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Content

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Introduction

Railway Environments and Landscapes

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This issue of *Fabrik & Bolig* – Factories and Dwellings – is inspired by the recent publication of three books on Danish and Swedish railway environments, as well as by the shared concern among experts regarding the scale of preservation efforts – or, rather, the lack thereof. Most listed railway buildings are isolated buildings that do not say much about the main function of the railway: Connecting different places. You could say that railways have become one, big cohesive system.

The books are reviewed, in Danish, at the back of this issue. One of the main points emerging out of the books is that we must look at the wider landscape, and that this can be done so on different levels. This issue of Fabrik & Bolig is a modest follow-up to these books which presents several overviews of the research history on railway environments in Denmark and Sweden, as well as the preservation efforts and by providing examples of different railway environments in Denmark, Finland and Sweden.

The focus is here on the built environment, and on the natural environment in one of articles, but it is worth remembering that there are historically a number of approaches to railways. The American business historian Alfred D. Chandler has stressed how the American railroad companies pioneered the establishing of large organisations and bureaucracies for the planning and coordination of running the railways, and therefore as pioneers of large corporations themselves, which later came to dominate American business.[1)] Others have characterised the middle of the 19th. century as the Railway Age.[2)] The British-Venezuelan scholar, Charlotta Perez, specialising in technology and socio-economic development, likewise argues that the period lasting from 1829 to around 1875 was dominated by a techno-economic paradigm of steam and railways.[3)] Especially in American historiography, a transport revolution has been seen as important for the economic growth of the USA, first with canals and later with railways. The railway has also been seen in relation to the city and urbanisation.[4)] Common for most of the various perspectives is a focus on the early development, on the introduction of the railways, and thereby on the railways as innovations.

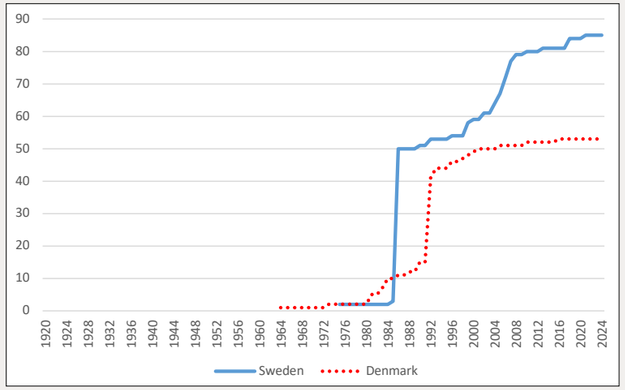
Another approach is to analyse railways as big systems and thereby laying a greater emphasis on the years around 1900, or as parts of 'mega-systems' as the Swedish historian of technology, Staffan Hansson, has done for the mining activities, the railway and electricity supply in Northern Sweden in the period 1880-1920, where each element is dependent on one another.[5)]

Others have argued for the need to look not at innovations, but on how long the technology, the buildings and the rollingstock was in use, how long it lasted, and especially how it was renewed, repaired, improved and adapted for new requirements.[6)] Many railways are still functional; some are closed, and new ones have been laid out. The railways of today, however, have little in common with the one inaugurated in 1829 between Manchester and Liverpool.

In architectural history, the interest has mostly centred on the station buildings as part of the revaluation of historicistic architecture.[7)] This interest also included functional analyses of the station buildings.[8)] The layout of early stations clearly reflected and supported a class society, as David Cannadine among others points out for Britain, and the same appears to hold true for Scandinavia.[9)] In Sweden and Denmark, the passengers were likewise divided into three classes, not only in the wagons but also with different waiting rooms at the major stations. At the moment, we do not have a precise chronology of when the waiting rooms were amalgamated, but we know the second and first class in the trains was combined from 1934 in Denmark, and the third class was abolished in Sweden from 1956 on.

Another change which research has drawn attention to is the introduction of direct passenger transit through the stations to the platforms. This transit blocked by the ticket office and luggage room in the first generations of stations, meaning that passengers were directed to waiting rooms on the sides. Starting in the 1890's, the way through the stations became more direct and clearly planned.

On another level, terminals were changed into passthrough stations made possible by the laying out new tracks through, or along, the built-up area – in the case of Copenhagen along the former ramparts. An early example – also in a European context – is "the Connecting Line" (Sammanbindnings-Banan) in Stockholm from 1870, which required both bridgebuilding and tunnel construction. German examples include the central station in Hanover



Listed Railway Buildings in Denmark and Sweden. Source: Slots- og Kulturstyrelsen and Riksantikvarieämbetet.

An intercity train (IC3) at the mainline between Copenhagen and Korsør near Sorø. The line was established 1856 and extended to double track in 1900. The IC3 trainset was introduced in 1989 as a development of the IC-concept – intercity trains – introduced in Denmark in 1974. Photography by René Strandbygaard 2016.

from 1881, which additionally has subways linked to the platforms; the Stadtbahn stations in Berlin from 1882, and the Hauptbahnhof in Hamburg from 1906. In Denmark, the change occurred later with the rearrangement of the terminal in Viborg in 1896; the third central station, "Boulevardbanen", in Copenhagen from 1911, and finally the station in Randers in 1936.

Another change was the establishment of a second track which likely took place earlier in Denmark than in the other Nordic countries. For example, the line from Roskilde to Korsør was established in 1856, with the second track in use from 1900. But these changes, as well as the forms of the new embankments, has not been the subject of any research.

In England, there has been some research done on railway works such as Swindon, and an overview of railway goods sheds and warehouses. In the Nordic countries such work is still missing although some of the works have been documented.[10)]

There exists sketches of how railways made their impact on the landscape in the first years, especially with reference to romantic poets and critics like Wordsworth and Ruskin: *"Your railroad mound, vaster than the walls of Babylon – they brutally amputated every hill on their way"*. The planned construction of the railway embankment to Venice appears to have triggered Ruskin to write *The Stones of Venice,* which was published in 1851-53.[11)] According to the pioneering work, *The Making of the English Landscape,* from 1955 by the English historian W.G. Hoskins, who was in turn inspired by preceding romantic authors, the railways made a major imprint on the English landscape, but it is as though the Railways did not change after their introduction. The industrial archaeologist Barrie Trinder goes into more details in his book, *The Making of Industrial Landscape,* from 1981 and operates with a wider chronology, but the approach is basically the same as Hoskins'. Trinder distinguishes between the early wagonways (horse drawn with wooden rails) in the mining districts up until 1840, the breakthrough of the railways in the period 1830-50, and their development in the years 1850-1900. Besides the change of the landscape by the many embankments, bridges, cuttings and tunnels, Trinder underlines the creation of entire railway areas or quarters in the major cities with railway workshops, goods sheds, coal yards, locomotive depots, cattle docks, sorting sidings alongside the well-known viaducts, that carry the railway tracks through the English cities.[12)] One could also ask what kinds of industry were attracted by the railways, like the Burton-on-Trent breweries, or the impact of the railways on the local population.[13)]

The railways were also followed by gardens or parks, protective cultivation and kitchen gardens, at least it was so in Sweden, where this theme has been investigated.[14)]

While Hoskins and Trinder describes the impact of the railway on the landscape, the German-American critic, Wolfgang Schivelbusch, points to the change in perceptions of the landscape brought by the railway – among other things. The changes in perceiving the landscape, and the impact of different kinds of transportation, is also a central theme in the study of a local community in Scania by Henrik Ranby. Further the railway can be analysed as a symbol and as identity building.[15)]

All in all, there appears to be a general agreement within the historical literature on the importance of the railways in the middle of the 19th century, "the Age of Steam and Railways". The changes and effects of the railways around the beginning of the 20th century appears to be less valued in the general historical literature, although it is recognised. One can wonder why the period 1829-1875 and not the period 1875-1908 is called the Age of Steam and Railways. The extent to which the railway has changed the landscape is another question that could be explored. However, in this issue of *Fabrik & Bolig* we will not try to answer that question, but instead we will provide an overview of what has been written in Denmark and Sweden about railway history and especially railway landscapes, environments and buildings, and then restrict our self to three examples of railway environments seen through the eyes of an archaeologist, an art historian and a geographer.

LISTED RAILWAY ENVIRONMENTS IN DENMARK AND SWEDEN

Prior to wrapping up this introduction, giving an overview of listed railway environments in Denmark and Sweden may be of benefit to the reader, as it is possible to regard listing a type of history writing. We will be omitting Finland as the protection of buildings and environments is organised differently, instead with planning as the main tool.[16)]

The listings in Denmark have been carried out since 1964, with Roskilde Station as the first, and Handest Station in 2016 as the latest. Most listings were passed in 1992-93 as a result of a review of the Danish State Railways (DSB) station buildings.[17)] In addition, the Copenhagen-Korsør railway line was designated as one of 25 national industrial monuments in 2007, which was only a recommendation to take care of the heritage with no legal consequences.

In Sweden, the listing started in 1975 with two stations: Vansbro from 1899 and Halsmo from 1858. As many as 47 listings were carried out in 1986 at the same time as the Nordic Journal of Settlement History and Built Heritage (Bebyggelseshistorisk Tidskrift) published an issue on railway environments. Later, several buildings have been listed, with Tjuls Station on Gotland in 2021 as the last for the time being.

There are currently 53 listings in Denmark and 85 listings in Sweden that include elements of railway environments. These are mainly station buildings, but there are also listed warehouses and a few examples of other building types such as signal posts and water towers.

In Denmark, two depots with associated turntables (in Roskilde and Viborg) and three locomotive workshops at the former central workshop in Aarhus, are protected. In addition, there are two porter's residences (portørboliger) at Vedbæk Station and six preserved railway bridges.

In Sweden there are three depots with turntables (in Kristinstad, Nässjö and Nynäs), several bridges among others the Årstabron in Stockholm from 1929 designed by the architect Cyrillus Johansson, but like in Denmark it is difficult to find examples of listings of dwellings for railway personnel.

Chronologically, the buildings in Denmark cover the period 1847 to 1930; from the first railway station in what is now Denmark in Roskilde, to Nørrebro Station in Copenhagen.

In Sweden, the listings cover the period 1858 to 1935 from Fryksta Järnvägsstation and Göteborgs Centralstation to Falköpings Järnvägsstation.

In the last couple of years a few short railway lines have been listed. In Sweden, sections of two narrow track railways and the buildings along the Malmbanen (Ore Railway) in the far north, and in Denmark the short line to Aabenraa have been protected in 2024 as an ancient monument, with 11 shorter embankments registered since 2020. It is possible to see these events as the inception of a wider recognition that railways are more that station buildings. On the other hand, the railway works, warehouses and workers dwellings are still largely missing, not the least in the period after 1935.

As in architectural history the main interest in listing has been in the (early) station buildings.

THANKS

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Literatur

Burman, Peter and Michael Stratton, *Conserving the Railway Heritage.* London: E & FN Spon 1997.

Cannadine, David, *Class in Britain.* New Haven and London: Yale University Press 1998, p. 89.

Cattell, John and Keith Falconer, *Swindon: The Legacy of the Railway Town.* London HMSO 1995.

Chandler, Alfred D., *Scale and Scope: The Dynamics of Industrial Capitalism.* Cambridge Mass & London 1990.

Dyos, H.J., Railways and housing in Victorian London. *Exploring the Urban Past. Eassys in urban history by H.J. Dyos.* D. Cannadine and D. Reeder (eds.). Cambridge University Press 1982, p. 101-125.

Edgerton, Davis, The Shock of the Old. Technology and Global History since 1900. [2006] London: Profile Books 2008.

Hansson, Staffan, Malm räls och elektricitet, Skapandet av ett teknologiskt megasystem i Norrbotten 1880-1920. *Den konstruerade värden. Tekniska system i historiskt perspektiv.* Pär Blomkvist and Arne Kaijser (eds.). Stockholm Brutus Östlings Bokförlag Symposion 1998, p. 45-76.

Hartmann, Eivind, Øistein Mangset, and Øyvind Reisegg, *Neste stasjon: en guide til jernbanens arkitekturhistorie.* Oslo: Gyldendal, 1997.

Hoskins, W.G, *The Making of the English Landscape.* [1955] Toller Fratrum: Little Toller Books 2013.

Hvattum, Mari, Panoramas of Style. Railway Architecture in Nineteenth-century Norway. *Journal of the Society of Architectural Historians,* Vol. 70, No. 2 (June 2011), pp. 190-209.

Kellermann, Robin, *Im Zwischenraum der Beschleunigten Moderne. Eine Bau- und Kulturgeschichte des Wartens auf Eisenbanen 1830-1935.* Bielefeld: Transcript 2021.
Krings, Ulrich, *Deutsche Grossstadt-Bahnhöfe des Historismus.* Vol. 1-2, Köln 1981.
Linde, Gunilla, Från Malmö till Boden på 40 år – A.W. Edelsvärds stationshus 1855-95. *Bebyggelsehistorisk Tidskrift* no. 1986, p.108-130.
Lindgren, Anna, *Staten som trädgårdsmästare. Järnvägens planteringar från naturförskoningskonst til testamente.* Göteborgs Universitet 2022.
Lindqvist, Svante, *Changes in the Technological Landscape.* [1994] Science History Publications /USA a division of Watson Publishing International LLC Sagamore Beach 2011, p. 3-24.
Minnis, John with Simon Hickman, *The Railway Goods Shed and Warehouse in England.* Swindon: Historic England 2016.
Nevanlinna, Anja Kervanto, Following the tracks – railways in the city centre of Helsinki: bygone past or unwritten urban history? *The City and the Railway in Europe.* Ralf Roth and Marie-Noëlle Polino (eds.). Aldershot: Ashgate 2003203-219.
Palmer, Marilyn and Peter Neaverson, *Industrial Archaeology Principles and Practice.* London: Routledge 1998.
Perez, Carlota, *Technological Revolutions and Financial Capital. The Dynamics of Bubbles and Golden Ages.* Cheltenham/ Northampton: Edward Elgar 2002.
Perkin, Harold, Age of the Railways. London 1962.
Pevsner, Nikolaus, *A History of Building Type.* London: Thames and Hudson 1976, p. 225-234.
Raabyemagle, Hanne, N.P.C. Holsøe og den 'officielle' danske jernbanestation. *Fabrik og Bolig* 1, 1982, p.11-22.
Raabyemagle, Hanne and Poul Vitus Nielsen, Fredningsværdier i dansk Jernbanearkitektur. *Fabrik og Bolig* 2, 1991, p.17-37.
Ranby, Henrik, *Åkdon, Blick och Landskap. Om relationer mellan kommunikationer, kulturmiljö och landskapssyn med huvudexempel från Kullahalvön, Skåne.* Göteborg: Makadam 2020.
Schivelbusch, Wolfgang, *The Railway Journey. Industrialization of Time and Space in the Nineteenth Century.* [1977] University of California Press 2014.
The City and the Railway in Europe. Ralf Roth and Marie-Noëlle Polino (eds.). Aldershot: Ashgate 2003.
Trinder, Barrie, *The Making of the Industrial Landscape.* [1982] London: Phoenix 1997.
Viklund, Roine, *Riksgränsbanans elektrifiering. Stat och företag i samverkan: 1910-1917.* Doktorsavhandling Luleå Tekniska Universitet 2012.

Notes

1) Alfred D. Chandler, *Scale and Scope: The Dynamics of Industrial Capitalism.* Cambridge Mass & London 1990.
2) Harold Perkin, Age of the Railways. London 1962.
3) Carlota Perez, *Technological Revolutions and Financial Capital. The Dynamics of Bubbles and Golden Ages.* Cheltenham/ Northampton: Edward Elgar 2002, p. 8-19.
4) *The City and the Railway in Europe.* Ralf Roth and Marie-Noëlle Polino (eds.). Aldershot: Ashgate 2003.
5) Staffan Hansson, Malm räls och elektricitet, Skapandet av ett teknologiskt megasystem i Norrbotten 1880-1920. *Den konstruerade värden. Tekniska system i historiskt perspektiv.* Pär Blomkvist and Arne Kaijser (eds.). Stockholm Brutus Östlings Bokförlag Symposion 1998, p.45-76. Roine Viklund, *Riksgränsbanans elektrifiering. Stat och företag i samverkan: 1910-1917.* Doktorsavhandling Luleå Tekniska Universitet 2012.
6) Svante Lindqvist, *Changes in the Technological Landscape.* [1994] Science History Publications /USA a division of Watson Publishing International LLC Sagamore Beach 2011, p. 3-24. Davis Edgerton, The Shock of the Old. Technology and Global History since 1900. [2006] London: Profile Books 2008.
7) Nikolaus Pevsner, *A History of Building Type.* London: Thames and Hudson 1976, p. 225-234. Carroll Meeks, *The Railroad Station.* New Haven 1956. Ulrich Krings, *Deutsche Grossstadt-Bahnhöfe des Historismus.* Vol. 1-2 Köln 1981. Eivind Hartmann, Øistein Mangset, and Øyvind Reisegg, *Neste stasjon: en guide til jernbanens arkitekturhistorie.* Oslo: Gyldendal, 1997.
8) Hanne Raabyemagle, N.P.C. Holsøe og den 'officielle' danske jernbanestation. *Fabrik og Bolig* 1, 1982, p.11-22. Hanne Raabyemagle og Poul Vitus Nielsen, Fredningsværdier i dansk Jernbanearkitektur. *Fabrik og Bolig* 2, 1991, p.17-37. Gunilla Linde, Från Malmö till Boden på 40 år – A.W. Edelsvärds stationshus 1855-95. *Bebyggelsehistorisk Tidskrift* no. 1986, p.108-130.
9) David Cannadine, *Class in Britain.* New Haven and London: Yale University Press 1998, p. 89. Robin Kellermann, *Im Zwischenraum der Beschleunigten Moderne. Eine Bau- und Kulturgeschichte des Wartens auf Eisenbanen 1830-1935.* Bielefeld: Transcript 2021.
10) John Cattell and Keith Falconer, Swindon: *The Legacy of the Railway Town.* London HMSO 1995. John Minnis with Simon Hickman, *The Railway Goods Shed and Warehouse in England.* Swindon: Historic England 2016. Peter Burman and Michael Stratton, *Conserving the Railway Heritage.* London: E & FN Spon 1997.
11) According to a lecture in 2004 in Venice by Guido Zucconi.
12) W.G Hoskins, *The Making of the English Landscape.* [1955] Toller Fratrum: Little Toller Books 2013, p. 231-243. Barrie Trinder, *The Making of the Industrial Landscape.* [1982] London: Phoenix 1997, p. 144- 165 and 227-230.
13) Marilyn Palmer and Peter Neaverson, *Industrial Archaeology Principles and Practice.* London: Routledge 1998, p. 29. H.J. Dyos, Railways and housing in Victorian London. *Exploring the Urban Past. Eassys in urban history by H.J. Dyos.* D. Cannadine and D. Reeder (eds.). Cambridge University Press 1982, p. 101-125.
14) Anna Lindgren, *Staten som trädgårdsmästare. Järnvägens planteringar från naturförskoningskonst til testamente.* Göteborgs Universitet 2022.
15) Wolfgang Schivelbusch, *The Railway Journey. Industrialization of Time and Space in the Nineteenth Century.* [1977] University of California Press 2014. Henrik Ranby, *Åkdon, Blick och Landskap. Om relationer mellan kommunikationer, kulturmiljö och landskapssyn med huvudexempel från Kullahalvön, Skåne.* Göteborg: Makadam 2020. Mari Hvattum, Panoramas of Style. Railway Architecture in Nineteenth-century Norway. *Journal of the Society of Architectural Historians,* Vol. 70, No. 2 (June 2011), pp. 190-209. Anja Kervanto Nevanlinna, Following the tracks – railways in the city centre of Helsinki: bygone past or unwritten urban history? *The City and the Railway in Europe.* Op.cit. 203-219.
16) See Fabrik og Bolig 2023 which focus on the preservation of industrial heritage in the Nordic and Baltic countries.
17) cf. Fabrik og Bolig 1991, 2, p.17- 37.

