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A thorny past—the after-war life, and beyond, of Nazi WWII barbed wire in Norway

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Abstract

Conflicts have legacies beyond peace treaties and armistices. This article focuses on one example of such an enduring heritage, namely barbed wire left after the Nazi occupation of Norway during World War II. This barbed wire has persisted up to the present day and thus presents a case that can illuminate nuances of a material legacy that is harmful but also an important source of insight and experience of heritage. This involves the incomplete clean up in the postwar years and how the barbed wire continues to pose challenges for present-day and future cultural and natural heritage management. Contemporary archaeology offers insights into the afterlife of war and works as a counterweight to grand historical narratives that mainly focus on the height of armed conflicts.

Keywords: after-conflict archaeology, afterlife, barbed wire, material excess, materiality, heritage

Introduction

Tuesday, April 9, 1940, the Germans attacked Norway from sea, air, and land without issuing a declaration of war in advance. This campaign was the start of five years of occupation that finally ended Tuesday, May 8, 1945. The occupation left behind not only destruction but also things, from bunkers to roads and railways built by Soviet prisoners of war, and not least, an enormous amount of barbed wire used to control prisoners and civilians and fortify military positions. A film bulletin from July 12, 1945, with the title "German soldiers removing barbed wire barriers," shows soldiers cutting away barbed wire and dismantling Spanish rider barriers on Karl Johans Street in the Norwegian capital of Oslo (Filmavisen 1945). The narrator ends with the joking, but unintendedly prophetic, words that "any new production of barbed wire seems currently to be quite redundant, at least for a lifetime to come" (My translation).

Barbed wire is still a relevant object today as more and more nations barricade their borders (Grinceri 2020). It is one example of a plethora of modern technologies of obstruction, like firewalls used to control internet traffic in authoritarian states (Ensafi *et al.* 2015), hostile architecture (Petty 2016), and human and animal control weapons (Scotton 2019), to mention a few. Despite its simple and mass-produced character, barbed wire, and its cousin the "razor wire," is embedded in the complexities of globalization (Feigenbaum 2010), colonialism (Forth 2017), people fleeing conflicts and injustice (Matthewman 2008; Ibrahim 2020), capitalism (Taussig 1980, 73–74), pandemics (Baker and Phongpaichit 2021, 373), animal rights and welfare (van der Ree 1990), and confinement in general.

This article will investigate the aftermath of barbed wire from the Second World War in Norway. The aim is not to summarize a cultural history of barbed wire; there are already detailed books written on the subject (see Razac 2000; Krell 2002; Netz 2004; Liu 2009). The central point is that barbed wire has an after *life* (Farstadvoll 2019a, 11; 2019b, 181), that it persists obstinately after peace treaties have been signed and the last soldier has retired from the field. Importantly, this article aims to demonstrate that caring for the material and post-anthropocentric afterlife of things is just as important as exposing the politics, monstrous ideologies, atrocities of and in their origins. This kind of perspective has been put into contention in recent literature on contemporary archaeology (e.g. Penrose 2017, 187; González-Ruibal 2019, 57), but I hope this article can illustrate the merit of such approaches to things.

Many scholarly works use the trope "behind" the barbed wire; a search for it in literature databases results in thousands of hits. This article takes on an alternative perspective that does not look around the barbed wire, but instead puts it in the forefront. Interestingly, there is a distinct lack of research on barbed wire in archaeological literature, even within conflict and battlefield archaeology. It usually falls into the background as an empty trope; ironically, there are books with barbed wire in their title without mentioning it in the following text (e.g. Pollard and Banks 2009). There are of course some exceptions where barbed wire is explicitly but briefly discussed (see Persson 2014, 259-263; Seitsonen et al. 2017, 9-10; Seitsonen 2021, 107–109). In the context of conflicts as an enormous conglomeration of people, ideologies, animals, artefacts, and so on, some objects get overshadowed in historical narratives. Archaeology's focus on the "small things" can help bring these things' overlooked aspects into view (Olsen and Witmore 2014). Also, archaeology can highlight the affective aftermath of things that outlive their apparently more spectacular events. While it is important to point out the "monstrous" origins of certain things (see González-Ruibal 2019, 179–169; Witmore 2019), it is also essential to observe their aftermath and how they percolate into and shape the future. Some durable objects like barbed wire exist for much longer after their

intended and sometimes planned life cycle (Farstadvoll 2019a). Therefore, it is crucial to look further than their intended use to articulate their lively complexity.

