bear a horse. It was estimated that there were about a hundred fishing communities in northern Ladoga in the early 20th century, with at least ten farmhouses in each. The labor-intensive nature of the fishery meant that almost all the men in the archipelago took part in the hauling, and the women took part in cleaning the fish. In the summer, a few men could handle the vendace net, and the fish were sold fresh either directly to buyers, or to brokers. But sturgeon was so valuable that it was worth delivering it alive to St. Petersburg for sale.<sup>20</sup>

17 Jääskeläinen 1917.

18 Jukka Sihvonen's announcement. November 6, 2019.

19 Sortavalan maalaiskunta 1953, 101; Jääskeläinen 1917.

20 Jääskeläinen 1917.

In the spring, after the ice left, it was time for seal hunting in the outer archipelago. The Ladoga ringed seal (*Pusa hispida ladogensis*) was good prey for one man. Every year, one and a half thousand Ladoga seals were killed on the Finnish side of Lake Ladoga. The Sortavala archipelago accounted for almost half of this, and for example, in 1924, 453 of Ladoga's 1082 seals killed had been killed in the Sortavala archipelago. By way of comparison, only 18 Saimaa ringed seals were killed in Lake Saimaa in the same year.

Finland's independence in 1917 and the closure of the border posed a threat to the whole way of life in the outer islands. The loss of the St. Petersburg market was particularly strongly felt for fishermen in the outer archipelago, who now had to look elsewhere for a living. The loss of the market was also felt in the inner archipelago, and while fishing had been mainly an ancillary industry for farmers, it must be remembered that fishing groups also took the fish they caught and dried in the waters near Sortavala to the markets of Sortavala and St. Petersburg.

The number of professional fishermen in the archipelago decreased rapidly. In addition to the loss of the main market, fishing became increasingly expensive. New prefabricated fishing gear and motorboats had entered the market, which required investments of money. However, the landless fishermen could not get a loan to buy new fishing gear because they did not have land or forest for collateral. At the same time, Finland's domestic policy emphasized the rights of landowners, and this was also reflected in fishing rights. Fishing waters were distributed in the inland archipelago among landowners, and the amount of free fishing waters decreased. The inhabitants of the villas came to take up fishing in the 1920s and 1930s. They fished in their nearby waters for catfish, using nets and longlines. For them, fishing was part of their leisure time and not important for their livelihood. Whatever their enthusiasm for the taste of fresh-caught fish, they did not have to go fishing in bad weather or frosty conditions like the real fishermen.

The closure of the border also marked the end of the important trade in stone and logs for the archipelago residents. The large quarries on the islands of Tulolansaari and Kalkkisaari fell silent.<sup>21</sup> It was possible to go to work on the mainland from the island of Riekkalansaari, but those from the outer islands found it necessary to move. The islands were put in mothballs every fall and spring.

### *The archipelago during the Soviet era*

During World War II, the Finnish people of the archipelago had to leave their homes for the interior of Finland. They were placed in neighborhoods of the city of Jyväskylä in central Finland.<sup>22</sup> The Soviet Union emptied the islands of inhabitants. The people and all their domestic animals had left, along with some tools and furniture. But the houses, barns, saunas, seine boats, fields, meadows, and forests were still in place, as were schools, commercial

21 Borisov 2014a; Borisov 2014b; Borisov 2014c.

22 Sortavalan maalaiskunta 1953, 101.

buildings, clubhouses, piers and roads. As the new host of the archipelago, the Soviet Union defined the Sortavala region as a livestock and dairy farm in its economic plans. A couple fishing collective farms were also established in North Ladoga. Already after the Winter War (1940), a total of 68 families had been relocated to the island of Tulolansaari, mainly from the Astrakhan area. The families were settled in houses that had been left behind by Finns and formed a fishing and farming cooperative called the Lenin Road. During the Finnish-Russian Continuation War (1941–1944), they were evacuated to the Vologda region, and the original Finnish inhabitants of the archipelago returned to their homes. But the settlement changed again in the autumn of 1944, and the Finns left and the inhabitants who had lived on the islands for less than a year returned after the Winter War. New inhabitants also moved to the archipelago and came mainly from Belarus.<sup>23</sup>

The surrender of Finland's territory meant that the entirety of Lake Ladoga was now in the possession of the Soviet Union. Importantly, the lake was no longer a transboundary water, but a Soviet inland lake. Sortavala was reconnected to the large city of the Neva, Leningrad (formerly St. Petersburg). Lake Ladoga again became part of its economic territory, which had been the case before Finland's independence in 1917. The fish caught in northern Ladoga again ended up in the huge city on the Neva,<sup>24</sup> and the break in the fishing trade had effectually lasted only twenty years. Ship traffic from Sortavala travelling on the lake and River Neva to Leningrad and on to the Baltic Sea also resumed, and Stalin's canals reached from Lake Ladoga to Lake Onega and further north to the White Sea.

Lake Ladoga provided good conditions for the development of fishing. The main fishing units in northern Ladoga were the Pitkäranta (Pitkyaranta) fishing collective farm and Sortavala fish factory (ZAO). They operated relatively successfully in the closed system of the Soviet economy, and in the 1970s, both fishing brigades of the fish factory were able to report that they had completed their annual target one and a half times over.<sup>25</sup> However, fishing ran into difficulties in the late 1980s, as did the entire Soviet system. Statistics show fish catches collapsing, but with the break-up of the Soviet Union and the birth of a new Russia, fishing was also privatized and catches of major fish species such as vendace and whitefish increased once more.<sup>26</sup>

Fishing had been tightly regulated in Lake Ladoga during the Soviet era, but it was thrown open to everyone in 1992. The fishing permit allowed everyone to keep 70 meters of nets, and recreational fishermen came to the same fishing grounds that were worked by the former Soviet-era professional fishermen. This resembled the free-for-all that had existed in Finland during the 1930s, when villa residents entered the traditional fishing areas of archipelago fishermen. But fishing is said to have been a wild activity in the 1990s. Nets and other valuable equipment were destroyed and stolen. Fishing guards and professional fishermen carried weapons, and it was said

23 Borisov 2014b, 214–215.

24 See Taskinen 1998, 50.

25 *Neuvosto-Karjala* November 11, 1978; Tiitola 1993.

26 Guvorova et al. 2001, 162; Ryzhkov & Kucho 2003, 560–561.

in Ladoga that the main salmon rivers at the time were dominated by some kind of “fish mafia”.<sup>27</sup>

But life in the archipelago had one constant, and while you might live in Sortavala without a car, it was harder to get by without a boat, as the boat allowed people to fish and navigate the waterways to visit islands to pick berries and mushrooms. It was estimated that there were about 2000 boats in Sortavala in the 1990s, and almost every family had their own or shared a boat with their neighbors. Also, townspeople continued to fish with nets and fishing poles from the dirty water in front of Sortavala, and winter ice fishing and pole fishing were both a hobby and a pastime.<sup>28</sup>

### *State and collective farming in Sortavala archipelago*

The fields and old Finnish villages of the large inland islands of the Sortavala archipelago provided an opportunity for the development of large-scale agriculture projects favored by the Soviet Union. The authorities moved the individual houses of the Finnish period into larger entities on the large islands, but only concentrated on a few villages. The houses and cottages of the smaller villages and outer islands were left empty and demolished in the 1950s and 1960s, and some simply rotted where they stood.<sup>29</sup>

According to Soviet doctrines, the people were raised and civilized in settlement centers, each of which had a clubhouse or other public space where the soviet citizens could gather, watch movies, and hold joint events. In this way, the inhabited villages of the Sortavala islands were each given a school, a health center, a clubhouse, and a shop. Electricity lines were also laid to the islands of Riekkalansaari and Tulolansaari, and grain, potatoes, carrots, cabbage, cattle, pigs and sheep, and chickens were raised in former Finnish fields.

A collective farm called Lenin’s Road was established on the island of Tulolansaari. Although the fields on the island had good clay soil and Lake Ladoga protected them from frost, they were too small for a collective farm economy. The Lenin’s Road collective was closed as early as 1956, and after that, an auxiliary farm called Sortavala operated on the island for a few years. Tulolansaari began to empty in the early 1960s. The employees of the collective farm and the auxiliary farm moved to Sortavala, and some moved to the neighboring island of Riekkalansaari. The last permanent resident left Tulolansaari in 1968, and the fields of Tulolansaari were used by the Voroshilov collective farm based in the village of Lamberg on Riekkalansaari, which turned them into cattle pastures and meadows.<sup>30</sup> The fact that Marshal Kliment Voroshilov was given a collective farm in Karelia that had been conquered by Finland was itself quite interesting. Voroshilov

27 Taskinen 1998, 100, 185.

28 Kasatkin 2011, 52; Izotov 2001, 95–96, 104; Izotov 2016, 89; Lintunen et al. 1998, 140.

29 Izotov 2016, 47; Taskinen 1992, 21.

30 Kornishenko 214, 116–24; Borisov 2014b, 214–215; Borisov 2014c, 96.



had been the People's Commissar (Minister) of Defense in the Winter War against Finland and lost his position because the war did not go according to plan despite the final victory. However, Voroshilov later went on to become a Soviet hero.

Cows grazed on Tulolansaari during the summers. The women of the Lamberg collective farm were transported by motorboat to Tulolansaari every morning during the grazing season. After the evening milking was done, the milk was transported by boat to the central farm of the collective, and from there by milk trucks to the Sortavala dairy. The work of the Lamberg milkers was heavy and dirty, and the working day with the journeys was long. The cows had to be milked twice a day and seven days a week. There were no milking machines on the island, so the cows were milked in the open air by hand into a zinc bucket, and then filtered into milk churns with a capacity of about 40–50 liters. The milking parlor had some sort of canopy and floor, but its surroundings were muddy and manured. At home in Lamberg, the women still had housework, a man, children and other dependents waiting for them. Nevertheless, every day, they had to leave for the trip to work, regardless of the weather.

A collective farm dedicated to the Komintern rural locality was established in the village of Nukuttalahti on Riekkalansaari Island in 1947. It raised cattle and horses, and cabbages, different roots and grain were grown in the nearby fields of the collective farm. However, the collective farm was short-lived, as it was already associated with the collective farm in the village of Lamberg as early as 1953 and formed into a state farm called The Priladoshky ("Ladoga region"). This was a large farm that produced meat and milk, and also raised pigs and chickens. The farm also included a calf barn in the nearby village of Ojavoinen, and thus the fields of the former Finnish village also received a new purpose. But the farm was also one of the culprits involved in the contamination of nearby waters, so it also had a negative impact on the area.

During the Soviet era, Riekkalansaari was best known for its furs. Light blue and silver-gray foxes were brought to the island in the late 1950s, and rabbit farming was also tried. A fur farm of more than 10 000 animals grew out of just a few dozen foxes imported from Estonia. The animals were fed cabbage and slaughter waste from nearby collective farms, and small fish from Lake Ladoga, which were supplied from the fishing farm in northern Ladoga. But large-scale fur farming was also hard work, as there were many animals to be fed and the cages required cleaning. Also, getting used to the smell and sounds of animals, not to mention killing and skinning, took time.

A third collective farm on Riekkalansaari Island was located in the village of Hakala and named after the Russian Civil War hero Vasily Ivanovich Chapayev. Like Voroshilov, Chapayev was a Soviet hero, and one of a chain of "holy men" in the Soviet Union, after which localities, collective farms and factories were named. A film about Chapayev (1934) gave birth to its own Chapayev-centric tradition of jokes, so the name of the collective farm was inevitably accompanied by a certain humorous undertone. However, the operation of this collective farm was short-lived as a decent road was never laid in the village, and the farm was deserted within a few years.

Riekkalansaari's glory era was in the 1970s and 1980s, when several new barns and stone houses were built on the island. There were thousands of animals on the island, so the collective farm members relied on their own small vegetable gardens and orchards to diversify their diet. But fur farming ended with the collapse of the Soviet Union in 1991, and the island gradually fell silent. But the fields and meadows of Riekkalansaari and other large islands close to the mainland continued to be grazed until the mid-1990s, and feed collectors still paid occasional visits to the islands during the 21st century.<sup>31</sup> The end of grazing and the cessation of fodder harvesting also affected the overall appearance of the archipelago landscape in northern Ladoga. The cultivated landscape grew over and flower meadows formed on the islands, and shrubs and groups of trees covered old courtyards and structures. Now, the former orchards and vegetable gardens have run wild, although fruit trees, berry bushes, and ornamental and useful plants still grow around the old ruins. With the passing of time and eras, the Finnish white rose, chives, and beetle spice have proven to be hardy crops.<sup>32</sup>

### *The archipelago of tourism*

The importance of traditional archipelago livelihoods such as fishing, seal hunting, animal husbandry and agriculture, as well as boating and freight transport, has diminished in Lake Ladoga, but the livelihoods of many people living in the archipelago are still based on having multiple livelihoods and moving around and working. Large fish farms have become a new phenomenon. While the whole of the Ladoga area had only one large fish farm and a few small fish farms in the 1980s, today there are dozens. But fish farming has caused local water pollution, as the water is not effectively exchanged, especially in sheltered bays.

From a continental perspective, the archipelago presents an eternal opportunity, a kind of underutilized area that demands its discovery. In particular, the tourist sector is always acutely aware of numerous opportunities in the archipelago, but at the same time fears the pollution caused by fish farming. In the current Russian tourist catalog, the Ladoga archipelago is seen as a place of natural peace and wildlife, yet at the same time, it is presented as an entertaining playground for adults. The tourism video of the Sortavala area presented the tourism services offered by the Sortavala region in 2020 and was aimed at wealthy Russian tourists. The natural beauty of the Sortavala area was presented in the tourist catalog, and young couples and their children skied, swam, picked berries and mushrooms, and enjoyed the sun. But soon they moved on to various motorized equipment, and muscle boats, hovercrafts, jet skis, snowmobiles, motorcycles, ATVs and other weird equipment raced on water, ice and land. Lake Ladoga is perfect in summer and in winter, says the video, but the wild adult activities are depicted with

31 Ibid.

32 Siilahti 2008, 19, 84.

no children in the picture frame. After their hectic day, the young families in the video had dinner at Winter's villa in Taruniemi and admired the glasses of wine in their hands as the evening sun set on Lake Ladoga.<sup>33</sup> The contradiction between the peace of nature and the roar of the engines was therefore obvious, and it was clear who the target audience was.

Tourism was already planned and centered around the natural wonders of the Ladoga archipelago during the Soviet era, especially in the 1970s. In Soviet-era pictorial works and travel guides, the city of Sortavala itself was also portrayed through Lake Ladoga. Winter's villa was featured in a picture book depicting Karelia with the caption "Forest villa on the shore of Ladoga" and the picture of a bridge in Karelia was in fact a bridge over the Strait of Ladoga. But in the 1970s, tens of thousands of tourists from all over the Soviet Union visited the Sortavala archipelago every year.<sup>34</sup>

The role of the Sortavala archipelago in the leisure time of the mainland's inhabitants remained the same after the Finns had left. The finest Finnish-era villas on the shores of Lake Ladoga were handed over to various communities. Winter's villa initially served as a rest home for the party's central committee until 1951, after which it was turned into the Sortavala sanatorium in the Karelo-Finnish Soviet Socialist Republic. The villa operated as a sanitarium until 1991, after which the building served as a training station for the Young Sailors Club until the early 2000s, when it reverted to private use, and a holiday village was built next to it.

The Jääskeläinen villa became the House of Composers. In addition to its special architecture, the villa also gained the status of a cultural heritage site, and was visited by artists, composers, and cultural figures from all over the Soviet Union. Guests of the villa included e.g. the renowned ballerina Maija Pliseskaya and the Soviet hit writer Alexander Kolker.<sup>35</sup>

A pioneer camp called Lager Ladoga was established on the site of Louhela's summer hotel on the island of Riekkalansaari. The purpose and the camp program remained to all intents and purposes the same, as it included land-based activities and shore fishing as had been the case in the earlier Finnish era. The food was the same, with fish soup and smoked Ladoga vendace.<sup>36</sup> In Tokkarlahti on Riekkalansaari Island, a holiday home was set up for the Central Committee of the Fishing Industry. It was transformed into a holiday village in 1990, with about twenty cottages, and in recent years, the holiday village has had an inn.<sup>37</sup> A third holiday village on the island is called Lamberg and was established during the new Russian market economy. The business idea of this holiday village was based on affluent customers, and the holiday village offered fishing and hunting trips, as well as snowmobile trips on Lake Ladoga and through the island's forests.<sup>38</sup> The village of Rantue in

33 Field trip memory 2019, May 17.

34 Lindström 1979, 8–9, 81; Björn 2018, 82; *Neuvosto-Karjala* July 23, 1978; *Neuvosto-Karjala* September 13, 1978.

35 Izotov, 2016, 16; *Neuvosto-Karjala* September 13, 1978; Björn 2018, 99.

36 Lintunen et al. 1998, 176–177; Salmenkallio 1989, 29.

37 Borisov 2014c, 94.

38 Lehtipuu 2017, 268.

the northern part of Riekkalansaari became a dacha village in the early 1990s. At that time, the Granit cooperative was founded. The dachas were intended as holiday homes, but they also provided the necessary supplementary food for their owners. Granite-like dacha villages were constructed in the 1990s in different parts of the Sortavala region, but not in the archipelago itself.<sup>39</sup> In the 2010s, Rantue was home to about a hundred permanent residents.

With the collapse of the Soviet Union and the birth of a new Russia, the winners of the market economy converged on the archipelago to build their villas, and especially on the nearby islands of Sortavala. These showy villas, such as the three large bungalows built next to Winter's villa (and the muscle boat moored at its pier) and the flamboyant Marjalahti villa have been associated with President Vladimir Putin and his close circle. There were also rumors that Marjalahti is really owned by Putin's good friend Yuri Kovalchuk, who is also one of the financiers of Winter's villa and nearby villas. The increased status of the Sortavala archipelago is further indicated by the construction of a villa near Marjalahti for the Russian Israeli billionaire Roman Abramovich, who recently was also the owner of the Chelsea football team and owned the Avantgard Omsk hockey club as well. However, the noticeable gap between the social status of the archipelago residents and the villa residents still appears to be relatively unchanged from former times. The modern dachas are comparable to Finnish-era middle-class weekend houses in terms of both ownership and function. But most of the shores of the lake were still uninhabited, and shoreline construction similar to that which has taken place in Finland since the 1960s, has not been experienced on Lake Ladoga. Ironically, a key topic of discussion for Finnish tourists on Valaams boat trips has been the possible prices of beach plots.<sup>40</sup>

Russia's transition to a market economy marked a reassessment of tourism in the 19 region. The eyes of the tourism authorities in the Sortavala region initially turned to Finland. At the same time, the Finnish tourism authorities were also interested in Russia's opportunities.<sup>41</sup> Especially, historic places, family and family memories brought visitors to the Sortavala region and opened a direct flood of memories in Finland. In Sortavala, talk of the return of Finnish tourists to Ladoga had already begun in the late 1980s, and the city had become concerned about the outcome of rich Finns and the changes they might cause, and the encounter between the rich west and the poorer east.<sup>42</sup> The opening of Hotel Ladoga and the improvement of the road between the Finland border and Sortavala in 1995 were milestones in terms of Finnish tourism, but it was clear that nostalgia tourism would be enough for a limited target group of Finns, and that it would not be a permanent growth factor for tourism in the Sortavala region. In Sortavala, the direction of marketing was therefore changed, and Finland took on a secondary focus, as Russia's prosperous middle class was targeted. Notably, St. Petersburg alone had more inhabitants than the whole of Finland. At the same time, nature tourism was

39 Lintunen et al. 1998, 20.

40 Forss 2010, 69; Field trip memory 2015, May 17.

41 *Karjalan matkaopas* 1992, 2.