Swedish Railways and Cultural Heritage Research

Layers of Development and Reduction over 170 years

ANNA LINDGREN AND BJÖRN HASSELGREN

Amongst comparable technological systems, the railway ranks highly both in terms of longevity, and the vigour of its continuous development over time. The presence of the railway system over such a long time-period has generated a vast and varied set of physical assets and socially interrelated processes, customs and memories. This longevity is very much the crux of the challenge in dealing with the cultural heritage of the railway system: How do we deal with the large and varied volume of material and data gathered over the preceding 170 years? In this article we present a framework for structuring the long development of the railway system, intending as a supporting effort towards analysing and serving, in practical terms, the preservation of railroad-related cultural heritage. The article brings onboard research from the cultural heritage field connected to the different time periods, and close out by discussing some important and relevant research questions for future investigation.

PURPOSE

The purpose of this article is to identify different categories of cultural heritage-research related to the long-term development of the Swedish railway system, from the middle of the 19th century to the present day. Initially, for framing and context, the course of development of the railway system is presented. The discussion is structured in four broad time periods and three functional categories. Furthermore, we discuss the gaps in the current research, and propose relevant, if not needed, further avenues of investigation. The article focuses on the built environment from historical, cultural and societal perspectives.

BACKGROUND

Many people have an emotional connection to railways being themselves travellers, and through relatives who still are, or have historically worked on the railroad. This is unsurprisingly in part a consequence of the size of the railway system and its organisations. By the middle of the 20th century, the National Railway Board (Statens Järnvägar – SJ) was the largest employer in Sweden with more than 75 000 employees in various positions within the railway organisation.[1)] In 2022,[2)] there were 244 million passengers travelling by train and 71 million tons of goods transported by freight trains in Sweden, compared to 1923[3)] when the corresponding figures were 63 million passengers and 32 million tons of freight.

Both passenger and freight transport on rail have lost market share to other transport modes. Passenger transport on rail has kept an important role, especially for regional and local transport, while freight transport on rail has lost considerable market shares to road transport and other modes except for the heaviest goods transported over long stretches. This huge system has generated a multifaceted number of buildings, rail tracks and other technical systems. Statistics of interest in this context are 253 listed buildings and facilities classified as National monuments *(Statliga byggnadsminnen and Byggnadsminnen)* and a huge number of buildings and bridges with cultural values.[4)]

There are some interdisciplinary overviews of the development and impact of the Swedish railways authored by researchers in the 1980s and around the turn of the millennium.[5)] There is also a huge number of publications from lay-men and practitioners regarding the railway system, though taking different approaches, mostly presenting very practical or local perspectives.[6)] However, what can be said of the state of research taking a cultural heritage perspective within academia?

The railways have affected the landscape and societal development in depth. Despite that, the cultural heritage connected to the railways is barely discussed and researched through that specific lens. In this article, we are primarily discussing the railway system from an infrastructural angle with a focus on the physical expressions of the railway system. Apart from this, it is also relevant to analyse the social and societal processes relating to the rail-infrastructure, with the transportation flows in focus, but also including all different aspects of human interrelation with the rail-system. These aspects do not, however, leave behind as apparent physical expressions as the infrastructure does, which is at the core of the cultural heritage definition with a focus on the physical expressions we are using here.

Analysing a long-term technological system like the railways, and its impact on the physical (and social) environment, brings to the fore a number of aspects that are common to longitudinal studies.[7] The physical infrastructure assets developed over time in the railway system consist of rail-infrastructure including buildings at stations, historically including gardens; dwellings for employees; maintenance-related assets; buildings directed at rail-system maintenance, and the maintenance of rolling stock. These parts of the railway system, as well as the industries connected to the rail system such as manufacturing focused on rail-system parts and/or rolling stock, together with primarily freight transport related interchange nodes (freight terminals, shunting yards etc.), all-together constitute an industrial heritage, which shares characteristics with other technological systems that likewise reflect the gradual growth of the general economy.[8]

Over time, freight transport related parts of the railway system have successively been separated from the passenger transport serving parts of the system. For example, shunting yards have often been relocated outside cities, indeed stations and industries alike have become increasingly, physically externalised in their relation to the associated city area. Such industrial assets (buildings, facilities, plants, nodes) are also generally the subject of continuous alterations in the uses of land and assets. An overarching transformation takes place leading to a separation of different functions from the inner cities.

The part of the railway system focused on passenger travel is often more interconnected with cities, towns and villages, where the exchange of passenger transport flow occurs, when compared to freight transport. The traditional railway station has also often been the focal point when it comes to interest in preserving cultural heritage generated over time, while the supporting aspects of the railway system – such as maintenance facilities for cars and locomotives – have often been developed in mixed-use between freight and passenger flows, and has suffered a lesser focus, being regarded as less important parts of the cultural heritage and for preservation.

As railway stations have often been integrated with town landscapes and city centres, with many of the railway stations as high-class buildings with ambitious design and architecture, they have been relatively persistent over time with regards to societal changes. It might be that additions to railway stations have been made to accommodate increasing passenger flows and traffic, and to be able to supply new services to passengers, like shops, restaurants and so on, but older parts of the stations are often still in use, and merely adapted to new circumstances and needs. This utilisation may be very different from how the buildings were originally used, both internally and in relation to adjacent land, such as gardens, parking and so forth.[9]

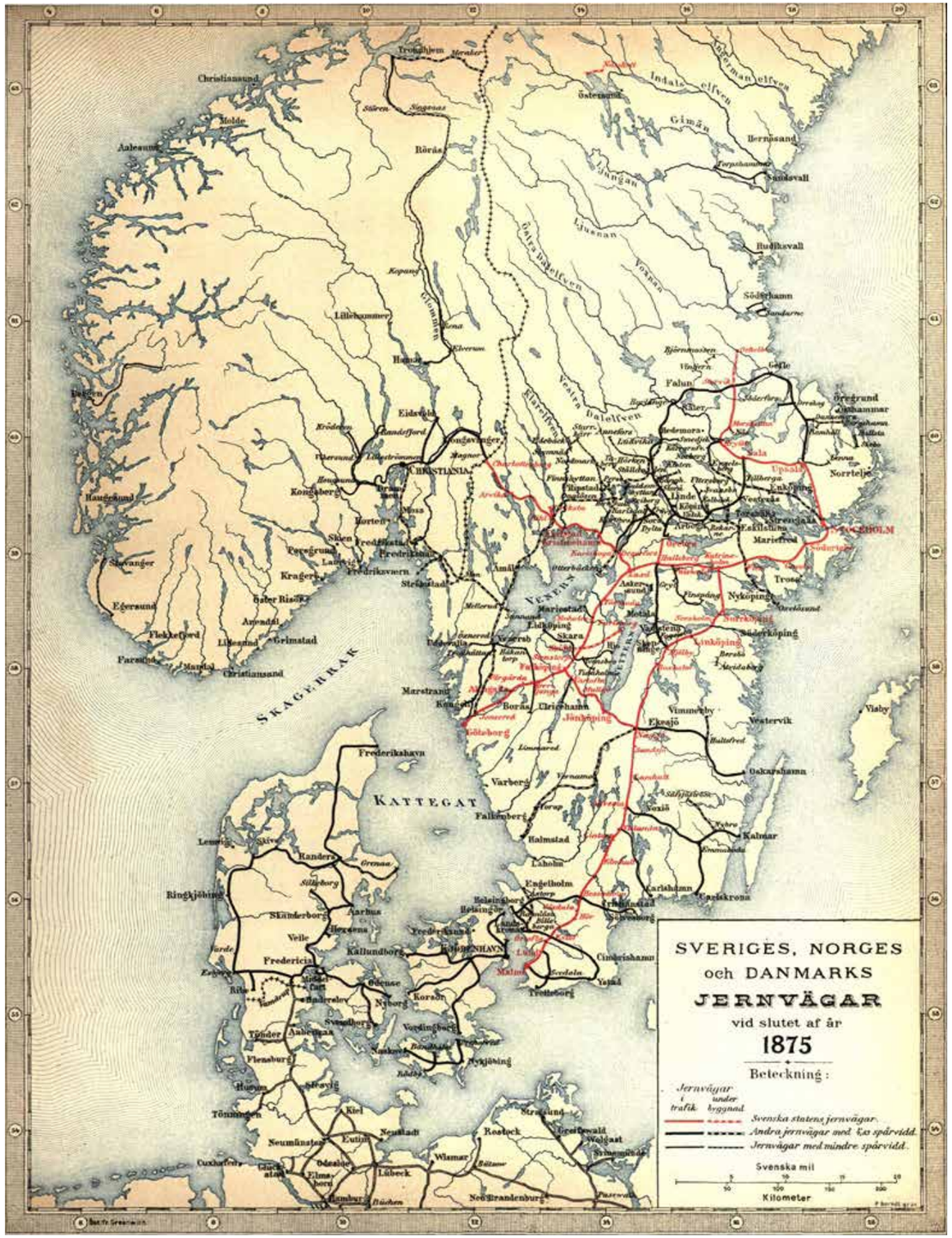
Following this way of describing the railway system as it has come to be, broadly speaking, we can identify three different classes of physical cultural heritage:

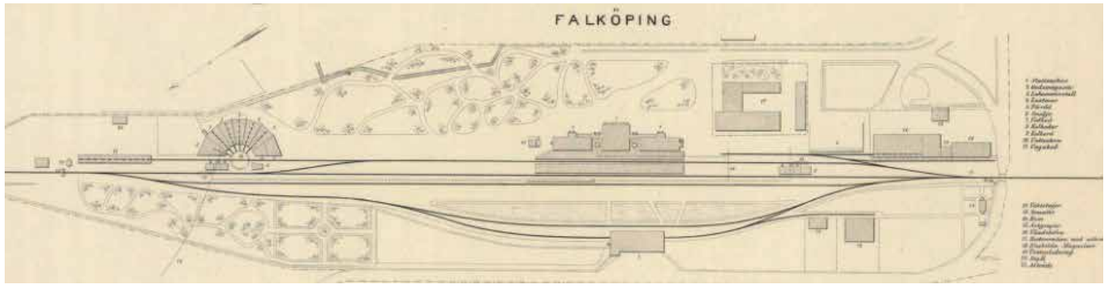
- The rail (track) system, primarily outside cities.
- Facilities serving freight transport and the railway system.
- Facilities serving passenger transport.

Furthermore, it could be argued that the three classes express different aspects of cultural heritage. The rail system outside cities as examples of *engineering history;* bridges, tunnels, electrification, and technologically related assets for the steam engine era (water-cisterns, coal-storages, etc.). The rail tracks in general also represent an intrusion in to the landscape, but also provides an understanding of the transportation systems' development, and the way the railway system has worked over the years, with flows of transportation changing over time.

The facilities related to the maintenance of the railway system and freight functions are more connected to *industrial heritage* at large, which naturally includes a myriad different structures. The railway system represents an important stage in the gradual development of the industrial economy and society, and the still-standing assets can transfer an understanding for how industrialisation played out over time; restructuring land-use and adding new assets, buildings and facilities, all set further apart from cities over time. Today these older buildings, objects and facilities might be in different modes of decay. This is a central obstacle facing the preservation of industrial heritage at large, bringing into the endeavour

A map of railway lines in Sweden, Denmark and Norway in 1875. In Sweden the state-owned lines are in red and the private lines in black. From: Bidrag till Sveriges Officiela Statistik. L) *Statens Järnvägstrafik. 19 a. Trafikstyrelsens underdåniga berättelse för år 1880, Bihang. Kartor öfver utsträckningen af Sveriges jemte Norges och Danmarks jernvägar vid slutet af hvarje år under tjugufemårsperioden 1856–1880.*





The station area at Falköping as an example of what sort of buildings, facilities and gardens that was created along the lines. From: *Teknisk-Ekonomisk beskrifning. Svenska statens Jernvägsbyggnader. I. Vestra stambanan, "Stockholm-Göteborg", med utgrening till Örebro,* Stockholm: Iwar Hæggströms Tryckeri 1868.

high costs, a danger of accidents, and often environmental pollution – the latter rendering alternative uses of industrial landscapes very expensive.[10)]

Railway stations and other parts of the railway system specifically provided for passenger transport are usually, as noted above, more often integrated into the urban fabric. This means that the buildings are visible to a higher extent than the other parts of the railway system, and that the questions that relate to these are part of a wider *urban planning and place-making discourse,* where the cultural heritage aspects are often at the fore. The central location of railway stations often leads to a high development-pressure on these in times of urban renewal, as the land-value is generally high and drives regeneration. For other sections of the railway systems; formerly utilised stations, gardens, and facilities may have become obsolete from a transportation point of view, since railways have been redirected, or due to decreasing traffic volumes following closures of stations, and a downgraded rate of maintenance as an effect. This latter situation may prompt voluntary actions to rescue old(-er) buildings from further decay and possible demolition.[11)]

FOUR PERIODS OF RAILWAY DEVELOPMENT AND RELATED CULTURAL HERITAGE STUDIES AND RESEARCH

In this section, we offer brief descriptions of the most important aspects of the different time periods of the railway systems' development and retraction, as regards the cultural heritage produced over time and often still in use or preserved today. The organisational and financial principles have often affected the setting of the system, including with regards to what kind of buildings and other physical expressions that have been added to the system. We begin our study when planning for the first mainlines began, but there are also older rail-bound transport systems whose cultural heritage deserves to be analysed.

Establishment 1850-1900

The establishment of the state railways was surrounded by an intense political debate – how to finance, by whom, and where to place the new transport system's different parts; stations, rail tracks and auxiliary facilities like maintenance and shunting buildings, all in relation to various interests at play. Taking influences from England, Germany and other countries, collected through educational journeys and literature; techniques, know-how, and materials were imported to Sweden. The organisational and staffing skills largely originated in the construction of the canals, e.g., *Göta kanal* and *Trollhätte kanal,* and the military organisation.[12)]

The railways played an essential part in the industrialisation and modernisation of Sweden. Modern project-ideals regarding preferred development, as expressed by the leading layers of society regarding education, discipline, and cultivation of land and human resources, were brought into practice with the help of the railways. The state wanted to showcase a model for architecture and cultivation, and connect the nation in a way that had not been possible up until that point. The structuring role of the railways in societal development cannot be emphasised enough.[13)]

The new railway system was in the beginning limited to the middle and southern part of Sweden, but after an initial phase with focus on south and mid-Sweden, the plans and construction continued northward. Previous research has often emphasised the roles of a few pioneers and leading persons for the realisation of these projects.[14)] It would be interesting to also include the more numerous groupings of people and staff who were engaged in the establishment projects. Many of these people found themselves favoured by the projects financially, it serving as means of acquiring an income, but the projects also involved many challenges for the staff and their relatives, what with diseases, accidents and unfavourably dispersed families constituting a darker side of the large railway projects.

From the very first beginning of the establishments of the main lines in 1855, one architect was hired for the Western Main line *(Västra Stambanan)*, and another one hired for the Southern Main line *(Södra Stambanan)*. The historiography has paid a lot of attention to the first one, Adolf Edelsvärd (1824-1919), who became the head architect for the state railways from 1856 to 1895.[15)] The other architect is overlooked in research so far, in fact his name is not even known. Some minor studies have been made regarding the architecture of the private lines, but we still lack comprehensive knowledge of long-time structures and change in design ideals, organisation, collaboration, and so on. In addition to that, almost no studies have been made of the gardens adjacent to stations that belonged to the private lines.

