# TRANSFORMING THE TRANSFORMED

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#### ABSTRACT

The purpose of this article is to examine how Marinewerft Drontheim, U Boot Stutzpunkt DORA, established at Nyhavna (Trondheim, Norway) during World War II, faced fundamental changes regarding its physical outlook and intended role and use after World War II. The changes were due to an interplay of prewar plans, post-war distance towards occupation and changing socioeconomic realities and trends in urban development ideology. We ask how this German submarine base was understood in post-war Trondheim. How could the basic principles behind the gradual transformation into a massive non-military complex be described, and what was the result of this process? Trondheim is currently growing. The harbour areas are natural urban renewal sites. In 2015, the municipal authorities put forward a plan for the transformation of Nyhavna into an urban city area. Most of the post-war buildings were to be demolished; however, the remnants of the German naval yard were not to face such a destiny. These buildings with their 'extreme' architecture and massively powerful outlook appear as a defining principle for further development of a new urban city district. The article examines the changing perspectives, visions and understandings applied by local authorities during the last decades. This leads towards an understanding of how this area came to be regarded as a potential hub for a major urban redevelopment plan transforming a post-military/industrial town area into an area wherein the larger part is occupied by residential quarters. Keywords: German submarine base, occupation, post-war transformation, transformation of the post-war transformation.

# 1 INTRODUCTION

During the occupation of Norway from 1940 to 1945, preparatory work on the possibility of turning a bay south of Trondheim into a new German naval base started at Führer Headquarters. It was officially commissioned by Hitler in 1941. The idea was to establish a naval base larger than the British one in Singapore, just south of Trondheim named 'Nordstern' (The Northern star), also referred to as Neü Drontheim (Speer [1]).

Because of the significant strategic importance of the Trondheim fjord to the German military, the city was to be constructed in conjunction with a major navy and military base intended to give Germany unprecedented maritime control over the North Atlantic area. The plan was to establish a harbour city with a population of approximately 250,000–300,000 German inhabitants (Spotts [2]).

Prior to this massive effort, the Nyhavna (the new harbour) area of the Trondheim harbour was turned into a major base for German submarines. The 13 Unterseebootsflottille (13th German submarine flotilla) under the command of Korvettenkapitän (Lieutenant Commander) (later Fregattenkapitän – Frigate captain) Rolf Rüggeberg was set up in June 1943 when the submarine pen Dora I was finished. This was a front line unit predisposed of 55 submarines of type VIIC and VIIC/41, which sailed 141 sorties from June 1943 until May 1945. It took up quarters in the German-built Persaunet submarine camp some kilometres south of submarine pen Dora I (Nielsen [3]).



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Thus the German occupier left behind a state-of-the-art submarine base in Trondheim in 1945. It consisted of one operative submarine pen (Dora I) made up of five boxes able to dock and service seven submarines. Another approximately 60% finished submarine pen (Dora II) with four pens was planned for a further six submarines. In addition, a number of submarines were left behind; all kinds of infrastructure needed to run a submarine base were present including workshops with advanced tools, torpedoes and even a torpedo factory. And as already mentioned, a specially designed navy camp (Persaune leir) for men in addition to all kinds of supplies necessary to run the submarine base was at hand.

For most of the post-war period, the hegemonic point of view was that the constructions at Nyhavna were terribly ugly and should be demolished sooner rather than later. In Norway, the vast majority were of the view that the German 1940–1945 occupation was an aggressive and unforgivable assault. The German occupation left deep and fundamental wounds on the Norwegian society (Grimnes [4]). The German occupation of Norway from 1940 until 1945 viewed with Norwegian eyes was a period of strife and conflict, where a substantial number of countrymen "failed" by collaborating with the German authorities. The German submarine base thus became a reminder of occupation, conflict, violence and humiliation – and as such also continued to be controversial after the war.

The labour party came to play a major historical role in the development of post-war Norway. From 1945 until 1975, then from 1980 until 1989 and again from 2003 until this day, the Labor party has managed to obtain a majority in the local Trondheim municipal elections and by doing so occupy the position as city Major. During the first decades after the war, the party was engaged in the development of overall city plans. The main objective was rebuilding destroyed infrastructure and buildings as well as comprehensive modernization. According to the social democratic modernization ideology, large parts of old structures in general and remnants of the German occupier in particular were outdated and should be placed in the dustbin of history. The future welfare state was to be built jointly. The relevant plan for Nyhavna including an old neighbouring working-class district, Lademoen, aimed at a large-scale transformation of the whole area to a modern port and industrial area. This plan had a dual purpose. One was modernization and transformation in order to let the memories of war and abuse fade away; the other was demolishing and removing an old working-class 'slum' seen as a physical reminder of the humiliation of the working classes in the past.

