Tourism development in border areas: a benefit or a burden? The case of Karelia
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TOURISM DEVELOPMENT IN BORDER AREAS: A BENEFIT OR A BURDEN? THE CASE OF KARELIA

S. V. Stepanova¹

Border regions are expected to benefit from their position when it comes to tourism development. In this article, I propose a new approach to interpreting the connection between an area’s proximity to the national border and the development of tourism at the municipal level. The aim of this study is to identify the strengths and limitations of borderlands as regards the development of tourism in seven municipalities of Karelia. I examine summarised data available from online and other resources, as well as my own observations. Using median values, I rely on the method of content analysis of strategic documents on the development of cross-border municipalities of Karelia. My research focuses on the tourism and recreation potential of borderlands and analyses the development of local tourism infrastructure. I describe the major types of tourism, examine tourist flows, and consider the strategic aspects of tourism at the municipal level. I identify the strengths and limitations of the development of tourism in border areas by comparing the data on border and inland municipalities of Karelia and investigate the role of international border crossing points in the development of tourism in borderlands.

Keywords: borderlands, tourism, municipal districts, tourism infrastructure, tourist flow, road border crossing point, Republic of Karelia

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Introduction

As a tool to boost regional development, tourism has become the focus of borderland studies. A border location is considered beneficial for the development of regional tourism. Thus, it is logical to assume that border territories have a more considerable competitive advantage in terms of tourism promotion than the inland parts of a region. Although the presence of a border has a positive effect on the development of regional tourism (provided bordering territories have good neighbourly relations), one may ask whether this holds true at a municipal level. The article puts this question into the context of tourism development practices in the Karelian borderlands.

Tourism development in borderlands: theoretical overview

There is a considerable body of research on different aspects of tourism in borderlands and the contribution of the industry to regional development.

Recent transformations in the global community stimulated discussion on the effect of national borders on the tourism industry.

Proposed by J. Matznetter as early as 1979 [1], the typology of spatial effects of national borders on tourism was further developed in the 2000s by D.J. Timothy [2]. Both Russian and international researchers have addressed the impact of the emergence and disappearance of national borders on the tourism industry [3—6] and cross-border cooperation in tourism [7—9]. Studies focusing on transboundary tourist routes as a tool for tourism collaborations between border regions of neighbouring countries [10, 11], as well as on transboundary tourist mobility as a factor in the development of borderlands merit special attention [12, 13].

Socio-economic transformations and change in Russia’s geopolitical standing in the international arena at the turn of the 21st century encouraged regional studies of Russian borderlands. At the time, the Republic of Karelia came to be considered a periphery region [14—16]. Since the 2000s, the research community have focused on both the industrial and tourism-recreational development of the territory [17; 18]. Researchers have also addressed transboundary relations in tourism, the development of tourism infrastructure, and the management of tourism development [19—23].
However, the current body of research provides only a general picture of tourism development and the benefits the Republic of Karelia enjoys due to its geographical location and geopolitical standing. There are few municipal-level studies into individual aspects of the tourism industry. This article attempts to fill this gap by identifying the advantages of and limitations to tourism development in borderlands in the case of Karelia, particularly, its border districts.

**The methodological aspects of studying the Karelian borderlands**

To examine the cause-effect relationship between tourism development and the border location of a territory, the following aspects were considered: tourism and recreation resources, the level of tourism infrastructure development, inbound tourism, types of tourism, and strategic management of tourism development. The study identifies the strengths and limitations of tourism development in borderlands by comparing data on the development of the industry in seven Karelian border municipalities and in ten inland districts. The capital district of Petrozavodsk is not taken into account.

The study relies on the analysis of integrated data from official online resources: websites of the administrations of border municipalities, the website of the Republic of Karelia, the republican Visitor Centre, booking.com, TripAdvisor, and the Unified Federal Registry of Russian Tour Operators. In addition, it presents summarised data on the standardised tourism passports of Karelian border districts obtained through literature study, observations, and median values. The content analysis of strategies for socio-economic development of border municipal regions was used to study the strategic management of tourism development.