The main lines began forming from Gothenburg and Malmö heading towards the capital city of Stockholm. By the end of 1856, the first parts of the main lines were inaugurated – Malmö – Lund, and Gothenburg – Jonsered. A few years later, in 1862, the Western main line was completed from Gothenburg to Stockholm, and the Southern main line from Malmö to Falköping, inaugurated in 1864, providing connection to the western line. The architect office produced drawings for the buildings; the design of the rails and technical assessments were made by engineers, and local gardeners were hired to arrange the gardens. Each section of the railway was led by a "Station Engineer" *(Stationsingenjör)* who organized and hired staff for the construction and gardening, and also requisitioned all the materials and support services needed for the effort.[16)] Apart from the organisation of the State railways on a national level, studied by Berggrund & Bårström 2014, the involvement and cooperation between different actors in the local society in the building process has not been studied in similar detail so far. A significant, unresearched field is the role played by women; in general, in railway families, as salesmen of different goods and services, as navvies, and so forth.[17)]

Early industrial railways and freight transport have not been studied to the same extent as the history of the main lines and passenger transport. We know quite a lot about trains and transports on the rail-system, but not so much about senders and recipients and the built facilities that were parts of the freight transport system. Studies have been made in relation to specific stretches and railways connected to industrial facilities, but the more general picture remains to be analysed and described.[18)]

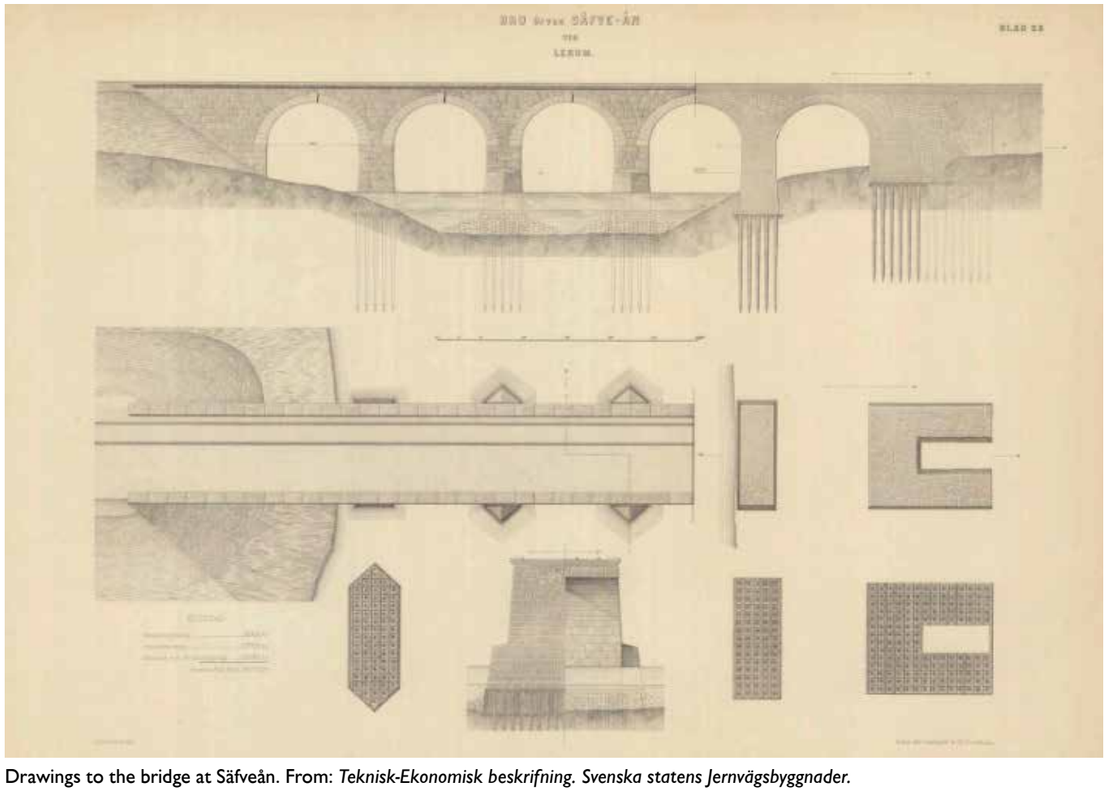
The built environment characterised many places with its station areas, which included a lot of buildings and technical facilities. In addition, extensive gardens and plant nurseries were established to provide the railway with plant material for ornamental, shelter and household needs.[19)] The railway connected places and regions, even countries. The landscape was, as a result, transformed in a comprehensive way, and a lot of new places where exchange of passengers and freight goods occurred were established. New meeting places were created in station buildings, with restaurants, wagons and gardens adding to the traditional places for exchange. News from the surrounding world reached towns and villages with newspapers, mail and people transported by the train, with a frequency and speed that had not been the case earlier. Even a national time-keeping standard was established in the end of the 1870s with a basis in the needs of the railway system.[20)]

The construction of the rail-lines outside the cities, where most people were affected by the new facilities relating to the railways, was very often a challenging process, supposing major excavations to provide for stretches of canals, the establishment of bridges and tunnels, all to unprecedented extent within Sweden. Only the major canal-projects, primarily *Göta kanal,* had had a size even remotely close to the grandeur and complexity of the railway construction. Roads had been constructed for a long time in Sweden, but the size of such projects had been less grand. Along the rail-lines in the countryside the railroad system introduced a new structure to the landscape, reducing the number of free passages across the terrain, but also leaving obvious landmarks, which are often apparent even today. The railroads, indeed, signalled that a new era was coming: An era of engineering and major man-made structures that altered the landscape and the way people interacted, or were directed by the system to interact.

A lineman cottage, number 26 at Gunnarp in Skåne, in the 1860s with its kitchen garden on the left side. In the background a mill and in the middle several people, including three children, are lined up. From: The Swedish Railway Museum, JvmKDAA02321.

This painting, by the artist Albert Blombergsson (1810-1875), is showing the first station area in Gävle built by Gefle Dala Järnväg (GDJ) in the 1860s. Notice the station building, the hotel, and the warehouse in the background and the engine house and the green area in the foreground. From: The Swedish Railway Museum, Jvm11775-1.

One study which exemplifies theoretically based research concerning a major railway stretch established during this timeperiod, but also covering later periods, is *Åkdon, blick och landskap. Om relationer mellan kommunikationer, kulturmiljö och landskapssyn med huvudexempel från Kullahalvön, Skåne* (2020) by Henrik Ranby, researcher in conservation. Another study that stands out is *Stationshus – Järnvägsarkitektur i Sverige* (2010) by Gunilla Linde Bjur, architect and researcher in art history.[21] As stated above, these are, though, two of only a few, similar examples with this cultural heritage as research subject.



Drawings to the bridge at Säfveån. From: *Teknisk-Ekonomisk beskrifning. Svenska statens Jernvägsbyggnader. I. Vestra stambanan, "Stockholm-Göteborg", med utgrening till Örebro,* Stockholm: Iwar Hæggströms Tryckeri 1868.

The station and transformer building in Vassijaure, along the line from Kiruna in Sweden to Narvik in Norway, was built in the 1910s and is safeguarded as a National Monument (*Statligt byggnadsminne)*. From: The Swedish Railway Museum, JvmKDAA02321.

Maintenance 1900-1950

During the first part of the 20th century, a lot of effort was given to maintenance and improvement of the railway system. This entailed major additions to the existing railway system such as electrification and building of double tracks, but fewer additions with regards to the length of the system, although the Inland line *(Inlandsbanan)* stands as the exception to that. The electrification of the railways started in 1910s in the very north of Sweden, deeply studied by Viklund 2012. In Viklund's dissertation, the major construction works necessary for incorporating the electrification technology, co-built with station buildings, is analysed, primarily from a technological rather than a cultural heritage point of view.[22] How the electrification of the railways, beside style ideals, affected architecture and the design of facilities in parts of Sweden other than the north has though not yet been studied in a comprehensive way. The Inland line, which was inaugurated in 1937, was the last major railway project, managed by the National Railway Board (SJ) during this period. The history and architecture of this line has been described in a report by the National Heritage Board *(Riksantikvarieämbetet)*.[23]

In 1939, it was decided by the Parliament that all important railways should be transferred – on a voluntary basis, but effectively without any alternative – to state ownership and management, which meant that the state incorporated 7,000 kilometres of railway, previously owned and managed by private and local railway companies. The idea behind the nationalisation was to reap coordination gains and rationalisation effects in the railway system. This took place during a situation in which several railway companies experienced financial problems, brought about by competition from road vehicles and sometimes also by deferred maintenance.[24] Incorporation of the private lines, with its different characters of architecture and design, have been studied primarily from an economical-historical perspective, but not as much from a cultural heritage perspective.[25]

A wide variety of different materials have been used in the railway facility and rolling stock like metal, wood and paint, and is in many cases still in use, but there exists as of yet just one single study with a cultural heritage and conservation perspective focusing on the use of different materials. In the dissertation *Painting Treatments of Weather-Exposed Ferrous Heritage. Exploration of Oil Varnish Paints and Painting Skills,* Arja Källbom investigates how anticorrosive oil varnish painting can be used in the maintenance of ferrous heritage. The starting point in the study is the industrial heritage and the railway heritage, and paint used from the 1920s and a couple of decades beyond.[26]

During the Maintenance-period there was an interesting example of expressing the ideal of furthering public education, with had its roots in the 19th century: The National Railway Board (SJ) hired landscape historian Mårten Sjöbeck, with the position as an Agency director. Between the years 1928 to 1950 he published a series called The Mainlines Landscape books *(Statsbanornas landskapsböcker)*. The books expressed an ideal of nature, culture and travelling in a context of education. This, and the educational orientation of the SJ Director of Gardening Gösta Reuterswärd, is studied by Johan Bergkvist in a licentiate dissertation 2013.[27]

Kiruna as an example of a well organised and maintained station area with technical facilities like the water tower in the middle. Notice the well-mowed lawns and manicured gravel surfaces, the planted trees and hedges, and the houses to the employees in the background. Photo: T Dahllöf 1928. From: The Swedish Railway Museum, JvmKDAA11273.

SJ bus-operations in Funäsdalen, in the north of Sweden. Photo: Lennart Nilsson 1956. From: The Swedish Railway Museum, JvmKBDB16832.

Reduction 1950-2000

In the second half of the 20th century, the development of railroads in Sweden was characterised by two major changes: On the one hand, the finalisation of the nationalisation of the formerly privately owned railroads, as described above. On the other hand, the continuing and successively stronger development of road transport as a competitor to the railway system, for both freight and passenger transport. Combined, these two development paths meant that a strong pressure for change and increased effectiveness of the railway began significantly affecting the railway system.

Nationalisation of the railway reached its conclusion during the 1950s. A huge number of local and regional railroad-stretches, that had up until this time been built and managed by local corporations, often partly owned by the municipalities and industries in the regions, were transferred to the National Railway Board (SJ). Generally, these local and regional railroad companies had been built based on a government concession, which also generally was combined with government loans and/or grants. There where thus a complicated web of relations between the railroad companies and the government to sort out as the ownership was changed, and negotiations unfolded regarding the timing of transfer, and the price the state should pay for the assets and operations.

One of the difficulties relating to the combination of the formerly separated railway organisation was differing technological solutions. The gauge of the tracks was in many cases different and the capacity that the different railroad systems could transport in length and weight was also varying. Electrification was implemented to a varying extent. This brought an increased complexity to the railroad operations of SJ, and a need for organisational change and increased streamlining of the operations.

The competition from road transport (buses, cars and trucks) grew strongly from the 1950s on. SJ was also involved in these business lines, by operating both a network of buses and road freight transport services. That the state-owned transport operations should function in a setting of competition between the transport modes was part of the transport policy decision of 1963,[28] which was the result of a series of government investigations into handling the major infrastructure systems following both World War II, and the nationalisation of roads and railroads in the 1940s and 50s. For the railroads, the 1963 transport policy decision also meant that direct government support was to be extended to SJ to cover the deficits generated by the unprofitable parts of the rail network. The overall policy was, otherwise, that SJ should be operated as a utility institution, covering its costs by revenue extracted from the users of the system. Public response to closures was frequently negative, and SJ had difficulties explaining and defending its business-economically based decisions. The formerly strong position SJ enjoyed as "the railway of the entire people" (*"Hela Svenska folkets järnväg"*) was suddenly turned into a dilemma, as the idea that the railways were to be kept and operated "for the people" made the necessary reductions and closures even more controversial.[29]

The combination of strong changes to operations and the weak financial situation of SJ meant that numerous parts of the railroad system had to be shut down. This particularly affected minor operations and local parts of the system, but also brought a stronger focus on large scale standardisation in the freight-related aspects of railway operations. Local handling of freight in shunting yards were gradually transferred to larger terminals with shunting yards, and similar trends also affected the maintenance facilities for both the rail-system and trains. The effect was a generation of a large quantity of obsolete assets pertaining to railway operations; former stations, storage facilities and warehouses, maintenance buildings situated near the stations, shunting yards and side rail track-systems successively becoming obsolete.[30]

This restructuring of the operations was occurring alongside a gradually deteriorating maintenance standard of the railway system and its related facilities and assets at large. Railway tracks without traffic, old stations and maintenance houses not in use and tracks adjacent to railway stations in towns left without railway traffic, became over time a well-known sign of the railway system. The earlier, ambitious gardens and related facilities connected to railway stations found itself reduced to smaller flower beds, or indeed a cessation of gardening altogether. An impression of decay spread across the system well into the 1990s.

An example of decay. A storehouse next to other buildings from the railway safeguarded as National Monuments in Landeryd, in the western part of Sweden. Photo: Björn Olofsson, Jamtli 2021.

During the later decades of this period, the late 1980s to 2000, tendencies towards introducing changes to the railway system gradually grew stronger. The deregulation of the railways by the late 1980s, the splitting up of SJ in railway operations and a separate agency for management of the rail-track infrastructure, made it easier for SJ to focus on a development of new railroad transport efforts. The political interest in railroads also switched from perceiving railroads as the "reverse salient" of transportation development, to representing an attractive, efficient and environmentally friendly alternative, especially as concerns over emissions from fossil fuelled transport gradually became vogue. Innovation of rail-tracks, stations and freight transport facilities increased, often related to passenger services, with a focus on regional railroad transportation.

How did this development over five decades affect aspects of cultural heritage? There seems to be few examples of reports and research from the decades where changes to the railway system were accentuated. A report from the Swedish Railway Museum (2017:189) mentions that a huge number of former houses owned by SJ were gradually demolished, often because of advanced decay or due to being outdated from a living standard perspective. A substantial number of houses were transferred to private owners as railways were closed. This took place, however, without much in terms of elaborated description or research related analysis pertaining to these structures as the demolition and transferral processes went about. The first, substantial effort to describe and categorise station buildings and alike, from a cultural heritage perspective,

Mariefred with its station building and trains in use captured in 2020. Photo: Hans Wicklund.

The station building in Falun from the 1870s preserved and extended with a new building serving bus travellers since 2017. Photo: Jan-Åke Bosell 2015. From: www.vireser.se

was carried out by SJ during the 1980s, and in this process the county administrative boards *(Länsstyrelser)* and local municipalities were involved.[31)]

Aside from this general and overarching developmental trend, there has long since existed an interest in preserving railway history on a local level, and often facilitated by voluntary initiatives. Railway societies and associations have been formed to take care of railway systems that have been closed by SJ, and there are numerous such examples in Sweden. One prominent example of these, *Östra Sörmlands Järnväg,* was initiated by the late 1950s[32)] and is preserving a railway dating back to the late 1890s, with a railway station in a small village, Mariefred. From a cultural heritage perspective, these railway associations play a crucial role in the preservation and exemplification of how the railway system could function and appear in earlier periods.

New era 2000-

As previously described, following the first five decades after the Second World War, the railway system and railway transport gradually regained constructive momentum in the political sphere, and in the public debate on transportation issues. Several different influences had their part in this turn-around in perceptions of the railways, from the unmodern "reverse salient" in the transportation system to – once again – becoming a vital part of visions for a society more in line with sustainable development, than other transport modes. The deregulation of the railway system by the late 1980s had an important role in this change, as it led to freer operating conditions for the remaining SJ, which was soon after the turn of the millennium transferred into a state-owned limited company (SJ AB), with a clear ambition to generate profit based on user fees and transport services delivered to public sector authorities, primarily regionally. The freight operations of SJ were separated to form a state-owned company, which was intended to more efficiently be able to meet the strong competition from other freight carriers in the market, which is primarily road transport. The latter has, however, proven to be a very challenging task, with rail freight remaining yet a low-margin operation.

The responsibility for the railway stations and some of the auxiliary systems such as shunting yards, were transferred from SJ to a new state-owned company, *Jernhusen,* which today operates many historic as well as modern railway stations. The Swedish Transport Administration *(Trafikverket),* formed in 2010 as a merger of the former Railroad and Road Administrations, has kept in their possession the land closest to the tracks, while private and public sector actors on local and regional level today own most of the land adjacent to the railways.

The interest in passenger rail transport was also renewed. Competition in the rail market, both for national lines and in the regional and local commuter and metro/tram system (in the latter cases in the form of procurement of operations of tracks and traffic by the regional and local authorities), transformed the previous state monopoly into a market with many players and activity. The stronger role of Regions in Sweden, with a responsibility for regional and local public transportation, from the 2000s onward also contributed to stronger demand for an increase to regional and local public transport in general, and with rail-transport as a preferred option. Among the first was the newly organised Region Skåne in southern Sweden, initiating a new regional train system, *"Pågatågen"*. Following this, passenger transport by rail increased strongly over the first two decades of the 2000s. As a side effect, many railway locations and stations that were taken out of use during the earlier time periods again have been put to use, with older railway stations being transformed into connection points for different modes of transport.

Visions for, and completion of, a number of major railroad infrastructure projects has been part of a strengthening interest in railroad transport, both in terms of passenger and freight. The actual new developments of railroads outside the cities following a standstill of almost 75 years has indeed prompted a strong, general interest in railroads. Additions of new rail systems to enhance railroad capacity around the major cities (Stockholm, Malmö, Gothenburg) have been important parts of this development, with the major project *Västlänken,* still ongoing in Gothenburg, the *City tunnel* in Malmö and the *City line* in Stockholm as other examples.

Teckomatorp in Skåne, in the southern parts of Sweden, is one example where to old station building is still connected to the railway and the new trains Pågatågen. Photo: Frederik Tellerup 2016. From: www.jarnvag.net

In addition to this, a new railway north of Stockholm reaching Umeå some 600 km north of Stockholm, has been another important addition to the rail system, with an ongoing extension to Luleå. Planning for high-speed rail (currently though planned for a speed of 250 km/h), connecting Stockholm, Malmö and Gothenburg has been underway since the early 1990s, and a first stretch from Stockholm to Linköping in mid-Sweden is under construction, with more stretches to follow. Additional visions for new construction are discussed and furthered on a local and regional level in several geographies in Sweden, some of these with a border crossing perspective. All these projects of course affect the landscape and the cultural heritage, since they often are constructed close to older railway-sections and structures.

This strong development has led to renovations and fresh construction of railway stations in many places. Completely new railway stations have been planned and built along the new railway lines in different locations, ranging from major projects in the larger cities to more frugal stops in the regional railroad systems. The variety is massive. In many cases, renewed interest in the railway system has led to increased maintenance of railroads and railway stations that have been sparsely looked after in the later decades. The demand for increased capacity and higher quality standards has, though, also led to an interest in complementing the older stations with new additions, or to the new construction of stations in places where station buildings have been present for a long time. This of course can lead to conflicts between different interests in relation to the built environment and the cultural heritage, and it generally is a major question as part of the land-use planning in the municipalities where railway capacity is being expanded.