42 Salmenkallio 1998, 4; Izotov 2016, 40.

again raised as an attraction of the Sortavala region. The development of tourism was supported by the idea of establishing a large natural park in the archipelago.<sup>43</sup> But not everyone was enthusiastic about the impact of tourists, as an increase in tourism was believed to affect the nature of the shores of Lake Ladoga and raise prices in the region. In the eyes of some, the average Russian tourist was a wealthy tourist from Moscow or St. Petersburg, who boasted about their money and were thought to have a derogatory attitude towards the region's small townspeople.

Tourism marketing in the Sortavala region turned to Moscow and St. Petersburg in the early 2000s. In addition to improving transport connections (including a rehabilitation of the roads and railways between St. Petersburg and Sortavala), the growth of Russian tourism was supported by a common culture and language, and the growing influence of the Russian Orthodox Church. Interest in the region was further promoted by the persona of President Putin, who increased the market value of the region, and rumors and news about whether “he himself” was coming to either Marjalahti or Valaam for a holiday aroused interest locally and in Finland. Thus, the visit of a person like Putin was taken as a sign that not only was the place valuable, but the visit made it unique, it raised the glamour of the location.<sup>44</sup>

### *How nature-loving eyes protect the archipelago*

Environmentalists on both sides of the border watched with concern the growth of tourism in the area and warned of the damage uncontrolled numbers of tourists threatened to have on the archipelago.<sup>45</sup> As the availability, size and power of motorboats increased, voyages could be taken to more and more distant islands, and consequently, there were more and more berry and mushroom pickers. Some of the waterfowl populations declined as more and more of the nesting areas were disturbed. Lake Ladoga had become a kind of no-man's land, which was reflected in careless behavior. Campfires were left unattended, or fires seemed to have been lit intentionally and no attempt was made to extinguish fires on some of the islands. It was as if the incineration of the islets and small islands were a matter of complete indifference.<sup>46</sup>

Attempts were made from time to time to curb large-scale illegal fishing and the direct destruction of fish stocks in Sortavala. As early as the late 1960s, a five-kilometer-wide protection zone had been proposed in which all fishing would be prohibited. According to fishing guard Boris Vaisman, by the 1980s, the entire lake had become visibly disturbed by human activity.<sup>47</sup> Soviet artist Georgi Stork dated the change back even earlier, to the 1970s. According to Stork, even then, the buzz of the engines seemed inescapable, and it was becoming increasingly difficult to find solitude. He proposed no-

43 Izotov & Laine 2013, 101–103.

44 Lehtipuu 2017, 234; Björn 2018, 92–93,

45 Karelia 2007, 164; Gurova et al. 2001, 164; Izotov 2018, 56.

46 Siilahti 2008, 90.

47 Taskinen 1998, 14.

go areas for motorboats to protect the archipelago's precious silence and water cleanliness.<sup>48</sup>

Conservationists have believed that the nature of the archipelago is seen at its best when completely without people. But according to them, the enchantment of Lake Ladoga was lost in the early 2000s. Finnish nature activist and photographer of Ladoga Pertti Siilahti wrote how one could move for days in the Ladoga region in the 1990s without seeing other people and without distractions.<sup>49</sup> In the chaotic times of the collapse of the Soviet Union, even the locals were not allowed to move around the archipelago. From the 1990s until the 21<sup>st</sup> century, Finnish environmental authorities, universities, and research institutes were running nature conservation projects in the northwestern part of the Ladoga archipelago alongside Russian conservationists. The establishment of the Ladoga Nature Park was also supported by the tourist sector, which in turn believed that the number of tourists would increase with it. Several hotels were planned for the archipelago, but instead, the island's permanent residents, villa residents and dacha owners opposed the project because they feared the park would deprive them of access to nature and otherwise weaken their status.<sup>50</sup>

The archipelago has also been threatened by pollution. The effects of pollution on the nearby waters of Sortavala is clear to see, as beaches suffer, the water has become cloudy, and debris, bottles and other rubbish has drifted into the lake. The biosystem was also burdened by invisible toxins, and the worst pollution was seen in the 1980s when Lake Ladoga's phosphorus content tripled. The largest polluter in northern Ladoga was the Pitkäranta pulp mill, although chlorine was not a problem, as the pulp was not bleached. But in addition to industrial plants and agglomerations, Ladoga has also been polluted by agriculture with pesticides and other emissions.<sup>51</sup>

After the collapse of the Soviet Union, the Ladoga military islands and the secret experiments that were carried out there contributed to the strain on the lake and were openly publicized. The radioactive ship "Kit" lay by Heinäsenmaa Island, and for four decades spilled its toxins into Lake Ladoga until it was towed away in 1991.<sup>52</sup> In the Finnish era, the Finnish air force flew dozens of hedgehogs from Helsinki to the Ladoga area, as it had been heard that hedgehogs would kill vipers. Also, on the island of Mökerikkö, the coastal artillery stationed there raised rabbits that proceeded to dig tunnels all over the island and laid the island bare.<sup>53</sup>

48 Stork 1979, 71–72.

49 Siilahti 2008, 118–119.

50 Izotov & Laine 2013, 101; Lintunen et al. 1998, 12; Siilahti 2008, 107; Viljanen & Niinioja 1996; Tiitola 1993.

51 Izotov 2016, 91–92; Viljanen et al. 1996, 118; Tiitola 1993.

52 Taskinen 1998, 15, 135; Lehtipuu 2004, 174–177; Lehtipuu 2007, 284.

53 Pöysti 1990, 21.

*Conclusions: A timeless and unchanging archipelago*

However eloquent, the discourse around the natural beauty of the archipelago is inseparable from a particular vision of the region associated with the needs and expectations of tourists, vacationers, and wealthy political elites. It is sometimes disconnected from the lived reality of the archipelago, its isolated character, and the variation of the weather and seasons. Despite the changes in territorial control between Finland and Russia, diverse influences, and new social systems, the Sortavala archipelago has been spoken and written of in almost the same words from decade to decade, and indeed the uses of the archipelago by outsiders have remained the same. In contrast, for the inhabitants of the archipelago, outdoor life has been at the center of daily life and working for a living. They have gone out to work above all because they had few other options. But for holidaymakers, villa dwellers or other casual visitors, the Sortavala archipelago is above all a leisure area, which ironically has brought extra hardship to the region by estranging daily life from Ladoga and its natural rhythms. Life for the two groups is different, and while leisure residents can stay inside during the rain and blizzard, a Ladoga fisherman has to go out regardless of the weather.

The Sortavala archipelago is no longer the archipelago of work it was in the 1980s. Today, the archipelago's outdoor work is largely related to dacha upkeep, land management, making firewood, and domestic fishing. But numerous fish farms have entered the archipelago as a new element, changing the relationship inhabitants have with the lake. Regular changes in socio-economic laws have influenced and changed the use of resources in the archipelago. After the Finns left, many of the islands received new inhabitants who adapted to archipelago life within the Soviet system. The large islands of Sortavala were part of the closed economic system of the Soviet Union, and well-maintained fields provided enough food for the large farms. The climate was also suitable for a fur farm that could utilize the slaughter waste from adjacent dairy and meat collective farms, and fish caught by the regions fishing collective farms. Any settlement was concentrated in a few villages, and the special status of the archipelago was still preserved, as were the opposing positions related to 'being an islander'. From time to time, efforts have been made to define the use of the archipelago from the mainland, but with the collapse of the Soviet Union and the emergence of a new market-oriented Russia, the soviet and collective farms in the archipelago fell silent. Barns and shelters rotted in place. Tractor garages, sheds, repair shops and the dwellings of state and collective farms were left empty. Today, the overgrown ruins with their wild and cultivated plants are an integral part of the landscape of the Sortavala archipelago.

Permanent settlement has become concentrated on Riekkalansaari, an island near Sortavala, as it was possible to combine paid work and archipelago living near the city. But the gentle nature and fertile fields of Riekkalansaari offer a great place for dachas. Other islands have long been emptied of permanent residents, but villas have risen up on the shores of these islands, and a new phenomenon is one of saunas and cottages floating on pontoons. The outer archipelago has become peripheral in terms of settlement but

offers an opportunity in terms of leisure. Already during the Soviet era, the largest villas in Ladoga had gained new users, but the purpose of the Ladoga archipelago has remained the same: rest and recreation – a boat trip to Ladoga. However, Russia's economic rise is reflected in the archipelago, taking the form of new spectacular villas and stories of presidential visits.

Citizenships, nations, and social systems are changing, but the relationship between the nature of the archipelago, the archipelago and the mainland, and the permanent residents and temporary villa residents and holidaymakers will remain. The Finnish period of the Sortavala archipelago in the 1930s displays many continuities with conditions in the Russian Sortavala archipelago today, in terms of social stratification, tensions between vacationers and archipelago residents, as well as tensions between mainland people and islanders. Even in the Soviet era, there were these differences and confrontations. In that sense, the Finnish villa lifestyle proves to be timeless.

## References

### *National Library of Finland*

Digitalized Newspapers (Digi.nationallibrary.fi)

Field trip diaries of the author on May 5, 2017, May 16–17, 2017 and September 4–6, 2017

Field trip diaries of the author on May 14–17, 2019 and August 19–24, 2019

### *Literature*

Ahonen, Raimo 2014: *Sellanen elämä Karjalas*. RA Publishing, Oulu.

Björn, Ismo 2001: Suomalaisten Sortavala, Laatokan valkoinen kaupunki. In: *Sortavala – rajakaupunki*. Pekka Hakamies, Ilkka Liikane & Heikki Simola (eds.). Joensuun yliopisto, Karjalan tutkimuslaitoksen julkaisuja 132, Joensuu, 21–35.

Björn, Ismo 2002: Suomalaisten Sortavala – lavakarjalaisuuden keskus. *Karjalainen* June 24, 3.

Björn, Ismo 2017a: Historian poliittinen tarkoituksenmukaisuus. *Sortavalan Vuorion kylä. Karjala* March 9, 6.

Björn, Ismo 2017b: Saarisen huvila-arkkitehtuuria Sortavalassa ja Kuopiossa. In: *Joensuun Kaupungintalo*. Ismo Björn & Alina Kuusisto (eds.). Pohjois-Karjalan historiallisen yhdistyksen vuosikirja 17, Joensuu, 88–93.

Björn, Ismo 2018: Sortavala kansallisten kamppailuiden rajalla. In: *Ylirajaiset kaupungit Sortavala ja Viipuri*. Miika Raudaskoski (ed.). Pohjois-Karjalan historiallisen yhdistyksen vuosikirja 18, Joensuu, 76–107.

Björn, Ismo 2021: Ulkoilmaelämää Sortavalan saaristossa. In: *Laatokka. Suurjärven kiehtova rantahistoria*. Maria Lähteenmäki (ed.). Finnish Literature Society, Helsinki, 234–264.

Borisov, I. V. 2014a: The Stone Pits of Tulolansaari Island. In: *Mining road*. V. A. Shekov (ed.). Karelian Research Center of the Russian Academy of Sciences. The Institute of Geology, Petrozavodsk, 198–215.



- Borisov, I. V. 2014b: Marble Island Uven. In: *Mining road*. V. A. Shekov (ed.). Karelian Research Center of the Russian Academy of Sciences. The Institute of Geology, Petrozavodsk, 216–219.
- Borisov, I. V. 2014c: Greseckij (Riekkalansaari). In: *Cerdobol*. Gorodskoj almanah, Kaupungin almanakka, Serdobol, 88–97.
- Cerdobol* [magazine]. Gorodskoj almanah. Kaupungin almanakka. Serdobol 2014.
- Forss, Timo 2010: *Karjala edestakaisin*. Like Kustannus Oy, Helsinki.
- Gurova, Svetlana, Kozyreva, Galina & Suharev, Mihail 2001: Sortavalan taloudellinen tila ja kehityksen näkymät. In: *Sortavala – rajakaupunki*. Pekka Hakamies, Ilkka Liikanen & Heikki Simola (eds.). Joensuun yliopisto, Karjalan tutkimuslaitoksen julkaisuja 132, Joensuu, 157–168.
- Heikkilä, Markku 2006: *Laatokan kevät*. Kustannus Oy Rajalla, Jyväskylä.
- Hirvonen, Sari 2015: *Keisarin luostarista marginaaliin. Valamon veljestö ja kansallinen identiteetti 1910–1939*. Sosiaalishistoriallinen tutkimus munkkiyhteisöstä ja sen sopeutumisesta. Dissertations in Social Sciences and Business Studies, University of Eastern Finland.
- Huovinen, Jaana, Karttunen, Osmo, Piipponen, Hannu & Reskalenko, Kirsti 2007: *Sortavalan arkkitehtuuria 1864–1939*. Pohjois-Karjalan ympäristökeskus, Joensuu.
- Itkonen, Hannu 2018: Sortavalan liikuntakulttuuri muutoksessa. In: *Ylirajaiset kaupungit Sortavala ja Viipuri*. Miika Raudaskoski (ed.). Pohjois-Karjalan historiallisen yhdistyksen vuosikirja 18, Joensuu, 58–75.
- Izotov, Aleksandr 2001: Terra incognita: suljettu kaupunki ja sen asukkaat. In: *Sortavala – rajakaupunki*. Pekka Hakamies, Ilkka Liikanen & Heikki Simola (eds.). Joensuun yliopisto, Karjalan tutkimuslaitoksen julkaisuja 132, Joensuu, 91–110.
- Izotov, Alexandr 2016: Soviet Identity Politics and Local Identity in a Closed Border Town, 1944–1991. *Slavic Eurasia Papers* 8.
- Izotov, Aleksandr 2018: *Mapping Sortavala: Local Identity Formation in a Soviet and Post-Soviet Border Town*. Publications of the University of Eastern Finland. Dissertations in Social Sciences and Business Studies, University of Eastern Finland.
- Izotov, Alexander & Laine, Jussi 2013: Constructing (Un)familiarity: Role of Tourism in Identity and Region Building at the Finnish-Russian Border. *European Planning Studies* 21:1, 93–111.
- Jääskeläinen, Viljo 1917: Pohjois-Laatokan kaloista ja kalastuksesta. In: *Suomen kalatalous 4*. Suomen kalastusyhdistyksen sarjajulkaisu, Helsinki, 231–302.
- Kaikille* 1929, January 4, 8.
- Kanervo, Pirkko, Kivistö, Terhi & Kleemola, Olli 2018: Karjala elää keskuudessamme. In: *Karjalani, Karjalani, maani ja maailmani. Kirjoituksia Karjalan menetyksestä. muistamisesta, evakoiden asuttamisesta ja selviytymisestä*. Pirkko Kanervo, Terhi Kivistö & Olli Kleemola (eds.). Siirtolaisinstituutti, Turku, 209–226.
- Karelia*. Guidebook 2007: Scandinavia, Petrozavodsk.
- Karjalan matkailuopas* 1995: Matkailun koulutus- ja tutkimuskeskus Itä-Suomen yksikkö, Savonlinna. Karjalan tasavallan valtionmatkailukomitea, Petroskoi.
- Karttunen, Eeva 1970: Itsenäisyyden aika Sortavalassa. In: *Sortavalan kaupungin historia*. Erkki
- Kuujo, Jorma Tiainen & Eeva Karttunen. Sortavalaisten Seura r.y., Jyväskylä, 273–429.
- Kasantkin, Viktor 2011: *Veneretket Laatokalla*. S. L.
- Kornishenko, E. M. 2014: Istorija ostrova Tulolasaari b 1940–1990 e-godij. In: *Cerdobol*. Gorodskoj almanah. Kaupungin almanakka. Serdobol, 116–125.
- Lahikainen, Kaisu 1993: *Karjalan opas*. Otava, Helsinki.
- Laine, Antti 2001: Tyhjä Karjala ja uudet asukkaat. In: *Sortavala – rajakaupunki*. Pekka Hakamies, Ilkka Liikanen & Heikki Simola (eds.). Joensuun yliopisto, Karjalan tutkimuslaitoksen julkaisuja 132, Joensuu, 73–90.
- Lavrov, O. B. & Kuleshevich L. V. 2014: Geological Sites of the Northern Ladoga Area (Priladozhye) as Nature and Mining Monuments. In: *Mining road*. V. A. Shekov