The location of the Loukhi district (fig. 1) prevents from using municipality-level data and necessitates recalculations. Additionally, most tourism businesses, tourism infrastructure, and tourism and recreation resources in the district are concentrated in the eastern part of the area on the coast of the White Sea and along federal route R21. Thus, the data used in this article apply to the border area of the Loukhi district only.

**Border municipalities in the Republic of Karelia: an overview**

There are eighteen districts in the Republic of Karelia (fig. 1), four of them are located at the national border.
Fig. 1. The administrative division of the Republic of Karelia

The border districts differ significantly in size, population size and density, types of economic activities, and tourism and recreation resources. Their common feature differentiating them from the inland districts, alongside the access to the Russian – Finnish border, is the significant distance to the regional capital – the city of Petrozavodsk (on average, 464 km) (table 1).
Table 1

Overview of the border districts of the Republic of Karelia

<table>
<thead>
<tr>
<th>Municipality (north-south)</th>
<th>Area, 1,000 km²</th>
<th>Population as of 01.01.2018, people</th>
<th>Population change 2009—2018, %</th>
<th>Distance from the district centre to, km</th>
<th>Petrozavodsk</th>
<th>Nearest border checkpoint</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loukhi district*</td>
<td>22.55</td>
<td>11459</td>
<td>–33</td>
<td>600</td>
<td>Suoperya-Kuusamo, 60</td>
<td></td>
</tr>
<tr>
<td>Kalevala district</td>
<td>13.26</td>
<td>6774</td>
<td>–29.4</td>
<td>582</td>
<td>Lyuttya—Vartius, 170</td>
<td></td>
</tr>
<tr>
<td>Kostomuksha city district</td>
<td>4.04</td>
<td>29906</td>
<td>–1.3</td>
<td>518</td>
<td>Lyuttya—Vartius, 30</td>
<td></td>
</tr>
<tr>
<td>Muyezersky district</td>
<td>17.66</td>
<td>10064</td>
<td>–31.5</td>
<td>464</td>
<td>Lyuttya—Vartius, 180</td>
<td></td>
</tr>
<tr>
<td>Suoyarvi district</td>
<td>13.74</td>
<td>15867</td>
<td>–25.5</td>
<td>128</td>
<td>Vyartsilya-Niirala, 190</td>
<td></td>
</tr>
<tr>
<td>Sortavala district</td>
<td>2.19</td>
<td>31039</td>
<td>–6.2</td>
<td>289</td>
<td>Vyartsilya-Niirala, 57</td>
<td></td>
</tr>
<tr>
<td>Lahdenpohja district</td>
<td>2.21</td>
<td>12892</td>
<td>–16.3</td>
<td>302</td>
<td>Vyartsilya-Niirala, 180</td>
<td></td>
</tr>
<tr>
<td>Borderland average</td>
<td>13.26</td>
<td>12892</td>
<td>–25.5</td>
<td>464</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Inland district average</td>
<td>7.21</td>
<td>19340</td>
<td>–19.8</td>
<td>246</td>
<td>—</td>
<td></td>
</tr>
</tbody>
</table>


* In view of the specific features of the district, the distance was calculated from the village of Pyaozersky

The border municipalities have larger areas and sparser population comparing to the inland districts. A negative trend observed in the Republic of Karelia and its border districts is population decline accompanied by the growing proportion of the senior population. The rate of population decline in the borderlands is above the regional average: 25.5% against 19.8% in 2009—2018. The most affected areas are the Loukhi, Muyezersky, and Kalevala municipalities (–30%). To some degree, the exceptions are the Kostomuksha city district and the Sortavala district, where the decline rate is lower. This is explained by broader employment opportunities in the areas.
It is important to take into account how the borderlands were developing in the Soviet period when due to ideological reasons access to these areas was restricted even for the country’s nationals [24]. The vicinity to the capitalist state of Finland reinforced the barrier function of the border and resulted in poor development of transport infrastructure as compared to other northwestern regions [14]. The past still hampers the socio-economic development of the border municipalities and imposes limitations on various economic activities, including tourism.

At the turn of the 21st century, socio-economic changes affected relations between Russia and its neighbours, creating a framework for new political, economic, and cultural dialogue between countries on either side of the border. The contact function of the border came to prevail over the barrier one [25; 26].

