# Preserving industrial heritage in Finland from 1970s to 2020s

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his article introduces Finnish industrial heritage work from 1970s to 2020s, focusing on the process and system of listing and protecting buildings and sites. The perspective in the following text pertains to the heritage process, wherein role of experts and administrative work are essential aspects to the process of heritagization.<sup>1)</sup>

### THE BEGINNING OF INDUSTRIAL HERITAGE WORK

The biggest industrial actors amongst the Finnish have been - going back to the 1860s – the sawmill industry, paper and wood processing industries, mining and metal industries, textile industry, and growing to eventually encompassing culinary industries and beyond. At the beginning of the twentieth century, Finland was



Cable Factory in Helsinki was built in in three faces: first part in 1943, and two extensions in 1947-48 and 1952-54. The factory became part of Nokia in the 1960s and the site was in use until 1990s. Finally, after many steps, the large factory was preserved and was transformed into cultural uses: museums, artist's studios, physical training etc. Foto: Sakari Kiuru/Helsinki City Museum 2013.

predominantly agricultural land, with most inhabitants living in the countryside or under similarly rural conditions. Urbanization progressed slowly throughout the country. A few larger cities such as Helsinki and Tampere witnessed strong currents of industrialization in the early twentieth century, where rapid population growth precipitated poor housing conditions for ordinary workers. However, the primary axis of Finland's industrialization occurred in its countryside. The forest industry took hold in both coastal areas possessing ample shipping opportunities, as well as further inland by the raw resources themselves. Especially in forests accessible by water routes. Several industrial communities – towns in the making – were born in and around forest industry sites.<sup>2)</sup>

Finland has industrialized late when compared to other European countries, and it deindustrialized late as well. The structural changes in industrial planning in the 1960s and 1970s left behind buildings, machinery and sites empty and abandoned in many urban environments. Prior to that, when factories were still running, the cultural historical or aesthetical values of industry itself were mostly absent from people's minds. The imagery associated with factory work were mostly negative. <sup>3)</sup>

However, there was a much earlier effort to legitimize industrial buildings as architecture by architects from the 1920s onwards, as an interesting field for them to design, and not to leave it exclusively to the function-centric engineers. In 1927, architect Marius af Schultén presented industrial buildings worthy of assignments for architects to design. Schultén used here the term *industrial architecture*. He argued that factories should not be considered only as technical assignments, but rather an architect should plan out the buildings from the start; in fact preferably at the earlier stage of city planning itself. It could be interesting to study whether this legitimization influenced the canon of industrial architecture in the architectural histories, and how this in turn affected the cultural historical valuations later attached to *heritagization*.

The first general publication about Finnish industrial architecture was published in 1952 by the Finnish association of architects. In its introduction, architect Viljo Rewell clarified the motivation behind publishing the book: Industrial architecture needed to be

### HERITAGE PROTECTION LEGISLATION IN FINLAND

The first **Town Planning Act** of 1931 and the building regulations gave the first legal opportunity to protect historically or artistically valuable buildings and cityscapes in Finland.

The **Building Protection Act** in Finland was enacted in 1964. The act was renewed only twenty years later. The renewed act from 1985, **Act on the Protection of Buildings**, shifted the responsibility of building protection to the municipalities, as they were now obligated to implement heritage concerns at the fundamental level of town planning. The act was renewed again in 2010 by the **Act on the Protection of the Built Heritage**, which protects the built-up cultural environment and preserves its special characteristics and features. Based on the act, the protection may cover structures, building groups and developed areas, in addition to individual buildings.

Besides the Town Planning Act there was a **Building Act** given in 1958, in which special regulations concerning protecting buildings could be provided, too. The two acts were put together in 1999 when the **Land Use and Building Act** was given. This act steers land-use planning and building, but also the preservation and change of the cultural environment. Land use planning is conducted by designing land use plans, which require adequate, updated studies and surveys. These include inventories on ancient relics and built heritage. It is possible to render protection orders in a detail plan that may cover larger areas and even landscapes, but also individual buildings and structures, interiors, yard areas and gardens. The Land Use and Building Act from 1999 is currently under renewal: in 2025 there will be a separate Building Act. Also, the Land Use Act is under revision.