- (ed.). Karelian Research Center of the Russian Academy of Sciences. The Institute of Geology. Petrozavodsk, 81–105.
- Lehtipuu, Markus 2004: *Karjalan tragedia. Kuinka Suomen kauneimmasta maakunnasta tuli koko Euroopan häpeäpilkku*. Matkaopas. Finnish Guidebooks Oy, Helsinki.
- Lehtipuu, Markus 2017: *Karjala*. Suomalainen Matkaopas, Tallinna.
- Lehto, Liisa 2010: *Kaipaus Karjalaan. Matkoja kotiseudulle*. Kansanelämän kuvauksia 76. Finnish Literature Society, Helsinki.
- Lettingen, Eva 2004: *Saaristolaisen kokemus omasta kulttuuristaan. Eläminen merestä ja meren kanssa*. Turun yliopiston julkaisuja, Turku.
- Lindström, Juhana 1979: *Karjala tänään*. WSOY, Helsinki.
- Lintunen, Petri, Hytönen, Mervi, Ikonen, Kirsti & Kivimäki, Sari 1998: *Laatokan pohjoisrannikon kulttuuriympäristö. Suomalainen kulttuuriperintö Laatokan pohjoisrannikon maisemassa*. Suomen ympäristökeskus, Helsinki.
- Lähteenmäki, Maria 2021: *Laatokka moniulotteisessa raamissaan*. In: *Laatokka. Suurjärven kiehtova rantahistoria*. Maria Lähteenmäki (ed.). Finnish Literature Society, Helsinki, 11–31.
- Matvejeva, Irina 2014: Balaam. In: *Cerdobol. Gorodskoj almanah, Kaupungin almanakka, Serdobol*, 71–78.
- Mikkola, Kati 2012: *Yhdet vielä Karjalalle!* In: *Maailman paras maa*. Anu Koivunen (ed.). Finnish Literature Society, Helsinki, 92–127.
- Myllylä, Vieno 2010: *Kukkahöperön kuusi matkaa koti-Karjalaan*. In: *Kaipaus Karjalaan. Matkoja kotiseudulle*. Liisa Lehto (ed.). Kansanelämän kuvauksia 76. Finnish Literature Society, Helsinki, 122–124.
- Mäkinen, Yrjö-Pekka (ed.) 1956: *Laatokan Karjalan nousun vuosikymmenet. Laatokan Karjalan henkisen ja taloudellisen kehityksen vaiheita 1880–1940*. Laatokan Karjalan kulttuuriryön toimikunta, Pieksämäki.
- Nerdum, Monica 1998: *Skärgårdskvinnor. Tradition, modernitet och diversitet*. Åbo Akademis Förlag, Åbo.
- Neuvosto-Karjala* 1978: Eri puolilta Karjalaa. Sortavala. July 23, 4.
- Neuvosto-Karjala* 1978: Matkailukausi päättyi. Written by A. Zaharova. September 13, 4.
- Neuvosto-Karjala* 1978: Eri puolilta Karjalaa. Sortavala. October 4, 4
- Neuvosto-Karjala* 1978: Eri puolilta Karjalaa. Sortavala. November 12, 4.
- Neuvosto-Karjala* 1980: Sortavalan rotukarjatilalla. September 12, 1.
- Niikko, Klaudia 1960: *Sortavalan-Itä-Suomen seminaari 1880–1960*. Juhlajulkaisu. Kymölän kiltä, Helsinki, 82–87.
- Pajamo, Reijo 1985: *Sortavala. Laatokan laulava kaupunki*. Karjalaisen Kulttuurin Edistämisseätiö, Joensuu.
- Pelkonen, Elna 1961: *Karjalan meren äärellä. Perimätiedon valoa 1800-luvun ihmiskohtaloihin idän ja lännen rajamaissa*. Otava, Helsinki.
- Pöysti, Lasse 1990: *Lassen oppivuodet*. Otava, Helsinki.
- Ryzhkov, Leinod & Kuchko, Tamara 2003: *Whitefishes of the northern Lake Ladoga and their use*. In: *Proceedings of the fourth International Lake Ladoga Symposium 2002*. Heikki Simola, Arkady Yu Terzheik, Markku Viljanen & Ismo J. Holopainen (eds.). Joensuun yliopisto, Karjalan tutkimuslaitoksen julkaisuja 138, Joensuu, 560–565.
- Röyhkä, Kauko 2011: *Rajantakainen Karjala*. Johnny Kniga, Helsinki.
- Salmenkallio, Kauko 1989: *Matkakuvia Laatokan-Karjalasta. Tulkua muutkin katsomua. Matkakuvia Kiziltä, Sortavalasta, Jaakkimasta, Lahdenpohjasta ja Valamosta kesällä 1988*. Karjalaisen Kulttuurin Edistämisseätiö, Joensuu.
- Seppänen, Martta 1960: *Retkimuistoja*. In: *Sortavalan-Itä-Suomen seminaari 1880–1960*. Juhlajulkaisu. Kymölän kiltä, Helsinki, 54–58.
- Semjonoff, Boris 1999: *Karjala*. Britinvest, Helsinki.

- Sihvonen, Pekka 2010: Norppa. In: *Kaipaus Karjalaan. Matkoja kotiseudulle*. Liisa Lehto (ed.). Kansanelämän kuvauksia 76. Finnish Literature Society, Helsinki, 131–133.
- Siilahti, Pertti 2008: *Karjalan luonto. Kannas ja Laatokan Karjala*. AtlasArt, Jyväskylä.
- Siivonen, Katriina 2008: *Saaristoidentiteetit merkkien virtoina. Varsinaissuomalainen arki ja aluekehitystyö globalisaation murroksessa*. Kansatieteellinen arkisto 51, Helsinki.
- Sortavalan maalaiskunta 1954: *Muistojen kirja 1954*. Sortavala Säätiö r.y., Jyväskylä.
- Stork, Georgi 1979: Laatokan luodoilla. *Punalippu* 10, 70–75.
- Suomi. Maa – kansa – valtakunta* 1923. Otava, Helsinki.
- Suutala, Maria 2008: *Onnellisia lehmii ja viisaita ihmisiä. Elämää saariston luontais-taloudessa ja sen muutoksia*. Karprint Oy, Huhmari.
- Taskinen, Juha 1998: *Laatokan seitsemän merta*. Bajannoi, Savonlinna.
- Tiitola, Vappu 1993: Ei kuolemansairas. *Aamulehti*. December 12, 27.
- Wartiainen, Eliel 1927: Laatokan pohjoisrannikko, Valamo ja Raja-Karjala. In: *Finlandia I*. Finlandia, Helsinki, 139–182.
- Viljanen, Markku & Niinioja, Riitta 1996: Laatokka on pahoin saastunut. *Helsingin Sanomat* August 19, 3.
- Viljanen, M., Rummyantsev, V., Slepukhina T. & Simola, H. 1996: *Ecological sate of Lake Ladoga*. In: *Karelia and St. Petersburg*. Eira Varis & Sisko Porter (eds.). Joensuu University Press, Joensuu, 107–124.

## Environmental Conflict and the Birth of the Russian Ladoga Skerries National Park

On June 8, 2011, the calm and measured life of Sortavala residents was interrupted by a massive environmental rally, at which about 400 people heatedly discussed the creation of a national park around the city. The majority of the participants opposed the creation of a national park, and in the fall of the same year, they collected 9500 signatures against this idea.<sup>1</sup> Thus, every second inhabitant of the city was against the establishment of a national park. This rally was one of the important links in the 30-year history of the creation of the Ladoga Skerries National Park, underlying the negative attitude of local residents towards the park. These protests and discussions around the national park have become the largest environmental conflict in the history of Russian Karelia since 1920. How the idea of the national park was born, why the locals were against the park, what other actors were involved in the conflict, and what goals they pursued are important issues. This chapter examines the economic, political, and social aspects of the environmental conflict in the Northern Ladoga from the 1980s to the present day.<sup>2</sup>

First, it is necessary to clarify the meaning of the concept of environmental conflict. As a rule, an environmental conflict is a struggle for natural resources – water, land, forests, minerals, landscapes, which is usually considered through the phenomenon of power and social positions of interest groups.<sup>3</sup> A modern environmental conflict, therefore, is not a confrontation between human beings and nature but a result of a cultural conflict, that is, a collision of two cultures – a consumer culture, and a culture that is more concerned

- 1 Obshchestvennye slushaniya v Sortavale po sozdaniyu natsional'nogo parka "Ladozhskiye shkhery" prevratilis' v nesanktsionirovannyj miting 2011. Spok-karelia.ru. <http://spok-karelia.ru/2011/06/news/2191/comment-page-1/#comments> Accessed January 10, 2022.
- 2 This chapter has been rewritten from the chapter published in *Laatokka. Suurjärven kiehtova rantahistoria* (2021). See Osipov 2021; On the environmental history of Russian Karelia, see Osipov 2022.
- 3 Sidaway 2005, 49.

with protecting the more-than-human world.<sup>4</sup> Environmental conflict is therefore often referred to as “socio-ecological”. Maarten Hajer pointed out that environmental conflict should not be conceptualized “as a conflict over a predefined unequivocal problem with competing actors pro and con”; he added that “a discussion of a typical environmental problem involves many different discourses”.<sup>5</sup>

In addition to the power approach, there are different ways to study environmental conflicts. For example, James Lee defined environmental conflict as a set of violence cases.<sup>6</sup> These violence cases could be considered as direct, structural, cultural, slow and ecological.<sup>7</sup> Rickard Lalander and Maija Merimaa proposed such central dichotomies to characterize and analyze environmental conflicts as environmentalism – ecologism, anthropocentrism – post-anthropocentrism, and cultural and ethnic rights – socio-economic rights.<sup>8</sup> The Russian sociologist Oleg Yanitskij and his colleagues proposed the new term “socio-biotechnical systems”, as a result of technical, natural, and social interactions as well as human transformation of nature or socio-ecological metabolism.<sup>9</sup> The authors argued that socio-biotechnical systems are conflicting and contradictory, open and changeable, and their study requires the rejection of dichotomies such as “human-nature” and “subject-object”.<sup>10</sup>

The case study of the Ladoga Skerries National Park could be considered a classical socio-biotechnical system. The national park became the fourth in the Republic of Karelia and was created by the decision of the government of the Russian Federation in December 2017. However, the environmental conflict around the park remains unresolved. Unlike other national parks in the Republic of Karelia, the territory of the Ladoga Skerries is densely populated and has been transformed by human activity for a long time. When the map of the national park was superimposed on the grid of the urban landscape of Sortavala and settlements, developed spaces, natural resources, tourist routes and locations, Ladoga landscapes, a clash of interests was inevitable. In this chapter, I will analyze the territory of the Northern Ladoga as an open socio-biotechnical system and examine its transformation over the past three decades.

Following an approach that is common in environmental history, this chapter draws on a diverse range of historical sources. First, archival

4 Yanitskij 2016, 303.

5 Hajer 1996, 14, 45.

6 Lee 2018, 24.

7 Navas, Grettel, Mingorria, Sara & Aguilar-González, Bernardo 2018: Violence in Environmental Conflicts: the Need for a Multidimensional Approach. *Sustainability Science*, 13:3, 649–660.

8 Lalander, Rickard & Merimaa, Maija 2018: The Discursive Paradox of Environmental Conflict: Between Ecologism and Economism in Ecuador. *Forum for Development Studies* 45:3, 487.

9 Efremenko, Dmitrij V., Yanitskij, Oleg N. & Ermolayeva, Polina O. 2019: O sotsiobiotehnicheskikh sistemakh. *Voprosy filosofii* 5, 138; Yanitskij 2016, 6.

10 Efremenko, Dmitrij V., Yanitskij, Oleg N. & Ermolayeva, Polina O. 2019: O sotsiobiotehnicheskikh sistemakh. *Voprosy filosofii* 5, 138, 143.

materials from the National Archive of the Republic of Karelia and the Scientific Archive of the Karelian Research Centre were used. Basically, these are documents from the Ministry of Ecology and Natural Resources of the Republic of Karelia: orders and correspondence between various authorities and projects and proposals of scientists from the Karelian Research Center. The second group of sources includes published official documents – laws and decrees of federal, regional, and local authorities. The largest group of sources are articles from the republican newspapers: *Kareliya*, *Leninskaya pravda* (later – *Severnyj kur'yer* and *Kur'yer Karelii*) and *Komsomolets* and local newspapers: *Ladoga – Sortavala*, *Krasnoye znamya*, as well as online newspapers – *VestiKarelii*. The fourth part of sources consists of internet resources: web pages and forums of environmental organizations such as Greenpeace and SPOK and publications and discussions in the most popular Russian-language social network VKontakte.

The main research method in this chapter is discourse analysis, or rather the socio-cognitive approach proposed by Teun van Dijk. Unlike many other approaches that consider the relationship between discourse and social practices, van Dijk used the notion of *mental representations* or *mental models*. He also called mental models a “cognitive interface”. Van Dijk argued that “discourse structures and social structures are of a different nature and can only be related through the mental representations of language users”.<sup>11</sup> He proposed the discourse–cognition–society triangle, where social practices and social interaction can influence discourse and conversely, discourse can influence social interaction through the same mental models and people’s interpretations.<sup>12</sup> Following the socio-cognitive approach, I analyze not only texts and social interactions but also their interpretation in the mass media and social networks, which have become influencers in the environmental conflict in the Northern Ladoga.

### *Environmental problems become economic problems*

Some modern Russian and foreign researchers noted that the ecological situation in Lake Ladoga in the 1970s was catastrophic due to increasing anthropogenic impact,<sup>13</sup> but the general public learned about it later. The case of Ladoga was not exceptional in the USSR, where environmental issues were recognized by the Soviet government in the late 1980s and began to be actively discussed. In 1988 and 1989, the Central Committee of the Communist Party, the Supreme Soviet, and the Council of Ministers of the USSR adopted two highly important environmental decrees. The

11 Van Dijk 2015, 64; Van Dijk 2021, 760.

12 Van Dijk 2015, 64.

13 Colpaert & Gbagir 2021, 195–196; Pavlovskaya 2017: *Ekologicheskoye sostoyaniye Ladozhskogo ozera v 1970-e–1980-e gg. po dokumentam CGAIPD SPb. Publikatsii CGAIPD SPb*; Rumyantsev, Vladislav 2012: *Ladozhskoye ozero. Ekologicheskiye problemy, prichiny, puti reshenij. Regional'naya ekologiya* 1–2 (33), 9.

first one, “On the Fundamental Reorganization of Nature Protection in the Country”, listed numerous shortcomings in the field of nature protection, pointed out the pollution of the lakes Ladoga and Baykal, and called the conservation and enhancement of natural resources the most important task of all authorities.<sup>14</sup> The authors of the other law, “On Urgent Action of for the Ecological Recovery of the Country”, called the current ecological situation in the country alarming and at crisis. They argued that the basin of Lake Ladoga, like many other lakes and rivers in the country, was on the verge of a crisis. Among the measures to improve the environmental situation, the authors proposed to increase the total area of strict nature reserves and national parks to 2 % of the total area of the country by 1995.<sup>15</sup>

The new environmental and glasnost policy of the Chairman of the Presidium of the Supreme Soviet of the USSR, Mikhail Gorbachëv, sparked an active discussion of the ecological situation in the Karelian Autonomous Soviet Socialist Republic (KASSR)<sup>16</sup> in general and in Lake Ladoga in particular. Environmental issues of Ladoga, which had not previously been discussed publicly, suddenly found themselves at the center of the republican agenda in the late 1980s. Local residents wrote with anxiety about the main pollutants being dumped into the lake – pulp and paper mill waste in Käkisalmi, Pitkäranta and Syasstroj, agricultural and livestock waste, and domestic sewage.<sup>17</sup> The local press also reported incidents of poaching and pollution caused by DIY (Do It Yourself) tourism and tourist boats.<sup>18</sup> These problems were discussed in the press of the Sortavala region, whereas the republican newspapers focused on the main issues of that time: the construction of a nuclear power plant in the Republic of Karelia and a pumped-storage hydroelectricity plant on Lake Paanajärvi.

In the early 1990s, two more issues that had a great impact on the future of the Ladoga Skerries National Park were added to the environmental agenda of Ladoga. One of them was the proposal of building a tank farm in Kurkijoki on the northwestern shore of Ladoga, south of Sortavala. The project developers promised to transfer 15 % of the profits to the local budget

14 Postanovleniye Tsentral'nogo komiteta KPSS i Soveta Ministrov SSSR "O korennoj perestrojke dela okhrany prirody v strane" ot 8.1.1988. Elektronnyj fond normativno-tekhnicheskoy i normativno-pravovoj informatsii Konsortsiuma "Kodeks". <https://docs.cntd.ru/document/765705008> Accessed January 10, 2022.

15 Postanovlenie Verkhovnogo Soveta SSSR "O neotlozhnykh merakh ekologicheskogo ozdorovleniya strany" ot 27.11.1989. Elektronnyj fond normativno-tekhnicheskoy i normativno-pravovoj informatsii Konsortsiuma "Kodeks". <https://docs.cntd.ru/document/765704495> Accessed January 10, 2022.

16 From 1991 – the Republic of Karelia.

17 Dyatlov, M. 1989: Ekologiya – problema nomer odin. *Krasnoye znamya* April 12, 3; Ledin, YU. et al. 1988: Ladoga – novaya ugroza. *Sotsialisticheskaya industriya* June 12; Timlin, A. 1989: A sortaval'cy molchat. *Krasnoye znamya* January 10, 3; Vajzman, B. 1989: Ne gubit' svoyë budushchee. *Krasnoye znamya* January 17, 3.

18 Hyarkinen, YE. 1989: Dumayu, finny ne vozrazhat. *Krasnoye znamya* January 28, 2–3; Kudryavtsev, A. 1989: Za chistoty Onegi i Ladogi. *Leninskaya pravda* June 26, 3; Vajzman, B. 1989: Ne gubit' svoyë budushchee. *Krasnoye znamya* January 17, 3.

and guaranteed new jobs, the development of the regional infrastructure, and funds for charity. The idea was met with resistance from local residents, journalists, nature protectors, and scientists, who feared an oil disaster on Ladoga. They accused the oil barons of the illegal exploitation of natural resources and the deception of local residents. The republican and local press was full of catchy headlines such as “In the Arms of the Oil Devil”, “Ladoga: Would You Like a Sip of Oil?”, “Does Ladoga Need the Persian Gulf?”, “Residents of Ladoga Could Become Hostages of the Oil Business”.<sup>19</sup> Despite the absence of the necessary permits, oil companies carried out the first shipments of oil products to Sweden in the summer of 1992; however, the tank farm construction project was rejected.