In most Karelian border districts, principal economic activities rely heavily on the local natural resources. These municipalities specialise in logging, woodworking and mining. The largest local enterprise is the mining facility in Kostamuksha. There are metallurgic, food processing, agricultural, and service companies, as well as pulp mills, in the border districts. In recent years, tourism and recreation services have become a priority in the socio-economic development of the areas.

Tourism and recreation resources of the Karelian borderlands

The tourism industry cannot develop without tourism and recreation resources. Border municipalities of the Republic of Karelia have unique natural and manmade resources. The existence of most of them is attributed to the vicinity to the border. Some local tourist attractions are of national and even international significance.

The Green Belt of Fennoscandia, a unique natural complex, stretches along the national border from the Barents to the Baltic Sea. The tight border regime made it possible to preserve large areas of natural ecosystems along the border between the capitalist and the socialist blocs. Later, international projects helped to create a system of federal and regional conservation areas along the Karelian section of the border. Eighty per cent of the territory spanning 1/3 million ha is Russian. The belt has many potential tourist attractions unrivalled by those in any other border region of the country. The most important conservation areas are the Paanajarvi national park (1992, 104,000 ha) in the Loukhi district, the Kostomuksha national reserve (1983, 49,000 ha), and the Valaam archipelago national park (1999, 24,000 ha) [27—29]. Regulation of the Government of the Russian Federation No. 1684 of December 28, 2017, established a new national park, the Ladoga Skerries, of an area of 122,000 ha within the system of the conservation areas.
The border municipalities also have unique cultural and historical heritage:
— the rune-song villages that have preserved their ancient traditions (the village of Kestenga in the Loukhi district, the village of Kalevala in the Kalevala national district, the village of Voknavolok in the Kostamuksha city district). At the turn of the 20th century, when the Grand Duchy of Finland was a part of the Russian Empire, there was significant interest in the tourist routes crossing the rune-song territories of today’s Karelia. This wave of enthusiasm was attributed to the publication of the Karelian-Finnish epic *Kalevala*;
— the border town of Sortavala included in the List of the Historical Cities of Russia. It was founded by Swedes in the mid-17th century. Having changed its allegiance many times, it has retained its unique architecture. The town is justly famed as the jewel of the Northern Ladoga region (the area includes the Sortavala, Lahdenpohja and Pitkyarana districts, the latter being an inland municipality);
— historical (Kollasyarvi in the Suoyarvi district) and military (the Owl Mountain, a command and communications bunker of the Finnish Army in 1943—1945, one of the largest underground museums of Northern Europe, 2016) memorials telling the military history of the borderlands.

Overall, the seven border municipalities are home to 42% of the Karelian cultural heritage sites included in the Unified State Registry. Sixteen per cent is located in the Sortavala district,¹ the most significant sights being the Valaam Monastery and the Rusekala mountain park. A considerable proportion of the cultural sites has been identified but not yet included in the registry.

**The development of tourism infrastructure**

Tourism infrastructure is a prerequisite for the development of tourism and recreation. A comparison of the integrated indicator and the structural element indicator values helps to identify territorial disparities across the Republic of Karelia and the standing of its borderlands in terms of tourism infrastructure development (table 2, for more detail on the calculation methodology, see [30]).

Table 2

<table>
<thead>
<tr>
<th>Formula</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>$i_{dj} = \frac{F_{dj}}{m}$</td>
<td>$i_{dj}$ is the index of the $j^{th}$ indicator of the $d^{th}$ district. $F_{dj}$ is the actual value of the $j^{th}$ indicator of the $d^{th}$ district. $m$ — the median of the $j^{th}$ indicator of the district.</td>
</tr>
<tr>
<td>$I_{dk} = \frac{1}{x} \cdot \sum_{j=1}^{x} i_{dj}$</td>
<td>$I_{dk}$ is the indicator of the development of the $k^{th}$ structural element of the tourism infrastructure of the $d^{th}$ district. $x$ is the number of the selected indicators of the structural element of tourism infrastructure.</td>
</tr>
<tr>
<td>$I_{d} = \frac{1}{n} \cdot \sum_{k=1}^{n} I_{dk}$</td>
<td>$I_{d}$ is the integrated indicator of tourism infrastructure development in the $d^{th}$ district. $n$ is the number of the structural elements of the tourist infrastructure.</td>
</tr>
</tbody>
</table>