Freight transport on rail has continued to develop with successively more efficient ways to operate. In general, this has led to a concentration of shunting to larger, but fewer locations in the railroad-system. Older facilities – often being close to cities – have become obsolete and is frequently focused on in terms of a growing interest to construct housing and office space near to the railway stations themselves. Many city landscapes have as result of this process been transformed into denser areas with new town-structures close to the railways. (Over-) decking of railroads is one such type of project, often with high cost, that has been part of city development. Preservation of industrial landscapes has also become an important strand of interest in cultural heritage preservation, particularly in a local context.[33)]

Construction of new railways has led to an uptick in discussions regarding the effect on the landscape this infrastructure inevitably has. How does the landscape change when new major infrastructures are added to earlier greenfield areas? In what way should, and can, the older structures that are today perhaps obsolete, be preserved for present and future generations to be able to understand and capture the layers of development, that stepwise transformed the railway system and characterised economic development at large?

CULTURAL HERITAGE STUDIES RELATED TO THE RAILWAYS ñ A MULTIFACETED APPROACH

The railway system is one of the longest lasting technological systems still in use in society. Over its long lifetime, the railway system has undergone changes of direction and experienced radical innovations with regards to technology, markets, market shares and function. Assets that today represent valuable cultural heritage has been generated since the 1850s and consists of a very large and multifaceted set of facilities, installations, buildings and rail-track. In this way, the railway system in its entirety is one of the most challenging subjects of historical preservation.

In this field, the multifaceted structure and the plethora of approaches that can be the starting point for grappling with, and understanding, the railways' cultural heritage means that there most likely will be a continuous stream of challenges and frustrations to be faced. It is highly unlikely that a consensus view on priorities and aims will be reached, and the available resources for preservation will probably always be too scarce, at least from the perspective of cultural heritage preservation.

When the aspects discussed in this article; the functional and the temporal, are combined, a pattern of generation of cultural heritage assets as well as challenges and possibilities for preservation of assets from different periods, and with different functions becomes visible. This pattern is presented in Table 1 below, and it has guided our structuring of references to literature and research in this article. Used as a working method in this article, the pattern could also possibly be useful in other similar studies.

Following the structure outlined in Table 1, cultural heritage related to the railway system can be classified according to the period in which it was originally constructed, in what way it has been transformed over time, and by how the remaining physical expressions are used or otherwise maintained (or demolished) today. The table also exemplifies how the physical assets of the railway system have different origins and represent different challenges as regards preservation efforts today, both spatially when it comes to the places where the assets are located, and as to whether these assets/facilities are publicly available or only accessible for specific groups internal to the system.

The physical expressions connected to the railway system (general use of land, buildings, station areas etc) have thus been formed in different situations and with very different profiles in terms of remnant physical assets from the different time periods. It is not only that the cultural heritage assets that remain can be interpreted from the present standpoint and with the contextual norms that dominate the discourse today, but the vast historical assemblage of assets also conveys different messages and societal values; each an expression of the time in which they came to be. The reading of the physical expressions of the cultural heritage of the railway system, therefore, has to be multifaceted and multidisciplinary, which of course renders the endeavour quite challenging.

One such aspect is that assets in use that become cultural heritage, with a positive value as seen from the perspective of one period, can be treated as obstacles or problematic in a later period. For example, extant old station buildings can be seen as hampering the continued development and attractivity of the system, not least in cities where change and reconstruction is continuously ongoing. Physical expressions of the railway system such as workshops and maintenance buildings can on the other hand take on more positive connotations over time: A locomotive maintenance hall, previously seen as something expressing a dirty and noisy workplace can gradually be seen as an attractive and innovative setting for a museum, modern workspaces/workshops or a market hall.

Even if there are large unresearched areas and investigations still to be carried out with regards to the railway systems' cultural heritage, some broader attempts to fill out the gaps have been made during recent years. As an example, inventories have recently been conducted along certain lines by the Swedish Transport Administration, but at the same time there is no national overview of the cultural environment along the railways in Sweden. There is no analysis of which buildings and technical facilities that have been demolished and how this has affected the historical dimension of places, the railway system and the everyday life of citizens. Furthermore, there is no research discussing the decay of former designer-built environment or the impact of the fractionated ownership in station areas, after Bergkvist 2013 highlighted the situation in his research field.[34] On the other hand, the designed green areas adjacent primarily to railway stations have been deeply studied from different perspectives, but even so, as an example, the traces of the extensive gardening efforts along railways is not treated as a cultural heritage in terms of legislation or plans of maintenance.[35]

Time period	The rail-track system	Freight	Passenger
Establishment 1850 – 1900	Old railway stretches nowadays still in use, rebuilt, demolished or transferred to railway history associations' ownership.	Some old facilities from this period still in use, but mostly "historic".	Some stations still in use, but often rearranged and reconstructed.
Maintenance 1900 – 1950	Comparatively fewer new stretches were built. Electrification changes the physical appearance of the track-system.	Buses and heavy road freight are combined with railroads in growing extent.	The railway stations are maintained as exemplary public spaces.
Reduction 1950 - 2000	Many stretches were taken out of use. An increase of obsolete assets, but also demolition of old assets.	Facilities in use, but often reduced or demolished.	Many station areas and areas where the staff were living and cultivated the land were abandoned or remade.
New era 2000 -	New railways have been constructed and affect also the cultural heritage.	Strong focus on effectiveness, which is affecting the physical assets and cultural heritage with new-building and demolition.	Old stations are demolished/or used in new ways. The built environment along railways is often in decay.

Table 1. The railway system – functional aspects and different time periods.

Some years ago, an initiative was also taken by the Swedish Transport Administration with the aim to combine research in three different aspects of landscape connected to rail and road infrastructure – ecology, open-air activities and cultural heritage – and to identify what research that would be important to initiate in relation to the rail infrastructure system. Furthermore, the researchers aimed to identify the main research questions for the future. The publication pointed out the lack of research on maintenance of the cultural heritage, as well as lack of basic inventory methods. Unfortunately, the report was not published outside the Transport Administration and therefore the results are not known in wider circles of academics in the cultural heritage sphere.[36]

The analysis in the publication also made it clear that there are difficulties in accessing information about older assets since general "knowledge storages" are lacking. Knowledge and experiences from projects over time is not stored or available at one place, archive or in one IT system, instead it is spread out across different actors and stored and kept under different circumstances. In the best case scenario, the material is searchable in public archives.

These latter deficiencies have recently been addressed by a research-project financed by the Swedish Transport Administration. A research project named "Historical data for the benefit of infrastructure and research – a feasibility study" *("Historiska underlag till nytta för infrastruktur och forskning - en förstudie")* that was finalised in 2024 had the purpose to "investigate how the historical materials can be used in current work within the Swedish Transport Administration and in research related to infrastructure. The aim of the project was also to make the historical collections concerning roads, aviation and railways useful in the Swedish Transport Administration's operations and in research by applying new methods.[37] The project has arranged several workshops, pilot studies in archives, and a broad literature overview in railway history, including research from both academics and practitioners.[38] The project, organised as a pre-study, also points to future research projects that can be carried out.

RESEARCH GAPS

Our view is that further research related to the railway system is necessary to better understand and interpret the system's development, future opportunities and its challenges, as seen from a cultural heritage point of view. When reviewing the numerous studies carried out over time in relation to railroads, a general reflection is that the majority of these have either been performed by laymen or at least not in the form of proper research with a theoretical footing. It is a common theme that most of these studies, reports and documentary efforts are focused on specific parts of the system, rather than aiming at a broader, lateral perspective on the railway-system and its development.

A reason for this piecemeal rather than overarching perspective in research is probably that the initiative for change in the railway system, that often motivates studies of the cultural heritage, and the need for preservation and protection of railway related assets, often comes from local urban development processes and projects, rather than from actors with a system perspective. Even though there are examples of how wide-ranging projects also affects the railway-system. From a structural point of view, change and challenge to the historical railway system thus might come from three sources:

- Local city and urban planning – in general initiated by municipalities or landowners.
- The general process of increasing efficiency and reducing costs in the railway system.
- Major railway projects where existing structures in the system are exchanged for new structures - often initiated by the Swedish Transport Administration.

We would argue that this leads to a situation in which cultural heritage aspects are most commonly analysed properly only in parts, e.g., for a railway station and not for railway stations in general, or for older maintenance building in a specific place, rather than for maintenance buildings related to the railway in general. The development of methods to analyse the landscape of transports by researchers predominantly has its inception in new major projects for roads, involving taking the perspective of landscape architecture.[39] Research projects investigating and developing analysis-methodologies focusing on the historical built environment along the railways are almost completely absent.

The longevity of the system calls for a longitudinal approach to railway systems research, as we have mentioned earlier. The successive developmental steps of the system, and the understanding of the remaining physical expressions is, in our view, captured well by taking such a perspective as its starting point. Studies incorporating the prerequisites and challenges common to the development of large technological systems are therefore also good starting points for further research, one where technology, economy and politics are part of the analytical paradigm. In addition, we require more additional insights into climate change how such changes will affect our cultural heritage.

Based on the view presented above, there is a need for – and room to do – further research on the cultural heritage of the railway system; research that from its inception incorporates general aspects of the railway system's development and its expressions. These studies can be carried out within many different research fields and with different approaches, both more directed to preservation and to more general understanding of the cultural heritage. Some of these studies could be exemplified by the following suggestions:

- Longitudinal studies – studying the meaning and function of railway landscapes and buildings over time, including precursors to the main lines.
- Horizontal studies of the cultural heritage aspects of the railway as a system, on a national and overarching level.
- The impact of the railway architecture locally, regionally and nationally.
- The use/appropriation of the railway systems and technology for varying ideological and political purposes over time.
- How the rationalization/efficiency concept has affected the cultural heritage. The interface and conflicts between natural values, cultural values, design and technical development.
- The cultural heritage contributions or problems connected to climate change, circularity and the sustainability agendas.
- The gardening along the railways has been studied in several studies, but how can the traces of the gardening be treated as a cultural heritage to take care of?
- Studies regarding how to relate to cultural values in a technological system that is constantly changing.

Investigating a complex technical system like the railways in its continuous physical reshaping is undoubtedly a demanding undertaking, but it is an absolutely necessary endeavour in the pursuit to understand different aspects of Sweden's cultural heritage and how to take good care of it.

References

Electronic sources
https://www.oslj.nu/en-GB
Royal Library's *(Kungliga Bibliotekets):* Libris

Unprinted material

Engström, Christina, manuscript
Nilsson, Lars, Helldin, J-O & Björckebaum, Mia, *Kunskapssammanställning Landskap och Infrastruktur,* Magnus Nilsson Produktion och Trafikverket. Only published in the internal IT system "FUD-Info" at Trafikverket in 2016.
Trafikverket, Application to Trafikverket, TRV 2021/53219:1

The Swedish Railway Museum rebuilt with new exhibitions reopened in 2024, is housed in a former locomotive station. From: The Swedish Railway Museum and Tyréns.

Literature

Ahlberg, Sven Olof, *Kulturhistoriskt bevarandevärda järnvägsbroar. Nationell förteckning,* Trafikverket 2023:164, Borlänge: Trafikverket 2024.
Ahlberg, Sven Olof & Spade, Bengt, *Våra broar – en kulturskatt,* Banverket och Vägverket 2001.
Améen, Lennart & Forsström, Margit (ed.), *Bebyggelsehistorisk tidskrift,* nr 12 1986, Uppsala 1987.
Andersson-Skog, Lena, *"Såsom allmänna inrättningar till gagnet, men affärsföretag till namnet": SJ, järnvägspolitiken och den ekonomiska omvandlingen efter 1920,* Diss., Umeå universitet, Umeå 1993.
Andersson-Skog, Lena & Ottosson Jan, "'Hela folkets järnväg' och marknaden", Rosander, Karin et al (ed.), *Järnvägen 150 år 1856-2006,* Stockholm: Banverket och Informationsförlaget 2005.
Antonson, Hans, *Kulturmiljöns visuella dimension. Utveckling av ett redskap för att identifiera det historiskt visuella innehållet i dagens kulturmiljö,* VTI meddelande 925 2002.
Antonson, Hans & Åkerskog, Ann, *Landskapsanalys och upphandling En intervjustudie med aktörer i väg- och järnvägsplaneringen,* VTI notat 9-2012.
Aronsson, Peter & Johansson, Lennart (ed.), *Stationssamhällen. Nordiska perspektiv på landsbygdens modernisering,* Växjö universitet, Malmö: Frank Stenvalls Förlag 1999.
Axelsson, Rasmus, *Järnvägsobjekt i Sverige. Med och utan kulturhistoriskt skydd,* Sveriges Järnvägsmuseum, Rapportnummer 2017:189, Gävle: Trafikverket 2017.
Bakerson, Aram, *Från järnvägsstation till kommunikationsnod. En studie av verksamhetsfunktioner, rumsliga komponenter och anpassning till nutida resandebehov i järnvägsstationer från sju länder,* Diss., Institutionen för arkitektur, Chalmers tekniska högskola, Göteborg 2010.
Banverket, Banverket, *Kulturvärden längs spåren – Banverkets avvecklingsprojekt,* 2008.
Berggrund, Lars, "Statens Järnvägar – ett affärsverk i hundra år", *SPÅR* 2013, Årsbok utgiven av Sveriges järnvägsmuseum i samarbete med Järnvägsmusei vänner, Gävle: Sveriges Järnvägsmuseum 2013.
Berggrund, Lars & Bårström, Sven, *De första stambanorna. Nils Ericsons storverk,* Gävle: Sveriges Järnvägsmuseum 2014.
Bergkvist, Johan, "Järnvägarnas parker och trädgårdar – en återblick", *SPÅR* 2012, Årsbok utgiven av Sveriges järnvägsmuseum och Järnvägsmusei vänner, Gävle: Sveriges Järnvägsmuseum 2012.
Bergkvist, Johan et al (ed.), *Spår i landskapet. Hur järnvägen format stad och land,* Stockholm: Arena 1999.
Bergkvist, Johan, *Landskapsarkitektur i järnvägslandskap. Platsernas förändring i historiskt perspektiv,* Swedish University of Agriculture Sciences, Licentiatavhandling, Uppsala 2013.
Berglund, Ulla et al, *Landskapsanalys för transportinfrastruktur – en kunskaps- och metodredovisning för utveckling av väg- och järnvägsprojekt i enlighet med den Europeiska Landskapskonventionen,* Rapporter Institutionen för land och stad nr 1 2013. Uppsala: SLU – Sveriges lantbruksuniversitet 2013.
Berglund, Ulla et al, *Om landskap och landskapsanalys för väg och järnväg – ett kunskapsunderlag med fokus på begrepp och exempel,* Rapporter Institutionen för land och stad nr 1 2011, Uppsala: SLU – Sveriges lantbruksuniversitet 2011.
Falkemark, Gunnar, *Politik, mobilitet och miljö. Om den historiska framväxten av ett ohållbart transportsystem,* Möklinta: Gidlund 2006.
Geijerstam, Jan af (ed.), *Industrisamhällets kulturarv i praktik och forskning – nuläge och framtid: Arbetets museum 11-12 oktober 2012,* Svenska industriminnesföreningen i samarbete med Arbetets museum, Arbetslivsmuseernas samarbetsråd, Industrihistoriskt forum och Kungl. Tekniska Högskolan, Stockholm, 2013.
Af Geijerstam, Jan & Kaijser, Arne, "En spårbunden historia", Rosander, Karin et al (ed.), *Järnvägen 150 år 1856-2006*, Stockholm: Banverket och Informationsförlaget 2005.
Government Bill 1963:191 (Prop. 1963:191 Angående riktlinjer för den statliga trafikpolitiken m. m.)
Hasselgren, Björn, *Government's role for transport infrastructure. Theoretical approaches and historical development,* Diss., Stockholm: KTH Royal Institute of Technology 2013.
Hasselgren, Björn, *An Institutional Approach to the Göta kanal, A Nineteenth century Mega-Project,* Palgrave Macmillan, 2023.
Houltz, Anders et al, *Transporthistoriska underlag till nytta för infrastruktur och forskning – en förstudie,* Trafikverket 2024:024, Borlänge 2024.
Klintborg Ahlklo, Åsa, "SJ:s rabatter – Statens järnvägar som förmedlare av trädgårdskultur", *Lustgården* 1993, Stockholm: Föreningen för dendrologi och parkvård 1993.
Kulturmiljövård, Kommunikationer, 1/1997, Stockholm: Riksantikvarieämbetet 1997.

Källbom, Arja, *Painting Treatments of Weather-Exposed Ferrous Heritage. Exploration of Oil Varnish Paints and Painting Skills*, Gothenburg Studies in Conservation 52, Diss., Göteborg 2021.
Lagerberg Fogelberg, Charlotte & Fogelberg, Fredrik, *Järnvägens trädgårdskultur – att återskapa banvaktstugans trädgård. Ett projekt utfört på uppdrag av Banverket.* JTI-Institutet för jordbruks- och miljöteknik, 2007
Lagerberg Fogelberg, Charlotte & Fogelberg, Fredrik, "One hundred years of gardening for public service – the horticultural heritage of the Swedish State Railways", *Studies in the history of gardens & designed landscapes,* Vol. 31:4, nov.-dec. 2011
Linde Bjur, Gunilla, *Arkitekt vid industrialismens genombrott. Adolf Edelsvärd – en yrkesbiografi,* Diss., Konstvetenskapliga institutionens skriftserie Nr 5, Göteborg: Göteborgs universitet 1999.
Linde Bjur, Gunilla, *Stationshus – Järnvägsarkitektur i Sverige,* Stockholm: Balkong förlag 2010.
Linde Bjur, Gunilla & Malmström, Bertil, "Från stadsport till trafiknod", *Arkitektur* Nr 2, 2000.
Lindgren, Anna, *Planteringar vid järnvägen. Funktion och organisation under stambanornas första tid,* Gothenburg Studies in Conservation 47, Licentiatuppsats, Göteborg 2020
Lindgren, Anna, *Staten som trädgårdsmästare. Järnvägens planteringar från naturförsköningskonst till testamente,* Gothenburg Studies in Conservation 54, Diss., Göteborg 2022.
Lindgren, Anna & Saltzman, Katarina, "Promoting modernity through cultivation: Early Swedish railway gardens and the art of improving nature", Legnér, Mattias, Qviström, Linda & Berglund Lake Håkan (ed.), *Bebyggelsehistorisk tidskrift* 81/2021, Uppsala 2021.
Lundin, Per, *Bilsamhället. Ideologi, expertis och regelskapande i efterkrigstidens Sverige,* Diss., Kungliga Tekniska Högskolan, Stockholm: Stockholmia förlag (2008) 2014.
Löfgren, Orvar, "Motion and emotion: Learning to be a Railway Traveller", *Mobilities,* 3:3, 2008.
Matti, Hjördis, "Järnvägens kvinnor", *SPÅR* 1996, Gävle: Sveriges Järnvägsmuseum 1996.
Mårtensson, Torbjörn, *Bantågens gång. Järnvägens godstrafik och dess anpassning till näringslivets rumslighet, branschstruktur och transportefterfrågan 1890-1985,* Ekonomisk-historiska institutionen, Diss. Göteborgs universitet, Göteborg 1994.
Oredsson, Sverker, *Järnvägarna och det allmänna. Svensk järnvägspolitik fram till 1890,* Diss., Lund 1969.
Qviström, Mattias, "Decentring landscape: rethinking landscape analysis with a relational ontology", *Landscape Research* 2023.
Ranby, Henrik, *Åkdon, blick och landskap. Om relationer mellan kommunikationer, kulturmiljö och landskapssyn med huvudexempel från Kullahalvön, Skåne,* Makadam: Göteborg 2020.
Rosander, Karin et al (ed.), *Järnvägen 150 år 1856–2006,* Stockholm: Banverket och Informationsförlaget 2005.
Rylander, Ulla, *Fjällnära trädgårdar i Jämtland och Härjedalen tiden 1830-1900.* Skogs- och lantbrukshistoriska meddelanden utgivna av KSLA:s bibliotek 11, Stockholm 1996.
Sandberg, Katarina & Sundlin, Harald, Inlandsbanan. *En järnväg genom den svenska historien – en framtidsväg genom Sverige,* Stockholm: Riksantikvarieämbetet 2003.
SCB, *Historisk statistik för Sverige 1700-1900-tal, Statistiska översiktstabeller utöver i del I och del II publicerade tom år 1950, Tab 47.*
Trafikanalys, *Railway transport 2023 quarter 1.*
Viklund, Roine, *Riksgränsbanans elektrifiering. Stat och företag i samverkan: 1910-1917,* Diss., Luleå: Luleå tekniska universitet, 2012.