Another threat to the Ladoga landscapes was logging. On October 27, 1989, the Finnish logging company Enso-Gutzeit and the Soviet logging company Karellesprom signed an agreement to establish the Finnish-Soviet joint venture Ladenso. This agreement provided for the transfer of 381 000 hectares of forest for rent for 20 years to the Ladenso logging company. In other words, the company received almost the entire territory of the Northern Ladoga.<sup>20</sup> The terms of the agreement between Finnish and Soviet logging companies in general and the cost of rent in particular neither suited the republican authorities nor the regional authorities and local residents. The confrontation peaked in February 1990, when several thousand residents of Sortavala went to a rally against Ladenso.<sup>21</sup> As a result, the Supreme Soviet of the KASSR adopted a decision to suspend the activity of the company in March 1990. In addition, the Supreme Soviet decided to create a commission consisting of representatives of the republican and local authorities, timber merchants, and scientists to decide about the future of the Ladoga Skerries.<sup>22</sup>

The key issue in this confrontation was not how much people cared about the environment and the future of Ladoga, but the management of rival claims to natural resources. Both the local authorities and the residents struggled over the question “Who owns the forest?”. If the republican authorities were concerned about the low price of rent and the income distribution mechanism, the authorities of the Northern Ladoga region realized that the arrival of Ladenso would leave their own timber enterprises without work.<sup>23</sup>

- 19 Mikhajlov, M. & Tikhonov, M. 1992: Ladoga: ne khotite li glotochek nefi. *Severnyj kur'er* July 18, 1, 3; Sidlovskaya, Oľga 1993: ZACHEM Ladoge Persidskij zaliv. *Kareliya* March 3, 1–2; Timofeev, Viktor 1993: Torg v Kurkičkakh. Zalozhnikami nefyanogo biznesa mogut stat' zhiteli Priladozh'ya. *Severnyj kur'er* January 30, 2; Timofeev, Viktor 1993: V ob"at'yakh nefyanogo d'yavola. *Severnyj kur'er* March 20, 1–2.
- 20 Bogdanov, V. 1990: “Ladenso i ”reketiry” iz Sortavaly. *Krasnoye znamya* February 24, 2–3.
- 21 Rodionova, I. 1990: Miting protesta: Sortavala protiv ”Ladenso”. *Krasnoye znamya* February 24, 1.
- 22 Lugovskoj, A. 1990: “Ladenso”: proizvol ili zdavyj smysl. *Krasnoye znamya* March 21, 1.
- 23 Kalganova et al. 1990: Lesu – my khozyayeva. *Krasnoye znamya* January 18, 1; Lugovskoj, A. 1990: “Ladenso”: proizvol ili zdavyj smysl. *Krasnoye znamya* March 21, 1; Voskresenskaya, L. 1990: “Ladenso”: Komu dividendy. *Krasnoye znamya*



The discussion around the Ladoga Skerries thus became economic rather than ecological: about 30 articles, letters, and interviews on this issue were published in the local newspaper *Krasnoye znamya* in 1990. An important consequence of the discussion was the proposal of some local deputies and residents to create a national park as an alternative to logging.<sup>24</sup>

In fact, the plan of a national park in the Ladoga Skerries was not born in this newspaper discussion, but it had already been proposed in academic circles back in the late 1980s. One of the authors of the idea was the Head of the Department of Nature Protection of the Karelian Research Centre, Aleksandr Kuchko. According to the proposal of his working group, the area of the future national park would be 85 000 hectares, and it was to be located on the northern shore of Lake Ladoga between Lahdenpohja and Läskelä, including the coastline and islands (Map 5).<sup>25</sup> The idea of protected areas on the shores of Lake Ladoga was not new. Such areas had existed in the Northern Ladoga even before the Second World War, when this territory belonged to Finland. In the 1970s and 1980s, several small botanical reserves and natural monuments were created there.

Scientists and supporters of the idea of a national park were primarily for the preservation of nature of the Northern Ladoga region. This territory was famous for its unique natural landscape, with rare species of plants and animals, hundreds of bays, straits, and islands, which had no analogues among the European inland waters. The idea of tourism development emerged simultaneously with the plan of a national park. Journalist Viktor Timofeev and the residents of Kurkijoki proposed the creation of an international tourist center in the Northern Ladoga region and compared tourism incomes with oil revenues.<sup>26</sup> Some supporters of the national park noted the recreational potential of the area and called the Northern Ladoga region a "Tourist Mecca" and compared it with Thailand. One of the locals wrote:

"The Northern Ladoga region is often called the second Switzerland, the second Crimea. There are millions under our feet. Tourism. When will there be leaders in the republic who want to raise these millions and make our region rich?"<sup>27</sup>

January 9, 1; Voskresenskaya, L. 1989: Komu khozyajnichat' v lesu? *Krasnoye znamya* December 14, 2.

- 24 Ambrazhevich, K. et al. 1990: "Ladensko" ili natsional'nyj park? Obrashchenie deputatov Olonetskogo rajonnogo soveta k zhitelyam Pitkyarantskogo, Sortaval'skogo, Lakhdenpohskogo rajonov. *Krasnoye znamya* May 12, 3; Voskresenskaya, L. 1990: "Ladensko": Komu dividendy. *Krasnoye znamya* January 9, 1; Voskresenskaya, L. 1989: Komu khozyajnichat' v lesu? *Krasnoye znamya* December 14, 2.
- 25 Ob'yasnitel'naya zapiska k predlozheniyu po organizatsii osobo okhranyaemykh territorij KASSR. 1990. F. R-3741. Op. 1. D. 59. L. 16–18. National Archive of the Republic of Karelia; Protokol zasedaniya Prezidiuma Karel'skogo filiala Akademii Nauk SSSR. 1990. F. 2. Op. 2. D. 399. L. 84. Scientific Archive of the Karelian Research Centre.
- 26 Timofeev, Viktor 1993: V ob'at'yakh neftyanogo d'yavola. *Severnyj kur'er* March 20, 1–2.
- 27 Feshchenko, V. 1990: Mneniye protiv. *Krasnoye znamya* March 29, 2.



*The landscape of the Sortavala archipelago. Source: Nikolaj Zhukov 2016. Nature of Ladoga Skerries – Free Photo on Pixabay Accessed February 10, 2022.*

The decision of the commission created by the Supreme Soviet was controversial. On the one hand, all members of the commission supported the idea of a national park. At the same time, Ladsenso continued its activities, and logging in the Northern Ladoga region was not stopped.<sup>28</sup> It is worth noting how the discussion about the ecology of Ladoga has changed its character within two years. Now it was not about environmental pollution and the use of natural resources but about *how* to use these resources and *who* is the owner of the forest. In fact, this was the first public environmental conflict in the KASSR between, as Yanitskij noted, consumer and protecting, development and conservation, production and reproduction, global unification and local uniqueness.<sup>29</sup> The first round of the conflict only outlined the issues, and the compromise solution of the commission was unable to solve them.

### *The National Park as an economic model*

On June 28, 1990, the Sortavala City Council adopted the decree "On the Organization of the Ladoga Skerries Nature Park on the Island and Coastal Area of Lake Ladoga", which was based on the proposal of scientists from the Karelian Research Centre. Later, this decision was supported by the deputies

28 Sitnikova, L. 1990: Nash mer o komissii po "Ladsenso". *Krasnoye znamya* April 5, 1–2.

29 Yanitskij 2016, 14, 303.

of the city councils of Pitkäranta and Lahdenpohja.<sup>30</sup> There were at least two reasons why the city councils of the three cities of the Northern Ladoga region supported the idea of a protected area. First, it was the implementation of the decision from above to increase the area of protected areas in the country in accordance with the new environmental policy. Second, the local authorities did not want to cede these lands to the Ladenso joint venture.

It is important to pay attention to the wording of the decree, which spoke about the creation of not *a national park (natsional'nyj park)*, but *a nature park (prirodnyj park)*. The Soviet and then Russian system of nature protection included several types of protected areas, and the difference between national and nature parks was significant. In the late 1980s and early 1990s, the local press did not distinguish the difference in the status of the parks, mixed up the concepts, and wrote about "national", "nature", and "nature national parks". The concepts of national and nature parks were officially divided in the Russian legislation only in 1995 within the "Federal Law on Specially Protected Nature Areas".<sup>31</sup> The main requirement for national parks was a unique and pristine nature, whereas economic activity should be limited as far as possible, and therefore, the recreational use of territory played a subordinate role in national parks. Nature parks could be established on areas influenced by humans. Nature parks were intended for the development of tourism, and some economic activity was allowed in them. In other words, nature parks belonged to lower-rank protected areas. The status of a nature park thus provided the local authorities much greater powers and allowed them to conduct economic activities and develop tourism.

The decision of the Sortavala, Pitkäranta, and Lahdenpohja City Councils on the formation of a nature park required the approval of the republican authorities, who were in no hurry to consider it. The establishment of any kind of protected area in the Northern Ladoga region was an important economic issue. Funding for national parks was carried out from the federal budget, whereas nature parks received money from regional budgets. There were no funds in the republican budget for the creation of a new protected area, and the existing nature reserves and national parks received only a part of the planned financing from the federal budget. This situation forced the head of the Republic, Viktor Stepanov, to intervene and ask for support from the federal government and even abroad.<sup>32</sup>

30 Informatsionnoye pi'smo ot Komissii po voprosam okhrany prirody i razvitiya turizma RK v Sovmin RK. 1993. F. R-3741. Op. 1. D. 174. L. 39. National Archive of the Republic of Karelia.

31 Federal'nyj zakon ob osobo okhranyayemykh prirodnykh territoriyakh ot 14.3.1995 (s izmeneniyami na 11 iyunya 2021 goda). Elektronnyj fond normativno-tekhnicheskoy i normativno-pravovoj informatsii Konsortsiuma "Kodeks". <https://docs.cntd.ru/document/9010833> Accessed January 10, 2022.

32 Pi'smo Predsedatelya Pravitel'stva Respubliki Kareliya V. Stepanova Zamestitelyu Predsedatelya Pravitel'stva Rossijskoj Federatsii A.H. Zaveryukhe. 1996. F. R-3741. Op. 1. D. 318. L. 36. National Archive of the Republic of Karelia; Pi'smo Predsedatelya Pravitel'stva Respubliki Kareliya V. Stepanova Predsedatelyu Parlamenta Finlyandii R. Uosukainen, a takzhe prem'yer-ministram Danii,

While the park project stalled due to lack of funding, the main issue was the status of the protected area. The majority of Karelian scientists argued for the status of a national park with its restrictions and funding from the federal budget.<sup>33</sup> The local authorities defended the idea of a nature park, arguing that this territory is densely populated, and local residents are engaged in economic activities.<sup>34</sup> Moreover, on July 22, 1997, the heads of the administrations of the cities of Pitkäranta, Sortavala, and Lahdenpohja adopted a new resolution on the creation of a nature park in the Ladoga Skerries. This interesting document can be divided into three parts. In the first part, the local authorities showed concern for the ecological situation of Ladoga, its unique nature as well as historical and cultural monuments and offered to create a nature park. In the second part of the document, the authors proposed to exclude agricultural land, settlements, dachas, farms, and roads from the park, as well as to allow fishing activities throughout the park. In conclusion, the authors referred to the Federal Law on Specially Protected Nature Areas, which allowed local authorities to create "protected areas of local importance".<sup>35</sup>

Unlike other scientists, Yulo Systra, a senior researcher from the Karelian Research Centre, agreed with the local authorities and noted that the status of a national park would restrict the rights of tens of thousands of owners of the Ladoga region.<sup>36</sup> Some local residents were dissatisfied with either the nature or national park projects. They accused the authorities of "gigantomania" – the desire to create huge protected areas and the fact that ordinary people will not have access to the forest:

"As far as the voters are concerned, the overwhelming majority of them are against the creation of a park in any form."<sup>37</sup>

An analysis of the newspapers revealed that voices against the park did not become widespread in the 1990s. At the same time, these voices and Yulo Systra identified one of the most important sides of the environmental conflict around the Northern Ladoga – the issue of landowners, which became most acute due to the mass construction of dachas in the 1990s.

A powerful argument for the creation of a protected area in the Northern Ladoga was the fashionable term "ecotourism", which appeared in the Republic of Karelia in the late 1990s.<sup>38</sup> Republican authorities, scientists, journalists,

Norvegii, Shvetsii, Federal'nomu kantsleru Germanii G. Kolyu. F. R-3741. Op. 1. D. 318. L. 58–59. National Archive of the Republic of Karelia.

33 Sazonov S., Kravchenko A. & Kuznetsov O. 1997: Sud'ba ladozhskikh shkher. *Severnyj kur'er*, August 21, 3.

34 Zhukov, A. 1995: Park v ladozhskikh shkherah. *Severnyj kur'er*, February 1, 2.

35 Osipov 2021, 276.

36 Systra, YU. 1997: Sud'ba ladozhskikh shkher. *Severnyj kur'er*, April 26, 5.

37 Mal'kovskij, Vladimir & Timofeev, Viktor 1998: Strasti po parku "Ladozhskiy shkhery": ostorozhno, gigantomaniya! *Severnyj kur'er*, February 14, 5.

38 Osipov, Aleksandr 2019: Ecotourism in Russian Karelia: Emergence, Development, Opportunities. *Matkailuttkimus* 15:1, 53.

and entrepreneurs believed that tourism in general and ecotourism in particular could become the main sector of the republic's economy. Most of the questions, however, remained open: how to attract tourists, what green or nature tourism should be, how to develop infrastructure, and who should be responsible for this.<sup>39</sup> Two already existing Karelian national parks – Vodlozero (founded in 1991) and Paanajärvi (founded in 1992) – were an example of the underdevelopment of ecotourism. They did not attract large numbers of tourists due to their remote location, poor infrastructure, and a lack of public awareness about national parks.

Unlike the other two national parks, the favorable geographic location of the future nature or national park in the Northern Ladoga at the crossroads from Saint Petersburg to Finland and Petrozavodsk promised ample opportunities for the development of tourism. According to some scientists, the park would be able to receive some 200 000–500 000 tourists a year without harm to nature.<sup>40</sup> Mikhail Nekrasov, an economist from the Karelian Research Centre, argued that foreign tourists spend an average of 50 dollars per day in national parks.<sup>41</sup> Simple arithmetic promised incredible benefits for the republic, which was in a difficult economic situation in the 1990s.

The expectations of the republican authorities from tourism coincided with the arrival of “big money” in Karelia. The first projects under the TACIS (Technical Assistance for the Commonwealth of Independent States) and Interreg (European Territorial Cooperation) umbrella started in the republic in 1994. These programs supported the transfer of European management practices to the former Soviet republics, including Russia and the transition “towards parliamentary democracy and the market economy”.<sup>42</sup> In 1997, the regional TACIS bureau was opened in Petrozavodsk, and the development of cross-border networks and the environment was announced as the main objective of the program.<sup>43</sup>

The grandiose Karelia Parks Development project, with a budget of 3,5 million euros, was launched under the auspices of TACIS in 1999. Unlike many other projects carried out in the Republic of Karelia and Northwest Russia, the Karelia Parks Development project involved investment in equipment. Finnish and Russian scientists and the government of the Republic of Karelia planned to create four new national parks on the Russian side of the Finnish-Russia border, including the Ladoga Skerries, as well as

39 Gromtsev, A. 2001: Kak privilech' k nam turistov? *Severnyj kur'er*, June 21, 2; Kazberovich, N. 2000: Stanet li ekologicheskaya "Mekka" turistovskoj? *Severnyj kur'er*, August 12, 2000, 1.

40 Luchshiy uchënye sily privilecheny k vyrabotke kontseptsii natsional'nogo prirodnoogo parka "Ladozhskiy shkhery" 1995: *Ladoga*, January 28, 2–3.

41 Nekrasov, M. 1999: Natsional'nye parki: plyusy i minusy. *Severnyj kur'er*, March 10, 5.

42 Wassenberg et al. 2015; *Territorial Cooperation in Europe: A Historical Perspective*. [https://ec.europa.eu/futurium/en/system/files/ged/interreg\\_25years\\_en.pdf](https://ec.europa.eu/futurium/en/system/files/ged/interreg_25years_en.pdf) Accessed January 10, 2022.

43 Programma transgranichnogo sotrudnichestva TACIS. Informatsionnaya zapiska dlya SNG. 1996. F. R-3741. Op. 1. D. 329. L. 30. National Archive of the Republic of Karelia.

to modernize the existing Paanajärvi National Park. Scientists developed an economic plan for each park, which was supposed to work as a business project and generate profit through ecotourism.<sup>44</sup>

Despite the opposition of the local authorities and the dissatisfaction of the local residents, the republican authorities, together with scientists from the Karelian Research Centre, launched the project. The lack of an official status of the national park did not become an obstacle. While the authors of the project were waiting for a decision from the Russian government on the creation of a national park, the municipal entity of the planned Ladoga Skerries National Park was created as an intermediate model. This municipal entity received office supplies and tourism equipment such as cars, boats, canoes, boat engines, sledges, snowmobiles, tents, sleeping bags, tools, and electric instruments worth 182 000 euros.<sup>45</sup> The paradox of the situation was that the park began to receive the first tourists while not yet having the status of a protected area.

The main reason that the park was not created despite the excellent opportunities was not a conflict between local and republican authorities but the approach of the central government. Unofficial historians of the Russian system of protected areas, Mikhail Krejndlin and Vsevolod Stepanitskij, argued that the Ministry of Finance of Russia (whose approval was necessary for the establishment of new national parks) has been introducing an "unspoken moratorium" on the creation of new national parks since 1999.<sup>46</sup> The municipal entity Ladoga Skerries remained functioning for several years after the end of the project and then ceased to exist. The territory of the Northern Ladoga was "reserved for the creation of a national park", but effectively, it belonged to everyone and no one, all at the same time.

Logging in the Northern Ladoga region was stopped due to the influence of the public, scientists, and environmental organizations, and the idea of creating a national park was dominant. However, the construction of dachas and DIY tourism continued in the territory of the planned national park in the 2000s. As a result, 3833 private plots of land were located within the planned park and near the borders by 2009.<sup>47</sup> The republican authorities and Karelian scientists recognized the difficulties in solving the environmental conflict in the Northern Ladoga region. The head of the Republic of Karelia, Sergej Katanandov, even spoke about the need for a vote on the fate of the Ladoga Skerries.<sup>48</sup> Obviously, the residents were satisfied with the situation, which can be called a compromise, when most of the disputed territory was "in reserve", and the residents were the true owners of this land.

44 Predstavleniye rabocheho plana proekta TACIS "Razvitiye parkov Karelii". 1999. F. R-3741. Op. 2. D. 11/43. L. 100. National Archive of the Republic of Karelia.

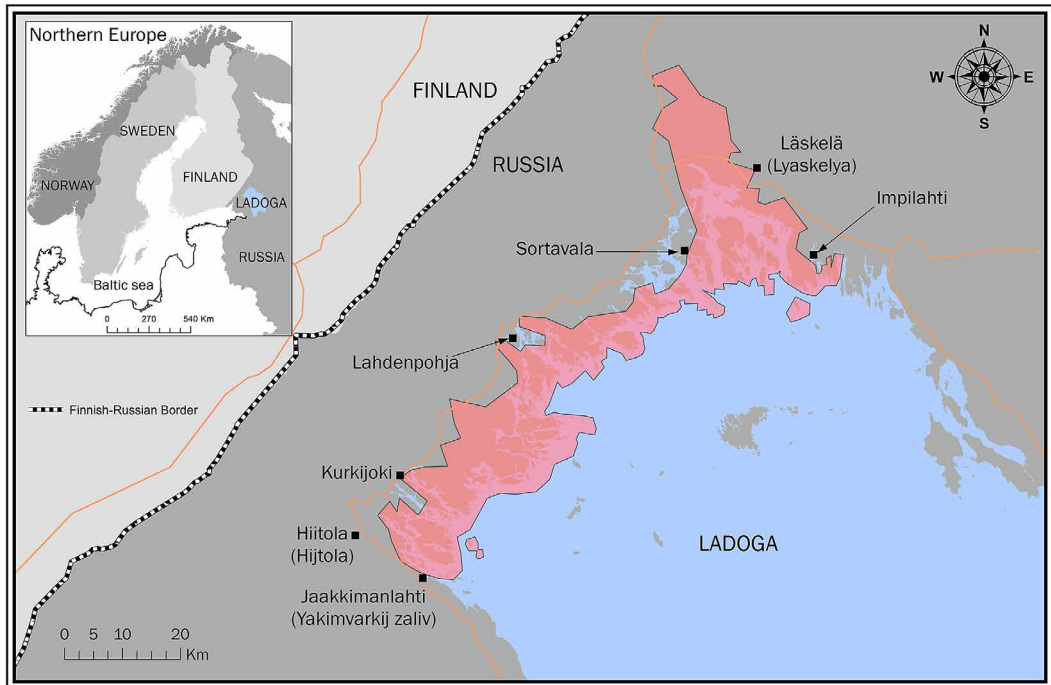
45 Kravchenko 2001, 89–90.