In Finland, the **Antiquities Act** from 1963 protects fixed relics. The law is being renewed and a proposal was given 2023. The Antiquities Act has been in use almost 60 years and there have been major structural changes in society, and also regulations regarding environmental use, official activities and administrative procedures have been significantly reformed.

There are separate laws on the protection of church buildings in both the Church Act concerning the Evangelical Lutheran Church (2023) and the Act on the Orthodox Church (985/2006). The purpose of conservation legislation is to ensure that church buildings are maintained and repaired in an appropriate manner.



legitimized as a design field for architects, not a separate assignment, with architects relegated to designing the exteriors or the shell. The publication also showed recently built factories and sites, yet mostly still focusing on modern industrial architecture, and especially on workers' housing.4) A few examples, such as Alvar Aalto's designed Sunila pulp mill and residential area in Kotka, were presented in this publication. Besides these, few industrial sites were present in architectural journals or other publications. The discussion about industrial architecture had no direct significance for heritagization at the time, but it had an impact on valuing building's architectural quality, and thus led to a certain canonisation. The process of heritagisation has been connected with canonisation, as they can be claimed to be identical processes.<sup>5)</sup>

The case of Verkatehdas [the Baize factory] in Tampere in the 1970s marks a turning point in Finnish building protection, and in the recognition of larger industrial sites as culturally/historically significant enough to warrant inclusion in the public, Finnish heritage. Verkatehdas was a centrally located industrial site in Tampere, which had relocated its operations in 1960s to the outskirts of the city, and thus the company and the city of Tampere wanted to demolish the existing industrial buildings, meaning to use the plot for other purposes. A long battle for its preservation ensued. Eventually, following a court ruling, it was permitted to demolish the buildings. Symbolically, the long chimney was torn down first in 1977 and the rest of the site by 1981. Two buildings of Verkatehdas site remained, and a high-rise hotel lives (1986), a shopping mall Koskikeskus (1988) and residential housing were built on the plot.<sup>6)</sup> The singular case of Verkatehdas was significant for the wide public debate, and recognition of industrial heritage in Finnish building preservation, it facilitated.

# STUDIES AND INVENTORIES OF INDUSTRIAL HERITAGE

One of the starting points in industrial heritage work in Finland was to recognize, map and conduct inventories of industries to evaluate candidates for cultural historically valuable sites and buildings.

The first (pre-) industrial sector, which was studied, were the ironworks: Erkki Härö's study included 80 sites. Prior to taking inventory, there had been an exhibition in 1979 about the ironworks in the Finnish architectural museum where 18 ironworks and their close-by environments were presented. Two years later the museum displayed worker's housing, studied by Merja Härö.<sup>7)</sup> Iron mills play a special role in Finnish heritage work, as they were formally recognized quite early, in part because of widespread recognition of ironworking as a Finnish historical practice. The iron mills were communities, which besides the industrial activities included the upper-class manor culture led by the patron, church and worker's housing and farming.

Industrial archaeology had earlier roots in Finland than industrial heritage preservation. The first excavation of industrial site A Finnish consumer co-op Elanto's old Bread Factory in the inner courtyard of the Elanto block in Sörnäinen, Helsinki. The bakery moved out late 1990 and the property was converted into an office building. Foto: Tuula Sipilä/Helsinki City Museum 2023.

(a tar pit) occurred in 1932. Several other, yet sporadic excavations happened in the following decades, but systematic industrial archaeological excavations did not begin until the 1980s, with studies into traces of glass and faience factories. The Finnish Glass Museum, founded in 1961, mapped 58 historical glass factories. Industrial archaeology was institutionalized in the 1990s and research grew increasingly diverse. The fieldwork remained managed primarily by the National Board of Antiquities.8)

Participation in industrial heritage discussion came via Nordic co-operation, which began in Finland in the 1970s. TICCIH (the International Committee for the Conservation of the Industrial Heritage) was founded in 1973, at the first international conference of industrial heritage sites at Ironbridge, Great Britain. There were no Finnish delegates attending at the time, but they joined a conference in Stockholm in 1978. In this conference, the term industrial heritage came to replace industrial archaeology, term used from the 1960s onwards.9) Sweden was a role model to Finland in terms of industrial heritage practice, with Sweden already pioneering the practice internationally. The Finnish TIC-CIH-Finland (Teollisuusperinteen seura ry) was founded in 1985.