To investigate this, this article combines historical research and observations from contemporary archaeological surveys from German WWII sites. One of the primary types of historical sources used in this article is mentions of barbed wire in small local newspapers after the war. Using newspapers as historical sources have its challenges and biases (Demarest and Langer 2019). Still, in recording the aftermath of WWII barbed wire in Norway, the archival work has revealed that they are some of the few sources where its presence and impact on local communities are recorded. They are also sources that accentuate the lived experience and events of barbed wire, often mentioning small events and encounters with barbed wire in the local communities. The survey information stems from working for over a decade with sites from WWII in Northern-Norway, including excavations. The striking amount of barbed wire encountered during this fieldwork was one of the triggers for writing this article. Even walking around the urban wilderness in the city of Tromsø, you will stumble across spools and tangled nests of barbed wire. The municipality of Tromsø has a webpage where people can report sightings of barbed wire for later "clean up" (Tromsø kommune n.d.). Several piles of barbed wire have, for example, been marked with signs telling passers by that it is slated to be removed sometime in the future (Figure 1). But should it be removed?



Figure 1. Barbed wire by a recreational path in the Urban wilderness in Tromsø. In Norwegian, the signs say: "The barbed wire in the area is from WWII. The Tromsømarka Project/Tromsø municipality is working towards removing it."

The genesis of barbed wire – brambles, barbs, and scars

Barbed wire is probably one of the defining technologies of modernity, or even supermodernity (see González-Ruibal 2008). In the book Barbed Wire: An Ecology of Modernity, Reviel Netz (2004) demonstrates how barbed wire fit together with the modern tropes of expansion, confrontation, and containment. Netz argues that barbed wire was invented in 1874 to control the movement of settler cattle herds and demarcate properties on

the Great Plains. It was a part of a colonization process that was likely unprecedented in its speed and scale. But, barbed wire is probably an object conceived before its first mass production and implementation in North-America. For example, in 1864, a patent for the invention of "artificial brambles" (ronces artificielles) was filed (Krell 2002, 13). There are even claims that the invention could be traced even further back in time (see Basalla 1988, 49–55). This has led to the hypothesis that because of the "empirical simplicity" of barbed wire, it could have also existed in societies that do not depend on accumulated "modern" scientific knowledge (Cardwell 1968, 114; 1972, 32–33). As the French name suggests, barbed wire has a characteristic similarity to certain plants like Osage orange and blackberry, which may have served as "naturfacts" that inspired its invention (see Basalla 1988, 49–55). Nevertheless, there is no proof yet that barbed wire was employed in any meaningful degree before the late 1800s (Basalla 1988, 50; Krell 2002), and its usefulness would have been limited before the Bessemer process was used to mass-produce high quality and less brittle steel in the last quarter of the 1800s (Hayter 1939). The hundreds upon hundreds of new patents on different barbed wire (see Glover 1972; Hagemeier 1998) also shows its connection to the capitalist systems of the time, not really breeding innovation, but rather reiterating the same concepts with minute differences again and again for profit. Despite all these patents and the burst of "innovation" around the time barbed wire was invented ended later up with monopolization (McFadden 1978). Barbed wire was much cheaper than employing open-range cowboys and dramatically reduced the cost of enclosing and expanding properties (Regan 2015, 35).

To continue the botanical connection, barbed wire has been described as an "indicator species", an apt ecological metaphor for a critical period of transformation not only in America but also the world (Connelly 1993, 11). Regardless of its origins, it was not incidental that its ubiquitous global proliferation appeared in an era of time dominated by intensive Western colonization, accelerated industrialization, and the development of industrialized warfare. In some instances, barbed wire is described as the invention that has brought the most economic progress to the West than any other factor (e.g. McFadden 1978, 465–466). The rancher's barbed wire fences on the great plains were a multispecies entanglement from the get-go, as it was meant to keep domesticated animals inside and humans unwanted by the settlers, like indigenous people, out (Razac 2000, 18). In the Boer war, it was the British that, for the first time, strategically used barbed wire in warfare (Netz 2004, 59). Nevertheless, it can be said that the clashes between indigenous people and white settlers on the Great Plains that have sometimes been called the "barbed-wire wars" is also an example of where barbed wire was used in warfare (Razac 2000, 11). Where it was employed, barbed wire also obstructed non-human processes, sometimes unintentionally, such as hindering natural migrations of animals like pronghorn antelopes (Connelly 1993, 46–47).