46 Stepanitskij & Krejndlin 2004, 25.

47 Ekologo-ekonomicheskoye obosnovaniye dlya obrazovaniya natsional'nogo parka "Ladozhskiy shkhery" 2009: 93–94, 97.

48 Zapovednaya zona 2007: *Kareliya* June 7.

Map 5. The Ladoga Skerries National Park in 2017



Map: Augustine-Moses Gbagir 2022.

### *The issue of the Ladoga Skerries reaches the political level*

The lull in the Ladoga Skerries was short, and the conflict turned from an economic one into a socio-political one in the 2010s. Yulo Systra identified the problem of landowners back in the mid-1990s, and the active construction of dachas and campsites as well as the development of farms on the shores of Ladoga only aggravated the situation in the 2010s. A feature of the environmental conflict was the emergence of a new factor – the internet, where the discussion about the fate of the Ladoga Skerries was transferred. The print media gave way to online newspapers, and now, online resources, such as the forum of the environmental organization SPOK, the Russian Forestry Forum, and the social network Vkontakte, began to shape the public opinion. Internet resources, thus, have become not only a platform for discussion but also a new player in addition to the authorities of three levels, local residents, environmentalists, scientists, timber merchants, and journalists. Studying socio-ecological conflicts, Yanitskij argued that more than 10 actors take part in making one decision, but since conflicts are processes, the number of actors is difficult to calculate.<sup>49</sup>

In 2010, the issue of the national park was revived at the republican level. The new head of the Republic of Karelia, Andrej Nelidov, supported the proposal of a group of ecologists and nature protectors and spoke out in

49 Yanitskij 2016, 278.

favor of the national park.<sup>50</sup> The fragile compromise was broken, and the residents launched a massive campaign against the creation of the national park. The roots of the problem were in the concept of a national park, which was relatively new to Russia, despite the adoption of the federal law in 1995. The Soviet system of protected areas is based on the protection of nature from people through prohibitions, whereas the concept of a national park reflected the idea of the recreational management of nature, which combined conservation, research, and tourism development.<sup>51</sup>

What the residents can and cannot do in the planned park remained unclear for them. This was especially important for those residents whose houses or dachas were inside of the planned national park. In numerous internet discussions, they expressed their concerns about what would happen to their property:

“I have a dacha on Riekkalansaari Island. I was very surprised when I saw a map of the supposed national park. The entire Riekkalansaari Island is included in the national park! A thousand people are registered on the island! Where should we go?<sup>52</sup>

It turns out that we will automatically become violators. Riekkalansaari is my home island. I was born and bred there, my parents’ house is there. The worst thing is not knowing what will happen. Rumors are very different. Some say that the land will be bought from us.<sup>53</sup>

It will be a failure for those whose dachas are in the park – they will not even be able to plant potatoes.<sup>54</sup>

A few words should be said about the Russian dacha phenomenon. Formally, on the one hand, the term “dacha” means a second home with the right to plant various agricultural crops. On the other hand, as Louiza Boukharaeva and Marcel Marloie noted, a dacha is “a socio-cultural quintessence of the life of Russian city-dwellers”.<sup>55</sup> In the 1990s, urban family agriculture in Russia constituted a survival strategy and “a shock absorber for the food crisis”. In 2012, there were 4,2 million dachas and garden plots in Russia, and more than 40 % of city-dwellers had their own dachas.<sup>56</sup>

Opponents of the park called the national park *a human zoo, a national*

50 Glava Karelii: Natspark “Ladozhskiy Shkhery” budet sozdan v neskol’ko etapov 2010. SeverInform. Vse novosti Severo-Zapada. [http://www.severinform.ru/lenta/?full\\_id=122513](http://www.severinform.ru/lenta/?full_id=122513) Accessed January 10, 2022.

51 Osipov, Aleksandr 2019: Ecotourism in Russian Karelia: Emergence, Development, Opportunities. *Matkailuttkimus* 15:1, 57.

52 “Dacha Putina” v zapovednik ne popala 2011. Rep.ru <https://rep.ru/daily/2011/04/20/17183/> Accessed January 10, 2022.

53 “Dacha Putina” v zapovednik ne popala 2011. Rep.ru <https://rep.ru/daily/2011/04/20/17183/> Accessed January 10, 2022.

54 Social media Vkontakte: [https://vk.com/topic-40121\\_26377619](https://vk.com/topic-40121_26377619) Accessed January 10, 2022.

55 Boukharaeva & Marloie 2015, 27, 31.

56 Boukharaeva & Marloie 2015, 23, 81, 193.



zone (the word “zone” in Russian is also used as a slang term for a prison), and *reservation* became the most popular term for the planned protected area.<sup>57</sup> The ties of the local population with nature were traditionally strong, and therefore, many of them were concerned that the park would block their access to the forest for picking mushrooms and berries and that fishing would become paid or banned.

The conflict around the park was also a traditional confrontation between the center and the periphery, between Moscow and the regions. The decision to create a national park was the prerogative of the central authorities, behind which the residents saw the interests of a narrow circle of people. Many believed that the purpose of the park was to provide the residents of Moscow with exclusive access to the nature of the Northern Ladoga area. Indeed, several elite houses were built on the islands in the northern part of Lake Ladoga in the 2010s. According to rumors and information from journalists, they belonged to residents of Moscow, Vladimir Putin, and his entourage.<sup>58</sup>

“We want to live, fish, and relax on Ladoga. Gardeners and summer residents are people and citizens of the Russian Federation. We don’t want to serve the “masters” from Moscow! We are not lackeys. We are *all equal before God*.”<sup>59</sup>

The Ladoga area is our home, our land. I and another 10,000 residents do not need either zones or Moscow owners. We don’t need a national park.”<sup>60</sup>

The peak of protest moods was in 2011, when residents of the Northern Ladoga region collected about 10 000 signatures against the creation of the park and organized a rally. The voices of the supporters of the national park were drowned in a stream of negativity and were not heard. Local authorities, of course, could not remain apart from the events. As noted above, the Sortavala City Council twice approved the creation of a nature park in the Ladoga Skerries, in 1990 and 1997, but in 2011, the council canceled previous resolutions and made the opposite decision: not to include the territory of the Sortavala district in the planned national park.<sup>61</sup> “There is nature on the

57 Obshchestvennye slushaniya v Sortavale po sozdaniyu natsional’nogo parka “Ladozhskiy shkhery” prevratilis’ v nesanktsionirovannyj miting 2011. Spok-karelia.ru. <http://spok-karelia.ru/2011/06/news/2191/comment-page-1/#comments> Accessed January 10, 2022; Social media V Kontakte: [https://vk.com/topic-40121\\_26377619](https://vk.com/topic-40121_26377619) Accessed January 10, 2022

58 “Dacha Putina” v zapovednik ne popala 2011. Rep.ru <https://rep.ru/daily/2011/04/20/17183/> Accessed January 10, 2022.

59 Obshchestvennye slushaniya v Sortavale po sozdaniyu natsional’nogo parka “Ladozhskiy shkhery” prevratilis’ v nesanktsionirovannyj miting 2011. Spok-karelia.ru. <http://spok-karelia.ru/2011/06/news/2191/comment-page-1/#comments> Accessed January 10, 2022

60 Social media V Kontakte: [https://vk.com/topic-40121\\_26377619](https://vk.com/topic-40121_26377619) Accessed January 10, 2022.

61 Ob otkaze v soglasii vlyucheniya territorii Sortavalskogo munitsipal’nogo rajona v granitsy natsional’nogo parka “Ladozhskiy shkhery” 2011. Administratsiya

maps, but there is no place for people”, argued the local authorities.<sup>62</sup>

The protest of local residents against the park coincided with the 2011–2013 protest movement in Russia. Although organized for different purposes, these events had common features and took similar forms: rallies, participants’ political activity, acute discussions in social networks, as well as the increased role of these networks. The common idea was to defend the interests of the country’s inhabitants before the state. However, if the participants of the all-Russian protests disputed the results of the parliamentary and presidential elections, local activists tried to solve their problems through local elections. Aleksandr Fedichev, a candidate for the Legislative Assembly of the Republic of Karelia from the Sortavala district, went to the polls with the slogan ”No to the National Park” and won the elections in 2011. After that, he initiated a discussion about the creation of the national park in the Karelian parliament, which split the deputies. The supporters of the national park argued at meetings in the Karelian parliament that dachas and private lands would be excluded from the park. In addition to the votes for and against, there were also those who proposed to return to the nature park project. As one of the deputies noted:

“Most of the locals do not know what will happen to their homes when the national park is created.”<sup>63</sup>

Unlike the deputies of the Legislative Assembly, the republican authorities supported the national park project. Aleksandr Hudilainen, the new head of the Republic of Karelia (2012–2016), argued that some unscrupulous people manipulated public opinion and organized rallies against the park. He assured that:

“There will be no restrictions on access to water or forest for picking berries and fishing for the local population.”<sup>64</sup>

At the same time, he acknowledged that the project is not yet ready and the final decision on the creation of the park has not yet been made.

The draft law on the special status of the Ladoga and Onega lakes was another

Sortaval’skogo munitsipal’nogo rajona [http://xn----8sbaai9blupdjo.xn--p1ai/regulatory/?auth\\_service\\_id=1&ELEMENT\\_ID=ircajrohcxjk&PAGEN\\_1=136](http://xn----8sbaai9blupdjo.xn--p1ai/regulatory/?auth_service_id=1&ELEMENT_ID=ircajrohcxjk&PAGEN_1=136) Accessed January 10, 2022; Ob otmene resheniya II sessii XXI sozyva Sortaval’skogo gorodskogo Soveta narodnykh deputatov ot 28 iyunya 1990 g. “O prirodnom parke “Ladozhskiy shkhery” 2011. Administratsiya Sortaval’skogo munitsipal’nogo rajona [http://xn----8sbaai9blupdjo.xn--p1ai/regulatory/?auth\\_service\\_id=1&ELEMENT\\_ID=ircajrohcxjk&PAGEN\\_1=136](http://xn----8sbaai9blupdjo.xn--p1ai/regulatory/?auth_service_id=1&ELEMENT_ID=ircajrohcxjk&PAGEN_1=136) Accessed January 10, 2022.

62 Glava Karelii: Natspark “Ladozhskiy Shkhery” budet sozdan v neskol’ko etapov 2010. SeverInform. Vse novosti Severo-Zapada [http://www.severinform.ru/lenta/?full\\_id=122513](http://www.severinform.ru/lenta/?full_id=122513) Accessed January 10, 2022.

63 Kto “zakazal” Ladozhskiy Shkhery? 2012. Petrozavodsk bezformata. <https://petrozavodsk.bezformata.com/listnews/kto-zakazal-ladozhskie-shheri/3855024/> Accessed January 10, 2022.

64 Eto manipulirovaniye obshchestvennym mneniem 2012. Vesti Karelii. <https://vestikarelii.ru/news/6953/> Accessed January 10, 2022.

attempt to resolve the socio-environmental conflict in the Northern Ladoga region. The authors of the law, one of whom was Aleksandr Fedichev, argued that lakes Ladoga and Onega needed special protection and proposed to limit economic activity and construction on the shores of these lakes. Fedichev noted that the law could become an alternative to the national park project, which restricted the rights of the local population. Indeed, the law “On the Protection of Ladoga and Onega Lakes” would be an ideal compromise for residents. On the one hand, it limited the activities of major players: logging, mining, and fishing companies. On the other hand, the law was not as strict as the rules of the national park and in fact did not limit the rights of local residents.<sup>65</sup> The law was discussed in regional authorities and the State Duma of the Russian Federation from 2014 to 2018 but remained on paper.

In the last days of 2017, which was declared the year of ecology and protected areas in Russia, the Prime Minister of Russia Dmitrij Medvedev signed a decree on the creation of the Ladoga Skerries National Park. The final design of the park and the careful delimitation of the boundaries smoothed out the social conflict, but this is not the main reason why the protests calmed. The fact is that the park exists only on paper, it has no director, no staff, no website, and officially belongs to the Kivach Strict Nature Reserve, which is located 250 km from Ladoga to the east. The park does not operate as an economic model, does not conduct tours, does not collect fees, and does not keep order in the Ladoga Skerries. This situation suits the residents, for whom, in general, nothing has changed, but does not suit the local authorities, who have lost control over the territory.

## *Conclusions*

The environmental conflict in the Northern Ladoga region went through three phases: environmental, economic, and socio-political. The deteriorating ecological situation of Lake Ladoga, the plan to build a tank farm and logging led to a broad protest movement in the late 1980s. The temporary victory of environmentalists, local authorities, and residents over logging companies raised an important question – how to use nature. The idea of creating a nature or national park as an alternative to the use of natural resources quickly gained support from the authorities. Ecotourism was supposed to become the engine of the economy of the Sortavala district. The economic model of the Ladoga Skerries National Park, created by Karelian and Finnish scientists, however, did not work. The transfer of the European practice of ecotourism and the model of the national park turned out to be alien to the local population, which considered this as an infringement of their rights. The issue of creating a park, therefore, turned from an economic into a social one and entered the political level.

The creation of the national park was a great victory for scientists,

65 Moskva ne sobirayetsya spasat' Ladozhskoye i Onezhskoye ozera. Ptzgovorit 2014. <https://ptzgovorit.ru/obshhestvo/ladoga> Accessed January 10, 2022.

ecologists, and environmentalists, which, however, does not solve all the ecological problems of Ladoga. The park is a guarantee of nature protection only in the Northern Ladoga region, since the federal law on the comprehensive protection of the Ladoga and Onega lakes has not been adopted. The main task of the park is to preserve the unique nature, historical and cultural sites, as well as scientific research, environmental education, and tourism development.<sup>66</sup> From a geographical point of view, the national park is a compromise between scientists and residents. The boundaries of the park have changed their shape many times over 30 years, and today, the area of the park is 122 000 hectares (Map 5). It took the creators of the park more than two years to define clear boundaries and exclude dachas, campsites, and private plots from the park.<sup>67</sup> The charter of the park allows residents to pick mushrooms and berries and fish for their own needs.

A powerful jump in domestic tourism in Russia in 2020–2022 due to the pandemic attracted a huge number of tourists to Ladoga. Some entrepreneurs and residents, taking advantage of the inaction of the park, began organizing tourism on the territory of the Ladoga Skerries. In addition, it is difficult to estimate how many DIY tourists have visited the national park in recent years as well as how this tourist boom will affect the ecosystem of the Ladoga Skerries and how the national park will interact with entrepreneurs. It is obvious that a new major actor – tourists – has appeared in this complex socio-biotechnical system, which might lead to a new phase of environmental conflict. Yanitskij et al. argued that the socio-biotechnical system is open, it does not have fixed subjects/actors, conflict is a process, and therefore, no final solution is possible.<sup>68</sup>

## References

### *Archival material*

National Archive of the Republic of Karelia, Petrozavodsk, Russia

R-3741. Ministry of Ecology and Natural Resources of the Republic of Karelia (1988–2000).

- 66 Prikaz ministerstva prirodnykh resursov i ekologii Rossijskoj Federatsii 13.1.2020 №1 "Ob utverzhdenii Polozheniya o natsional'nom parke "Ladozhskiye shkhery". Informatsionno-analiticheskaya sistema "Osobo okhranyayemye prirodnye territorii Rossii". [http://oopt.aari.ru/sites/default/files/documents/ministerstvoprirodnyh-resursov-i-ekologii-Rossiyskoy-Federacii/N1\\_13-01-2020.pdf](http://oopt.aari.ru/sites/default/files/documents/ministerstvoprirodnyh-resursov-i-ekologii-Rossiyskoy-Federacii/N1_13-01-2020.pdf) Accessed January 10, 2022.
- 67 Prikaz ministerstva prirodnykh resursov i ekologii Rossijskoj Federatsii 13.1.2020 №1 "Ob utverzhdenii Polozheniya o natsional'nom parke "Ladozhskiye shkhery". Informatsionno-analiticheskaya sistema "Osobo okhranyayemye prirodnye territorii Rossii". [http://oopt.aari.ru/sites/default/files/documents/ministerstvoprirodnyh-resursov-i-ekologii-Rossiyskoy-Federacii/N1\\_13-01-2020.pdf](http://oopt.aari.ru/sites/default/files/documents/ministerstvoprirodnyh-resursov-i-ekologii-Rossiyskoy-Federacii/N1_13-01-2020.pdf) Accessed January 10, 2022.
- 68 Efremenko, Dmitrij V., Yanitskij, Oleg N. & Ermolayeva, Polina O. 2019: O sotsiobiotehnicheskikh sistemakh. *Voprosy filosofii* 5, 143.

Scientific Archive of the Karelian Research Centre  
 2. Federal State Budgetary Institution of Science "The Karelian Research Centre of the Russian Academy of Sciences".