The overall strategy for Nyhavna after 1960 when Dora I was sold to private investors can shortly be summarized as an attempt to exploit the remains of the German submarine base for industrial and commercial purposes of the port as far as possible. This approach sparked no debate about the historical nature of the remains of the German submarine base.

# 2 HOW WAS THE GERMAN SUBMARINE BASE UNDERSTOOD POST-WAR?

At the time of the German capitulation, nobody actually had any idea of what to do with the gigantic concrete submain installations, bunkers etc. at Nyhavna. The British Admiralty worked to 'neutralize' as many of the former German military installations in its occupied territories as possible (Grini [5]). The concern was that they *could* fall into the hands of a new enemy (during the Cold War, The Soviet Union) and thus quickly could emerge as a threatening force once more. In Norway, however, there was little interest for demolishing the top modern submarine base. Moreover, from the autumn of 1945, the Royal Norwegian Navy used Dora I as a home base for its submarine fleet, established in Britain during the war.

The management of the German installations at Nyhavna thus split between the navy and the port authorities. Dora I continued for the time being to function as a submarine bunker. The rest of the former German-built complexes came under control of the landowner, the municipality-owned company Trondheim harbour. How did they view the situation? They realized that the occupying power had carried out major works with lasting effects on the shaping of the landscape at Nyhavna. They realized, however, that demolishing them would be extremely expensive and complicated, thus this line of action could not be justified. Technically, they knew that it was *possible*, but every time it was debated they concluded that the costs were excessive compared against the benefits (Brabrand [6]). The Germans had developed the Nyhavna area for their own needs independent of the existing harbour plan adopted as late as 1937. In spite of this, the Port Authority after the war concluded that they could develop the landscape created by the Germans to suit future needs. In short, they accepted the realities and instigated efforts to establish a new plan for the development of the future Nyhavna based on realities created on the ground by the Germans. The City Council approved the harbour authority's new plan in 1948. This plan envisaged an extensive harbour development. Dora II now quickly became the base for the efforts to expand the harbour.

In 1945, neither the City Council nor the harbour authorities and the public had any awareness of the submarine base as a historic interesting or important national and international heritage site. The Nyhavna area, its buildings, equipment and tools were more or less universally considered to be some sort of 'raw materials' for transformation to suit the harbour authority's needs and plans as soon as possible. This meant a quick transformation into harbour industry buildings for civilian purposes. The hands-on development programme implemented by the harbour authorities immediately after the war testifies that the emphasis was on the area's potential rather than its heritage value, in short, on the future rather than the past. All available materials, tools, etc. left behind by the Germans were put into use to achieve the port authorities' overall objectives. As years passed by, every loose object or tool the German Navy had left behind was broken, sold off as scrap metal, thrown away, burned, given or taken away or indeed outdated and went out of use. What remains today is the transformed buildings.

## 2.1 The fate of Dora II

After the war, the port authorities of Trondheim finally saw an opportunity to speed up port construction developments desired since a long time before the war. More or less immediately, they instigated a discussion on what to do with the little more than half-finished Dora II. Cleaning up on the site, they started to fill in dock 3. Later, an interior wall was blasted down in order to finish off the infilling of dock 3 (Brabrand [7]). The port authorities then made Dora II the centre for their administrative and daily operations. On shore, a mechanical workshop and later a forge was also established. The unfinished dry docks of Dora II became the harbour authorities' maintenance and repair facility for the fleet of various vessels they disposed. Dora II docks later were rented to a company that used them as an ordinary commercial shipyard, docking minor coastal vessels in need of maintenance and repairs (Fig. 1).

# 2.2 The fate of Dora I

In 1954, the Royal Norwegian Navy chose to move the main base of the Norwegian submarine force from Trondheim (Dora I) to Bergen (Buno) – the second submarine base the Germans established in Norway. Dora I had survived the end of World War II as a genuine submarine bunker, but now it was put up for sale. The new owners had commercial plans and started more or less immediately to transform Dora I. Like the Port Authority, those who bought Dora I in 1961 neither had reverence for nor understanding of it as a cultural heritage.

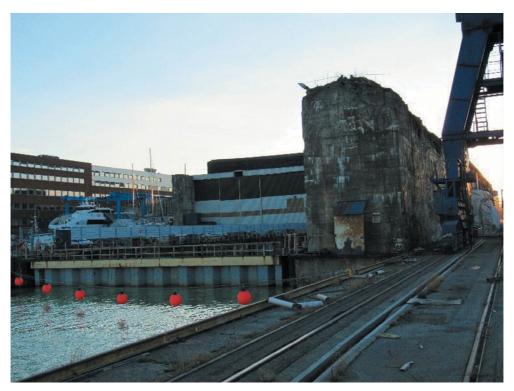


Figure 1: The never complete, partially demolished Dora II with the intact dock gates shut, January 2016. (Photo by S. Carstens.)