Notes

1) Berggrund, Lars, "Statens Järnvägar – ett affärsverk i hundra år", SPÅR 2013, Årsbok utgiven av Sveriges järnvägsmuseum i samarbete med Järnvägsmusei vänner, Gävle: Sveriges Järnvägsmuseum 2013, p. 35-36 and 44.
2) Trafikanalys, *Railway transport 2023* quarter 1.
3) SCB, *Historisk statistik för Sverige 1700 - 1900-tal, Statistiska översiktstabeller utöver i del I och del II publicerade tom år 1950, Tab 47.*
4) Axelsson, Rasmus, *Järnvägsobjekt i Sverige. Med och utan kulturhistoriskt skydd,* Sveriges Järnvägsmuseum, Rapportnummer 2017:189, Gävle: Trafikverket 2017, p. 15 and 23; Ahlberg, Sven Olof, *Kulturhistoriskt bevarandevärda järnvägsbroar. Nationell förteckning,* Trafikverket 2023:164, Borlänge: Trafikverket 2024.
5) Améen, Lennart & Forsström, Margit (ed.), *Bebyggelsehistorisk tidskrift,* nr. 12 1986, Uppsala 1987; Bergkvist, Johan et al (ed.), *Spår i landskapet. Hur järnvägen format stad och land,* Stockholm: Arena 1999; Aronsson, Peter & Johansson, Lennart (ed.), *Stationssamhällen. Nordiska perspektiv på landsbygdens modernisering,* Växjö universitet, Malmö: Frank Stenvalls Förlag 1999; Rosander, Karin et al (ed.), *Järnvägen 150 år 1856–2006,* Stockholm: Banverket och Informationsförlaget 2005; *Kulturmiljövård,* Kommunikationer, 1/1997, Stockholm: Riksantikvarieämbetet 1997.
6) E.g. Ahlberg, Sven Olof & Spade, Bengt, *Våra broar – en kulturskatt,* Banverket och Vägverket 2001; Berggrund, Lars & Bårström, Sven, *De första stambanorna. Nils Ericsons storverk,* Gävle: Sveriges Järnvägsmuseum 2014. A search in the Royal Library´s *(Kungliga Bibliotekets)* database Libris on the word railway *(järnväg)* yields nearly 3000 hits, and the word train (tåg) yields over 3600 hits. E.g. Houltz, Anders et al, *Transporthistoriska underlag till nytta för infrastruktur och forskning – en förstudie,* Trafikverket 2024:024, Borlänge 2024, Bilaga 8.
7) Here we use this concept for studies that cover historical processes that take place over a longer time period. Similarities and differences over time as regards similar phenomena and geographic locations can thereby be observed and analysed.
8) Cf. Mårtensson, Torbjörn, *Bantågens gång. Järnvägens godstrafik och dess anpassning till näringslivets rumslighet, branschstruktur och transportefterfrågan 1890–1985,* Ekonomisk-historiska institutionen, Diss. Göteborgs universitet, Göteborg 1994.
9) Linde Bjur, Gunilla, *Stationshus – Järnvägsarkitektur i Sverige,* Stockholm: Balkong förlag 2010; Linde Bjur, Gunilla & Malmström, Bertil, "Från stadsport till trafiknod", *Arkitektur* Nr 2, 2000 and Bakerson, Aram, *Från järnvägsstation till kommunikationsnod. En studie av verksamhetsfunktioner, rumsliga komponenter och anpassning till nutida resandebehov i järnvägsstationer från sju länder,* Diss., Institutionen för arkitektur, Chalmers tekniska högskola, Göteborg 2010.
10) Cf. Geijerstam, Jan af (ed.), *Industrisamhällets kulturarv i praktik och forskning – nuläge och framtid: Arbetets museum 11-12 oktober 2012,* Svenska industriminnesföreningen i samarbete med Arbetets museum, Arbetslivsmuseernas samarbetsråd, Industrihistoriskt forum och Kungl. Tekniska Högskolan, Stockholm 2013; Bergkvist, Johan, *Landskapsarkitektur i järnvägslandskap. Platsernas förändring i historiskt perspektiv,* Swedish University of Agriculture Sciences, Licentiatavhandling, Uppsala 2013 and Ranby, Henrik, *Åkdon, blick och landskap. Om relationer mellan kommunikationer, kulturmiljö och landskapssyn med huvudexempel från Kullahalvön, Skåne,* Makadam: Göteborg 2020.
11) Cf. Bergkvist 2013 and Ranby 2020.
12) Oredsson, Sverker, *Järnvägarna och det allmänna. Svensk järnvägspolitik fram till 1890,* Diss., Lund 1969 and Berggrund & Bårström 2014.
13) Linde Bjur, Gunilla, *Arkitekt vid industrialismens genombrott. Adolf Edelsvärd – en yrkesbiografi,* Diss., Konstvetenskapliga institutionens skriftserie Nr 5, Göteborg: Göteborgs universitet 1999; Lindgren, Anna, *Staten som trädgårdsmästare. Järnvägens planteringar från naturförsköningskonst till testamente,* Gothenburg Studies in Conservation 54, Diss., Göteborg 2022; Aronsson & Johansson (ed.) 1999.
14) Af Geijerstam, Jan & Kaijser, Arne, "En spårbunden historia", Rosander, Karin et al (ed.), *Järnvägen 150 år 1856–2006,* Stockholm: Banverket och Informationsförlaget 2005, p. 25-30 and Berggrund & Bårström 2014.
15) Linde Bjur 1999, p. 164 and 375-376.
16) Bergström & Bårström 2014; Lindgren, Anna, *Planteringar vid järnvägen. Funktion och organisation under stambanornas första tid,* Gothenburg Studies in Conservation 47, Licentiatuppsats, Göteborg 2020.
17) Matti, Hjördis, "Järnvägens kvinnor", *SPÅR* 1996, Gävle: Sveriges Järnvägsmuseum 1996 and Engström, Christina, manuscript in progress with archival resources overlooked in previous research.
18) Houltz et al 2024, Bilaga 8.
19) Lindgren 2020; Lindgren 2022; Rylander, Ulla, *Fjällnära trädgårdar i Jämtland och Härjedalen tiden 1830–1900.* Skogs- och lantbrukshistoriska meddelanden utgivna av KSLA:s bibliotek 11, Stockholm 1996.
20) Améen & Forsström (ed.) 1987; Bergkvist et al (ed.) 1999.
21) The travellers gaze and the view of the landscape, as well as the historical dimension, has been discussed by Ranby in the same publication and by Löfgren 2008, but can be given more attention. Ranby 2020; Löfgren, Orvar, "Motion and emotion: Learning to be a Railway Traveller", *Mobilities,* 3:3, 2008 and from a road perspective by Antonson, Hans, *Kulturmiljöns visuella dimension. Utveckling av ett redskap för att identifiera det historiskt visuella innehållet i dagens kulturmiljö,* VTI meddelande 925 2002.
22) Viklund, Roine, *Riksgränsbanans elektrifiering. Stat och företag i samverkan: 1910–1917,* Diss., Luleå: Luleå Tekniska universitet, 2012.
23) Sandberg, Katarina & Sundlin, Harald, *Inlandsbanan. En järnväg genom den svenska historien – en framtidsväg genom Sverige,* Stockholm: Riksantikvarieämbetet 2003.
24) Berggrund 2013, p. 41. For an overview of the rise of automobiles: Lundin, Per, *Bilsamhället. Ideologi, expertis och regelskapande i efterkrigstidens Sverige,* Diss., Kungliga Tekniska Högskolan, Stockholm: Stockholmia förlag (2008) 2014 and Falkemark, Gunnar, *Politik, mobilitet och miljö. Om den historiska framväxten av ett ohållbart transportsystem,* Möklinta: Gidlund 2006.
25) E.g. Andersson-Skog, Lena, *"Såsom allmänna inrättningar till gagnet, men affärsföretag till namnet": SJ, järnvägspolitiken och den ekonomiska omvandlingen efter 1920,* Diss., Umeå universitet, Umeå 1993.
26) Källbom, Arja, *Painting Treatments of Weather-Exposed Ferrous Heritage. Exploration of Oil Varnish Paints and Painting Skills*, Gothenburg Studies in Conservation 52, Diss., Göteborg 2021.
27) Bergkvist 2013.
28) Government Bill 1963:191 (Prop. 1963:191 Angående riktlinjer för den statliga trafikpolitiken m. m.)
29) Andersson-Skog, Lena & Ottosson Jan, "'Hela folkets järnväg' och marknaden", Rosander, Karin et al (ed.), *Järnvägen 150 år 1856–2006,* Stockholm: Banverket och Informationsförlaget 2005.
30) Cf. Hasselgren, Björn, *Government's role for transport infrastructure. Theoretical approaches and historical development,* Diss., Stockholm: KTH Royal Institute of Technology 2013 and Falkemark 2006.
31) Axelsson 2017 and Banverket, Banverket, *Kulturvärden längs spåren – Banverkets avvecklingsprojekt,* 2008.
32) https://www.oslj.nu/en-GB
33) There are a lot of local investigations before changes. In 2008 Banverket and Riksantikvarieämbetet made an overview as a basis to the "Decline project" at Banverket 2008.
34) Bergkvist 2013.
35) Lindgren 2020; Lindgren, Anna & Saltzman, Katarina, "Promoting modernity through cultivation: Early Swedish railway gardens and the art of improving nature", Legnér, Mattias, Qviström, Linda & Berglund Lake Håkan (ed.), *Bebyggelsehistorisk tidskrift* 81/2021, Uppsala 2021; Lindgren 2022; Rylander 1996; Lagerberg Fogelberg, Charlotte & Fogelberg, Fredrik, *Järnvägens trädgårdskultur – att återskapa banvaktstugans trädgård. Ett projekt utfört på uppdrag av Banverket.* JTI-Institutet för jordbruks- och miljöteknik, 2007; Lagerberg Fogelberg, Charlotte & Fogelberg, Fredrik, "One hundred years of gardening for public service – the horticultural heritage of the Swedish State Railways", *Studies in the history of gardens & designed landscapes,* Vol. 31:4, nov.-dec. 2011; Klintberg Ahlklo, Åsa, "SJ:s rabatter – Statens järnvägar som förmedlare av trädgårdskultur", *Lustgården* 1993, Stockholm: Föreningen för dendrologi och parkvård 1993; Bergkvist, Johan, "Järnvägarnas parker och trädgårdar – en återblick", *SPÅR* 2012, Årsbok utgiven av Sveriges järnvägsmuseum och Järnvägsmusei vänner, Gävle: Sveriges Järnvägsmuseum 2012.
36) Nilsson, Lars, Helldin, J-O & Björckebaum, Mia, *Kunskapssammanställning Landskap och Infrastruktur,* Magnus Nilsson Produktion och Trafikverket. Only published in the internal IT system "FUD-Info" at Trafikverket in 2016.
37) Application to Trafikverket, TRV 2021/53219:1.
38) Houltz et al 2024.
39) Berglund, Ulla et al, *Om landskap och landskapsanalys för väg och järnväg – ett kunskapsunderlag med fokus på begrepp och exempel,* Rapporter Institutionen för land och stad nr 1 2011, Uppsala: SLU – Sveriges lantbruksuniversitet 2011; Berglund, Ulla et al, *Landskapsanalys för transportinfrastruktur – en kunskaps- och metodredovisning för utveckling av väg- och järnvägsprojekt i enlighet med den Europeiska Landskapskonventionen,* Rapporter Institutionen för land och stad nr 1 2013. Uppsala: SLU – Sveriges lantbruksuniversitet 2013; Antonson, Hans & Åkerskog, Ann, *Landskapsanalys och upphandling En intervjustudie med aktörer i väg- och järnvägsplaneringen,* VTI notat 9-2012 and Qviström, Mattias, "Decentring landscape: rethinking landscape analysis with a relational ontology", *Landscape Research* 2023.

Danish tangible railway heritage in literature and practice

RENÉ SCHRØDER CHRISTENSEN

THE DANISH RAILWAY LANDSCAPE

Like many other countries, Denmark experienced a profound transformation of its landscape due to the advent of the railway. However, in Denmark the impact was particularly widespread due to its relatively high railway density, which peaked in the late 1920s. At that time, most people in Denmark had access to a train station within a 10 km radius.[1)] In the 1920s, Denmark enjoyed one of the highest railway densities globally, with 128 meters of railway per square kilometre. Despite a reduction since those times, the railway density nonetheless remains significant at 80.9 m/km² – nearly four times that of neighbouring Sweden.[2)]

From the 1840s onwards, the new railway infrastructure altered Denmark's agricultural landscape, as well as its old trading towns and villages; the rail network spurred the development of smaller settlements, while the open countryside was crisscrossed with new connections. Railway lines cut through fields and forests and spanned small rivers and streams, introducing new divisions in the rural landscape. In countries with mountainous terrain and larger rivers, these alterations can be drastic and often have more dramatic and lasting effects. Yet, even in Denmark's comparatively gentle landscape, the railway has left enduring marks. Traces of disused embankments and tracks are found throughout the country, and almost every region and local community has been affected by the railway. Its presence is still visible in the morphology of towns, the structures in the landscape, as well as in architecture and the natural environment.

Mølby Bro, Ansager: Derelict railway bridge and embankment on the private railway line Varde-Grindsted (1919-1972), protected ancient monument (photo: Fl. Wedell 2021, DJM)

How do we define and understand this tangible railway heritage in the landscape? Does it encompass only the specific rail structures and buildings, or does it extend to other environments influenced by the railway's development? In some places, the railway structure is clearly defined and delineated, while in others the dividing line is more diffuse. The intangible heritage also changes over time. Studies reveal an evolution in the perception of the railway across literature, painting, and cinema. Initially, the railway evoked a mixture of fear and fascination, representing both progress and destruction, a disruptive force, and a threat as well as a regular part of everyday life.[3)] Public attitudes toward the railway have shifted over the years, as reflected in its varied uses for leisure and commuting.

The rise in the number of railway trips sold over time is countered by the fact that the average number of trips per year per capita was very low initially, with growth being slow and gradual. Historically, trains were not widely used by the general population – frequent use was limited to a relatively small number of people.[4)] However, virtually every town and smaller urban settlements were affected by the railway – not least by the stations and smaller stops. Everyone had to relate to these buildings and structures.

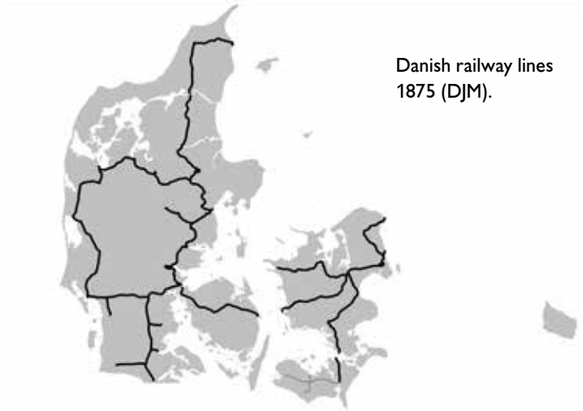
The railway is intrinsically linked to key societal developments such as industrialisation, urbanisation, and increased mobility. Its tangible structures are intertwined with other built environments, making it impossible to fully understand one without the other. The railway's significance and impact extend far beyond its physical infrastructure and direct users, influencing the broader landscape and society. Furthermore, the perception of these tangible elements evolves over time.

This article aims to outline trends in Danish literature and practice concerning immobile tangible railway heritage; to identify and discuss potential gaps, and finally proposes possible directions for future research. The literature is categorised into several groups: enthusiast writings, standard railway history works, railway heritage within broader heritage studies, architecture and building works, and research focused on station towns. Additionally, the article explores tools for preservation, such as heritage listings and the designation of cultural environments, which include studies and descriptions of railway heritage. A central focus is on how immobile railway heritage is perceived and treated in practice. Different approaches to registering and assessing heritage values are discussed, highlighting the broader debate between essentialist and constructivist perspectives on heritage of which the latter appears to be the most dominant in current practice.

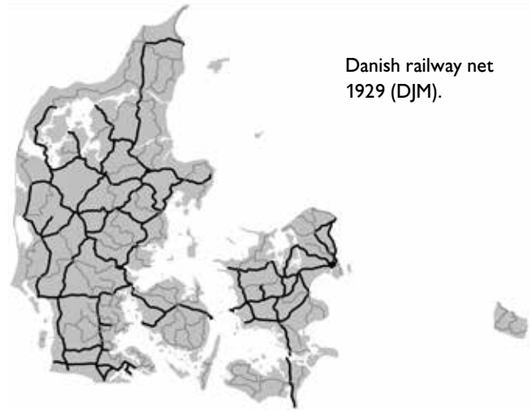
RAILWAY HISTORY

To understand the heritage of the railway today, a brief overview of its history is essential. The new technology – the railway – was introduced to the Danish monarchy in the 1840s, about 20 years after the first public railway line was established in the country of its origin, Great Britain. Initially, the development was sluggish. The first lines in Danish territory were built in the duchy of Schleswig, then part of the Danish Crown, connecting Flensburg and the port town of Tønning to Hamburg. From the mid-1840s through the next several decades, Copenhagen and many Danish market towns were gradually connected to the railway network. This expansion connected northern Jutland to Hamburg, northern Zealand to the western and southern Zealand, and crossed Funen via ferry routes to link with Jutland. By the 1880s, the major railway lines across the country of Denmark had been established.