## Newspapers

*Kareliya* 1993  
*Krasnoye znamy* 1989, 1990  
*Ladoga* 1995  
*Leninskaya pravda* 1989  
*Severnyj kur'yer* 1992, 1993, 1995, 1997, 1998, 1999, 2000, 2001, 2004  
*Sotsialisticheskaya industriya* 1988

## Literature

- Boukharaeva, Louiza M. & Marloie, Marcel 2015: Family Urban Agriculture in Russia: Lessons and Prospects. Springer International Publishing Cham. <https://springer.com/gp/book/9783319116136> Accessed April 24, 2022.
- Colpaert, Alfred & Gbagir, Augustine-Moses 2021: Laatokan vesien muuttuvat kuvat. In: Laatokka. *Suurjärven kiehtova rantahistoria*. Maria Lähteenmäki (ed.). Finnish Literature Society, Helsinki, 188–202.
- Efremenko, Dmitrij V., Yanitskij, Oleg N. & Ermolayeva, Polina O. 2019: O sotsiobiotehnicheskikh sistemakh. *Voprosy filosofii* 5, 138–147.
- Ekologo-ekonomicheskoye obosnovaniye dlya obrazovaniya natsional'nogo parka "Ladozhskiy shkhery"* 2009: Moscow.
- Friman, Arja & Högmänder, Jouko 2001: *Strategiya razvitiya turizma dlya karel'skoj chasti Zel'nogo Poyasa*. TACIS, Petrozavodsk.
- Hajer, Maarten A. 1996: *The Politics of Environmental Discourse: Ecological Modernization and the Policy Process*. Oxford University Press, Oxford. <https://ebookcentral-proquest-com.ezproxy.uef.fi:2443/lib/uef-ebooks/detail.action?docID=3052931> Accessed January 10, 2022.
- Kravchenko, Aleksej 2001: *Natsional'nyj park "Ladozhskiy shkhery"*. *Predlozheniya k organizatsii*. TACIS, Petrozavodsk.
- Lalander, Rickard & Merimaa, Maija 2018: The Discursive Paradox of Environmental Conflict: Between Ecologism and Economism in Ecuador. *Forum for Development Studies* 45:3, 485–511. <https://www.tandfonline-com.ezproxy.uef.fi:2443/doi/full/10.1080/08039410.2018.1427622> Accessed January 10, 2022.
- Lee, James R. 2018: Environment and Conflict. In: *Routledge Handbook of Environmental Conflict and Peacebuilding*. Ashok Swain & Joakim Öjendal (eds.). Taylor & Francis Group, 17–28. <http://ebookcentral.proquest.com/lib/uef-ebooks/detail.action?docID=5351961> Accessed January 10, 2022.
- Navas, Grettel, Mingorria, Sara & Aguilar-González, Bernardo 2018: Violence in Environmental Conflicts: the Need for a Multidimensional Approach. *Sustainability Science*, 13:3, 649–660. <https://www.proquest.com/docview/2016871947?parentSessionId=7Avq%2FJgdRNR5ig%2FrKDFxmH8lOgct6PJ1AciS7zxkDr4%3D&pq-origsite=primo&accountid=11739> Accessed January 10, 2022.
- Osipov, Aleksandr 2021: Ladoga Skerries: Suomen kansallismaisemasta venäläiseksi kansallispuistoksi. In: *Laatokka. Suurjärven kiehtova rantahistoria*. Maria Lähteenmäki (ed.). Finnish Literature Society, Helsinki, 265–295.
- Osipov, Aleksandr 2019: Ecotourism in Russian Karelia: Emergence, Development, Opportunities. *Matkailututkimus* 15:1, 53–66.
- Osipov, Alexander 2022: *Green Karelia: National Parks and Ecotourism in the Republic of Karelia from the 1980s to the 2000s*. Dissertation in history, University of Eastern

- Finland, Joensuu. eRepo - Green Karelia: National Parks and Ecotourism in the Republic of Karelia from the 1980s to the 2000s (uef.fi) Accessed March 21, 2023.
- Rumyantsev, Vladislav 2012: Ladozhskoye ozero. Ekologicheskiye problemy, prichiny, puti reshenij. *Regional'naya ekologiya* 1–2:33, 7–13. <https://www.elibrary.ru/item.asp?id=23593663> Accessed January 10, 2022.
- Sidaway, Roger 2005: *Resolving Environmental Disputes: from Conflict to Consensus*. Earthscan, Sterling, London.
- Stepanitskij, Vsevolod & Krejndlin, Mikhail 2004: *Gosudarstvennyye prirodnye zapovedniki i natsional'nye parki Rossii: ugrozy, neudachi, upushchennyye vozmozhnosti*. Grinpis Rossii, Moscow.
- Van Dijk, Teun A., 2015: Critical Discourse Studies: A Sociocognitive Approach (new version) In: *Methods of Critical Discourse Analysis*. Ruth Wodak & Michael Meyer (eds.). Sage, London, 63–85. <http://www.discourses.org/OldArticles/Critical%20Discourse%20Studies.pdf> Accessed January 10, 2022.
- Yanitskij, Oleg N. 2016: *Ekosotsial'nye issledovaniya: mezhdistsiplinarnaya metodologiya, teoriya, praktika*. Institut sotsiologii RAN, Moscow.

### *Internet sources*

- "Dacha Putina" v zapovednik ne popala 2011. Rep.ru <https://rep.ru/daily/2011/04/20/17183/> Accessed January 10, 2022.
- Eto manipulirovaniye obshchestvennym mneniyem 2012. Vesti Karelii. <https://vestikarelii.ru/news/6953/> Accessed January 10, 2022.
- Federal'nyj zakon ob osobo okhranyayemykh prirodnnykh territoriyakh ot 14.3.1995 (s izmeneniyami na 11 iyunya 2021 goda). Elektronnyj fond normativno-tekhnicheskoy i normativno-pravovoj informatsii Konsortsiuma "Kodeks". <https://docs.cntd.ru/document/9010833> Accessed January 10, 2022.
- Glava Karelii: Natspark "Ladozhskiy Shkhery" budet sozdan v neskol'ko etapov 2010. SeverInform. Vse novosti Severo-Zapada [http://www.severinform.ru/lenta/?full\\_id=122513](http://www.severinform.ru/lenta/?full_id=122513) Accessed January 10, 2022.
- Kto "zakazal" Ladozhskiy Shkhery? 2012. Petrozavodsk bezformata. <https://petrozavodsk.bezformata.com/listnews/kto-zakazal-ladozhskie-shheri/3855024/> Accessed January 10, 2022.
- Moskva ne sobirayetsya spasat' Ladozhskoye i Onezhskoye ozera. Ptzgovorit 2014. <https://ptzgovorit.ru/obshhestvo/ladoga> Accessed January 10, 2022.
- Ob otkaze v soglasii vklucheniya territorii Sortaval'skogo munitsipal'nogo rajona v granitsy natsional'nogo parka "Ladozhskiy shkhery" 2011. Administratsiya Sortaval'skogo munitsipal'nogo rajona [http://xn----8sbaai9blupdjo.xn--p1ai/regulatory/?auth\\_service\\_id=1&ELEMENT\\_ID=ircajrohcxjk&PAGEN\\_1=136](http://xn----8sbaai9blupdjo.xn--p1ai/regulatory/?auth_service_id=1&ELEMENT_ID=ircajrohcxjk&PAGEN_1=136) Accessed January 10, 2022.
- Ob otmene resheniya II sessii XXI sozyva Sortaval'skogo gorodskogo Soveta narodnykh deputatov ot 28 iyunya 1990 g. "O prirodnom parke "Ladozhskiy shkhery" 2011. Administratsiya Sortaval'skogo munitsipal'nogo rajona [http://xn----8sbaai9blupdjo.xn--p1ai/regulatory/?auth\\_service\\_id=1&ELEMENT\\_ID=ircajrohcxjk&PAGEN\\_1=136](http://xn----8sbaai9blupdjo.xn--p1ai/regulatory/?auth_service_id=1&ELEMENT_ID=ircajrohcxjk&PAGEN_1=136) Accessed January 10, 2022.
- Obshchestvennyye slushaniya v Sortavale po sozdaniyu natsional'nogo parka "Ladozhskiy shkhery" prevratilis' v nesanktsionirovannyj miting 2011. Spok-karelia.ru. <http://spok-karelia.ru/2011/06/news/2191/comment-page-1/#comments> Accessed January 10, 2022.
- Pavlovskaya, Svetlana 2017: Ekologicheskoye sostoyaniye Ladozhskogo ozera v 1970-e–1980-e gg. po dokumentam CGAIPD SPb. Publikatsii CGAIPD SPb.
- Postanovleniye Tsentral'nogo komiteta KPSS i Soveta Ministrov SSSR "O korennoj perestrojke dela okhrany prirody v strane" ot 8.1.1988. Elektronnyj fond


- normativno-tehnicheskoy i normativno-pravovoj informatsii Konsortsiuma "Kodeks". <https://docs.cntd.ru/document/765705008> Accessed January 10, 2022.
- Postanovlenie Verkhovnogo Soveta SSSR "O neotlozhnykh merakh ekologicheskogo ozdorovleniya strany" ot 27.11.1989. Elektronnyj fond normativno-tehnicheskoy i normativno-pravovoj informatsii Konsortsiuma "Kodeks". <https://docs.cntd.ru/document/765704495> Accessed January 10, 2022.
- Prikaz ministerstva prirodnykh resursov i ekologii Rossijskoj Federatsii 13.1.2020 №1 "Ob utverzhenii Polozheniya o natsional'nom parke "Ladozhskiye shkhery". Informatsionno-analiticheskaya sistema "Osobo okhranyayemye prirodnye territorii Rossii". [http://oopt.aari.ru/sites/default/files/documents/ministerstvo-prirodnih-resursov-i-ekologii-Rossiyskoy-Federacii/N1\\_13-01-2020.pdf](http://oopt.aari.ru/sites/default/files/documents/ministerstvo-prirodnih-resursov-i-ekologii-Rossiyskoy-Federacii/N1_13-01-2020.pdf) Accessed January 10, 2022.
- Wassenberg, Birte, Reitel, Bernard, Peyrony, Jean & Rubió, Jean 2015: *Territorial Cooperation in Europe. A Historical Perspective*. Publications Office of the European Union, Luxembourg. [https://ec.europa.eu/futurium/en/system/files/ged/interreg\\_25years\\_en.pdf](https://ec.europa.eu/futurium/en/system/files/ged/interreg_25years_en.pdf) Accessed January 10, 2022.

# Postscript V






MARIA LÄHTEENMÄKI

 <https://orcid.org/0000-0001-9142-659X>

ISAAC LAND

 <https://orcid.org/0000-0003-4292-1601>

## Multidimensional History of Lake Ladoga

In this book, we have demonstrated how Europe's largest lake, Ladoga (Russian *Ladožskoye ozero*, Karelian *Luadogu*) changed along its shores over time. The international emergence of the new coastal history and the research strand within it, lakefront history, have created tremendous opportunities for reassessing the region's multi-ethnic, sometimes painful, sometimes glorious past, its everyday life, work, and multisensory history of experience in a transnational and international context.

In this edited volume,<sup>1</sup> we have opened up four research paths into the history of the Ladoga region: the potential of the emerging research genre of coastal history; insights to be gained through examining the early waves of population; an exploration of the region's industrialization and its effects; and the relationship of the people on its shores with nature. Environmental history forms a common thread through all of these. While environmental themes began to gain traction gradually in social sciences from the 1970s onwards,<sup>2</sup> in the last decade, environmental history has gained a foothold in the humanities as well. This volume owes a debt to both the social science approaches and to the environmental humanities and seeks to further both of these important conversations. A recent state-of-the-field essay remarked:

“...it is possible to discern an emerging rich and provocative set of creative thinking about coastal pasts, the coastal present, and possible coastal futures. Not since the days of Fernand Braudel has there been such a clear sense that a comprehensive reconsideration of watery subject matter was imminent.”<sup>3</sup>

This is evident in a number of different arenas, ranging from the emergence of the useful and provocative term *hydrosocial* from social scientists to the investigation of embodiments and ontologies in the increasingly influential

1 This chapter has been edited from the chapter published in the Finnish volume *Laatokka. Suurjärven kiehtova rantahistoria*. See Lähteenmäki 2021, 296–307; Translated partly from Finnish to English by Kate Sotejeff-Wilson.

2 E.g. Hughes 2008.

3 Gaspar de Freitas, James & Land 2021, 3–9.

*Blue Humanities*.<sup>4</sup> While recent years have seen a great deal of preliminary “throat-clearing,” with a host of new terms coined and theoretical formulations articulated, this volume moves ahead and gets its hands dirty, settling on a particular location and doing the interdisciplinary work. While the disciplinary background of our contributors speaks for itself, the range of source material referenced in this volume is eloquent on its own terms: runes on amulets, Old Norse poetry, cairn burials, medieval tax registers, pollen samples, census data, account books, the results of geological surveys, satellite photographs, water samples, oral histories, folklore, official planning documents, travel guides, popular magazines, tourist promotional materials, and even social media posts.

### *Revealing the human-nature relationship*

If it were possible to name just one process of change in the lakefront history of Ladoga, it would be the recognition and acknowledgement of the human-nature-relationship – at local, regional, and global level – over the last 200 years, including the gradual accentuation of the values associated with it (purity, peace, spirituality, sustainability<sup>5</sup>). In the nineteenth century, aquatic nature, such as Ladoga with its extensive catchment areas, was valued primarily as an economic resource – a transport route, habitat for fish and freshwater seals, source of drinking water and hydroelectric power – and as an element that built society and the state called a natural border and national landscape, but not valued as such.

Finns began to recognize the value of nature conservation as such in the nineteenth century, mainly through forest conservation, the establishment of state-owned forests and the Forestry Institute<sup>6</sup> and, more broadly, through international examples of conservation areas and national parks.<sup>7</sup> As well

4 Mentz 2009, 997–1013; Mentz 2015; Linton & Budds 2014, 170–180; Mukherjee 2011; Grancher & Serruys 2021, 11–34.

5 In a nutshell, sustainable development is about reconciling economic and social development within the limits of natural resources in a way that preserves nature and the conditions for human development for future generations. Sustainable development therefore takes into account environmental values, economic conditions, and social needs. Cf. Rosenström & Palosaari 2000, 7.

6 The priority was to protect the forest and the national landscape. For example, the forests of Punkaharju in Eastern Finland were protected from 1802, and Finland's first scientific society focused on nature: Societas pro Fauna et Flora Fennica was founded in 1821. State-owned forests (kruununpuistot) were established near the Russian border in 1842 and in Punkaharju in 1843. A forestry institute was opened in 1859 and the first local nature conservation association was established in Kuopio, Eastern Finland, in 1887. In Finland, the first national protected area was designated in 1916, and the first Nature Conservation Act was passed in 1923. By 2017, Finland had 40 national parks, 19 nature reserves, and nearly 500 smaller conservation sites. Cf. Lähteenmäki 2017, 136–139.

7 Some of the oldest nature reserves on earth are said to be the Białowieża area in Poland, which has been protected since the fifteenth century, and the Kaipfstock area in Switzerland, which was protected in 1569. In 1836, the Drachenfels cliff in



*Juho Pöllänen, the “seal farmer” on the shore of Ladoga in 1909. Photographer: V. Jääskeläinen. Folklore image collection. Finnish Heritage Agency, Helsinki, Finland. CC BY 4.0.*

as protecting forests, Finns made advances in water conservation, when major European cities set an example by encouraging smaller communities to invest in water pipes and sewers to combat the spread infectious diseases. Sensitive peripheral areas were also protected from pollution. For example, the water of the Läskele (Lyaskelya) river was studied in 1908 and the earliest studies of the water in Ladoga were carried out around the same time. The deteriorating condition of the tourist trails in the former Finnish village of Terijoki (nowadays Russian Zelenogorsk), neighboring St. Petersburg, was also addressed locally in 1908, and the Tammisaari archipelago in the Gulf of Finland was protected in 1912, as was the area including the Tolvajärvi Lake in Karelia in 1913.<sup>8</sup>

In the first half of the twentieth century, however, bodies of water in Finland regarded as of particular conservation value were in sparsely populated areas that were considered economically less valuable. Therefore, efforts were already being made to protect the Paatsjoki (Nor. Pasvikelvi)

Germany was protected as a landscape and cultural site. Similar protected areas were also designated in France, Great Britain, and the United States during the nineteenth century. Yellowstone National Park (1872) is the world’s first national park. Borg 1984, 7–10.

<sup>8</sup> Borg 1984, 12, 13.

valley between Finland and Norway, which flows into the Arctic Ocean, the Heinäsaaret islands near its shores in Petsamo in 1926, when the area was part of Finland, as well as the Ounasjoki and Pallasjärvi areas in Finnish Lapland and the Oulankajoki region in Northeast Finland. Partly due to local opposition, the projects stalled at the committee stage, and the first four official national parks and six nature reserves in Finland were not designated until the 1938 Act on Nature Reserves. Southeast Finland was not entirely left unprotected, as one of the nature reserves, Hiisjärvi, was located in the Ladoga region in Salmi.<sup>9</sup>

### *From conservation to the environmental movement*

Attitudes to aquatic nature began to change in the 1950s, when both Finland and the Soviet Union began to pay attention to water protection in line with international trends, thanks to new research findings.<sup>10</sup> These studies led to the most radical guidelines during the period when American biologist Rachel Carson wrote her bestselling critique of the chemical industry, *Silent Spring* (1962).<sup>11</sup> As the debate on insecticide use and chemical emissions intensified worldwide, in northern Europe too, conservation began to grow into a broader environmental movement. Even in the Ladoga region before the Second World War, where industrialization policy had been implemented without regard for nature, timber rafting, and chemical discharges into the rivers, and the eutrophication and pollution of the banks by agricultural and urban wastewater discharges, prompted scientists, local activists, nature conservationists, and the authorities to take more effective national, transnational, and international regulatory measures. In Finland, a committee was set up to look into the state of bodies of water; it proposed the establishment of a Water Protection Advisory Board, done in 1962, and the Finnish Water Board was set up in 1970. The same year was designated the European Conservation Year. Contemporary scientists showed that the “heavy-handed” treatment of waters, peatlands, and forests created pressures, which triggered a wider conservation drive. The dramatic change in the shoreline landscape was caused by the construction of watercourses, damming, dykes, embankments, dredging and modification of the banks in the 1960s, as well as the regulation of water levels and flows, water pollution, dredging, and deforestation.<sup>12</sup>

9 National parks were designated in the eastern and northern border areas of Finland: The Pallas and Ounastunturi and Pyhätunturi regions of Lapland, the Heinäsaari islands in Petsamo, and Storlandet island in the Gulf of Finland. The following were designated nature reserves: Kutsa in Salla, Eastern Finland; Mallatunturi in Enontekiö, Lapland; Pääskypahta and Pummanki in Petsamo; Pisavaara in the municipalities of Rovaniemi and Kemijärvi in Lapland and Hiisjärvi Nature Park in Salmi. Lähteenmäki 2017, 81–84.

10 Concern was also expressed about the crisis in the Baltic Sea. E.g. Räsänen 2015.

11 In Finnish *Äänetön kevät* 1962.

12 A new conservation program was implemented in 1982 and the Ministry of the Environment was established in 1983. Borg 1984, 17–18; Alapassi et al. 1984, 238–239.

The transnational environmental movement, “Pro Ladoga”, made the state of the water in Ladoga a matter of public debate in both Finland and the Soviet Union in the 1980s. In Finland, especially at the University of Joensuu (now the University of Eastern Finland) and at the Academy of Sciences in Petrozavodsk, Republic of Karelia, researchers organized numerous transnational seminars and research projects on the protection of the great lake in the 1990s, mainly with the support of the European Union. Over the past decade, the global discourse on climate change, sustainable development, biodiversity,<sup>13</sup> and nature tourism bore fruit in Ladoga with the opening of the Ladoga Skerries National Park in the Sortavala archipelago in December 2017, covering 122 000 hectares.

