



Coastal Erosion and Military Heritage in Latvia

Kristiāna Ustuba

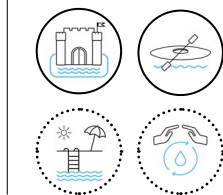
Delft University of Technology

Water often needs protection, but heritage can also require protection from water. The remains of a military fortification complex in the Latvian city of Liepāja are slowly being swallowed by the sea, a case where military heritage meets water heritage. To what extent should these ruins be protected from water and is preservation still possible? Both the coastal defense structures and the sea have been considered symbols of the city, attracting locals and visitors. Yet, over time, the monumental structures have been threatened by environmental challenges triggered by rising sea levels and ongoing coastal erosion. This has led to the deterioration of the structures and the loss of their structural integrity. Although the effects of the natural processes cannot be prevented entirely, they could be delayed. However, the rapidly deteriorating state of the coastal military structures has not resulted in a sense of urgency among local authorities. The article highlights the importance of the military structures in the local context as military and cultural heritage and the water challenges faced by the coastal defense line. It also explores the potential for, and impediments to, the structures' preservation.

Keyword: military heritage, ruins, identity, coastal erosion, preservation



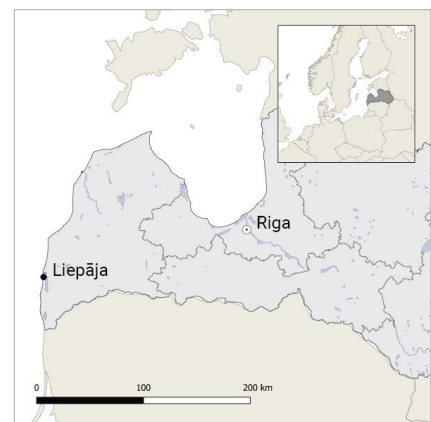
KEY THEMES



CLIMATE



Dfb
Humid continental climate



< Fig. 1 Artillery Battery 3, showing the relationship between the military heritage structures and the Baltic Sea. As a result of coastal erosion, the forts have deteriorated and have begun to disintegrate (Source: Kristiāna Ustuba, 2023).

Introduction

Karosta, “War Port” in Latvian, is a former military naval base, now a neighborhood in northern Liepāja, which was created because of its relationship with water. Situated on the west coast of Latvia, today Karosta stands as a witness of past military activity. In 1890 Liepāja was chosen by the Russian Empire as a suitable city to establish two interrelated systems over the course of the following decade; a military naval base in conjunction with a fortification complex around the city. The construction of new factories, a railway route and, most importantly, one of the biggest ports in the Russian Empire during the nineteenth century caused Liepāja to become a strategic city for Tsarist Russia’s military ambitions. In addition to becoming an important industrial center, the city’s unique position, framed by three water bodies – the Baltic Sea to the west and the lakes of Tosmare and Liepāja to the northeast and southeast respectively, further encouraged the decision to build a military base in Liepāja. The three water bodies became an integral part of the strategic layout of the fortification complex, consisting of both a terrestrial and coastal defense line (fig. 2). For Tsarist Russia, Liepāja represented the edge of what today is considered Eastern Europe.