It was rather the opposite. Reviewing Dora ASs' management of the building Dora I during the 1960s and 1970s, one is led to think that their way of dealing with the legacy of distress was to repress or just ignore the war heritage value of sites entirely.

Dora I rapidly transformed from being a submarine bunker to becoming a harbour industry warehouse. The transformation started by closing the old docks by moulding new inner 'bridges' functioning as floors first in the wet dock and then the dry docks. Then an inner floor was moulded approximately 6 m up the inner wall of the original submarine pen. This operation divided the bunker into two floors creating a lettable warehouse area of  $32,000 \, \mathrm{m}^2$ .

During 1979–1980, it was decided to remove the remains of the fortification installations on the roof and replace it with an 8-m-high warehouse-like building placed on top of the bunker and dressed in blue corrugated sheets. This added a second floor and another  $16,000 \text{ m}^2$  of lettable area. Then a large hole was blasted in the west wall so that trucks could run into the second floor and up on the old roof.

The apex in the transformation efforts came when the owners in the mid-1980s applied to the municipal building authorities for a permit to let Dora I transform into a combined shopping centre, with offices and car parks. To achieve this they wanted to create an 'old-west-town-facade' totally encircling the old submarine pen so it no longer would be visible (Fig. 2).



Figure 2: Dora I with the blue corrugated iron top floor and cooling towers. The cooling towers service major data storage centres, January 2016.

# 2.3 A different attitude emerges

In 1970, for the first time, a public voice shared the view that the German fortifications were war memorials and cultural heritage sites. The one who had the courage to do this was Tore Brantenberg, professor at the Faculty of Architecture of Technical University in Trondheim. In the journal of the Norwegian Architect Association 'Byggekunst' (Architectural Design), he published an article where he argued that the remains of the German submarine base at Nyhavna should be considered a cultural heritage. He compared the German installations at Nyhavna with the fortress Kristiansten that towers above the city centre of Trondheim. Building work on the fortress began in 1681, and from its commanding position on the hill to the east of the city, the forces could control access to the city and provide support for the open fortifications along the Nidelven River. Rhetorically, he asked: what makes the past of the Kristiansten fortress more glorious than the past of the German submarine base? They both were relics of warfare. He acknowledged, however, concluding his article, that for the time being it was unthinkable that a proposal to implement any kind of formal protection of Dora I and II would gain support from the national director of Cultural Heritage (Brantenberg [8]).

When the company Dora Ltd applied for provision to transfer Dora I completely in the 1980s, the municipal building department denied approval. This was because of protection and heritage considerations. New interpretations of the remains of the former submarine base

obviously were gaining currency within the municipal building authorities. However, there was still no question of any formal protection of the buildings. Moreover, the denial of this building plan inspired no public discussion about buildings and the area's status.

Furthermore, a municipal zoning plan for the Nyhavna area came into being in 1995. In this, what still remained of the German submarine base got temporary building circuit protection. This conservation decision represented, however, no permanent protection. This protection is no longer valid at present.

Janne Wilberg, present head of the Oslo city planning authorities, writes that Norwegian attitudes towards the remains of German military buildings changed decisively around 1995. According to her, one major reason for this was the upcoming commemoration of the 50th anniversary for the end of World War II. This event triggered substantial local efforts to detect the German fortification remnants, as well as individual interests of war history and cultural heritage in Norway (Wilberg [9]).

What had happened? Several factors add up to a plausible explanation.

First, the generation that had experienced the German occupation were diminishing. In 1992, the Norwegian National Fortifications Heritage Foundation was established. Their activities shed new light on German fortifications in Norway. Furthermore, the interest in World War II was increasing instead of diminishing. In Norway (as in many other countries) parts of the war history have traditionally been oppressed, neglected or just intentionally forgotten. In particular, this was the case in matters related to the history of collaboration, about abuses committed by Norwegian SS volunteers, Norwegian war profiteers, etc. For the post-war generation it felt natural to explore what appeared to them as untold stories where existential choices appeared to be part of the dramaturgy. The concept of Thana tourism (an extreme form of grief tourism) or Dark tourism was evolving and added new value to the remains of German fortifications from World War II. Thereby these installations gained a potential as commercially exploitable. Moreover the concept of cultural heritage has been constantly evolving. In the 21st century, heritage has meaning on multiple levels served by multidisciplinary approaches and methodologies developed and applied worldwide. Demographic effects also seem to be part of the game. The population of Trondheim is growing. With a growing environmental consciousness, the political response is densification of the existing city. Nyhavna thereby gains a potential as a renewal area.