The next 30 to 40 years saw rapid railway expansion, primarily through the development of local and branch lines, resulting in a very high railway network density. Most of these lines were



Danish railway lines 1875 (DJM).



Danish railway net 1929 (DJM).

legally considered private, though they were largely funded by a combination of state, county, municipal, and market town investments, along with a few private shareholders. This "golden age" of railways was characterised by urbanisation, as smaller market towns and newly established station towns were connected to the main lines. The emergence of mobile energy sources, the fossil fuels, shifted industrial development away from natural energy sites, with transportation and labour-accessibility taking over as primary factors for factory placement. As a result, industrial plants were mainly situated in or near market towns, close to ports and railways, with many companies establishing their own branch lines to connect to the main railway system. Urban areas and industrial zones were thus shaped in significant ways by the railway as it spread throughout the nation.

The 1950s represented a turning point, reaching full maturity during the 1960s and 1970s, as private cars, buses, and trucks began dominating transportation. Industrial plants grew increasingly independent of rail transport. Many side and branch lines were terminated during the 1950s, peaking in the 1960s, which shrunk the overall network to about half of the size it was in 1930 – largely corresponding to the scale of the network today. While passenger numbers continued to grow, the railway's share of overall passenger transportation plummeted.[5)] Urban expansion continued around the railways, but roads increasingly became the primary supporting transport infrastructure. Much of the growth consisted of residential areas, and the villages and station towns became commuter or dormitory towns.[6)]

A growing focus on faster travel between larger cities led to the closure of many stations in smaller towns, leaving railway buildings redundant. Passenger rail increasingly became an urban service, connecting major towns and offering public transport within larger cities. New urban rail systems – such as light rail in Aarhus and Odense, as well as the Copenhagen Metro – introduced modern elements with distinct architectural expressions into the railway landscape. Together with Copenhagen's S-train network, urban rail systems now account for approximately two-thirds of all train tickets sold in Denmark.[7)] Since the turn of the millennium, smaller station towns have declined, while the larger cities have continued to grow.

Meanwhile, rail freight transport declined in favour of road transport, and from the mid-2000s, most rail freight has been limited to transit between Sweden and continental Europe.[8)] Since the 1970s, freight hubs have been concentrated in fewer locations, leaving many former railway buildings abandoned or derelict.

The railway landscape has been continuously reshaped by shifts in political and economic conditions, as well as by technological advancements and choices. These changes have added layers of history to the immobile railway heritage, defined by changing functions. For example, steam engines required different maintenance facilities than those needed for diesel or electric trains. Similarly, changes in goods handling have rendered certain buildings and ramps obsolete, while shifts in passenger traffic have altered the size, number, and functions of station buildings. New demands for speed have also impacted railway infrastructure, leading to the replacement of old tracks – sometimes on entirely new embankments – or the abandonment of lines altogether.

THE LITERATURE

As in all other countries with rails, Denmark has a rich body of literature produced by railway enthusiasts which as such has secured the intangible cultural heritage for most local and private railway lines – which amounts to more than 50. Their meticulously detailed publications typically follow a consistent template, narrating the history of the railway's genesis, evolution, and eventual decline. These accounts are complemented by thorough descriptions of routes, station-by-station accounts, and detailed documentation of rolling stock. Historic photographs, drawings, and depictions of the people involved in railway operations are a hallmark of this literature, offering a comprehensive record of Denmark's tangible railway heritage in its original form. However, despite the wealth of knowledge these works provide, they rarely pose research questions or adopt theoretical frameworks. Unfortunately, annotations and references are often lacking, which makes it difficult for subsequent researchers to verify facts or build upon this body of work. Only one publication among these stands out for its academic rigor and broader perspective, though it still follows the traditional template to some degree.[9)]

It is nonetheless valuable literature and since the mid-1980s, publishers such as *Dansk Jernbane Klub* (the Danish Railway Club), *TpT* (*Tog på Tryk,* i.e. *"Trains in Print"*), and especially *Bane Bøger,* have been at the forefront of publishing these works, produced by an active community of enthusiasts. Despite their contribution to preserving railway history, the focus on immobile structures and the heritage perspective remains minimal.

The more comprehensive works on Danish railway history, particularly those focusing on the state railways, include two key anthologies and a more recent supplementary article – produced to mark significant anniversaries. The older anthology, *De danske statsbaner 1847-1947* (The Danish State Railways 1847-1947), was authored by experts in various fields, many of whom were employed by the state railways and had insider knowledge. Edited by industrial historian R. Willerslev and economist and railway historian J.A. Tork, with contributions from notable figures like Chief Architect K.T. Seest, this volume offers detailed descriptions of physical railway structures from Denmark's first 100 years of railway history.[10)] It covers materials, construction methods, and the functions of various structures, including rails, tracks, crossings, bridges, ports, welfare facilities, gatekeepers' houses, warehouses, depots, roundhouses, and station buildings. It also describes station layouts, equipment at stations and platforms, signals, signs, embankments, and the layout of the many tracks at large shunting yards. While the book does not take a heritage perspective, it provides valuable insights into the physical structures that have shaped Denmark's railway landscape.

In celebration of the 150th anniversary of the Danish railway in 1997, the Danish Railway Museum published the three-volume *På Sporet* (On the Track), authored by professional historians.[11)] The primary focus of this lavishly illustrated work is on the political and economic history of the railway, including topics such as investments, goods and passenger transport, rolling stock, management, and personnel. While the volumes feature photographs and drawings of buildings and bridges – mostly depicting them in their original condition – detailed discussion of the tangible, built environment is not a central theme. A few sections do address shifts in station architecture over time, but the material world of railway heritage remains secondary.

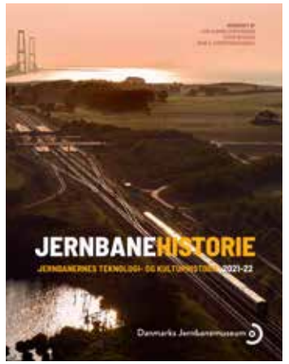
As a supplement, a comprehensive article published for the 175th anniversary of Danish railways brought the history up to date through thematic chapters.[12)] The last 25 years have seen significant changes impacting the tangible railway heritage, including the replacement of the last train ferries with bridges, increased electrification, centralisation of goods handling, and the digitisation of the signalling system. This latter change will soon result in the disappearance of many physical elements along the tracks.

Beyond these general railway histories, academic literature on the subject is limited. With a few exceptions, the railway is primarily examined as part of broader topics, such as economic, industrial, urban, or settlement history.[13)] One standout work is geographer Aage Aagesen's seminal thesis on the Danish railway system.[14)] Aagesen analyses the natural, cultural, and economic geographical preconditions and consequences of introducing and establishing the railways, focusing on their structural impact. Notably, he mapped the distance to railway access in 1949,[15)] illustrating the system's extensive reach and its influence on the landscape. He also studied the morphology of station towns and the relationship between railways and the location of agricultural industries, finding a weak connection with dairies but a strong one with butcheries. Aage-

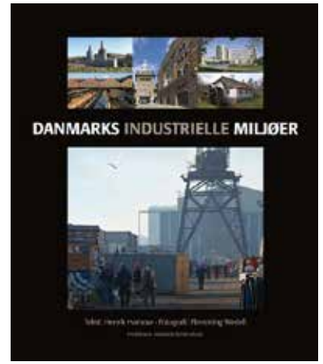
Steen Ousager: *Bogenseslagteren,* 2022.

De Danske Statsbaner 1847-1947, 1947.

P. Thestrup, S. Ousager & H.C. Johansen, *På sporet 1-3,* 1997.



Jernbanehistorie 2021-22.



H. Harnow, *Danmarks industrielle Miljøer,* 2011.

sen highlights the critical role of rail in transporting goods such as fuel, agricultural products, forestry materials, iron and steel, as well as how certain local rail lines specialised in products like marl, brickwork, beets, aggregates, turf, or fish.[16] However, the specific physical structures associated with this specialisation receive little attention in his work.

Interestingly, in a major publication on the history of road transport, the railway as a technical infrastructure for goods handling and its related structures and buildings is given considerable focus.[17] This work puts particular emphasis on narrow-gauge industrial railways, an often-overlooked aspect in the general railway literature.

Industrial archaeology tradition

The railway is a key component in a broader work on Danish industrial history, notably the standard work by historian Henrik Harnow, which follows the tradition of British industrial archaeology.[18] This geographically organised guide highlights significant industrial heritage sites across Denmark. Harnow examines the evolving perception of industrial heritage, including aspects of industrial archaeology such as the use of various building materials, architecture, listing, preservation, and adaptive reuse. Numerous railway examples are featured throughout. Harnow discuss the rationales behind the listing of buildings, considering the structures either as historical sources or symbols of identity. He emphasises the difficulty posed by Danish preservation laws, which require that an entire structure be listed, not just the exterior. To reuse an industrial structure without the ability to refurbish is beyond challenging.[19]

The most recent work in this tradition applies an essentialist approach to the railway landscape, interpreting it through a functional lens.[20] This approach seeks to understand the inherent logic behind the structures and their original purposes to better comprehend the current landscape and identify railway-related heritage values. The structures are understood in terms of their function, such as accommodating a certain number of passengers or goods, meeting technical and economic requirements, contributing to architectural discourse, and even symbolising power – all of which have evolved over time. A proposed framework for analysing the railway landscape includes the following elements:

- *Technological System:* The railway as an integrated technological system, encompassing tracks, embankments, buildings, bridges, tunnels, safety measures, and communication networks.
- *Business and Organisation:* The railway as a business and organisational entity, delivering products like passenger and goods transport, serving military purposes, and structured with specific administrative and operational needs.
- *Industrial Activity:* The railway as an industrial activity that requires maintenance facilities for tracks and rolling stock. Industries linked to the railway system (such as the production of rolling stock, rails, sleepers, and other components) are also considered, as are the sidetracks connecting many industries to the rail network, particularly from the 1880s to the 1950s.
- *Cultural Environments:* The railway's influence on shaping the landscape, from altering old towns to creating new ones and reshaping agricultural areas.
- *Physical Afterlife:* The commemorative aspects and the derelict or repurposed railway structures left behind as remnants of the railway's historical presence.

Each sub-theme has a chronology interwoven with broader societal development, technological development, and choices.

In the existing literature, only a few of these themes have been extensively analysed. Most of the research has focused on the aesthetic expression of the railway system, particularly station architecture and the cultural environment of station towns. However, several important aspects remain underexplored. For example, the "invisible legacy" of soil pollution at railway facilities and the environmental impact of fossil fuel use during the steam train era have yet to be adequately addressed.[21] Although these are not considered preservation-worthy elements, coal supply facilities and storage areas are emblematic of the steam era. Another neglected area of study is the biodiversity that has emerged in railway corridors, shunting areas, and workshop sites. The maintenance of these spaces has fostered unique flora and fauna. While biodiversity in railway areas has become a priority for Danish railway authorities (Banedanmark), comprehensive research within the Danish context is still pending.[22]

Architecture & buildings

The most visible and aesthetically ambitious elements of the railway system are the station buildings, particularly those in larger towns. A few prominent architects, particularly those working for the state railways, have left a lasting mark on Danish railway architecture. The works of these canonised architects reflect the evolution of architectural trends, from classicism to neo-Renaissance, historicism, neo-classicism, national romanticism, functionalism, and modernism. These trends are often characterised by features such as round-arch styles, Swiss-inspired designs, brick and tile construction, slate roofs, central vestibules flanked by waiting rooms, and the iconic semi-circular lunette window, an international symbol of railway stations.[23] While a few celebrated railway architects are acknowledged in standard architectural histories, their contributions primarily predate the 1930s.[24]

A notable figure in Danish railway architecture is K.T. Seest, the chief architect of the state railways railways (1922-1949). In 1947 Seest wrote about his predecessors and their ideas, providing insight into the architectural legacy of Danish railways.[25] During the first century of Danish railway history, approximately 8,000 railway buildings were constructed. Initially, station buildings featured symmetrical designs and floor plans, a tradition maintained by subsequent architects despite stylistic changes. Seest, however, adopted a more functional approach, reflecting the evolving needs of railway stations: growing numbers of passengers, shorter waiting times, and the shift in demand from large waiting lounges to bigger front halls with direct access to platforms.

Changes in the segregation of spaces, such as the 1925 switch from class-based to smoking/non-smoking sections, also influenced floor plans. Stations in cities and hub stations added dining rooms, expanded office spaces for goods handling and station management, and introduced welfare facilities like canteens, baths, and rest areas for employees. Many stations were renewed and modified during this period, with some incorporating bus stations. Seest also addressed the operational buildings and infrastructure: platforms, sheds, tunnels, large station halls, carriage depots, shunting yards, goods yards (established between 1890 and 1930), locomotive depots with coal and water facilities, turntables, coal cranes and ramps, water towers. This provided a comprehensive overview of the railway's physical infrastructure up until 1947.

In addition to Seest's contributions, other scholars have emphasised the role of modernism in Danish railway architecture during the 1930s, encompassing bridges, ferry fittings, and tram stations. A new feature at that time was the use of ordinary house models for countryside stations.[26] Different architectural influences are noted, such as the German-inspired Roskilde station (1847) and British-inspired designs in Schleswig stations (1850s). However, the international influences on Danish railway architecture could benefit from further research.

A few articles focus on the most influential railway architects, N.P.C. Holsøe and H.E.C. Wenck, who had the greatest impact on the railway landscape during the "golden age" of railways (1860s-1920s), along with a few other renowned architects.[27] Wenck, above all, designed stations in market towns and for private railways, emphasising the railway and the buildings as a cohesive system. The architecture followed a consistent layout: station building, warehouse, outhouse, and, at terminus stations, a locomotive depot. This system approach has been highlighted in a few articles, as has Wenck's significant impact on the railway architecture of the era.[28]

Of particular relevance in a heritage context are two articles on the Coast Line between Copenhagen and Elsinore.[29] In 2015, to mark the 150th anniversary of the main line across Funen, a thematic issue of *Jernbanehistorie* explored various aspects of the line's history, including its system buildings and the defining and altered landscape.[30] A brief excursus in this publication touched on the preservation status of the oldest buildings along the line but did not cover later generations of railway structures.

Later architects and more anonymous railway buildings are less frequently discussed in the literature, though some articles highlight unique projects, such as the integrated functions of Høje Taastrup station in the 1980s and the growing trend in using external architects for state railway projects. A short overview of railway architecture from the 1850s to 21st-century metro stations has also been published.[31] In 2004, DSB's head of design published an architectural policy that presented visions for state railway

R. S. Christensen & L. B. Christensen, *Danmarks Jernbanemiljøer,* 2022.

architecture with a historical perspective and a focus on heritage.[32] At that time, about one-third of Denmark's 1,200 state railway buildings were listed or deemed preservation-worthy, including 26 of the 150 station buildings. Many of these were out of use. The vision for these structures was to either sell, rent, or demolish them, with a focus on modernising stations by removing secondary buildings. This marked a shift from the preservation interest of the 1970s and 1980s, championed by state railway architects O.E. Bonding (1958–1979) and Jens Nielsen (1979–1980).

Specific types and locations

A few publications focus on specific railway buildings rather than the architects, though there is no comprehensive overview of the subject in Danish railway literature. One notable example is a detailed study of *Roskilde Station,* which examines the building's history, renovations, and associated structures such as the water tower, platform roofs, command centres, warehouses, machine depot, carriage shed, water purification plant, staff residence, and track tool depots.[33]

Another publication offers a historical portrayal of a station, focusing on its aesthetic details and functional aspects, which are often overlooked in railway literature. For example, it highlights elements such as brake sand containers and loading gauges.[34] One of few publications with a heritage focus explores Frederiksberg Station, which was listed in 1992. The station's architecture is examined within the context of German architectural influences, moving beyond a simple description of the individual building to explore its broader cultural significance.[35] The Copenhagen Central Station and its two predecessors have also been covered in articles and a monograph, including a documentation of a 2011 renovation.[36] However much of the enthusiast literature tends to treat stations as functional entities or a technical term rather than physical structures, often overlooking the architectural and heritage aspects of these buildings.[37]

There are few examples of general typological or geographical historical studies on stations. One exception is a study of the now-disappeared *countryside station* as a historical type,[38] which is of course to be considered as intangible heritage due to its absence in the present landscape. Other examples include a smaller heritage-focused publication on stations in Southern Jutland and a history of Copenhagen stations, though the latter focuses more on station functions than on the buildings themselves.[39]

The primary state railway workshop, the *Central Workshop* in Copenhagen, has been the subject of an anthropological study comparing it to other large industrial workplaces up to the 1970.[40] The study also addresses the workshop's situation in 2007 and examines the imagined future for workers, workshops, and worker's dwellings and provides a detailed overview of its buildings, functions, and site layout.

Other significant heritage analyses have been conducted in reports prepared for designations of the structures as worthy of preservation or repurposing of railway structures with respect for the cultural heritage. For example, analyses of *Aarhus' listed central workshops* as well as the *freight yard* was conducted with a focus on future use while preserving cultural heritage.[41] The freight yard analysis considered the site as a physical structure, urban space, and place of production, providing a functional, technological, and architectural understanding of the buildings. However, these studies often favour the preservation of original structures over later modifications, which is a common debate in heritage work – whether to preserve the original appearance or represent the building's entire lifespan.

Some other railway structures have been studied thematically in articles. For instance, the *crossing keeper's cottage,* a building type constructed from 1847 to around 1950, was examined in detail.[42] These cottages came in single and double-house versions and were modernised multiple times during the 1930s, 1950s, and 1970s, with rooms added and insulation improved. Another example is the railway signal houses, which have been studied with a focus on functions, offering some typological analysis providing examples from across the country.[43] None of these incorporate a heritage perspective.

A building type that has been thoroughly analysed from a heritage standpoint is the *water tower,* a symbol of the steam locomotive era.[44] Ten main architectural types was identified among the approximately 200 water towers built for the state railways, as well as various German models and towers on private lines. The study also explored related structures such as water cranes, pumping stations, and windmills.