The debate on water and land conservation has since grown into an unprecedented global green turn and, for some, an ideology (green parties and environmental movements), although in practice there can still be a gap between words and deeds, as the decades-long conservation process in the Sortavala archipelago shows. The interests of local authorities, public authorities, industry, and civil society coincide rarely, occasionally, or not at all. Jointly written social commitments,<sup>14</sup> conservation strategies, declarations, and programs never materialize as such, but when negotiated, they appear as practical acts of less-than-desirable compromise.

Nevertheless, progress has been made in the Ladoga region since the 1960s. Satellite images show that the water of Ladoga is in reasonably good condition in the twenty-first century. Because the lake is so large (about 200 km long and 100 km wide), the southern part is shallow, and the northern part deep, the biodiversity and the well-being of the shores of Ladoga is variable. Coastal areas in industrial communities and major population centres – Novaya Ladoga, Pähkinälinna (Nöteborg, Šlisselburg), Käkisalmi (Kexholm, Priozersk), Sortavala, and Pitkäranta (Pitkyaranta) – are worse off than ecosystems on more deserted parts of the lakefront. Ladoga does not have just one shore, but many.

### *Industry radically shapes the shoreline*

The shift in attitudes and values regarding aquatic nature and the resulting measures have been accompanied by another phenomenon that has had a major impact on the state of the waterfront and the landscape: industrialization. The same general developments in Ladoga over the last 200 years can be seen in the great lakes of America, Siberia, and even Africa. As settlement concentrates along the lakefront, the region is taken

13 E.g. Kauppinen 2019.

14 The concept emerged in the 1990s as a result of the 1987 report of the UN World Commission (the Brundtland Commission), *Our Common Future*, and the idea of sustainable development. Here, it refers specifically to corporate responsibility, which can be economic, social, and environmental. Cultural responsibility has also been discussed in tourism companies, for example. The most visible form of responsibility in recent years is responsibility for climate change. E.g. Tapaninen 2010, 3–4.

over for cultivation and industrialization, and throughout the process there is relentless competition to exploit the resources of the lake's shores and drainage basins. This in turn has led to conflicts between different interests.

Nineteenth- and twentieth-century industrialization has been called modernization, seen as a positive development that supported the growth of nation states. After all, the transfer of production from humans to machines and the concentration of productive forces in one place forms the bedrock of modern society. But the good things that industrialization has brought (such as jobs, increased trade, higher living standards, and internationalization) have been overshadowed by negative phenomena such as water pollution. Over the last century, pollution has become a major problem in almost every watercourse whose drainage basin has been inhabited.

From this point of view, Ladoga models a transnational trend that has left an indelible mark on the relationship between humans and nature, indeed the cultural and physical environment globally. In this way, Ladoga shares the fate of the world's great lakes. Ladoga is also an integral part of Europe. Seen from satellites, it is one of a chain of northern great lakes of Europe, including Saimaa, Päijänne, Ääninen (Onega), and the great lakes of Sweden and Estonia. The story of Ladoga is an important part of Europe's natural history, not least because it is located in the transnational European Green Belt. The slogan of the organization supporting this initiative is "Borders divide, nature unites."<sup>15</sup>

### *Multitemporal, intermittent processes*

The timeline of historical change, from lakeside settlement to conservation and the green turn, is long. The first inhabitants of Ladoga's shores arrived in the early Stone Age, around 8000 BCE. So, 10 000 years have passed from when humans began to shape their environment to the day when the northern region of Ladoga received its first national park. Such processes can be very long, but rapid historical changes occur en route, such as the leaps into industrialization in Pitkäranta, Jänisjoki, and Käkisalmi.

To understand the lakefront history of Ladoga, one needs to know the stages its vast watershed went through, the wider context of political and climate change, and the many layers in the history of life on and around the lake. Excluding the very long time span of thousands of years (*longue durée*) of geological change to the rhythm of ice ages, land uplift, and formation of new bodies of water,<sup>16</sup> three time dimensions related to human activities can

15 The European Green Belt is the 12 500 km zone following the Iron Curtain of the Cold War (1947–1991), which developed into a significant ecological network and a living landscape of memories. It is a symbol of a common European natural and cultural heritage that transcends borders. There are 40 national parks and more than 3 200 nature reserves along Europe's green belt, with their seas, rivers, and lakes. European Green Belt. <https://www.europeangreenbelt.org/> Accessed November 2, 2021.

16 For dimensions of time, see Braudel 2009; Lee 2012.



*The wooden stone-eye statue of the Ladoga fishers represents their centuries of cultural heritage. Stones are embedded in the statue as eyes. According to the 1907 text, the statue was a relic of a “superstition” originally from the island of Vossenoi, but a god of good fortune who came to Matsinsaari with the fisherfolk. It was made between 1625 and 1715. Photo: Finnish Heritage Agency, Helsinki, Finland. CC BY 4.0.*

be seen in the lakefront history of Ladoga. Long-term developments (such as multi-ethnic and multitemporal waves of settlement) are intertwined with medium-term phenomena (such as the life cycles of different industries) and short-term incidents (such as political crises, wars, and shortages).



*Lovingly remembered shores*

The lakefront history of Ladoga is not only about industrialization, its positive and negative consequences, and the slow recovery of aquatic nature, but also about its people. The final part of our work highlights the love and affection of the people who live along the Ladoga, “Karelian Sea”, for the lake itself, its material and immaterial assets: the shore, islands, fishing huts, boats, jetties, bathing holes, and the sensual and spiritual space of the water. Attachment is described as a multisensory relationship between humans, water, and nature. The Finns who lived on the shores of Lake Ladoga in the past had a close, even intimate, relationship with water. The emotional depth and the lasting memory of the relationship are recalled in bodily experiences of water, where humans (as representative of culture) became part of nature. Until the 1970s, culture and nature were seen as separate entities. This was reflected in the separate museums of cultural and natural history.<sup>17</sup> Based on the memories, it seems that in these areas, those people living between water and land – in the liminal, blue, or semi-marine space – have a closer relationship with nature than those living inland. Looking forward, lake scholarship might take a page from the vibrant and growing community of island studies scholars, who have never compromised their sense of the full diversity of possible examples, or the range of concepts that might enrich their inquiry. Indeed, they have excelled at exploring the possible research questions about islands without attempting to posit one sort of island – or one way to write about islands – as normative.<sup>18</sup>

Alongside the happy memories, there is a strong sense of class in the Ladoga lakefront ridge. The private ownership of beaches and islands, their protection from public use, and their closure to locals have overshadowed those who enjoy the coastal life of Ladoga, both past and present. As nature tourism in Ladoga today, Finnish tourists who can afford it have embraced the lake’s refreshing northern island beaches, as have the elite in St. Petersburg and Moscow. Sightseeing tours of Ladoga, by boat, kayak, or road, are also more popular than ever. The words used to describe the Sortavala archipelago in speech or writing are almost the same, regardless of period and nationality. The recurring themes over the last century have been beauty, nature, freedom, and trips to the islands.

In the Finnish narrative, the most tragic and long-lasting break in the history of Ladoga is the loss of its northern part to the Soviet Union in the spring of 1940 and again in the autumn of 1944. This violent incision has stopped the stories of those who lived in the area in their tracks, in a sudden rupture with prewar events. The fact that Finnish refugees did not necessarily recognize their home regions on the shores of Ladoga when they returned to visit decades after the war was due to the idealized memories of their childhood and youth, but above all to the profound changes in the built environment.

17 On the difference between human (culture) and nature, their interconnectedness, and related policy change, see Ilmolahti, Lähteenmäki, Karhu & Osipov 2018, 1–20.

18 Baldacchino 2007; Pugh & Chandler 2021.

The lakefront areas of Ladoga suffered extensive damage during the Second World War battles between Finland and the Soviet Union (1939–1944). Almost all the villages and town centers with their industrial plants on both the eastern and western shores of Ladoga were burnt or badly damaged. The retreating Finns also tried to destroy ports, bridges, and roads in accordance with their scorched earth tactics, as well as in other military operations.<sup>19</sup> When the Russian population arrived in the region, they created large, collective and state-owned farms and adapted industrial plants, villages, and towns to the Soviet model. But nature remembers; only rarely do the riverbeds change course, and the islands remain in place, as do the cliffs, the coves, and the hollows. They carry centuries of memories, even if human settlements disappear or change.

### *Relinquishing the national gaze*

Transnational environmental thinking, including lakefront history, questions not only the historical interpretations confined to strict national powers, but also the national character of natural heritage. Throughout the centuries, Karelia has represented more than just Finland, the Soviet Union, or Russia. The socioeconomic impact of Ladoga alone, along the watercourses flowing into and out of it, has extended hundreds of kilometers beyond the great lake itself and its shores, to more than just one country. The Finnish landscape of Koli National Park opens up to Lake Pielinen, which flows into the Pielinen river through the city of Joensuu, onto Finnish Lake Saimaa, continues down the Vuoksi river (Rus. Vuoksa) through the Finnish border town of Imatra, from there to Russian Ladoga and on along the Olhavanjoki (Volhov) river deep south into Belarus toward the banks of the Dnieper. Seen in this way, transnational Ladoga is our common cultural heritage,<sup>20</sup> containing values that we all share. It can be compared to the mighty flow of the Danube, as described by Claudio Magris.<sup>21</sup>

Just before the Winter War (1939–1940) between the Soviet Union and Finland, the philosopher Erik Ahlman wrote that culture is an expression and a supporter of values, which are “perceived” through emotion.<sup>22</sup> This seems to have happened to the cultural values associated with Ladoga. Cultural

19 Koukkunen 2020, 162–187.

20 Cultural heritage refers to those resources inherited from the past, regardless of their owner, which people consider to reflect their ever-changing values, beliefs, knowledge, and traditions. This includes all parts of the environment built up over time through the interaction of people and places. Cultural heritage is defined here from the bottom up, and includes: community orientation, human-centredness, social relevance and sustainability, which are the key elements of European cultural heritage policy in the twenty-first century. Finland ratified UNESCO’s Convention Concerning the Protection of the World Cultural and Natural Heritage in 1987 and the Convention for the Safeguarding of the Intangible Cultural Heritage in 2013. E.g. Salmela et al. 2014, 17.

21 Magris 1989.

22 Altman 1939, 15, 21.

diversity is the shared wealth of the world's peoples and safeguarding it in an increasingly globalized world is a key principle of sustainable development. The 1995 Constitution of Finland specifically mentions that all citizens are responsible for cultural heritage.<sup>23</sup> Ladoga is also a shared natural heritage site,<sup>24</sup> for which we humans in general – not just citizens of individual countries – are responsible, just as we are responsible for our cultural heritage.

As for the role of the great lakes in the emergence of environmental movements in general, since lakes were nearer humans than the oceans, they were the first to make us aware of the environmental crisis in the second half of the twentieth century. It was the transformation of the nearby lakes that brought people together in the cause of both green and blue environmentalism.

## References

- Ahlman, Erik 1939: *Kulttuurin perustekijöitä*. Gummerus, Helsinki.
- Alapassi, Markus, Häyrynen, Urpo & Linkola, Martti 1984: *Maisemansuojelu*. In: *Ympäristönsuojelu 2*. Rauno Ruuhijärvi & Urpo Häyrynen (eds.). Kirjayhtymä, Helsinki, 207–279.
- Baldacchino, Godfrey (ed.) 2007: *A World of Islands: An Island Studies Reader*. Island Studies Press, Charlottetown, PEI.
- Braudel, Fernand 2009: History and the Social Sciences. The Longue Durée. *Review* 32:2, 171–203.
- Borg, Pekka 1984: Luonnon- ja ympäristönsuojelun historiaa. In: *Ympäristönsuojelu 2*. Rauno Ruuhijärvi & Urpo Häyrynen (eds.). Kirjayhtymä, Helsinki, 7–18.
- Carson, Rachel 1962: *Äänetön kevät*. Tammi, Helsinki. [Orig. *Silent Spring* 1962].
- European Green Belt 2020: <https://www.europeangreenbelt.org/> Accessed November 2, 2021.
- Gaspar de Freitas, Joana, James, Robert & Land, Isaac 2021: Coastal Studies and Society: The Tipping Point. *Coastal Studies & Society* 1:1: 3–9.
- Grancher, Romain & Serruys, Michael-W. 2021: Changes on the Coast: Towards a Terraqueous Environmental History. *Journal for the History of Environment and Society* 6, 11–34.
- Hughes, J. Donald 2008: *Maailman ympäristöhistoria*. Vastapaino, Tampere. [Orig. *An Environmental History of the World: Humankind's Changing Role in the Community of Life* 2001].
- Ilmolahti, Oona, Lähteenmäki, Maria, Karhu, Jani & Osipov, Alexander 2018: Vihreä museo: paikallisuus, identiteetti ja ekomuseoliike. *Elore* 2:25, 1–20. <https://journal.fi/elore/article/view/77208> Accessed November 14, 2021.
- Kauppinen, Juha 2019: *Monimuotoisuus*. Siltala, Helsinki.
- Lee, Richard 2012: *Fernand Braudel, the Longue Duree, and World Systems Analysis*. State University of New York Press, Albany, NY.

23 E.g. Rosenström & Palosaari 2000, 109.

24 Natural heritage can be defined as a natural asset that represents a landscape of outstanding beauty, or tells us about an important stage in the history of the earth, or is an example of ongoing ecological or biological change, or is the habitat of an endangered animal species. UNESCO's international cultural heritage conventions. See the Finnish Heritage Agency <https://www.museovirasto.fi/en/about-us/international-activities/international-conventions> Accessed 12 November 2021.

- Linton, Jamie & Budds, Jessica 2014: The Hydrosocial Cycle: Defining and Mobilizing a Relational-Dialectical Approach to Water. *Geoforum* 57, 170–180.
- Lähteenmäki, Maria 2017: Footprints in the Snow. The Long History of Arctic Finland. Prime Minister's Office Publications 12/2017. VNK\_J1217\_Footprints in the snow\_net.pdf (valtioneuvosto.fi) Accessed November 12, 2021.
- Lähteenmäki, Maria 2021: Lopuksi: Monien rantojen Laatokka. In: *Laatokka. Suurjärven kiehtova rantahistoria*. Maria Lähteenmäki (ed.). Finnish Literature Society, Helsinki, 296–307.
- Mentz, Steve 2009: Toward a Blue Cultural Studies: The Sea, Maritime Culture, and Early Modern English Literature. *Literature Compass* 6:5, 997–1013.
- Mentz, Steve (ed.) 2015: *Oceanic New York*. Punctum Books, Brooklyn, NY.
- Mukherjee, Jenia 2011: No Voice, No Choice: Riverine Changes and Human Vulnerability in the 'Chars' of Malda and Murshidabad. *Occasional Paper* 28. Institute of Development Studies, Kolkata. <http://idsk.edu.in/wp-content/uploads/2015/07/OP-28.pdf> Accessed December 9, 2022.
- Pugh, Jonathan & Chandler, David 2021: *Anthropocene Islands, Entangled Worlds*. University of Westminster Press, London.
- Rosenström, Ulla & Palosaari, Marika (eds.) 2000: *Kestävyyden mitta. Suomen kestävän kehityksen indikaattorit 2000*. Ympäristöministeriö, Helsinki.
- Räsänen, Tuomas 2015: *Itämeren ympäristökriisi ja uuden merisuhteen synty Suomessa 1960-luvulta 1970-luvun puoliväliin*. Turun yliopisto, Turku.
- Salmela, Ulla, Matikka, Hannu, Latvala, Pauliina & Kauppi, Petja 2014: *Kohti kestävää kulttuuriympäristötyötä*. Opetus- ja kulttuuriministeriö, Helsinki.
- Tapaninen, Maippi 2010: *Yritysten yhteiskuntavastuu – Eettisyyttä, bisnestä vai sinipesua?* Finnwatch, Helsinki, <https://finnwatch.org/images/Yhteiskuntavastuu.pdf> Accessed 14, 2021.
- UNESCO's international cultural heritage conventions. Finnish Heritage Agency. <https://www.museovirasto.fi/en/about-us/international-activities/international-conventions> Accessed November 12, 2021.

# List of Contributors

**Björn, Ismo**, PhD, Senior Researcher in the Karelian Institute at the University of Eastern Finland. His expertise fields are community and environmental histories. His ongoing research concerns the multicultural death and memory politics in the Finnish-Russian border regions.

📄 <https://orcid.org/0000-0001-9876-994X>

**Colpaert, Alfred**, PhD, Professor in Physical Geography at the University of Eastern Finland. He also holds an Adjunct Professorship at the University of Oulu in Finland. He has specialized in remote sensing and geographical information systems and the analysis of spatial data. His recent research involves vegetation change in Scandinavia and southern Africa.

📄 <https://orcid.org/0000-0001-5833-7309>

**Gbagir, Augustine-Moses**, M.Sc., Project Researcher at the University of Eastern Finland. His research interests include the use of remote sensing, geographical information systems (GIS), and geoinformatics tools in environmental studies. He has studied the impacts of anthropogenic activities and climate change on land, water, and communities including the changes and impacts of phytoplankton in water bodies.

📄 <https://orcid.org/0000-0003-3322-6631>

**Ilmolahti, Oona**, PhD, Historian and Project Researcher at the University of Eastern Finland. Her latest topics have related to urban Karelian history, oral history, memory politics, and female biographies.

📄 <https://orcid.org/0000-0003-2914-2128>

**Kortelainen, Jarmo**, Professor of Human Geography at the University of Eastern Finland. Among other topics, he has studied the development of hydro-social networks of forest industry in Finland, local transformation of Russian forestry localities and transboundary forest relations at the Finnish-Russian borderlands.

📄 <https://orcid.org/0000-0003-0496-6489>

**Land, Isaac**, Professor in History at the Indiana State University in the United States of America. His first book was *War, Nationalism, and the British Sailor, 1750-1850*. He developed the concept and methodology of the new coastal history, and for many years he wrote and hosted “The Coastal History Blog.” Currently, he co-edits the journal *Coastal Studies & Society*, published by Sage.

📄 <https://orcid.org/0000-0003-4292-1601>

**Lähteenmäki, Maria**, PhD, Professor of History at the University of Eastern Finland, and Adjunct Professor at the University of Helsinki. Her recent research topics concern the coastal and lake histories, the female Finnish refugees in the Soviet Karelia in the 1920s–1930s, and cultural interactions in the transnational sub-Arctic Lapland.

📄 <https://orcid.org/0000-0001-9142-659X>

**Michelsen, Karl-Erik**, PhD, Professor in Science, Technology and Modern Society at the Lappeenranta-Lahti University of Technology (LUT University) in Finland. He has studied the transformation of society and technological developments, as well as the economic, political, and social forces affecting them.

📄 <https://orcid.org/0000-0002-0607-8621>

**Osipov, Alexander**, PhD, Researcher at the Karelian Institute of the University of Eastern Finland. His research interests include the environmental history of Russian Karelia, especially the history of protected areas and the development of ecotourism, as well as the Russian Civil War and Finnish-Russian relations in the 20th century.