Some of the most seminal writings discussing and introducing industrial heritage in Finland are from the 1980s. This includes architect Maire Mattinen's Teollisuusympäristöt: Teollisuusympäristöjen dokumentointi, tutkimus ja suojelu [Industrial environments: Documentation, research, and protection in Finland] in 1985. This report was the first analysis of Finnish industrial environments as a totality. The work had been initiated by a worker's tradition group, funded by Ministry of Education, and was monitored by the Finnish TICCIH group. The objective of the study was document the inventory of Finnish industrial environments, and especially delineate exactly what had already been studied and documented by the mid 1980's. In the publication, it is claimed that industrial sites were not appreciated very much, but this is seen understood as a consequence of lacking the inventories and studies prerequisite for such an appreciation.

The report took up the listing of nationally important cultural historical environments from 1979, which had included industrial sites. The listing of 1979 totaled 1309 cultural historically important

environments of which 124 were industrial sites. This list was not 59 exhaustive as there were both too few studies and the studies were insufficient in covering all the different industrial sectors at the time. In Mattinen's report, there was an annex of listing 500 industrial sites, put together based on regional planning organizations' own internal listings. However, the report acknowledges that this listing was not comprehensive either: for instance, the older inventories did not include sites from the industrialized time, only pre-industrial times were included (e.g. iron mills). 10)

Mattinen has also written some other articles about industrial buildings and environments to promote them as general heritage, and to pinpoint the necessity of mapping and researching industrial history and its heritage - material and immaterial. One article was about the process of an industrial building raised to the status of a cultural monument. Back in the 1980s, the reality of legally protecting this heritage meant that comprehensively preserving industrial monuments simply could not be achieved. Instead, an effective way to promote industrial heritage, as suggested in the article, would be to be raise general interest in it, and inventively re-using the industrial building stock. (1)

Another seminal writing from the 1980's is Lauri Putkonen's report Kulttuurihistoriallisesti arvokkaat teollisuusympäristöt [Cultural historically valuable industrial environments]. The Ministry of Environment with the National Board of Antiquities requested the report. The study provided an overview on the different sectors of Finnish industries and their building stock. It listed ca. 200 industrial sites all over Finland, pointing out the specific characteristics of individual industries and architectural values of industrial buildings. Sources for the first national list of Finnish industrial sites of cultural historic value came from the regional planning organizations, an inquiry made in 1986 regarding them, and from municipalities and sector inventories produced earlier in time. The biggest industrial sectors in the inventory were metal industry and mechanical engineering, wood processing industry, textile industry and food industry. In the report, the current planning situation of the site was recorded relative to the results of the earlier inquiry, and it furthermore contained information on whether the site was protected by planning authorities. (2)



The Sunila Pulp Mill and a nearby residential area in Kotka were designed by Alvar Aalto in the years 1936-1939. The industrial site has had many changes because of the expansion in the mill's production capacity and changes in the processes, but most of the original Aalto buildings are still existing. In 2023 Stora Enso who has been owner since 2009 decided to shut down the production and is going to sell the site. Foto: Soile Tirilä/Finnish Heritage Agency 1997.

There were also some local inventories done early in the 1980s of industrial buildings and sites throughout the country. For instance, in downtown Helsinki the industrial sites of 1850-1946 were studied. When the inventory project started, the role of Helsinki as a significant industrial city had already changed: Industries had moved away from the city, and the transformation processes of the industrial sites were going on. <sup>[3]</sup> Similar inventories were conducted in Turku and regionally in Kymenlaakso, Satakunta and Keski-Suomi.