Today, many docklands in old coastal towns and cities have been or are in the process of being transformed from industrial and sometimes squalid areas into contemporary urban and cultural spaces. Customs houses and other maritime buildings are often prime waterfront locations and architecturally significant buildings. The transition from harbour and industrial use to a public housing and creative use is part of the legacy of the maritime and broader communities. This transition is a process of urban renewal. Urban renewal often has to consider competing needs. There is the desire to preserve historic locations and buildings, as well as the need to satisfy commercial demands.

In the spring of 2014, the municipal authorities of Trondheim presented a plan description for future development of Nyhavna. This document described the area as an inner city development site. The description of the area goes as follows (translated to English):

Nyhavna is a unique area with existing large structures and war memorials. It is important that these elements can influence the district in the future, and be made visible and put to new use. (Byplankontoret [10])

Nyhavna with docks and buildings from World War 2 is a cultural urban environment with national interest, which must be shown special consideration in connection with the further administration and development. The area is a well-preserved environment with most historic buildings intact. Most prominent are the two major submarine bunkers Dora I and II. The two submarine bunkers, several yard buildings on the Ladehammer jetty, some smaller bunkers, various technical installations, the harbour basin and quays constitute as a whole a highly particular war memorial. (Byplankontoret [11])

This statement represents a quite new type of attitude and understanding of the site and the buildings resting on it, but considering the circumstances it is a logical one. To develop a new urban residential district with a set of old massive buildings with strong negative associations attached to them would be demanding. By letting the remnants of the German submarine facility appear as a historically valuable cultural heritage, with a potential for a new use, they gain a positive aura. The document moves closer to portraying the remains of the former submarine base as an exciting dimension that contributes to the future of the city centre. However, do they move too far? Are they too eager?

# 3 REFLECTIONS AND CONCLUSIONS

Most cultural heritage does not come into existence as such. It is the result of an ongoing selection process. In general this is a social process where both memory and oblivion characterizing every human society is constantly engaged in choosing – for cultural, social and political reasons – what is worthy of being highlighted as cultural heritage for future generations. On the other hand, the actual case shows that the choice regarding the transformed remains of the German submarine base in Trondheim are heavily influenced by authority actors, structures and interests mentioned. Cultural heritage is in this way constantly created out of a number of social, political and economic reasons by a variety of actors.

From having been a state-of-the-art submarine base under development, the buildings at the former German submarine base on Nyhavna in the post-war period underwent extensive transformation to fill new functions. The result was a rather rough transformation for all kinds of peacetime harbour and industrial purposes. In this process, virtually all loose material objects related to developing and operating the German submarine base were lost, destroyed or removed in different ways (sold, given or stolen) or thrown away like garbage as previously described. There is currently almost no known relics (artefacts) in existence dating from Marinewerft Drontheim. The fact that Dora I and II are now being showcased as the most interesting buildings on Nyhavna by the municipality planning authorities can be seen as a more or less random choice. There have been no systematic antiquarian or historical analysis conducted in order to establish a 'complete' understanding of the plant, the infrastructure of the areas and its operation. Hence it is likely that other far less striking buildings belonging to the former submarine base are just as well or even more unique and surely more authentic than Dora I and II. Two Zombeck-Turms (Zombeck tower) (Luftschutzturm der Bauart Zombeck) type BI or BII situated at Ladehammerkaia (Ladehammer quay) exemplifies this. These buildings are probably the only two of its kind built north of Germany during the war (Fig. 3).

A total of 70 years had to pass after the end of World War II, before a new understanding of the nature of the German submarine base could emerge as acceptable to a wider public. Once again, the remains of the submarine base are undergoing transformation: from unwanted war,



Figure 3: One of the pretty well-preserved air-raid shelters (Luftschutz Turm der Bauart Zombeck) on Ladehammer quay.

remains partly demolished and rebuilt for harbour and industry purposes to appear as cultural heritage of national interest in an urban city.

The transformation this time, however, is more conceptual than physical. It is the heavily transformed remains of the submarine base, some of it newer finished, some of it partially demolished and some of it heavily rebuilt, not what once was a state-of-the-art German submarine base, that now emerge as semi-authorized, authentic, important war memorials – heritage. The fact that the remains of what once was a submarine base have lost its complexity and functionality in the post-war transformation is apparently no obstacle for letting it occur as a well-preserved environment with most of its historic buildings intact. In the situation it is important to recall that what now is being intentionally turned into cultural heritage site is actually only what remains of the material structural once created, but in a rather radically transformed state. It is not the German submarine base established during World War II that now is being transformed into cultural heritage but a heavily transformed post-war structure. This structure moreover is unlikely to be protected or conserved without some sort of commercial use. In other words, it is highly unlikely that this will ever be reconstructed. What once was the German submarine base Marinewerft Drontheim has long ago been transformed. What we now will be observing is a transformation of the results of a long-term multistaged transformation. The future result will be a creation that never before existed, something that has the function of reminding us about those buildings including artefacts, a state-of-the-art German submarine base, that has long ago ceased to exist.

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