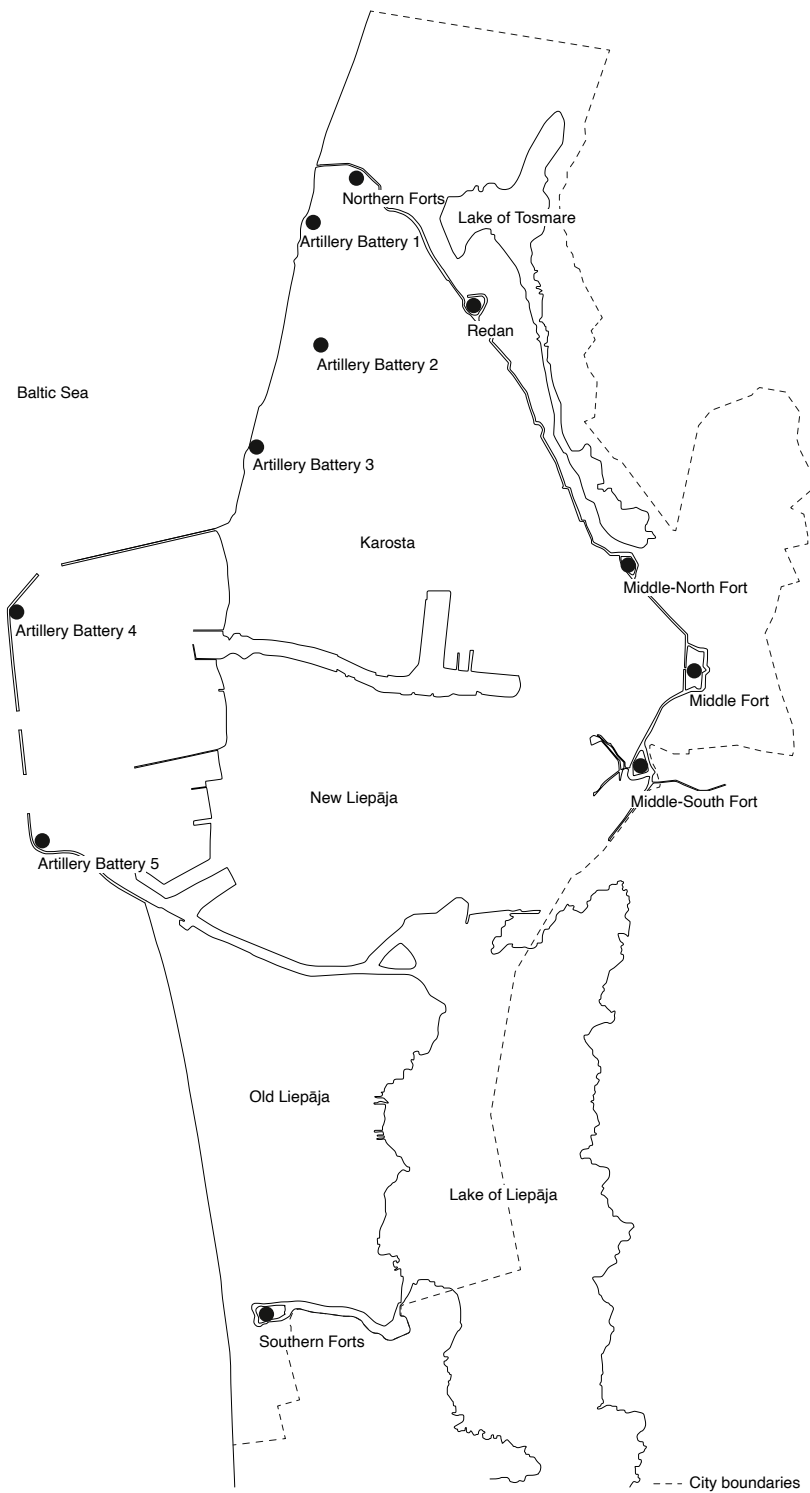
Yet, the force that brought the structures into existence during the rule of the Russian Empire is now causing their gradual disappearance and erasure. When it ceased performing its military role with the dissolution of the Soviet Union in 1994, Liepāja was left with an abundance of coastal and terrestrial defense structures rendering it the largest military territory not only in Latvia but the Baltics as a whole (Zeltiņa 2008). Ever since, part of the infrastructure has been left to deteriorate in the landscape. Located on the edge of the Baltic Sea, the coastal military structures particularly at Artillery Battery 1, also

(incorrectly) referred to as the Northern Forts, and Battery 3, are directly being impacted by dynamic coastal conditions. Coastal erosion is the main challenge faced by these military heritage structures. Consequently, the fortification complex in Liepāja presents a unique intersection between water and heritage.

Despite being in a state of decay, the former fortification elements in Karosta, especially the ones on the coast, are more than just concrete formations that were imposed on the landscape because the city offered a strategically favorable military location. Now that they no longer serve any military purpose, the structures continue to embody national history and local identity, simultaneously addressing and challenging notions of heritage, monuments and ruins. The forts on the coast are what many people across Latvia associate most with Liepāja and Karosta. They have become an unofficial symbol of the place, attracting both locals and tourists. In her essay on symbols of Liepāja, Ilze Balcere (2008) emphasized that Karosta in recent years has successfully managed to promote itself by engaging with its history through the remaining military structures. However, no efforts have been made to maintain the heritage that is at risk of disappearing.