To identify the cause-effect relationship between the development of tourism infrastructure and the vicinity of a municipality to the state border, it seems logical and sufficient to analyse the following measures associated with the structural elements:

1) accommodation infrastructure: the number of accommodation facilities (units); the number of beds, including those at campsites and health resorts (units);

2) the food services infrastructure: the number of restaurants, cafes, and bars (units); the number of seats in them (units);

3) the entertainment infrastructure: the number of museums, exhibition halls (units) and outdoor activity centres, including boating clubs, skiing facilities, horse riding arenas, etc. (units).

According to the integrated indicator calculations, the level of the development of tourism infrastructure in the border municipalities is below that in the inland districts (0.85 against 1.08). Four of the border municipalities are classified as areas of moderate (<1) and poor (<0.5) development of tourism infrastructure. These are the Kalevala national district (0.85), the Loukhi district (0.51), the Suoyarvi district (0.48), and the Muyezersky district (0.23). The areas of developed tourism infrastructure (1.4—2.8) are the Sortavala district, Kostomuksha city district, and the Lahdenpohja district.

The distribution of municipalities by the level of development of the structural elements of tourism infrastructure (Fig. 2) shows that the high ranking of the Lahdenpohja municipality is attributed to the significant number of entertainment facilities, whereas its food services infrastructure is relatively sparse.
The median values of the structural element indicators of tourism infrastructure in the border districts are rather low, ranging from 0.75 for the accommodation infrastructure (1.22 in the inland districts) and <0.5 for the food services infrastructure (1.02). The only exception is the entertainment infrastructure, where the median value is 1.4 (0.86 for the inland municipalities), although the Loukhi, Suoyarvi, and Muyezersky districts underperform in this respect.

Spatial disparities in the distribution of tourism infrastructure are a national trend. They are accounted for by the features of local tourism and recreation resources and prospects for the development of the corresponding industries. In the Karelian borderlands, the accommodation infrastructure is concentrated along the shorelines of lakes (primarily, that of Lake Ladoga, the largest lake in Europe) and in popular tourist destinations (for example, the village of Voknavolok). The food services infrastructure is gravitating towards the centres of municipalities.
The quality of services provided by the regional tourism industry was evaluated based on customer reviews and expert opinions voiced at the annual Karelian Tourism Industry competition held in the region for eighteen years. Every year, companies from the Sortavala district win awards in several categories. However, recently they have been joined by their counterparts from the Kostomuksha city district.2

According to the Standardised Federal Register of Tour Operators, out of sixty Karelian organisations working in the field, only eleven are located in the border municipalities. Four of them are in the Sortavala district and three are in the Kostomuksha district. There are no registered tour operators in the Lahdenpohja district or in the part of the Loukhi district covered in this study. This reduces the possibilities for both the promotion of the area and tourism development. However, a chain of travel agencies works in these districts and the tourism services rendered by the border districts are included in the offers of tour operators from other municipalities, including companies from Petrozavodsk and Moscow. Moreover, the republican Visitor Centre located in Petrozavodsk makes a significant contribution to the promotion of the borderlands as tourist destinations. The districts of the Northern Ladoga region have a significant advantage over the other border municipalities, namely, a Visit Centre that has opened in the town of Sortalva.

### Incoming tourism and types of tourism

The border municipalities account for a third of inbound tourism in the Republic of Karelia (35%).3 A typical tourist comes from Saint Petersburg, the Leningrad region, or Moscow, booking accommodation and organising entertainment himself or herself. Such visitors account for 50—85% of total inbound tourism. Most tourists come to the Karelian borderlands in summer. The Sortavala district receives the most significant proportion of tourists (fig. 3). In 2018, about 100,000 tourists and pilgrims from across the world visited Valaam, whereas the first Russian mountain park, Rusekala, attracted over 300,000 people (the number of visitors increased fortyfold in 2006—2017 [21]).