It is noteworthy that these inventories were not listings in a sense that would indicate juridical protection, but they were an essential part of heritagization and official heritage work. In Finland, the *official heritage* – a concept by Harrison – can be defined as a set of professional practices that are authorized by the state, and motivated by legislation or some kind of written statement. <sup>(4)</sup> These practices include inventories that have later a clear impact on what should be preserved and protected.

Within heritage studies, there is a differentiation made between official and unofficial heritage. *Unofficial heritage* meaning practices that are represented in the language of heritage, but are not recognized in current legislation. <sup>[5]</sup> In a Finnish context, this would be industrial buildings and sites that are significant to individuals and/or communities, but do not enjoy formal protection. Back in the 1980s there was a lot of interest in workers' own history and in collecting traditions, with volunteers studying industrial heritage, inventory work and research, and even with concrete attempts to maintain or repair old industrial buildings.

## HERITAGE PROTECTION LEGISLATION

In Finland, there are several laws that serve to protect industrial heritage. Protecting heritage is typically achieved at the planning stage, and it can be done in different plan levels such as detail plan, master plan or regional land-use plan. Buildings can also be specifically protected by law. For heritage to become *official*, it must be successfully perceived as worthy of protection, and in turn legitimized through corresponding planning and legislation systems.

The first *building protection act* in Finland was enacted in 1964. <sup>16)</sup> The act was renewed only twenty years later, as it was not in active use. Altogether, only 40 buildings were protected by this act, and no more than four buildings that had at least some degree of industrial heritage values. These were an old factory school in Forssa, a worker's house in Kannus, Koivaro mill in Kittilä and Siilikangas mill and industrial buildings in Pieksämäki. Besides these, several attempts to list other industrial buildings were made and rejected. <sup>17)</sup>

The renewed act from 1985, Act on the Protection of Buildings, shifted the responsibility of building protection to the municipalities, as they were now obligated to implement heritage concerns at the fundamental level of town planning, with only special cases going through the act itself. (B) Only a handful of industrial sites was protected by the renewed act, for example the ironworks of Fagervik in Inkoo, Verla groundwood and board mill in Jaala, the Hankala flax works in Hämeenlinna, and the Keretti mine shaft in Outokumpu. (9)

This act was renewed again in 2010 by the Act on the Protection of the Built Heritage, which protects the built-up cultural environment and preserves its special characteristics and features. Based on the act, the protection may cover structures, building groups and developed areas, in addition to individual buildings. The protection may cover only a part of the building, the fixed interiors, and structures.<sup>20)</sup> It is the Centers for Economic Development, Transport and the Environment (ELY Centers), and the Finnish Heritage Agency, that promote and monitor the preservation of the built heritage in accordance with this act. In urban areas subject to detail planning, it is consistently weighed whether the protection may take place under detail planning or the Act on the Protection of the Built Heritage. The primary means of protection remains as of yet detail planning, but the Act on the Protection of the Built Heritage can also be used if the building or a site is of national importance, and if its preservation and protection cannot be ensured through the Land Use and Building Act, or if there are special reasons for protecting the site because of the planning situation. These two laws, Act on the Protection of Buildings (1985) and Act on the Protection of the



Sunila residential area near the sulphate pulp mill was designed by Alvar Aalto (began 1937, finished in 1954). The area belongs to the proposal of series of Aalto's 13 works on the UNESCO World Heritage List is due to be completed in 2025. Foto: Soile Tirilä/Finnish Heritage Agency 2001.

Built Heritage (2010) have successfully protected altogether approximately 20 industrial sites.<sup>21)</sup>

The first *Town Planning Act* was enacted in 1931.<sup>22)</sup> It was followed by a *Building Act* (1958), in which special regulations concerning protecting buildings could also be provided. An early example of industrial heritage protection was the Strömfors iron works in southeastern Finland, whose protection was included in a detail plan from 1969.

The Land Use and Building Act (1999) steers land-use planning and building, but also the preservation and change of the cultural environment. Land use planning is conducted by designing land use plans, which require adequate, updated studies and surveys. These include inventories on ancient relics and built heritage. It is possible to render protection orders in a detail plan that may cover larger areas and even landscapes, but also individual buildings and structures, interiors, yard areas and gardens.<sup>23)</sup>

In Finland, the Antiquities Act from 1963 protects fixed relics.<sup>24)</sup> The law is outdated and undergoing revision at this time. The act considers industrial and ancient remains thus: "Remains of dwellings from ancient times, as well as places of residence and work, as well as formations that have arisen from the use of such dwellings or places."