📄 <https://orcid.org/0000-0002-6237-4425>

**Parppei, Kati**, PhD, University Lecturer and Adjunct Professor in Russian history at the Department of Geographical and Historical Studies, University of Eastern Finland. She is also a Life Member of Clare Hall, University of Cambridge. Her interests include history of mentalities and ideas, image studies, Russian history, and borderland issues.

📄 <https://orcid.org/0000-0002-4322-9046>

**Rannikko, Pertti**, Sociologist and Emeritus Professor of Environmental Policy at the University of Eastern Finland. His research themes include changes in the use of natural resources and the relationship with nature from the perspective of local communities. His research in recent years has focused on the villages located in the Karelian border regions of Finland and Russia.

📄 <https://orcid.org/0000-0002-9529-0383>

**Rosén, Thomas**, PhD, Senior Lecturer at the Department of Languages and Literatures of the University of Gothenburg, Sweden. He is a historical linguist whose research interests include eighteenth-century Russian, Russo-Swedish linguistic contacts, modern Ukrainian, medieval Slavic languages and cultures.

📄 <https://orcid.org/0000-0002-0247-0327>

**Räsänen, Tuomas**, PhD, Associate Professor of Environmental History at the University of Eastern Finland, and Adjunct Professor at the University of Turku. His research interests include the history of Baltic Sea environment, the history of human-wildlife relations in Finland and the history of Finnish environmentalism.

📄 <https://orcid.org/0000-0003-4288-2710>

# Abstract

## Lake Ladoga. The Coastal History of the Greatest Lake in Europe

Edited by Maria Lähteenmäki and Isaac Land

Aimed at researchers, students and all interested in history, this multidisciplinary study offers a spectacular view of the history of Europe's largest lake. Adopting the lens of coastal history, this edited volume presents the development of the vast Great Lake's catchment area over a long-time span, from archaeological traces to Viking routes and from fishery huts to the luxury villas of the power elite. It reflects on people's sensory-historical relationships with aquatic nature, and considers the benefits and harms of power plants and factories to human communities and the environment.

The focus of the study is on the central and northern parts of the shores of Lake Ladoga, which belonged to Finnish rule between 1812 and 1944. The multidisciplinary approach permits an unusually wide range of questions. What has the Great Lake meant to local residents in cultural and emotional terms? How should we conceptualize the extensive and diverse networks of activities that surrounded the lake? What kind of Ladoga beaches did the Finns have to cede to the Soviet Union at the end of the war in 1944? How have Finns reminisced about their lost homelands? How have the Russians transformed the profile of the region, and what is the state of Ladoga's waters today?

The volume is the first overall presentation of Lake Ladoga, which today is entirely part of Russia, aimed at an international readership. The rich source material of cross-border research consists of both diverse archival material and chronicles, folklore, reminiscence, and modern satellite images. The history of Lake Ladoga helps readers to understand better the economic, political, and socio-cultural characteristics of the cross-border areas, and the dynamics of the vulnerable border regions.

# Index

## A

Abramovich Roman 187  
Ahlman Erik 225  
Ahvenainen Jorma 129  
Ailio Julius 138  
Aldeigjuborg lord 61  
Aleksandr monk 81  
Alexander II 123  
Alexander III 124  
Androshchuk Fjodor 62  
Anisimov Andrei 121  
Aristotle philosopher 152  
Arppe Nils Ludvig 96, 97, 103, 110  
Arseniy monk 81  
Ashworth William 28, 29, 33

## B

Bayer Gottlieb Siegfried 58  
Barracrough Eleanor Rosamund 60, 61  
Belskiy Stanislav V. 71, 72  
Björn Ismo 23, 173  
Blomstedt Pauli 177  
Boddice Roband 152  
Branov Yevdokim 121  
Braudel Fernand 217  
Budds Jessica 33  
Boukharaeva Louiza 207  
Buller Walter 32

## C

Cameron Laura 31, 32  
Carl X Gustaf 83  
Carson Rachel 220  
Castree N. 95  
Chandler Alfred 123  
Chapayev Vasily Ivanovich 184  
Colpaert Alfred 17, 22, 136  
Columbus Christopher 42  
Corbin Alain 42

## D

Danylenko Andrii 59  
Darwin Charles 42  
Delusinina Irina 139  
Derjabin Alexander 121  
Diesen Christofer 131  
Dijk Teun van 197  
Devienne Elsa 19  
Drabkova V. G. 141  
Drozdenko Aleksandr 53  
Durkheim Emil 115

## E

Efrem monk 81  
Eirik king 61

## F

Faqlān Ibn 56  
Febvre Lucien 152  
Fedichev Aleksandr 209, 210  
Filatov Nikolai 139  
Franklin Simon 59  
Frevert Ute 152  
Furman Anton 120, 121  
Furuhjelm Hjalmar 124, 125

## G

Gaspar de Freitas Joana 42  
Gbagir Augustine-Moses 14, 17, 22, 55,  
93, 136, 174, 206  
Geertz Clifford 154  
George Rose 28  
German monk 81  
Gillis John R. 39  
Glöersen Ole 130  
Gorbachëv Mikhail 198  
Gröndahl Gustaf 124, 125



H

Hajer Maarten 196  
Hákonarson Jarl Eiríkr 61  
Hraundal Thorir Jonsson 59  
Huizinga Johan 152  
Hudilainen Aleksandr 209  
Humboldt Alexander von 42

I

Ilmolahti Oona 23, 151, 175  
Ingigerðr, wife of Yaroslav the Wise 61  
Iriye Akira 117

J

Jackson Tatjana N. 61  
Jacobsen Rowan 18  
Jarratt David 164  
Jütte Robert 151  
Jääskeläinen Tauno 177, 178  
Jääskeläinen V. 219

K

Kasperski Tatiana 127  
Katanandov Sergej 205  
Kolker Alexander 186  
Kortelainen Jarmo 17, 22, 91  
Kovalchuk Yuri 187  
Krejndlin Mikhail 205  
Kroll Gary 43  
Kuchko Aleksandr 200  
Kuusisto Esko 12  
Kuz'min Sergej 63  
Kyytinen Pekka 156, 165

L

Laakkonen Simo 41  
Laakso Ville 71, 72  
Lalander Rickard 196  
Land Isaac 18, 20, 21, 28, 37, 118, 156,  
217  
Langston Nancy 13  
Lebedev Gleb 59  
Le Bouëdec Gerard 19, 156  
Lee James 196  
Lind John 59  
Linton Jamie 33  
Littek Wolfgang 117  
Lukin Lionel 121  
Lundström Carl 121  
Lung Erling 127  
Lähteenmäki Maria 11, 23, 30, 139, 151,  
175, 176, 217

M

Magellan Ferdinand 42  
Magris Claudio 12, 225  
Malmberg Anders 117  
Malmgren Harald 58  
Marloie Marcel 207  
Marx Karl 115, 116  
Mas'ūdi geographer 56  
Matvejevic Predrag 11  
Mayer Edvard 124  
McEvoy Arthur 38  
Medinskiy Vladimir 53  
Medveder Dmitrij 210  
Merimaa Maija 196  
Merleau-Ponty Maurice 152  
Michelsen Karl-Erik 17, 22, 115  
Müller Gerhard Friedrich 58

N

Nash Linda 41  
Naumenko M. A. 141  
Nekrasov Mikhail 204  
Nelidov Andrej 206  
Nevskiy Aleksandr 83  
Nordenskiöld A. E. 42  
Nordenskiöld Nils 122

O

O'Brian Patrik K. 116  
Oleg prince 53  
Omeljanoff Vsevolod 122  
Osipov Alexander 23, 46, 195  
Osvintsov Mikhail 121  
Ozeretskovskiy Nikolai 84, 119

P

Parrinello Giacomo 44  
Park Geoff 32  
Parppei Kati 21, 69  
Pearson Michael 19, 38, 39, 157  
Pietinen A. 178  
Pious Louis the 56  
Plamper Jan 152  
Plieskaya Maija 186  
Pollard Sidney 116, 117  
Poulsen Bo 38  
Pozdnyakov D. V. 138  
Putin Vladimir 187, 188, 208  
Pöllänen Juho 219  
Pöysti Lasse 177, 178

R

Rannikko Pertti 17, 22, 91  
Redford Duncan 28

- Relander Oskar 125  
Revelle Roger 43  
Riegel Christopher 59  
Riello Giorgio 116  
Ronimus J. V. 79  
Rosén Thomas 21, 69  
Rudbeck Olof 57, 58, 60, 61  
Rukhovets Leonid 139  
Rurik varangian 53, 57  
Räsänen Tuomas 21, 37
- S
- Saarinen Eliel 177  
Saarinen Hannes 177  
Saarnisto Matti 139  
Saunier Pierre-Yves 117  
Savvatiy monk 81  
Schafer Murray 152, 153, 167  
Schwartz Henrik Theodor 124  
Sergey monk 81  
Sihvonen Jukka 180  
Sharov A. N. 142  
Shepard Jonathan 59  
Shirjajeff A. J. 123  
Shorov Oleg 53  
Siilahti Pertti 189  
Sineus varangian 57  
Smith Mark M. 151, 152  
Sorenson Olav 117  
Sorvali Eetu 40  
Stepanitskij Vsevolod 205  
Stepanov Viktor 202  
Stewart Mart 41  
Stobart Jon 117  
Stork Georgi 188
- Strang Nils A. 127  
Strom Anna 127  
Sturlason Snorri 61  
Systra Yulo 203, 206
- T
- Theophilus emperor 56  
Tilly Richard 115  
Timofeev Viktor 200  
Tolochko Oleksiy 59  
Turkama Väinö 177  
Truvor varangian 57  
Trüstedt Otto 125
- V
- Vaisman Boris 188  
Valdemar king 61  
Vasmer Max 60  
Varsta O. 99  
Voroshilov Kliment 183, 184
- W
- Weber Max 115, 116  
Winberg Carl Oskar 124  
Winter Hannes 177, 178  
Worobjeff Pjotr 121  
Worster Donald 41
- Y
- Yanitskij Oleg 196, 201, 206, 211  
Yaroslav prince 72  
Yaroslav the Wise 61
- Z
- Zhukov Nikolaj 201

## Studia Fennica Ethnologica

### **Gendered Rural Spaces**

Edited by Pia Olsson &  
Helena Ruotsala

Studia Fennica Ethnologica 12  
2009

LAURA STARK

### **The Limits of Patriarchy**

*How Female Networks of  
Pilfering and Gossip Sparked the  
First Debates on Rural Gender  
Rights in the 19th-century  
Finnish-Language Press*

Studia Fennica Ethnologica 13  
2011

### **Where is the Field?**

*The Experience of Migration  
Viewed through the Prism of  
Ethnographic Fieldwork*

Edited by Laura Hirvi &  
Hanna Snellman

Studia Fennica Ethnologica 14  
2012

LAURA HIRVI

### **Identities in Practice**

*A Trans-Atlantic Ethnography of  
Sikh Immigrants in Finland and  
in California*

Studia Fennica Ethnologica 15  
2013

EERIKA KOSKINEN-KOIVISTO

### **Her Own Worth**

*Negotiations of Subjectivity in  
the Life Narrative of a Female  
Labourer*

Studia Fennica Ethnologica 16  
2014

### **Transnational Death**

Edited by Samira Saramo,  
Eerika Koskinen-Koivisto and  
Hanna Snellman

Studia Fennica Ethnologica 17  
2019

## Studia Fennica Folkloristica

VENLA SYKÄRI

### **Words as Events**

*Cretan Mantinádes in  
Performance and Composition*

Studia Fennica Folkloristica 18  
2011

### **Hidden Rituals and Public Performances**

*Traditions and Belonging among  
the Post-Soviet Khanty, Komi  
and Udmurts*

Edited by Anna-Leena Siikala  
& Oleg Ulyashev

Studia Fennica Folkloristica 19  
2011

### **Mythic Discourses**

*Studies in Uralic Traditions*

Edited by Frog, Anna-Leena  
Siikala & Eila Stepanova

Studia Fennica Folkloristica 20  
2012

CORNELIUS HASSELBLATT

### **Kalevipoeg Studies**

*The Creation and Reception of  
an Epic*

Studia Fennica Folkloristica 21  
2016

### **Genre – Text – Interpretation**

*Multidisciplinary Perspectives on  
Folklore and Beyond*

Edited by Kaarina Koski, Frog &  
Ulla Savolainen

Studia Fennica Folkloristica 22  
2016

### **Storied and Supernatural Places**

*Studies in Spatial and Social  
Dimensions of Folklore and Sagas*

Edited by Ülo Valk & Daniel  
Sävborg

Studia Fennica Folkloristica 23  
2018

### **Oral Tradition and Book Culture**

Edited by Pertti Anttonen,  
Cecilia af Forselles and  
Kirsti Salmi-Niklander

Studia Fennica Folkloristica 24  
2018

### **Rhyme and Rhyming in Verbal Art, Language, and Song**

Edited by Venla Sykäri and  
Nigel Fabb

Studia Fennica Folkloristica 25  
2022

## Studia Fennica Historica

### **Fibula, Fabula, Fact**

*The Viking Age in Finland*

Edited by Joonas Ahola & Frog  
with Clive Tolley

Studia Fennica Historica 18

2014

### **Novels, Histories, Novel Nations**

*Historical Fiction and Cultural  
Memory in Finland and Estonia*

Edited by Linda Kaljundi,

Eneken Laanes & Ilona

Pikkanen

Studia Fennica Historica 19

2015

JUKKA GRONOW & SERGEY

ZHURAVLEV

### **Fashion Meets Socialism**

*Fashion industry in the Soviet  
Union after the Second World  
War*

Studia Fennica Historica 20

2015

SOFIA KOTILAINEN

### **Literacy Skills as Local Intangible Capital**

*The History of a Rural Lending  
Library c. 1860–1920*

Studia Fennica Historica 21

2016

### **Continued Violence and Troublesome Pasts**

*Post-war Europe between the  
Victors after the Second World  
War*

Edited by Ville Kivimäki and  
Petri Karonen

Studia Fennica Historica 22

2017

### **Personal Agency at the Swedish Age of Greatness 1560–1720**

Edited by Petri Karonen &  
Marko Hakanen

Studia Fennica Historica 23

2017

PASI IHALAINEN

### **The Springs of Democracy**

*National and Transnational  
Debates on Constitutional  
Reform in the British,  
German, Swedish and Finnish  
Parliaments, 1917–19*

Studia Fennica Historica 24

2017

### **On the Legacy of Lutheranism in Finland**

*Societal Perspectives*

Edited by Kaius Sinnemäki,

Anneli Portman, Jouni Tilli

and Robert H. Nelson

Studia Fennica Historica 25

2019

### **Handwritten Newspapers**

*An Alternative Medium during  
the Early Modern and Modern  
Periods*

Edited by Heiko Droste and

Kirsti Salmi-Niklander

Studia Fennica Historica 26

2019

### **Lake Ladoga**

*The Coastal History of the  
Greatest Lake in Europe*

Edited by Maria Lähteenmäki  
and Isaac Land

Studia Fennica Historica 27

2023

## Studia Fennica Anthropologica

### **On Foreign Ground**

*Moving between Countries and  
Categories*

Edited by Marie-Louise

Karttunen &

Minna Ruckenstein

Studia Fennica Anthropologica 1

2007

### **Beyond the Horizon**

*Essays on Myth, History, Travel  
and Society*

Edited by Clifford Sather &

Timo Kaartinen

Studia Fennica Anthropologica 2

2008

TIMO KALLINEN

### **Divine Rulers in a Secular State**

Studia Fennica Anthropologica 3

2016

### **Dwelling in Political Landscapes**

*Contemporary Anthropological  
Perspectives*

Edited by Anu Lounela, Eeva

Berglund and Timo Kallinen

Studia Fennica Anthropologica 4

2019

### **Responsibility and Language Practices in Place**

Edited by Laura Siragusa and

Jenanne K. Ferguson

Studia Fennica Anthropologica 5

2020

## Studia Fennica Linguistica

### **Planning a new standard language**

*Finnic minority languages meet the new millennium*

Edited by Helena Sulkala & Harri Mantila

Studia Fennica Linguistica 15  
2010

LOTTA WECKSTRÖM

### **Representations of Finnishness in Sweden**

Studia Fennica Linguistica 16  
2011

TERHI AINIALA, MINNA SAARELMA & PAULA SJÖBLOM  
**Names in Focus**

*An Introduction to Finnish Onomastics*

Studia Fennica Linguistica 17  
2012

### **Registers of Communication**

Edited by Asif Agha & Frog  
Studia Fennica Linguistica 18  
2015

KAISA HÄKKINEN

### **Spreading the Written Word**

*Mikael Agricola and the Birth of Literary Finnish*

Studia Fennica Linguistica 19  
2015

### **Linking Clauses and Actions in Social Interaction**

Edited by Ritva Laury, Marja Etelämäki, Elizabeth Couper-Kuhlen

Studia Fennica Linguistica 20  
2017

### **On the Border of Language and Dialect**

Edited by Marjatta Palander, Helka Riionheimo & Vesa Koivisto

Studia Fennica Linguistica 21  
2018

### **Conversation Analytic Perspectives to Digital Interaction**

*Practices, Resources, and Affordances*

Edited by Aino Koivisto, Heidi Vepsäläinen & Mikko T. Virtanen

Studia Fennica Linguistica 22  
2023

## Studia Fennica Litteraria

### **The Emergence of Finnish Book and Reading Culture in the 1700s**

Edited by Cecilia af Forselles & Tuuja Laine

Studia Fennica Litteraria 5  
2011

### **Nodes of Contemporary Finnish Literature**

Edited by Leena Kirstinä  
Studia Fennica Litteraria 6  
2012

### **White Field, Black Seeds**

*Nordic Literacy Practices in the Long Nineteenth Century*

Edited by Anna Kuismin & M. J. Driscoll

Studia Fennica Litteraria 7  
2013

LIEVEN AMEEL

### **Helsinki in Early Twentieth-Century Literature**

*Urban Experiences in Finnish Prose Fiction 1890–1940*

Studia Fennica Litteraria 8  
2014

### **Novel Districts**

*Critical Readings of Monika Fagerholm*

Edited by Kristina Malmio & Mia Österlund

Studia Fennica Litteraria 9  
2016

ELISE NYKÄNEN

### **Mysterious Minds**

*The Making of Private and Collective Consciousness in Marja-Liisa Vartio's Novels*

Studia Fennica Litteraria 10  
2017

### **Migrants and Literature in Finland and Sweden**

Edited by Satu Gröndahl & Eila Rantonen

Studia Fennica Litteraria 11  
2018

### **Versification**

*Metrics in Practice*

Edited by Frog, Satu Grünthal, Kati Kallio and Jarkko Niemi

Studia Fennica Litteraria 12  
2021