Fredericia Station hall. Architect K.T. Seest 1935 (photo: Fl. Wedell 2013).

The Station town

One prominent aspect of railway-related research has been the study of *station towns* (also referred to as new towns or rural towns). This urban phenomenon attracted considerable academic attention beginning in 1979,[45] with a decade-long research project that published a biannual journal and numerous articles,[46] culminating in several larger works.[47] The project primarily explored definitions, populations, functions, and the lives of inhabitants, though some studies also focused on the architecture and morphology of these new towns. This latter approach drew on theories of urban hierarchies and was later subject to further in-depth research, contributing to a broader understanding of countryside urbanisation.[48]

A more recent addition to the body of work is a report that assesses the current status of station towns and highlights future challenges and opportunities.[49] This report discusses the shift in how nature is viewed – from a production and agriculture focus that shaped their original form and location, to a more recreational perspective offering new potentials for the towns' future development. However, it also demonstrates that the pursuit of new potentials often leads to the restructuring of these towns, resulting in the loss of historic structures. In these cases, modern development typically takes precedence over preservation. The report, authored by architects, geographers, and urban planning experts, largely overlooks heritage considerations, which might be symptomatic of the priorities in planning and development recommendations.

Heritage Tools – Planning and Analysis

Apart from the publications in the industrial archaeology tradition, there has been little attention paid to heritage approaches in the literature of railway history. The first steps in that direction has been the work on *cultural environments* and the *cultural history in the landscape* in general – with infrastructure and the station towns as special themes.[50]

The protection of buildings, embankments and cultural environments in Denmark is governed by various pieces of legislation and planning tools managed at different levels of government – national, municipal, and the museums. The development and application of the *Nature Conservation Act* (1917), the *Building Preservation Act* (1918), the *Museum Act* (1958), and the *Planning Act* (1992) have been detailed in existing literature.[51] These legal frameworks regulate the protection of the heritage through a range of tools and at different administrative levels.

Listings

The preservation of built heritage in Denmark began with legislation focused on the listing of natural and architectural sites.[52] Over the years, the perspective has shifted from individual buildings with primarily aesthetic value to a broader approach that encompasses entire neighbourhoods and surroundings – to some extent. However, a setback occurred in a 1979 law revision that reduced the state's incentives to list larger environments, transferring the responsibility to regional and municipal planning.

The first railway-related listing took place in 1964 with the listing of Roskilde Station, the oldest station in Denmark, built in 1847.[53] This listing, along with others for 19th-century industrial buildings, has been interpreted as part of a broader recognition of cultural-historical values rather than solely architectural values. The second railway station to be listed was Bandholm Station (1869-70) in 1973, reflecting the 1970s interest in historicist architecture.[54] Remarkably, the next elements to be listed were not stations,

Detail from Elsinore Station, Architects N.P.C. Holsøe & H. Wenck 1891, listed building (photo: Fl. Wedell, 2021, DJM).

Private line station, H. Wenck's system building, Nors Station 1904 (photo: Fl. Wedell, 2021, DJM).

but the oldest surviving water tower in Skjern (1874) and three bridges – two dating back to 1853 – listed in 1981.

From the 1980s until 2005, thematic reviews of various types of tangible cultural heritage were initiated, leading to a national overview and laying the groundwork for further listings.[55] Among these 39 thematic reviews were the state railway stations examined from 1988 to 1990, and iron and concrete bridges constructed between 1840 and 1900, reviewed in 1996. In total, 446 railway buildings were evaluated during the 1988-1990 review, resulting in the listing of 28 station complexes comprising 56 buildings. These listings captured the evolution of state railway architecture from the 1850s to the 1930s, covering various types of buildings, from the large main stations to the small signal houses, the market town stations, and countryside stations. This focus on buildings older than the 1930s is reflected in the architectural literature. An interesting corrective from an enthusiast has pointed out factual inaccuracies and overlooked stations, such as those on private lines and smaller or newer stations.[56]

The thematic listing of railway stations built on top of a survey of active state railway stations initiated in 1980,[57] overseen by the chief architects O.E. Bonding and Jens Nielsen. It was a call for protection or registration of a then endangered building type – the station. The purpose was to enhance the understanding and sense of responsibility for railway heritage within DSB (Danish State Railways), serving as a resource for maintenance, information, planning, documentation for listings, education, and reuse.[58] The accompanying *route register* consists of 72 volumes assessing environmental and building qualities, as well as architectural values. It covers all buildings and areas, including parking spaces, gardens, access conditions, landscaping, fences, paving, bridges, tunnels, lighting, signage, and interior details (such as ceilings, floors, and benches), accompanied by building drawings and detailed photographs. A final report outlined the listing values for DSB stations,[59] but local and private railways, staff housing, and abandoned facilities were not considered. The project was supplemented two years later by a registration of fencing and fence types including live fencing as part of the preparation for a coherent design policy.[60] Live fencing was used to "humanise" otherwise sterile railway areas.

Currently, 52 railway facilities have been listed, the majority of which are station buildings (38),[61] alongside several embankments protected as "ancient monuments" under the Museum Act, including a recent designation of a 6.5 km railway line in Southern Jutland (2024). The listings also encompass seven bridges, two roundhouse complexes, a workshop area, and four water towers. Fifteen warehouses are included, primarily as part of station environments, as well as seven toilet buildings and a few minor elements such as sheds, fences, connecting walls, and platform canopies. The listing of the Apenrade Line in 2024 stands out as one of the few preservation measures that adopt a holistic perspective.

The two predominant architects behind these listed buildings are Holsøe and Wenck (15 each). To an extent the architects K.O. Fisker & Aa. Rafn who designed the stations in a limited area of Bornholm, has had their more than fair share of listings (4), while Seest and Th. Arboe each contributed four. Only a few other architects are represented, and although many local architects worked on private lines, their contributions are not reflected in the listings. A notable gap exists in the border region of Jutland, which rejoined Denmark in 1920 after being annexed by Prussia in 1864. This area still features a significant building stock by the German architect F.W. Jablonowskij (1890-1919), yet it is absent from the listings. Similarly, structures and architects from the post-1930s era are also underrepresented. This bias suggests the need for a comprehensive national overview that is not limited to state railways and encompasses a broader timeline, which would enhance the overall representativity of the listings.

Preservation Worthy / Cultural Environment

In the 1980s and 1990s, new tools were developed to map and register cultural heritage in the landscape, supplementing traditional listings. Following Denmark's ratification of the Granada Convention on the preservation of architectural heritage in 1985, the SAVE (Survey of Architectural Values in the Environment) method was created between 1987 and 1991. This tool for mapping, registration, prioritisation and designation was designed to evaluate the preservation value of buildings and neighbourhoods in urban areas.[60] Its application aided municipal planning, resulting

Standard type gatekeeper's cottage, Mørdrup, between Copenhagen and Elsinore (photo: Fl. Wedell, 2021, DJM).

in the production of 90 *municipality/cultural environment/cultural heritage atlases* from 1990 to 2007, with a few additional atlases published in the 2020s. However, a significant limitation of these atlases was their focus on buildings older than 1940, thereby excluding over half a century of architectural history, which is now approaching a century. As an architectural tool, the emphasis in these publications tended to prioritise architectural values over cultural-historical ones. Furthermore, while the atlases generally considered stations as part of their surrounding environment, they often omitted the key infrastructure – the railway line itself.[63]

In 1994, the concept of "cultural environment" was introduced, defined as a geographically delimited area that reflects significant aspects of societal development in its appearance.[64] This concept encompasses the perception of fixed, tangible cultural heritage as cohesive wholes – such as station towns – that represent specific time periods. A critical aspect of understanding a cultural environment involves recognising its historical context, identifying which elements and structures were characteristic during its primary functional period, and assessing how much of that heritage has been preserved. The concept has sparked debate due to its multidisciplinary nature, inviting various approaches, including aesthetic/architectural, ethnological, and historical perspectives.

An important distinction has been made between "cultural landscape," viewed as an analytical concept, and "cultural environment," which serves as a political and administrative one. The former represents historical realities, while the latter pertains to what is chosen for preservation.[65] This choice is influenced by the observer's perspective: essentialists view cultural environments as concrete realities, while constructivists perceive them as social constructions. From an essentialist standpoint, there is a call for classification and identification of different types of cultural environments, along with a registration of their preservation values, to facilitate the designation of preservation-worthy areas. Criteria such as rarity/representativity, authenticity, continued use/status of preservation, narrative value, and identity value must be satisfied before aesthetic evaluations are made.[66]

To further assist regional planning, a tool known as KIP (Cultural History in Planning) was developed in the late 1990s to map cultural heritage in open land.[67] An introductory publication highlighted key features across various themes, including infrastructure and the development of new towns/station towns.[68] It presented a general perspective on infrastructure, noting that structures and buildings are often not preserved due to ongoing use; instead, they are frequently altered or relocated when necessary. The publication argues for a more comprehensive preservation perspective that recognises the structural integrity of a site, even when alterations occur, emphasising the need to consider the entire lifespan of the railway and its associated buildings. It raises the question of what constitutes originality and authenticity.

One point is that the railway leaves lasting traces in the landscape such as discontinued tracks that might be repurposed as cycling paths. Another point is that train stations are identified as one of the most comprehensively preserved cultural-historical features, showcasing geographically varying characteristics. However, many typical elements – such as canopies, wooden warehouses, side and end ramps, cattle pens, and loading cranes – are seldom preserved. Other elements, including signal boxes, footbridges, platform tunnels, gatekeeper's cottages, trackside huts, water cranes, water towers, coal bridges, coal supply facilities, engine sheds, ash pits, inspection pits, bridges, ferry docks, and telegraph poles, also face similar preservation challenges.

In practice, the designations carried out at the regional or municipal level, often in collaboration with museums, have varied significantly in scope and quality, as different regions adopt different approaches.

The ongoing efforts to engage with cultural environments have led to the development of refined tools that reflect a shifting understanding of historical landscapes. A 2018 project, supported by the Danish Heritage Agency, aimed to create a straightforward, interdisciplinary approach for designating cultural environments. This initiative, inspired by the SAVE and KIP methods, is known as the Cultural Environment Method.[69] It posits that cultural and historical environments are in a constant state of flux, necessitating frequent evaluation of the designations, a view rooted in a relativistic and constructivist perspective. This approach emphasises the importance of integrating heritage into future planning.

Langå Station – Jutland/Funen type Water tower 1908, (photo: Fl. Wedell, 2009, DJM).

Øster Marie Station, Bornholm, Architects Aa. Fisker & Rafn 1916, Listed building (photo: Fl. Wedell, 2021, DJM).

This perspective aligns with contemporary cultural heritage research, which adopts a relativistic approach. The argument is that perceptions of cultural heritage are inherently debatable, deeply tied to identity politics, and involve democratic and ideological discussions that evolve over time.[70)]

Efforts are also underway to replace the older KIP and SAVE methods with the SAK method (Screening of Cultural Environments), which interconnects the past, present, and future. Developed by the School of Architecture in Aarhus, SAK builds upon projects conducted between 2015 and 2023.[71)] The understanding of cultural environments has shifted from a focus on historical layers[72)] to an emphasis on ongoing development and changing uses and perceptions of these environments.

As a result, it can be argued that historical layers and the original significance of buildings and structures are increasingly obscured by the numerous new layers generated by this dynamic approach. Assessments of cultural environments now incorporate factors such as tourism, settlement, business, and cultural potentials, which may contribute to the erosion of historical layers. A constructivist view or perhaps a relativistic view seems to be gaining prominence.

Regional Industrial Heritage Sites

In 2003, the National Heritage Agency launched a priority initiative focusing on the cultural heritage of industrial society.[73)] In 2004 and 2005, museums and cultural environment councils produced reports identifying the most significant industrial heritage sites within their respective regions, i.e. the former counties. These reports highlighted key industrial heritage sites and provided general overviews of local and regional industrial development. While railways played a minor role in these reports, the first railway line – connecting Copenhagen to Korsør – was designated as one of 25 national industrial monuments, which included several stations along the route, the central workshop, a roundhouse, and workers' dwellings.[74)] Although many of these elements had already been listed, the designation aimed to underscore their broader coherence within the industrial system. However, it did not include tools for preservation.

Railway components are an integrated part of various designated industrial environments, such as the Carlsberg brewery, which features loading ramps, and the F.L. Smith cement factory and iron foundry or the producer of washing powder and soap, Henkel A/S, which both has sidings connecting to the company premises. Similarly, the central meat market and slaughterhouse complex in Copenhagen, known as "Den Brune og Hvide Kødby", includes four freight tracks. In urban areas, particularly in the capital, railways were the localising factor and instrumental in shaping industrial districts. The tram system at the turn of the 20th century and the subsequent S-train network further influenced the development of industrial zones and contributed to the segregation of housing and workplaces.[75)]

In the regional report on industrial environments in Copenhagen, which designated 29 preservation-worthy industrial sites, infrastructure is acknowledged as an integral part of industrialisation but is not regarded as an industrial environment in its own right. In neighbouring regions, however, an actual railway environment comprising station buildings and workers' cottages has been designated as having high preservation value.[76)] Conversely, some view railways merely as technical structures – which may have disappeared – with only the buildings remaining.[77)] Others see them as components of larger cultural environments, such as small industrial plants with their own sidings or port facilities with numerous tracks. Notably, the actual railway tracks were not designated in the regional reports.

Designation of Valuable Cultural Environments

The designation of railway lines at the municipal level varies significantly in terms of approach, quality, and delineation. Some municipalities focus solely on the tracks, which may be paved for cycling or walking paths, while others emphasise individual buildings, such as stations, as preservation-worthy. This focus on singular elements often undermines the holistic understanding of the railway as a cohesive cultural environment. Additionally, some municipalities designate several kilometres of railway,[78)] while others concentrate on specific aspects, such as stations that did not lead to the development of towns or the visual prominence of certain structures.[79)] The station town remains the most frequently designated railway-related feature.

A few surveys of railway lines stand out as exemplary foundations for further designations. One notable example is a 2009 report from the Historic Museum of Faaborg, which approached the entire railway line as a single cultural environment – a rather unusual perspective.[80)] The report details the history of the railway line, identifies preservation-worthy buildings, and proposes measures for their preservation and potential reuse. Another recent report focuses on a section of a derelict railway line on Amager, employing the PHASE method, developed by the University of Southern Denmark, PlanScape, and English Heritage.[81)] This approach emphasises the interplay between cultural-historical and natural values, identifying and designating elements that best support the narratives and objectives prioritised by local stakeholders. This dynamic method allows for re-evaluation over time and distinguishes between fundamental preservation values (such as tracks, rails, and freight areas), enduring preservation values, and current preservation values (like garden allotments and reused tracks for rail bikes). The relativism is further developed here, and this raises questions about what is truly protected: the historical features or the continually evolving perceptions of the area?

The work on municipal heritage atlases continues sporadically, depending on municipal interest. Some municipalities emphasise preserved stations, railway embankments, and tracks, as well as station town environments.[82)] In Copenhagen, for example, the main stations and the railway line to Valby were designated as a cultural environment, highlighting the significance of Copenhagen

Gråsten State Railway Station, Architect F.W. Jablonowski, 1901 (photo: Fl. Wedell, 2021, DJM).

Central Station, the Central Post Office, and the Central Workshop, along with workers' dwellings.[83)] Often, these cultural-historical analyses and designations arise from ongoing development plans. In 2019, the Central Workshop in Copenhagen was designated as worthy of preservation, and many of the buildings on the site were included in a municipal master plan that was open for public consultation. This process revealed concerns about the proposed building density and the potential changes to preservation-worthy structures, suggesting that these designations may not serve as effective protective instruments.[84)] A similar case involved the analysis of a derelict freight station in Vejle, which led to a gentle demolition of the building with intention to reconstruct it elsewhere.[85)]

In 2022, following an evaluation of the Act of Planning, the parliament decided to secure designated cultural environments by appointing national cultural environments. The primary tool for this effort is a national planning map that includes designated cultural environments, including railway sites.[86)] A large area from the central station to the Central Workshop in Copenhagen was designated as a valuable cultural environment, though it did not encompass the entire line to Korsør as initially suggested in the national industrial cultural environment designation.

In summary, the focus on railway heritage over the past 25 years has led to the designation of 205 infrastructural facilities, including 39 railway lines.[88)] Additionally, 15 areas categorised as railway/port/factory environments have been designated in urban contexts, some with a railway focus. However, the 161 regional industrial environments, 25 national designations, and municipal planning designations do not entirely align,[88)] leading to inconsistencies that hinder national oversight and preservation efforts. The shift toward a constructivist, perhaps relativistic, approach to heritage may not enhance the understanding of the railway as a historical entity.

Practice

The economic capacity to maintain railway structures varies widely. Most local railway heritage sites are privately owned, while a significant portion of state railway heritage remains under the ownership of the state railway, despite the sale of many station buildings. While several larger stations have undergone renovations that acknowledge the balance between functional demands and preservation interests,[89)] others are left to decay or are refurbished with little regard for their original character.[90)] Public-benefit foundations in some cases step in to provide financial support and restoration expertise. A notable example is the thorough restoration of a smaller station in the town of Gelsted, documented in a small book that recounts the station's history and that of its inhabitants.[91)] Although this station is not listed, it has been well-preserved and restored while also modernised to meet contemporary requirements for heating, noise insulation, and other necessities. The goal of this restoration project is to secure a tenant for the facility.

What is Missing?

As indicated by the literature review, there is a significant gap in the general analysis of the physical railway landscape, particularly regarding stations, their structures, and their development over time. This includes a broader examination of the building culture – not just the iconic architectural works but also the more anonymous structures. While state railway stations were surveyed three decades ago, the numerous private line stations were excluded from this analysis. Although a few other building types have been addressed in the literature, a comprehensive overview remains absent. The various regional surveys and local designations of cultural environments lack consistency both vertically and horizontally due to differing methods and approaches, as well as divergent interpretations of the structures. Some perspectives are dominated by aesthetic and architectural views, while others adopt functionalist, essentialist, or increasingly prevalent constructivist viewpoints.

A common argument suggests that repurposing preservation-worthy buildings that are vacant and no longer serve their original functions is the only viable method of preservation.[92)] However, this raises a fundamental contradiction: Can preservation through alteration truly be considered preservation? It is estimated that approximately 25-33% of stations in station towns have either disappeared or undergone significant reconstruction.[93)] Yet, there is no comprehensive overview of how many railway buildings have been converted or lost, nor an assessment of how these conversions affect the preservation and public perception of the history of the buildings and their cultural environments.