There are roughly two groups of pre-industrial period and early industrial time related ancient remains based on their energy source. One being industries operated with hydropower (such as water saws or mills), and the other group consisting of production plants that have developed furnace or similarly controlled, high-temperature heat sources (such as glass or ceramic factories, brick and lime kilns or sugar factories). Among the many types of industrial historical ancient remains, the best-protected ones are the iron works. It is noteworthy that only very small proportion of industrial heritage is formally protected, and that for the most part, industrial buildings and sites have been protected by the Land Use and Building Act. The communities and cities themselves carry out the planning in which protections are part, and as such, there is no data available covering the totality of protected industrial heritage.

# INDUSTRIAL HERITAGIZATION

Industrial heritage became official heritage when industrial historical monuments and labor tradition was recognized as an aspect of world cultural history. An evident example of this recognition was the articulation of a UNESCO world heritage policy,



In Tampere, the banks of the Tammerkoski-river are among the oldest industrial areas in Finland. The former Finlayson textile mill and the former metal and textile factory Tampella were transformed into new uses in the 1990s. Foto: Timo-Pekka Heima/Finnish Heritage Agency 2008.

when the first industrial heritage sites were listed as World Heritage Sites: In 1978 Wieliczka and Bochnia Royal Salt Mines in Poland were listed as some of the very first, followed by Røros Mining Town and the Circumference in Norway in 1980.<sup>26)</sup>

Verla Groundwood and Board Mill, situated in southeastern Finland, was added to the World Heritage List in 1995 as the first - and as of yet the only - Finnish industrial heritage representative. The listing was based on the following criterion: Verla Groundwood and Board Mill and its associated habitation are an outstanding and remarkably well-preserved example of the smallscale rural industrial settlement associated with pulp and board production that flourished in northern Europe and North America in the 19th and early 20th centuries, of which only a handful survive to the present day. Verla was well preserved, as it had already been musealized in 1972. The production came to a stop there in 1964. Verla is a unique industrial site, because it largely preserved its 19th century state with buildings, machinery, and processes, and resisting the forces of modernization. Authenticity was the most valuable criterion for listing Verla as UNESCO world heritage.<sup>27)</sup>



Former Rope Factory in Turku was converted into a conservatory and art academy in the 1990s. Foto: Timo-Pekka Heima/Finnish Heritage Agency 2007.

Furthermore, the 1990s marked the beginning of an extensive administrative work on industrial heritage. National Board of Antiquities (today Finnish Heritage Agency) became involved with the industrial heritage. It advocated the protection of several industrial sites in the 1990's. Additionally, ancient industrial remains were researched and studied through fieldwork. Research and management of industrial heritage were a key priority of the National Board of Antiquities in the late 1990s. The state funded restoration and repair projects of industrial sites, mostly ironworks. These projects enjoyed state funding for the employees and lasted for several years.<sup>28)</sup>

In 1993, the National Board of Antiquities prepared an inventory of nationally significant built cultural environments. The inventory encompassed 1772 sites. This was essentially an updated version of the first inventory taken in 1979. In the 1993 inventory, there were 188 sites specifically included for their industrial-historical values. <sup>29)</sup> The nationally inclusive inventory did not imply actual legal protection for industrial heritage (or any other heritage), but the listing nonetheless constitutes a list of objects of official heritage, and the chosen industrial sites were clearly recognized as nationally important.