Barbed wire is brutally efficient in keeping people trapped, as the recent history of neoliberal prison systems and refugee concentration camps demonstrates. Nevertheless, despite all the horror and atrocities, it is still ever-present in almost every human society today. It sits on top of chain-link fences, from the experimental reindeer pen at the University in Tromsø to common industrial facilities and prisons (Figure 2). It is still an economical way of keeping livestock inside and wildlife at bay, despite how its barbs hurt and scar the hide and resulting leather of domesticated animals. What looks like lines left by a ballpoint pen on your leather sofa and chair might be barbed wire scarring. The present-day is very much built up from the obstructing affordances of barbed wire and is a concrete material reality faced by people and non-humans every day, from refugees on the borders of European nations to just walking through a city—a very much living legacy and accumulating heritage. Barbed wire is more

often than not so mundane and every-day that they hide seamlessly in our lived environments, despite its brutal character. The massive use and propagation of barbed wire over the last two hundred and forty years have amassed an excess that has spilt into the archaeological record through many depositional events and abandonment processes. The next part of the article will take a closer look at one such event, namely the German barbed wire left in Norway after WWII.



Figure 2. New barbed wire sitting on top of the fence around the reindeer pen by the artic biology department at UiT - The arctic university of Norway.

An ensnared world—WWII and Nazi barbed wire

Barbed wire is generally more associated with World War I than World War II. However, in the context of Norway, barbed wire is an icon and an archaeological indicator of the German occupation. One of the pretences Germans used as a propaganda tool to justify their invasion and occupation of Norway was that it was forced to protect it from an inevitable invasion by allied forces, like the British R 4 and Operation Wilfred invasions plans. One of the names the Norwegians used with spiteful sarcasm for the German forces was "vernemakten", which translates to English as the "protection power." The German name for its military, Wehrmacht, directly translates to "defence force." Barbed wire was a tangible materialization of power through static violence.

The Germans built *Festung Norwegen*, that is Fortress Norway, the northernmost extensions of the perhaps more famous *Atlantikwall*, the defensive works that one can still see traces off on the beaches of Normandy. The perhaps most visually striking about this "fortress" was the now well-known bunkers, casemates, torpedo launch facilities, and marine artillery batteries.

These fortresses would have been rather vulnerable if not for their perimeters that were walled off with a combination of layered barbed wire fences and minefields joined together with natural hindrances of the craggy Norwegian coastline and fjords (Figure 3). Accordingly, the *Atlantikwall* was not only built out of concrete but also mile upon mile of barbed wire and other less monumental and durable constructions (United States War Office 1943, 5; United States War Department 1943).



Figure 3. Three parallel lines of barbed wire fences that still encircle the ruins of the marine battery *Heeres Küsten Batterie Makkaur 2/448* in Eastern-Finnmark. The fences have partly collapsed because the German used wooden poles in the lack of iron pickets (Drone photo: Ingar Olsborg Figenschau).

One important historical source on the German use of barbed wire is Intelligence bulletins and other instructional manuals on German warfare printed by the United States War Department. These sources focus on the ideal tactical situations instead of, for example, how Germans employed barbed wire to contain slave labour in work and extermination camps. Nevertheless, they give a surprisingly archaeological insight into the barbed wire used by the Nazis (Figure 4). The manual aptly named Notes on German Obstacles and Fieldworks made in 1943 by the United States War Office summarizes different ways the Germans used barbed wire like, for example, vertical fences and concertina or "dannert" types of coiled barbed wire obstacles. It also lists the different types of pickets they used with accompanying technical drawings, from screw to T-section pickets. It is perhaps the closest to typologization of barbed wire used in conflict, but there are books on patents in, for example, the USA (e.g. Glover 1972; Hagemeier 1998). But as of now, there exists no proper archaeological systematization and categorization of barbed wire. Such historical documents give an insight into the immediate strategic and tactical use of barbed wire during a conflict, but it offers little insight into the post-conflict life, living-with, and removal of barbed wire.

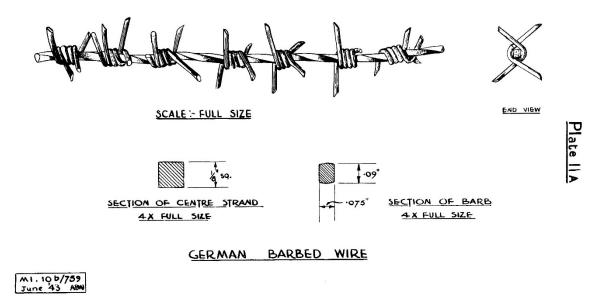


Figure 4. A technical drawing of one common type of barbed wire (*Stacheldraht*) in German Obstacles and Fieldworks by the United States War Office (1943). It is noted that the Vickers hardness of the wire is 197 and that it was found on the coast of France.