Military Ruins as Heritage

Only in recent years have military structures been discussed as architectural heritage. Questions remain about how to consider such remnants. In “Remembering Ruins, Ruins Remembering,” Marc Treib (2009) explores the difference between ruins and remains. He suggests that ruins are fragmented parts of a bigger whole that lack a sense of totality and completeness, but they are references to the past and provoke memories (Treib 2009). Fur-



^ Fig. 2 Schematic strategic map of the city and the fortification complex, highlighting the location of the three water bodies and the military interventions in relation to the naval base in Karosta and the city of Liepāja (Source: Kristiāna Ustuba, 2024).

thermore, Treib (2009) suggests that they slow time and simultaneously place the past in the present and present in the past. Monuments, however, are perceived as complete entities that exist outside of time (Ginsberg 2004). Despite the differences, the two notions share a common link with memory. Monuments have been perceived as “memory devices” that render the past tangible and simultaneously intertwine the geography and history of a place with its identity and associated memories (Mitchell 2003).

Although military remnants can be considered ruins or monuments, both designations have been contested. Paul Hirst, a political theorist, questions whether such structures can become ruins. He argues that their abandonment and subsequent decay over time does not establish them as ruins and that the structures gain a sense of monumentality solely from their materiality and monolithic character (Hirst 2005). It is only when the purely functional features of military structures are acknowledged as decorative elements of architectural quality that Hirst (2005) considers it right to frame these remnants as ruins.

Yet, it cannot be denied that monuments, together with the context they are embedded in, signify past conflict as well as the course of history – political, cultural and economic (Mitchell 2003). War landscapes can become entities of cultural wealth, often serving as national symbols, embodying a multitude of memories and meanings (Kim 2013).

Current Challenges of the Military Remnants in Liepāja

The military remnants of Karosta combine aspects of ruins, monuments, collective memory and cultural meaning, presenting assets that

should be preserved. Despite the layering of story and history, the coastal forts are disintegrating. Although the remnants are what people associate with Liepāja and Karosta, their eventual disappearance could be largely justified by their lack of recognition as valuable assets and heritage.

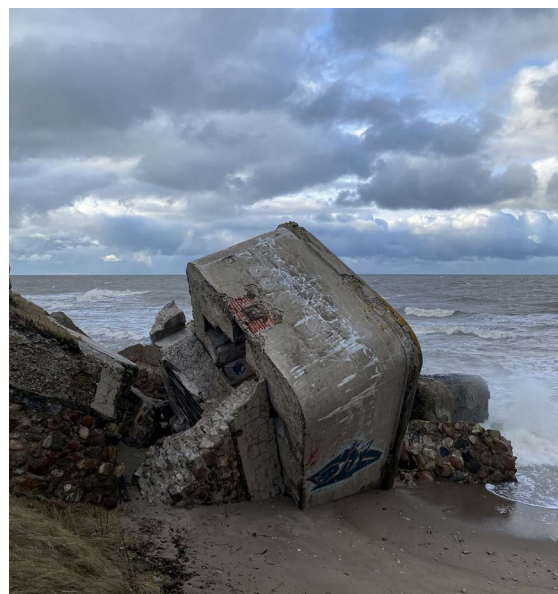
Despite the acknowledgment of the uniqueness and history of the site, no actions have been taken to conserve the military remains threatened by water. Members of the public express skepticism about the possibility of saving anything at this stage, hinting that something should have been done earlier. One reason people may question the value of making efforts to preserve the structures is that they appear to be so abundant. Monta Krafte, the head of a bottom-up preservation practice, has remarked that since the neighborhood of Karosta has so many military objects, the public doesn't consider it necessary to try to save them (Šķietniece 2023).

Perhaps one reason the value of the place was not identified earlier, when the structures could still have been rescued to some degree, can be found in the harsh past of this military territory. Although the history of Karosta dates to the nineteenth century, it is the more recent past that people recall. As a result, most of the time it is pain and anger linked to the Soviet occupation that has been projected onto the neighborhood. The military base, along with part of the fortification complex that encompasses it, became an autonomous territory during this time. Ever since, Karosta has been perceived as a place of contestation with a dark history. When the Soviet army left the territory in a demolished and vandalized state, the neighborhood could once again become an integral part of Liepāja. For an extended period of time Karosta was seen as a ghost town, characterized by crime and destruction and associated with a mainly Russian-speaking

community. Investment for rehabilitation was not immediately provided, leaving the neighborhood with many buildings in a state of decay, including the forts. It has taken many years for the place to recover on an urban and social level, and the forts as a site of military heritage have not been a priority for the local authorities (Šķietniece 2023). Recovery has instead taken shape through the promotion of residential and industrial use of the area without necessarily engaging with the historic fabric.