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The popularity of the Sortavala district is explained by its considerable tourism and recreation resources, the history of the conquest of the Northern Ladoga region, and the favourable economic and geographical location (border checkpoints, regular road and rail links to Saint Petersburg).
Border checkpoints play an important role in the development of tourism and recreation in border regions. This is particularly true of transboundary tourism. The busiest checkpoint is Vyartsilya-Niirala. On average, it was crossed by 1.5 million people per year in 2012—2017, which is 74% of the total traffic across the Karelian section of the Russian—Finnish national border.

In the 1990s, a major impetus for the development of regional tourism came from ‘nostalgic’ Finnish tourists coming to the Northern Ladoga region. Most of them visited the Sortavala district. Major socio-economic changes in the country, accompanied by the opening of the border checkpoints and the simplification of visa regime attracted international tourists and encouraged the development of private entrepreneurship. During that period, tourism was emerging as a sector of the regional economy. It ensured tax revenues and created jobs: this was very much at odds with the Soviet interpretation of tourism as leisure and socialising. The number of Finnish tourists reached 700,000 people per year. About one hundred private travel companies opened in the region [15; 17; 26]. For example, in the 1990s, an increase in transboundary travel to the Sortavala district encouraged a local resident to open a small café called Kolmas in the village of Vyartsilya, two kilometres away from the border checkpoint. The establishment is operating to this day. Later, inbound nostalgic tourism was gradually replaced by shopping tourism. According to I. Bjorn, the ‘fill up trips’ from Finland to the Republic of Karelia last only several hours, and three out four Finnish citizens never go any further than the village of Vyartsilya [31]. It is worth mentioning that the distance from Joensuu, the capital of the Finnish region of North Karelia, to Sortavala is 120 km, which means a three-hour journey by bus (there is a regular bus link). Businesspeople are another source of income for the residents of border municipalities on either side of the border [26].

The other border municipalities also entertain the idea of developing transboundary tourism and attracting Finnish tourists. According to strategy documents, the ‘prospects of the further development of tourism in the Loukhi district are associated with international tourism’ 4, whereas the Suoyarvi district is expected to ‘maintain transboundary traffic’. 5

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Today, the most popular types of tourism in the Karelian borderlands are educational tourism, ecotourism, and event tourism. The borderlands are unlocking their potential to hold international events, the most significant of them being:

— the international chamber music festival, the Nordsession rock festival, and the Kanteletar folk festival in Kostomuskha; the Enlightener orthodox singing festival and Ruskeala Symphony in the Sortavala district;

— a round of the Russian Rally cup, the White Nights and Jaakkia rallies, the ‘Karelia’ Russian classical rally championship, the world’s only snow-and-ice rally, and ‘Russia — Northern Forest’ Baja — a round of the FIA World Cup (the Sortavala and Lahdenpohja districts);

— military-historical festivals.

**Strategic approaches to tourism development**

Since the 1990s, when the benefits of tourism development became apparent, the Republic of Karelia has been devising and improving a system of strategic management in the industry. The 2007 General Layout of Tourist Sights and Tourism Infrastructure in the Republic of Karelia identified twelve tourism zones, five of which were located in the border districts [18]: the Pyaozersky zone (Loukhi district), the Kalevala, Muyezersky, and Suoyarvi zones in the districts of the same name, and the Ladoga zone spanning the Sortavala, Lahdenpohja, and Pitkyaranta districts.

At the national level, the federal target programme for the development of the Republic of Karelia until 2020 mentions among the other competitive advantages of the region its economic-geographical location (border checkpoints, simplified checkpoints, border crossing infrastructure) and strong commercial and economic ties (successful completion of cross-border cooperation programmes). All this is of special importance for tourism development in the border municipalities. The federal target programme includes the reconstruction and re-equipment of the border checkpoint in the Lahdenpohja district, particularly, for developing inbound tourism.