The war after the war

Every branch of the *Wehrmacht*, from *Kriegsmarine* (navy), *Heer* (army), to the *Luftwaffe* (air force), did not only leave behind destruction and suffering, but they also left behind enormous amounts of things. This also included para-military organizations such as *Organisation Todt*, which administered engineering projects such as building concentration camps and infrastructure like railroads (Andersen 2018). This was everything from typical war matériel like weapons and vehicles to more mundane things like toothpaste and worn boots. The industrialized German war machine caused unprecedented destruction but was also supported by an enormous extraction, transformation, transportation, and deposition of things. This machinery was supported by a range of capitalist private firms that employed and exploited slave labour, such as Audi (*Auto union*), which is still here today (Boch and Kukowski 2014). Together with the things, you also had the aforementioned infrastructure, from barracks and bunkers to roads and harbours. It is hard to explain the enormous material impact the war had on the Norwegian landscape.

Many things were intentionally destroyed when *Wehrmacht* had to flee from the advancing Soviet Red Army in Northern-Norway in 1944 and 45. Sometimes the retreat had to be rushed or came at such a fast pace that things that the Wehrmacht had brought in, produced or built, had to be left behind. The scorched-earth policy was one of the most well-known strategies that Wehrmacht employed during their retreat(s). One of the places that felt the terror of this tactic was the Northern-Troms and Finnmark county in Northern-Norway (Hunt 2014). Ironically, Finnmark, especially the Sør-Varanger municipality, had and probably still has the most significant amount of left-behind war matériel, like barbed wire (Stortingsforhandlinger 1954, 2541–2543). In the German retreat, the barbed wire reveals a polarized material character; in some ways, it hinders an advancing enemy, while it is also a potential strategic resource to be appropriated. Judged by how the barbed wire was not cleaned up by the Germans, as observed from fieldwork at WWII sites in Northern-Norway, like for example, Sværholt (Grabowski *et al.* 2014; Olsen and Witmore 2014), it was deemed tactically and strategically sound to leave the barbed wire behind. It was not only the standing barbed wire

fences that were left behind but also large caches and piles of unused barbed wire on spools (Figure 5). Buildings were burnt down, cases of beer bottles smashed, bunkers were blown up, fuel barrels perforated, but the barbed wire was left in place.



Figure 5. A pile of well over a hundred factory fresh spools of barbed wire ready to use abandoned at the German marine battery *Heeres Küsten Batterie Svaerholtklubben 1/971* in Western-Finnmark.

Cleaning up after the Germans in the years immediately after the war

One thing that is apparent when one looks into the history of the clean-up after WWII in Norway is the absence of explicitly historical research and summaries on the subject. The war is still probably one of the most popular and prolific topics of writing on recent history in Norway, but there is an abrupt chronological stop in 1945. One of the best explicitly documented processes of handling the material aftermath of the war is the removal of mines and explosives. It was common to use surrendered German soldiers to do this work after the war, which has been discussed as potentially a war crime (Gärtner 2019). The clean-up of mines and explosives in Northern-Norway started later than in the south. Besides German soldiers, Eastern-Finnmark, for example, was partly demined by the allied Red Army, while the Norwegian "police troops" arrived from Sweden (Steinbakken *et al.* 2000, 381). Only about seven Norwegians died during this work, while it is estimated that 178 German soldiers died and 241 were wounded, but there are probably unreported cases (Steinbakken *et al.* 2000, 382–383).



Figure 6. A hand-woven fence around the remnants of a German forced labour camp used for logging on Grensefossmoen in Báhčaveaji/Pasvik.

For barbed wire, there exists some historical information about its clean up after the war. Like with the mines, it is interesting to read who was put to this gruelling work. Putting up barbed wire fences was a difficult enough task itself; there are accounts from Eastern-Finnmark where the Germans used Soviet prisoners of war (POW) to build the fences around the slave labour concentration camps in the area (Kosnes and Siira 2015, 147). The fences had to be "woven" literally by hand, hopefully with heavy leather glows and aprons if they were available (Figure 6). Surveys in Báhčaveaji/Pasvik in Eastern-Finnmark have recorded

evidence that the Germans sometimes also re-bundled and reused barbed wire (Figure 7). There is evidence that the clean-up of barbed wire was administered as a sort of punishment after the war. People that were deemed as traitors were set to work. This included people that worked for the occupying forces for profit, often derogatory nicknamed "barrack barons" (Mortensen 1996), "demilitarized" German soldiers (Brabrand 1994, 11), *Nasjonal Samling* party members (Mastad 1997, 278), and civilian prisoners (Eriksen and Halvorsen 1987, 253; Hovd 2000, 135). In at least one instance, it is recorded that the Norwegian Ministry of Justice used women imprisoned because of their relationships with German soldiers to clean up after the Germans (Sæter 1986, 34–35). Military forces were also used in the clean-up effort. For example, When the Norwegian "Scotland brigade" soldiers came back to Norway, they were tasked with cleaning up war matériel in places like Tysfjord (Ellingsen 2015, 65).