Although many local people are indifferent about them, attempts have been made to showcase what remains of the coastal defense structures. Karosta's preservation association, a bottom-up group formed by local enthusiasts, has been working not only to expose the history of the coastal and terrestrial defense elements of the fortification, but also to protect them (Driķe 2019). Local historians have spoken in favor of the forts in discussions with the city council about how the historic landscape should be treated.

Even if the forts appear to be valuable assets and have been perceived as local symbols and a characteristic landmark by enthusiasts, historians, locals and tourists, they have not been officially recognized or classified as heritage on a national level. Perceptions of the structures as cultural and military heritage have influenced their treatment. However, despite their perceived value, there has been no significant search for strategies to preserve the deteriorating forts (fig. 3). During a conversation, Krafte revealed that she is not aware of anyone who would have brought up or wanted to initiate preservation of the forts. She further emphasized that it is now too late to do anything about the coastal structures, suggesting that if a conservation initiative were to be proposed, it would need to be directed toward the terrestri-



^ Fig. 3 A fort at Artillery 1. The deterioration and collapse of the defense structures is primarily caused by waves eroding the sand below the foundations of the structures (Source: Kristiāna Ustuba, 2023).

al defense line, which has remained in a much better state than the military heritage structures exposed to the sea.

Future Challenges of the Military Heritage

Thus far, most of the Liepāja's fortification complex infrastructure has, to a certain degree, withstood the test of time and the challenges posed by exposure to water. The forts reveal the complexity of heritage located in water. Although it is evident that some of the remains are slowly disappearing, with other structures having already vanished, locally there has been no sense of urgency to arrest the process.

Although it has been highlighted that the forts will continue to exist in some form for another century, they will sooner or later become unrecognizable as military structures (Kilevica 2018). In an essay by Māra Zeltiņa (2008), the

author revealed that coastal erosion rather than deposition is what predominantly characterizes the coast of Liepāja, with most erosion taking place in the northern part of the city, near Karosta. She notes that between 1985 and 1993 the coast receded by 19.2 m (Zeltiņa 2008). As a result of the coast receding at a constant rate, the coastal defense line has been left with a single fort that remains fully intact and in its original shape. Coastal erosion, specifically during the fall and winter season, has continued to reshape the coastline together with the remains of the forts. The sea's impact on the heritage site has regularly been highlighted and reported in the local newspaper.

However, a turning point may have been reached. After a season of many storms and unfavorable weather conditions in 2023 and 2024, the rate of coastal erosion has accelerated, causing larger portions of the ruins to disappear in the sea slowly but steadily. The historic sites at Battery 1 and Battery 3 now feature warning signs informing visitors about the erosion and the structures' lack of integrity (fig. 4). They are increasingly becoming dangerous to visit and interact with and local authorities advise against entering the structures to explore their spaces both above and under ground (Šķietniece 2023). Although in the past, the preservation association offered guided tours of the coastal forts, they no longer do so to avoid being blamed in case of an accident (Šķietniece 2023).

Even though coastal erosion is inevitable due to rising sea levels in the Baltic caused by climate change, it could be delayed. Strategies have been implemented near the Karosta coast to strengthen dunes and promote the accumulation of sand rather than having it continue to wash away. Additionally, the forts could be reinforced. This approach to the heritage structures, however, has not been considered due to



^ Fig. 4. In recent years, the forts have become increasingly affected by water challenges, decreasing the stability and structural integrity of both the military structures and the landscape surrounding them, rendering them dangerous. As a result, warning signs have been installed at Coastal Artillery Battery 1 and 3 to warn visitors (Source: Kristiāna Ustuba, 2023).

bureaucracy, lack of funding and the local authorities having other priorities. According to members of the preservation association, the potential of the place is not being fully realized, raising questions about the loss of structures which could be used as an asset to teach and inform future generations about local history (Šķietniece 2023).