The inventory of nationally significant built cultural environments was updated in 2009, covering a total of I23 sites from the period of industrialization, and 62 pre-industrial sites. A majority of these sites were recognized already in 1993. The built heritage contained therein dates predominantly from the first part of the 1900's, with modern industrial sites missing from it. This national inventory is used as an inventory of the built cultural environment, within the meaning of national land use objectives as communicated in the Land Use and Building Act. The inventory of 2009 is an administrative and legally dominant selection of properties classifying the national cultural heritage; in other words, it is an official list of national heritage in Finland, consisting of the objects most valued by the state and municipalities. Even though the inventory is not a juridical listing, nor provides any direct protections, it still has a special legal effect, as the qualities and value of these selected environments must be secured as part of the local planning efforts.<sup>30)</sup>



Verla Groundwood and Board Mill became Unesco World Heritage Site in 1995 as the first Finnish industrial heritage representative. Foto: Mikko Mannberg/Finnish Heritage Agency 2022.

In retrospective, the 1990s was a very active time in maintaining and promoting the industrial heritage, as well as taking inventories of it. The National Board of Antiquities conducted surveys concerning the wood-processing industry, which has historically been the major industrial sector in Finland. Older sawmills were studied, and later even the larger scale paper, cardboard, and pulp industry. Cooperation began with Finland's largest wood-processing companies, and in 1998, there was a preservation agreement between Enso and the National Board of Antiquities made on the maintenance of the industrial heritage owned by Enso. Another agreement was reached with Metsäliitto-Yhtymä in 1999.31) These agreements were based on large inventories of company's buildings and categorisation and a valuation of the built heritage.

Besides these activities, the 1990s was a decade when industrial heritage began figuring in re-use purposes and urban transformations. It was typical at the time to make conversions of industrial buildings into hotels, restaurants, art halls and museums and schools, even into residential apartments. There were cases where larger industrial sites were transformed into university and other college campuses, shopping malls and exhibition halls. Furthermore, the cultural tourism of industrial sites became more popular in the 1990s. Well-known examples of re-use are the former Tampella factories in Tampere that became Vapriikki Museum in 1990s, and the former Finlayson industrial site was transformed into other, commercial uses, including hosting a labor museum Werstas. In Turku, the former rope factory became a music conservatory in 1994. In Helsinki, The Cable Hall transformation is a success story, well known for cultural uses, but there are also other successful re-use examples such as the former Arabia ceramic factory, which became an art industrial school. Academy of Fine Arts moved to a renovated former Elanto bread factory, and nearby the Theatre School moved into an old soap factory called Kokos in the year 2000.

The beginning of the 21st century has been an active time for industrial heritage research, its protection and its restoration. It is safe to say that by the 2010's, industrial heritage had been successfully institutionalized in Finland, and today it is part of the

official heritage body.<sup>32)</sup> At the same time, the concept of industrial heritage has broadened, and there are now more perspectives and avenues of research within in the heritage field.

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- 1) Smith 2006: Harrison 2012: Sivula 2014. Lauraiane Smith's theory on how cultural heritage is made in a process. She has developed the well-known AHD = authorised heritage discourse -concept widely used in critical heritage studies. Anna Sivula has analysed a cultural historical process of how historical awareness of industrial heritage in Finland has developed.
- 2) Kuisma 2006, 529-53I.
- 3) Lähteenmäki 2017, 58.
- 4) Suomen teollisuuden arkkitehtuuria 1952.
- 5) Kalakoski et al. 2020
- 6) Lähteenmäki 2017, 81-148. There is a very thorough description and analysis of the Verkatehdas case in Lähteenmäki's dissertation.

- 7) Härö 1981.
- 8) Immonen. Mäki and Taavitsainen 2022.
- 9) Sivula 2014, 7.
- 10) Mattinen 1985a
- II) Mattinen 1985b: Hakkarainen Mattinen 1984.
- 12) Putkonen 1989.
- 13) Hakkarainen Putkonen 1995. The inventory work began already in 1981, but it was published later in 1990s.
- 14) Harrison 2012, 14.
- 15) Harrison 2012, 14-14.
- 16) Rakennussuoielulaki 1964.[Building Protection Act]
- 17) Mattinen 1985, 67.
- 18) Rakennussuojelulaki 60/1985. [Act on the Protection of Buildings] 19) Härö – Koskinen 1999
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- 21) Cultural environment registry portal on Finnish Heritage Agency website: https://www.kyppi.fi/palveluikkuna/portti/read/asp/default.aspx
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