Figure 7. A depot of re-spooled and recovered barbed wire in the same area as the POW camp at Grensefossmoen. It is evident that barbed wire, despite its apparent ubiquity, was, in some places and situations, a scarce resource because of, for example, complicated logistics in the far north (see Seitsonen and Lundemo 2021).

When the Germans capitulated, the allied forces had the overarching sovereignty over the matériel left behind, like the Joint Force War Materials Disposal Committee (Donnison 1961, 167; Vevstad 1998, 314). After the Allied command had surveyed the enemy matériel, much of it was left for the Norwegian state to handle, like barbed wire (see Oversikter over arbeidet i sentraladministrasjonen 1945, 63–68). The Directorate for Enemy Property was established in 1945 to manage this enormous material excess. This excess was most prominent in Northern-Norway, which included things like 5000 barracks and 16000 tons of foodstuff (Oversikter over arbeidet i sentraladministrasjonen 1945, 64–65; Ot. prp. nr. 23. (1945-46) 1946). This effort was accompanied by a new Enemy property law approved in 1946 (LOV-1946-03-22-4). The directorate made decisions on using, selling, and distributing German things, funds, and properties. Reparations for war damage were also a part of handling the

excess of war matériel. For example, the Office for distribution of enemy property in the city of Narvik announced in the local newspaper that owners of properties with a substantial number of German "leftover" on their property could apply for economic support for the clean-up (Fordelingskontoret for fiendtlig eiendom 1946, 2). Evidently, even if barbed wire fell under the state's responsibility in the post-war years, it was never fully collected and removed, at all. This might be due to its prolific nature and its apparently neglectable and even negative economic value. The director of the directorate, Erik T. Paulsson, publicly stated in 1947 that it was not the purpose or duty of the directorate to clean up valueless things after the Germans, like barbed wire (Fremover 1947, 1; see also, Stortingsforhandlinger 1954, 2541–2543). It is apparent that more valuable and immediately useful things, such as vehicles, food, and weapons, were prioritized. It is apparent that more valuable and immediately useful things, such as vehicles, food, and weapons, were prioritized. After the war, German military matériel for millions were scavenged and "stolen" by civilians, such as for example stoves, food, lumber, and tools (Nyhamar and Skotaam 1946). Five years after the war the government acknowledged the inadequate and improvised character and lack of coordination of the official effort (St. meld. nr. 15. 1950).

If not resold or used as scrap metal, there are recorded events of "dumping" of surplus barbed wire. It is well known in Norway that explosives and other munitions were dumped in the post-war years. A popular way to get these troublesome things out of the way was to dump them at designated places in fjords and the open ocean (Steinbakken *et al.* 2000, 143). This also included barbed wire, where, for example, the dumping locations were announced with coordinates in local newspapers to warn fishers (Bodø Marineavsnitt 1945). It is apparent that barbed wire was so prolific and ubiquitous that it was impractical for the state or any other authority to claim ownership of this type of war matériel. Nevertheless, there are recorded instances where barbed wire was attempted to be sold through announcements in local newspapers, even by the Directorate for Enemy Property (Romsdalsposten 1946, 2). It was also given away for free; in 1945, the Aust-Agder land and forestry societies announced in the local newspaper that they had a whole barge filled with spools of barbed wire they wanted to give away (Agderposten 1945a, 4; 1945b, 2).

Articles in local newspapers and other sources tell a story in the post-war years where civilians had to organize the clean-up themselves through collective efforts such as *dugnad* (for closer definition, see Magnani *et al.* 2021, 5–6). This work included everything from the Scouts and 4-H youth organizations (Falnes 2000, 50) to political youth organizations like the Workers' Youth League and the Communists' Youth League (Iversen 2011, 101). In the forests around, for example, the city of Trondheim, the local forester cut down and removed the barbed wire that blocked paths (von der Lippe 1945, 2). In general, from the historical sources, all kinds of civilian people and organizations mustered to the clean-up on their own terms and often out of necessity. The Barbed wire was everywhere the Germans had been, like weeds of steel. It was and is, in some part, still a heritage that people struggle with and live alongside today and into the future.