Conclusion

The coastal defense line illustrates the battle that often takes place between water and heritage. It is not clear at this point whether the structures at risk can be saved even if preservation and conservation efforts are made. De-

terioration and decay caused by water will eventually erase the structures completely. Even though they are still present and distinguishable, it is realistic to assume that future awareness of the structures lies in present-day efforts to document and record them. This is a case where both the fortification fragments and the sea are considered entities that symbolize and characterize the place, and are ultimately considered an expression of identity and history, both local and national. Only through their protection could the history and remembrance of past events and conflict remain tangible. This situation invites rethinking sustainable development through preservation strategies applicable for heritage of historic, cultural and military value that is at a constant battle with water as well as through practices that aim to share the wealth of knowledge of such structures with the wider community, addressing the physical and semantic qualities of the structures.

Acknowledgment

This contribution was peer-reviewed. It was edited by members of the editorial team of the UNESCO Chair Water, Ports and Historic Cities: Carola Hein, Hilde Sennema and Carlien Donkor.

Policy Recommendations

Considering the current absence of interventions to address the erosion that is destroying the forts, possible actions include:

- Incorporating the coastal military heritage sites as an integral part of local development plans, prioritizing strategies to address coastal erosion as well as the deteriorating state of the forts by stabilizing the dunes and reinforcing the defense structures.
- Encouraging engagement among the various stakeholders including members of the local community and the city council and using bottom-up practices to educate community members and including them in decisions about the area's military heritage.

References

Balcerē, Ilze. 2008. "Liepāja un simboli" [Liepāja and its symbols]. In *Liepāja kā attīstības ceļvedis* [Liepāja – The Guide for Development], edited by Antra Legzdiņa, 169–79. Rīga: Zinātne.

Driķe, Nora. 2019. "Brīvības cīņas iedvsmo mākslai" [Freedom fights as inspiration for art]. In *Kurzemes Vārds* [The Word of Courland]. Liepāja: Kurzemes Vārds.

Ginsberg, Robert. 2004. *The Aesthetics of Ruins*. Amsterdam: Rodopi.

Hirst, Paul Q. 2005. *Space and Power: Politics, War, and Architecture*. Cambridge: Polity.

Kilevica, Linda. 2018. "Forti turpina sargāt krastu" [The forts continue to guard the coast]. In *Kurzemes Vārds* [The Word of Courland]. Liepāja: Kurzemes Vārds.

Kim, Nam C. 2013. "Cultural Landscapes of War and Political Regeneration." *Asian Perspectives* 52, no. 2 (September): 244–67. <https://doi.org/10.1353/asi.2013.0015>.

Mitchell, Katharyne. 2003. "Monuments, Memorials, and the Politics of Memory." *Urban Geography* 24, no. 5: 442–59. <https://doi.org/10.2747/0272-3638.24.5.442>.

Šķietniece, Ilze. 2023. "Populāri, apdraudēti, neap rūpēti. Ziemeļu Forti jūras krasta erozijas ietekmē strauji pazūd ūdenī" [Popular, endangered, uncared for. The rapid disappearance of the northern forts in the sea due to coastal erosion]. In *Liepājas Vēstules* [Letters of Liepāja]. Liepāja: Kurzemes Vārds.

Treib, Marc. 2009. *Spatial Recall: Memory in Architecture and Landscape*. London: Routledge.

Zeltiņa, Māra. 2008. "Padomju armijas pēdas" [Traces of the Soviet Army]. In *Liepāja kā attīstības ceļvedis* [Liepāja – the guide for development], edited by Antra Legzdiņa, 233–40. Rīga: Zinātne.



© Author(s) 2024. This work is distributed under a Creative Commons Attribution 4.0 license (unless otherwise indicated). This license allows anyone to redistribute, mix and adapt, as long as credit is given to the authors.



Kristiāna Ustuba is a final-year student in the master's degree track in architecture at the Faculty of Architecture and Built Environment at TU Delft. Her history thesis and ongoing graduation project, focusing on issues of disappearing and contested heritage, concerns the former fortification complex and the remains of a military base in the city of Liepāja, on the west coast of Latvia.

Contact: K.Ustuba@student.tudelft.nl