At the regional level, resolution of the Republic of Karelia of December 24, 2015, No. 814r-P on implementing the Investment Strategy of the Republic of Karelia until 2025 introduced regular monitoring of investment projects, including those in tourism. About thirteen investment projects have been (or will be) launched in the region. Five of them deal with three border municipalities: the Kostomuksha city district and the Sort-

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ava and Lahdenpohja districts (as of January 1, 2019). These projects are expected to attract about 3.4 billion roubles and create about 350 jobs in the districts by 2020—2025.7

At the municipal level, the significance of tourism development has been emphasised in programmes and strategies for the socio-economic development of the border districts. In general, the implementation of municipal programmes for tourism development will increase the contribution of the industry to the socio-economic development of the borderlands, enhance their investment attractiveness, improve tourism infrastructure, which caters to both visitors and local residents, and create a competitive tourism product. Historically, the border districts were the first municipalities to embrace strategic planning and tourism management (including the devising and approval of municipal target programmes). This happened as early as 1999—2000.

According to municipal strategic documents, obstacles to tourism development in the borderlands are as follows:

- poor development of tourism infrastructure;
- the absence or poor condition of transport systems;
- the insufficient employment of local resources;
- insufficient promotion;
- the poor condition of sights.

In recent decades, the border location of the Republic of Karelia has encouraged several projects co-financed by the European Union, Russia, and Finland. The border municipalities of the Republic of Karelia are highly interested in launching international projects in tourism.

Conclusion

Tourism is a priority and a promising area of the socio-economic development of the Republic of Karelia and its municipalities. In the 1990s, the border location of the region gave a major impetus for the emergence of tourism as an economic activity.

Significant research groundwork and experience in tourism development in the border municipalities may lead one to interpret the border location of the region as a considerable advantage in terms of tourism development. However, this assumption does not seem to be completely true at a municipal level. The study made it possible to identify both the strengths and limitations of the border municipalities of the Republic of Karelia.

The strength of the Karelian borderlands is their natural and manmade tourism and recreation resources, which have survived to this day partly due to their vicinity to the border. At the same time, there are several limitations to tourism development in the border areas. Firstly, it is the significant distance from the centres of the municipalities to Petrozavodsk, which is the regional hub (the median value is 464 km, whereas the Republic of Karelia measures 660 km from north to south and 424 km from west to east). Secondly, it is the rapid rate of population decline across all the border municipalities. Thirdly, the national border both gives transboundary cooperation and mobility opportunities and imposes limitations on the movement of people and capital in the border areas. Fourthly, the poor condition of transport infrastructure prevents the development of tourism and recreation (this problem is partly rooted in the past). Fifthly, the development of tourism infrastructure is insufficient in the Karelian borderlands with the exception of the Sortavala district, the Kostamuksha city district, and the Lahdenpohja district.

Tourism has been developing in the republic as an economic activity for only a few decades. Additionally, the border municipalities were suffering from much more serious restrictions than the inland ones in the past. Therefore, one must acknowledge that the borderlands have done a lot to integrate into the regional tourism and recreation system and that they have achieved considerable success.

Overall, the experience of the Karelian borderlands shows that the border location of a district is not an immediate benefit when it comes to tourism development. The history of the borderlands and recent restrictions prevent the tourism and recreation resources of the Karelian border municipalities from being used to their full extent. The most impressive results in tourism development were obtained by the areas that boast a developed transport infrastructure, considerable social capital, good-neighbourly relations with territories on the other side of the border, and unique tourism and recreation resources of national and international renown, the latter being a product of joint efforts of authorities, businesses, and local communities. At the same time, well-functioning border checkpoints play an important role in tourism development.

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Reference


14. Druzhinin, P.V., *Razvitie ekonomiki prigranichnogo regiona v perekhodnyi period* [The development of the economy of the border region in transition], Petrozavodsk, 245 p. (in Russ.).


17. Gromov, V. V. 2003, *Vozdeistvie turizma na razvitie regiona* [Impact of tourism on the development of the region], Petrozavodsk, 187 p. (in Russ.).


25. Mezhevich, N. M. 2006, Models of cross-border cooperation in Russia: experience of research of municipalities of the Pskov region, *Rossiiskoe ekspertnoe obozrenie* [Russian expert review], no. 4 (18), p. 28—30 (in Russ.).


27. *Osobo okhranyaemye prirodnye territorii Respubliki Kareliya* [Specially Protected Natural Territories of the Republic of Karelia], 2017, Petrozavodsk, 432 p. (in Russ.).


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