Cleaning up barbed wire in the post-war years

To this day, there still exists a substantial amount of barbed wire in the Norwegian environment. For example, one newspaper article mentions the removal of about 10–20 metric tons of barbed wire from a German fort on Merraneset in Namsos in 1991 (Røed 1991). As mentioned in the introduction, the municipality of Tromsø has an active clean-up initiative today for a "barb-free wilderness." From the war until the present day, the archives of local Norwegian newspapers demonstrate the lingering presence of barbed wire. There is

not a decade without articles mentioning the issues and presence of barbed wire from the war (Steinsvik 1946; Sør-Varanger Avis 1954; Finnmarksposten 1968, 2; 1974, 4; 1981, 5; Beddari 1992; Grønvik 2001; Kristensen 2015; Lian 2021). At one stage, in the late 60s, one sees that the barbed wire is starting to be specifically referred to as *krigsminner*, that is "war memories" (see Finnmarksposten 1968). Today the ownership of the things that the German felt behind that had any obvious economic or even military value, like old munitions, explosives, and things like barbed wire, have never really been decided in Norway (Bydal *et al.* 2012). Neither does material remains from do not WWII have any specific protection through heritage legislation, except for human remains and burials and in Svalbard, which is technically Norway, where everything older than 1946 is protected (Farstadvoll and Nilsen 2020). *De facto*, the things still left in the landscape have become a part of the property they rest on and in. Barbed wire has in some sense been inherited and come into possession without any say of its inheritors. *De jure*, these things are very much "owner-less" things and demonstrate that abstract ideas of possessions and ownership do not matter; the barbed wire is still *there*.

Traces of the attempts to clean up after the war are evident in the archaeological record present today. Most places in southern Norway and sites close to population centres have been sanitized, but there are many examples that this is not finished. For instance, in the Luftwaffe storage camp at Gjøkåsen in the Paččjokk/Pasvik river valley, an archaeological survey documented distinct traces of this in-completeness (see Farstadvoll, Figenschau and Olsen 2020). Most of the camps' fencing has been removed, except for some short sections along the eastern edge. Nevertheless, one enormous pile of barbed wire, and several smaller piles, was recorded (Figure 8). Evidently, fences have been torn down, but the barbed wire had not been removed and instead deposited in different places in the camp. At the road leading into the camp, the barbed wire has been stuffed into the remnants of German trenches (Figure 9). The incomplete clean-up at the Luftwaffe storage camp is not in any way unique; it is something that can be observed at many WWII sites in Northern-Norway. The vast amount of barbed wire still present in the landscape, and traces of haphazard clean-up, are archaeological markers of inadequate preparation for and response to an unprecedented event that left an assemblage of modern and hard to handle things.



Figure 8. A pile of tangled barbed wire from an unfinished post-war clean-up at Gjøkåsen.



Figure 9. A German trench by Gjøkåsen was used as a garbage pit after the war. It is filled to the brim with German barbed wire and waste from the 1950s.

There are avid amateur collectors of war "relics" as their nomenclature refers to militaria and other objects connected to the war (Herva *et al.* 2016). Nevertheless, you would be hard-pressed to find anyone with interest in rusted barbed wire. As anyone detecting at WWII sites has experienced, they are hard to move and obscure signals of more "desired" non-ferrous objects. Ubiquity led to its own kind of obscurity. One can say that some of the barbed wire left after the war has done nothing, do nothing, and will never do anything of consequence that we know of. They lie in place, rusting away in middens, among the stony fossil beaches on the western coast of Finnmark, or slowly becoming a part of the soil under a carpet of expanding vegetation (Figure 10).



Figure 10. End of the line. A spool of barbed wire corroding into piles of iron oxide in the urban wilderness of Tromsø. The degradation of barbed wire is accelerated by humidity trapped in the vegetation. If the barbed wire hangs free in the air, it can last for decades, if not centuries.

Reuse and subversion

Some ways that German barbed wire was appropriated after the war did not need any adaption at all. For example, it was reused in camps to hold Germans and other prisoners like war criminals and "national traitors." In Nazi concentration camps like Falstad in Trondheim or Sydspissen in Tromsø, the German barbed wire fences were ready to host other groups of people (Nilssen 2015; Jasinski 2018). Similar examples can also be found across the border in Sweden, where internment camps for German soldiers were later reused for accommodating refugees, for instance, from the White Buses (Persson 2014, 259–263). There were accusations that barbed wire was used as a tool to punish and torture people in Norway, despite that some of the sources are less reliable due to the extreme right-wing beliefs of the author (e.g. Steinsvik 1946, 76, 82, 116). On an even darker note, the barbed wire encircled camps that the Germans left behind were also used to imprison the aforementioned women that had or were accused of having relationships with German soldiers during the war, such as

the Ljanskollen camp in Oslo (Papendorf 2012). In some instances, it was claimed that this barbed wire imprisonment protected them from lynching, but in actuality, it was punishment (Papendorf 2012.; Eriksen and Halvorsen 1987, 250). Sometimes these women were imprisoned together with their children (Pedersen 2012).

It is worth noting how fast the barbed wire became a part of Norway's post-war economy and landscapes. The reactions were not far behind either. Already in 1946, for example, one news article mentions a protest against the use of German barbed wire to fence cow pastures in the Harstad area in Northern-Norway (Nordlands Framtid 1946, 4). Here it was also mentioned that it was "ugly," and that there were "Norwegian types" that were not as dangerous as the German. The German barbed wire was perhaps more "menacing" and separated itself from domestic and non-warfare products because the barbs sit much closer to each other on the wire. This, however, did not stop them from being reused. Because the German barbed wire was so plentiful and inexpensive after the war, the architect Steinar Skådan has argued that the civilian use of barbed wire fences became more common after the war (Skådan 1991, 14). Similar examples of locals collecting and, for example, reusing German barbed wire in reindeer fences after the war is also evident in Finland (Seitsonen and Herva 2011, 183; Seitsonen 2021, 107). Still to this day, some fences in Northern-Norway are topped with German barbed wire, still functional with sharp points (Figure 11). The German barbed wire pickets of varying types are also not a rare sight to see reused in fences.



Figure 11. German barbed wire on a private fence at Rissebákti/Gressbakken. The barbs are still sharp despite being exposed to salty ocean air for decades in windy Várjjat/Varanger

When the new WWII exhibition at Nordberg fort was opened in 2019, they used authentic barbed wire from the war instead of cloth in the ribbon opening ceremony (Støle 2019). Despite its relatively simple design, German barbed wire has been reused in some imaginative

ways. This demonstrates the inherent excess of things; that they surpass and sometimes can subvert the intentions and plans of their original designers and users (Farstadvoll 2019a). In one instance, it is documented that German barbed wire was used as improvised low voltage conductors by local people in Varanger (Mikkelsen 1988). One other use barbed wire has inspired in the post-war years is its potency as a medium for art. For example, the artist Gjertrud Hals have used WWII barbed wire to make a pyramid-shaped sculpture named "Rød" in 1990. The sculpture was explicitly inspired by all the barbed wire still present in the landscape of her home island of Aukra (Haakestad and Lande 2008). One other artist that has used German barbed wire in their art and sculpture is the Sami indigenous artist and politician Heidi Persdatter Greiner Haaker (Kvammen 2019, 14). German barbed wire has even been used in flower decorations (Hivand 1998). Even animals have creatively reused German barbed wire; in 1960, a radiotelegraphist in Vardø observed that magpies (pica pica) had built a nest from mostly barbed wire and metal wires (Finnmarks Tidene 1960).

A more than human afterlife

When did the war really end? From a material perspective, the occupation of Northern-Norway did not ultimately end in 1945 (Olsen and Witmore 2014, 168). The violent potentials of warfare go far beyond active acts of war, and it does not discern between the human and non-human. Like colonial legacies and systemic discrimination, objects designed for harm can continue to do so beyond imagined historical timeframes and actions intended by humans. The afterlife of WWII barbed wire in Norway is also a tale that includes pets, domestic animals, wildlife, and thus ecologies. Animal welfare concerns are commonly used to argue for the removal of "war junk" in Norway and in northern Finland, which similarly has a large amount of German barbed wire remaining in the wilderness (see Seitsonen 2021, 180).

Already in 1946, an anonymous "letter to the editor" signed with the *nom de plume* "an animal friend" (*Dyrevenn*) reported the dissatisfaction with the increased use of cheap German "barbaric fencing material" (Dyrevenn 1946, 4). The person goes on about how they had to rescue both sheep and cows entangled by and hurt by the German barbed wire during the war. It is important to note that heritage is not only something being lived with but also something they *die by*. Heritage, to put it bluntly, is a *matter* of life and death. Even if barbed wire is designed as a "non-lethal" obstacle for humans, not to say that is always true, it is not uncommonly the cause of death and suffering of animals. Because material heritage is ecological in one sense or another (Farstadvoll 2021), the things we leave behind always impact its environment, both negative and positive (Farstadvoll 2019a, 93).

The impact barbed wire has on animals is a topic that regularly appears in local Norwegian newspapers, from immediately after the war's end until the present day. Interestingly, I have had very little success finding mentions of people being hurt by German barbed wire, but animals are another story. Domestic animals, like sheep and cows, getting hurt are the most common. For example, cows often got wounds in their udders from barbed wire hidden in grass and bushes (Finnmarksposten 1962, 4). For wild animals, the effects are probably more hidden. Even in the research literature about the impact of barbed wire on wildlife, there are few systematic observations on the number of animals being hurt and killed; mostly, it is acknowledging what kind of animals that are getting hurt and how (see Allen and Ramirez 1990; van der Ree 1990; Bevanger and Henriksen 1995, 11).

One aspect to note regarding the afterlife of barbed wire in the context of Norway is its legal status. Barbed wire is not illegal, but its use is strictly regulated. The animal welfare law approved in 2009 made it illegal to put up new barbed wire fences or repair old barbed wire

fences that have the purpose of regulating the behaviour of animals (*Lov om dyrevelferd*, LOV-2009-06-19-97). The barbed wire that was in place before the law, therefore, is not illegal or banned. Interestingly, on the other hand, there are no explicit prohibitions in Norway to use barbed wire to control and regulate human behaviour. One other thing to note is how barbed wire has been employed and is currently used as an instrument for scientific research on the genetics and demographics of bears in the Paččjokk/Pasvik river valley in Eastern-Finnmark. The researchers set up low strings of barbed wire around an area with bait; when the bear walk over the barbed wire, hair gets caught in the barbs that researchers can sample for DNA (Aarnes *et al.* 2015, 8).

To live and die by barbed wire

Barbed wire is a dutiful mediator of its past because of its persistent and obstinate material properties and affordances. As archaeological artefacts, they are literal strings tied to the past. In archaeological WWII contexts, they are almost ubiquitous. They *remain* in many different ways, from short cut-offs found in middens, like in the garbage heaps by the POW-camp at Sværholt (Grabowski *et al.* 2014; Olsen and Witmore 2014), still bundled up in rolls as they were shipped from the factory, to still standing fences around fortifications and storage camps (Farstadvoll, Figenschau and Olsen 2020). Most of the barbed wire I have encountered during my surveys and fieldwork on WWII sites in Norway is, in several ways, uncollectable. They are unruly objects so embedded in and intertwined with the landscape that the effort to musealise, conserve or even remove them would be nearly impossible; like the POW-camp fence on Grensefossmoen in Báhčaveaji/Pasvik where the barbed wire is nailed to still living Scots Pines and Birches (see Figure 12).

At the end of the introduction, I asked whether the barbed wire should be removed. The answer depends, in my opinion, on the material and social context. Nevertheless, despite multiple clean-up projects after the war by both civilian and official initiators that have cost millions, there is still a lot of barbed wire left in the landscapes of Norway. I do not think that even if there were a new concentrated effort to remove, it would be impossible to remove everything. Removing barbed wire will reduce the scientific, experiential, and communicative value of heritage sites (Wilberg 2018, 49), but keeping it in place, like the fence fragments at the Luftwaffe camp at Gjøkåsen, will inevitably hurt wildlife and potentially people (see Beddari 1992). Realistically, the presence of barbed wire must be reviewed on a case-to-case basis. Importantly, I would argue that it must be a multidisciplinary and multivocal effort. It must be a decision situated in the contemporary nature and character of sites and materials. This demonstrates the value of contemporary archaeology of situating the past in the present, using archaeological expertise and methods to survey and not least observe how the presentpast act and are acted upon in the present day. Archaeology can be a force of protection rather than conservation. Archaeologists have the expertise of locating, exposing, recording, mediating, and, if judged necessary, facilitating the disposal of the past. What is inherited is, more often than not, not a choice (Olsen and Pétursdóttir 2016), but there is an emancipatory power in how one can willfully interact with it. To reduce things to their origins and meanings in the past would undermine this potential. Therefore, it is crucial to take the life of things seriously after their origins have expired.



Figure 12. A remnant of the fence that once encircled the Luftwaffe storage camp by Gjøkåsen in Báhčaveaji/Pasvik. The fate of the barbed wire fence is entwined in the life of the trees that function as living pickets.

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