The literature has predominantly focused on larger state railway stations, neglecting private lines and smaller ancillary buildings, including numerous bridges and tunnels. Moreover, several chapters of railway heritage remain unaddressed in the existing literature. For example, the many industrial railways, most of which were narrow-gauge, and the industry they served (often involved in the extraction of natural resources, such as gravel) which have left physical scars on the landscape. The associated infrastructure, such as postal and telegraphic services, is an inseparable part of the original cultural environments and should be integrated into our understanding of this heritage; the railway was deeply intertwined with society.

Heritage considerations can encompass aesthetics, reuse, or a newer more critical approach reflective of the Anthropocene. The latter views heritage as a dynamic concept that can be constantly reinterpreted, focusing more on present-day interpretations than on the original rationales behind the structures' creation. This perspective critiques designated preserved heritage as narcissistic, positing that it merely reflects a specific self-image.[94)] This raises an extreme question: Why preserve human history at all?

In contrast, this article advocates for a historical-functional approach to analysing the railway landscape, viewing the railway as a vast *technological system* encompassing all its buildings, structures, safety measures, and communication systems. It was a *business,* an *organisation,* and a *workplace,* that facilitated the transport of various products, functioning as an industrial activity that required maintenance and production while supporting other industries. Additionally, the railway was deeply entwined with society, and the *related cultural environments* – shaping landscapes and urban areas – are equally important to consider. Finally, the derivative effects of this infrastructure – its *physical afterlife* – need to be analysed more comprehensively than current regional surveys and atlases allow.

Literature

"Centralværkstederne – et projekt om fredede industribygningers fremtidige anvendelse", Miljø og energiministeriet, skov og naturstyrelsen 1997.

38 kulturmiljøer i Odder Kommune, Revideret bilag til forslag til Kommuneplan 2021 – 2033 for Odder Kommune,/kommuneplan2021.odder.dk/media/2746/rapport_kulturmiljoeer_revideret-feb-2022.pdf.

Bech, Knud Erik (red.), *Arkitektur politik,* DSB 2004.

Bendsen, Jannie Rosenberg & Mogens A. Morgen, *Fredet – Bygningsfredning i Danmark 1918 til i dag,* Strandberg Publishing 2018.

Bock, Lauge; Henrik Bygholm, Vagn Clemmensen, Peter Haagen og C.A. Kierkegaard, *Frederikshavns Jernbanestation,* Nordtryk 1979.

Boje, Per: *Vejen til velstand – marked, stat og utopi – Hvorfor blev Danmark rigt – og ikke rigere?* Tiden 1850-1930, Syddansk Universitetsforlag 2020.

Bruhn Jensen Rix Design Arkitekter MAA, DSB, *Stakitter og hegn, En registrering af analyse af hegnsproblemer i DSB 1982,* DSB 1982.

Bruun-Petersen, Jens, 1898-vogterhuse – især "Model 1898", *Jernbanehistorisk årbog* '98, pp. 13-30.

Buthke, J., Larsen, N. M., Ostenfeld Pedersen, S., Bundgaard, C., & Boye, A. M. (2021). *Modulsystemer i bygningskulturarven: Transformation af funktionstomme bygninger med væsentlig kulturarvsværdi gennem modulsystemer og digital produktion.* Arkitektskolen Aarhus.

Carlberg, Nicolai & Søren Møller Christensen (red.): *Kulturmiljø – Mellem forskning og politisk praksis,* Museum Tusculanums Forlag, 2003.

Carlsen, C.J., *Banegaardsanlæggene i Kjøbenhavn* 1911.

Christensen, Hans Rex, "Skagen Station", *Det offentlige bygger og vedligeholder,* Kulturarvsstyrelsen 2002, pp. 62-65.

Christensen, Lars Bjarke, Jernbanernes udvikling i Danmark 1997-2022, *Jernbanehistorie 2021-2022,* 2023, pp. 23-177.

Christensen, Lars Bjarke: Fredericia Banegård – et teknisk vidunder, *Tog i Tiden* 2003-2004, pp. 47-51.

Christensen, René Schrøder & Lars Bjarke Christensen, *Danmarks Jernbanemiljøer, Spor af jernbanens fysiske kulturarv,* Syddansk Universitetsforlag/Danmarks Jernbanemuseum 2022.

Christensen, René Schrøder mfl., *Kulturmiljøer i Skam Herred 1000-2000, En totalregistrering,* Odense 1999.

Christensen, René Schrøder mfl., *Kulturmiljøer i Skam Herred II, Udvælgelse og afgrænsning,* Odense 1999.

Christensen, René Schrøder, "Togrejsen og byen", in: Sissel Bjerrum Fossat (ed.): *Den sorte omstilling. Fossile brændsler og livet i byerne,* Gad, 2024, pp. 204-236.

Christiansen, Anne, Danske statsbanestationer – en registrering, *Fabrik og Bolig* 1980, pp. 14-20.

Christiansen, Anne: Kysbanens bygninger og stationsmiljøer del 1, *Jernbanemuseets Venner,* Årsskrift 2000, pp. 1-21.

Christiansen, Anne: Kystbanens bygninger og stationsmiljøer del 2, *Jernbanemuseets Venner.* Årsskrift 2001, pp. 3-28.

Christiansen, Jørgen Hegner: DSB renoveringer og restaureringer, *Arkitektur DK,* 3, 1986.

Christiansen, Jørgen Hegner: gudhjembanens stationsbygninger, Fisker og Rafns entré i dansk arkitektur, *Architectura,* Nr. 15 – 1993.

Christiansen, Jørgen Hegner: Hovedbanegården i Høje Tåstrup – et fata morgana på Heden? Arkitekter: DSB Bygningstjenesten ved Ellen Waade og Søren Birch i samarbejde med Jacob Blegvad Arkitektkontor AIS ved Claus Bonderup, *Arkitektur DK.* 14, 1986.

Christiansen, Jørgen Hegner: Høje Taastrup Station, Arkitekter DSB bygningstjenesten i samarbejde med Jacob Blegvad A/S arkitektkontor, *Arkitektur DK*. 7, 1988.

Christiansen, Jørgen Hegner: Undervejs – til lands, til vands og i luften. Landevejskroer, stationer, bilisme, broer, skibsdesign og lufthavne, I; Nan Dahlkild (red.): *Huse der har formet os. Arkitekturhistorien bag danskernes institutioner og offentlige rum,* Museum Tusculanums Forklag/Danmarks Kunstbibliotek 2015, pp. 13-40.

Clausen, Kim & Peter Dragsbo, De nye byer i Vestjylland, Flemming Just (ed.): *Arbejdsrapport om Vestjyllands udviklingshistorie ca. 1750-1914.* Esbjerg 1984. pp. 143-156.

Clausen, Kim & Peter Dragsbo, Den vestjyske stationsby, *Folk og forskning* 4, 1981.

Clausen, Kim & Peter Dragsbo, Stationsbyen – et historisk bymiljø, *Arkitekten* 18, 1982, pp. 357-380.

Clausen, Kim & Peter Dragsbo, Stationsbyundersøgelserne. Arbejdet i Ribe og Ringkøbing amter, *FRAM* 1982, pp. 82-102.

Dahlkild, Nan (ed.), *Huse der har formet os, arkitekturhistorien bag danskernes institutioner og offentlige rum,* Museum Tusculanum 2015.

Dragsbo, Peter, *Hvem tegnede husene? : arkitektur og arkitekter på Langeland 1750-2010,* 2019.

Dragsbo, Peter, Station towns, *Ethnologia Scandinavica* 1986, pp.130-140.

Dragsbo, Peter, Stationsbyer, i Vivian Etting & Per Grau Møller, *De kulturhistoriske interesser i landskabet,* Skov og naturstyrelsen 1997, pp. 262-289.

Dressler, Steffen: Centralværkstedet i København, *Jernbanemuseets Venner.* Årsskrift 1998, pp. 11-16.

Erlandsen, Helge og Ida Haugsted, *Frederiksberg banegård og jernbanearkitekturen 1844-1864,* Frederiksberg gennem tiderne XXV, 2002.

Etting, Vivian & Per Grau Møller, *De kulturhistoriske interesser i landskabet,* Skov og naturstyrelsen 1997,

Federspiel, Beate Knuth, Kulturarv – et begreb til forhandling, *Nordisk Museologi* 2012, 1, pp. 4-19.

Groth, Niles Boje & Christian Fertner (ed.): *Stationsbyer i dag,* Center for strategisk byforskning, Arkitektskolen i Århus, 2013.

Fink, Jørgen: *Butik og værksted, erhvervslivet i stationsbyerne 1840-1940,* Selskabet for stationsbyforskning 1992.

Floris, Lene: *Stationsbygningen i Gelsted,* Realdania By & Byg 2024.

Frandsen, Lise Astrup, *Af banen! DSBs Centralværksted i København – fra statslig arbejdsplads til privat virksomhed,* Københavns Bymuseum/Dansk Jernbane-Klub 2007.

Furdal, Kim og Jørgen Toft Jessen: *Stationsbygninger i Sønderjylland,* Sønderjyllands kulturmiljøer nr. 6. Aabenraa 2004.

Gadegaard, Per, H. Wenck 1851-1935, *Jernbanen,* Årg. 34, nr. 2, 1994.

Gudmand-Høyer, S. Martens, *Værdibaseret udvikling af Danmarks almene boliger,* Arkitektskolen Aarhus.

Hansen, John Juhler, Jernbanereklamen – siden 1879 kommerciel udendørsreklame på stationsbygniner, *Tog i tiden* 2012, pp. 48-52.

Harnow, Henrik, *Danmarks industrielle miljøer,* Syddansk Universitetsforlag 2011.

Harrison, Rodney and Colin Sterling (ed.): Deterritorializing the Future Heritage in, of and after the Anthropocene, Open Humanities Press: London 2020.

Hegardt, Johan & Marcia Sá Cavalcante Schuback, *Kulturarv En begreppspolitik,* Södertörn Philosophical Studies 32, 2022.

Helldin, Jan Olof, Tommy Lennartsson, Magnus Stenmark, Henrik Weibull, Anna Westin, Jörgen Wissman, Biodiversitet I jernbanehabitater – biologisk kulturarv og grøn infrastruktur. *Jernbanehistorie* 2019, pp. 7-35.

Hovard, Svend, Om stationsfredninger, *Jernbanen* 1991, pp. 128-132.

Højring, Katrine og Ole Hjorth Caspersen: *Indikatorer for kulturmiljø og landskab under forandring.* Park- og Landskabsserien nr. 33, Skov & Landskab (FSL), Hørsholm, 2001.

Industri industri, 25 stk. dansk kulturarv, Gad 2008.

Jansen, Chr. R. (red.): *Stationsbyen – Rapport fra et seminar om stationsbyens historie 1840-1940,* Universitetsforlaget i Aarhus, 1979.

Jensen, Bernard Eric: "At forvalte kulturarv – en identitetspolitisk arbejds- og kampplads" i: Annika Alzén, & Peter Aronsson (red.): *Demokratiskt kulturarv? Nationella institutioner, Universella V¨rden, Lokala Praktiker,* Linköping Universitet, 2006, pp. 37-59.

Jensen, Ulrik Tarp, Wencks privatbanebygninger: 1900, *Jernbanehistorisk årbog,* 2000.

Johansen, Hans Chr., *På sporet 1847-1997: bind III, 1950-1997 – Jernbanen i bilismens skygge,* Odense: Jernbanemuseet 1997.

JWH Arkitekter, Plan Gruppen, WE Architecture: *De historiske stationsbymidter som kulturarv - udvikling eller afvikling,* JWH Arkitekter 2001.

Jørgensen, Caspar: The listed industrial Heritage in Denmark 1918-2023, *Fabrik & Bolig,* 2023, pp. 26-43.

Kappel, Thomas, "Perler på kysten", *Det offentlige bygger og vedligeholder,* Kulturarvsstyrelsen 2002, pp. 70-74.

Kappel, Thomas, 1979: Ny banegård med center i Herning, *Jernbanehistorisk årbog,* '04, pp. 58-64.

Kappel, Thomas, *Roskilde Station 1847-1997, Banens byggeskik,* Roskilde Museums Forlag 1997.

Kappel, Thomas: Hans Banegaarde i moderne betydning, Heinrich Wencks købstadsstationer 1903-06, *Architectura,* bd. 16, 1994, pp. 59-88.

Kolding, Frederik Birkholt: Som fugl Phønix af asken – bygninger og stationsmiljøer på den fynske bane i årene omkring 1865, *Jernbanehistorie* 2015, pp. 56-83.

Kristensen, Peter Thule, "M.G. Bindesbøll og den Sydslesvigske Jernbane", i: Kasper Lægring og Badeloch Vera Noldus, *Skjulte skatte i grænselandet: dansk bygningsarv i Slesvig og Holsten,* Bianco Luno, 2010, pp. 202-13.

Langberg, Harald, *Danmarks bygningskultur – en historisk oversigt,* bd. II, Gyldendal 1955.

Larsen, Christian: Da København fik sin hovedbanegård nummer tre, *Siden Saxo,* nr.3, 2011, pp. 30-37.

Larsen, Morten Flindt: Københavnske bystationer, *Jernbanehistorisk årbog* 1998.

Larsen, Morten Flindt: Statsbanernes vandforsyning af damplokomotiver 1. del, *Tog i Tiden* 2008 pp. 34-49.

Larsen, Morten Flindt: Statsbanernes vandforsyning af damplokomotiver 2. del, *Tog i Tiden* 2009 pp. 14-25.

Larsen, Morten Flindt: Statsbanernes vandforsyning af damplokomotiver 3. del, *Tog i Tiden* 2010 pp. 16-27.

Larsen, Niels-Holger, Bornholms industrihistorie 250 år – *Fra drømme, virkelyst og storhedstider til nedgang, afvikling og forfald – eller omlægning og udvikling,* Bornholms Museum, februar 2005a.

Larsen, Niels-Holger, Industriminder på Bornholm - *Fra stenbrud til silderøgerier Bevaring og Information,* Bornholms Museum, februar 2005b.

The disappearing traces in the landscape: the railway is converted to a path, and the gates are preserved, Lundfod, Brande in Central Jutland, 1920, (photo: Fl. Wedell, 2021, DJM).

Lorenzen, Vilh., *Vore byer. Studier i bybygning V. Afviklingen af den senmiddelalderlige by fortsat. Byisealet under forvandlingens lov 1814-1870,* Gad 1958.

Lundager, Gitte & Poul Thestrup: Niveaukrydsninger mellem jernbane og vej, *Tog i Tiden* 2008, pp. 22-33.

Millech, Knud (Kay Fisker red.), *Danske arkitekturstrømninger 1850-1950,* Østifternes Kreditforening 1951.

Moe, Steffen, Søren Birch og Cyril Olsen: *Historien om et succesfuldt renoveringsprojekt, Københavns Hovedbanegård.* Projekt Kh 08, Grontmij A/S & Public Arkitekter A/S, 2011.

Mogensen, Ole Edvard, *Den forsvundne landstation,* OEM Consult 2009.

Mogensen, Ole Edvard, *Signalhuse,* OEM Consult 2011.

Mogensen, Ole Edvard, *Struer station – fra rangerhest til udlicitering,* OEM Consult 2012.

Myrtue, Anders, "Dronning Louises Jernbane – anlæggelsen af banen og den tidligste udvikling i de rurale områder frem til ca. 1900, *Jernbanehistorie* 2015, pp. 109-131.

Møller, Per Grau, *Hvad er et kulturmiljø?,* Ubirex 2022.

Møller, Per Grau, Kulturmiljøregistrering, *Fortid og Nutid,* 2001, pp. 1-88.

Møller, Per Grau, Morten Stenak og Mette Ladegaard Thøgersen, Kulturmiljøregistrering – i praksis, *Fortid og nutid* 2005, pp. 192-220.

Møller, Per Grau: *Fra Landsby til soveby. Landbebyggelsen og dens økonomiske og kulturlandskabelige forudsætninger på Fyn 1770-1965,* Odense Universitetsforlag, 1990.

Nielsen, Henry & Dorte Fogh, *Frygt og fascination, Danske og udenlandske jernbanemalerier fra 1840 til i dag,* Aarhus Universitetsforlag 2011.

Nielsen, Jonas Søgård: *Vores kulturmiljøer og kulturarvsarealer – En gennemgang af Herning Kommunes Kulturmiljøer og Kulturarvsarealer,* Planafdelingen By, Erhverv og Kultur, Herning Kommune, u.a.

Nielsen, Kurt: *Nye jernbanestationer på Roskildebanen,* Forlaget Underskoven 2023.

Ousager, Steen, *"Bogenseslagteren", Historien om en lokalbane Bogense-Odense,* Syddansk Universitetesforlag/Danmarks Jernbanemuseum, 2022.

Ousager, Steen, *På sporet 1947-1997: bind II, 1914-1950 – Krige og fornyelse,* Odense: Jernbanemuseet 1997.

Pedersen, Margit Baad: Stationsliv: *Karise 1880-1940,* Selskabet for stationsbyforskning 1987.

Pedersen, Simon Ostenfeld, Mogens Andreassen Morgen, Mathilde Kirkegaard, Nina Ventzel Riis og Sidse Martens Gudmand-Høyer: *Kulturmiljø. Stedets fortælling – mellem fortid og fremtid,* Strandberg Publishing 2024.

Pedersen, Thomas Tram, *Kortlægning af kulturhistoriske og landskabelige værdier ved Amagerbanen langs Uplandsgade,* Rapport, PlanScape for Københavns Kommune 2021.

Poulsen, John, *Københavns banegårde,* bane bøger 1986.

Poulsen, John, *S-banen 1934-2009,* bane bøger 2009.

Rasmussen, Vigand Dann: *Nørrejyske Jernbanebyer,* Viborg 1981.

Raabyemagle, Hanne & Poul Vitus Nielsen, Fredningsværdier i dansk jernbanearkitektur, *Fabrik og bolig,* 2, 1991, pp. 17-37.

Raabyemagle, Hanne & Poul Vitus Nielsen: *Fredningsværdier I DSB's stationsanlæg,* Arbejdsrapport, Miljøministeriet/Planstyrelsen 1990.

Raabyemagle, Hanne, N.P.C Holsøe og den "officielle" danske jernbanestation, *Fabrik og bolig* 1982, pp. 11-22.

Raabyemagle, Hanne: *Dansk jernbanearkitektur 1843-1920,* unpublished thesis, KU 1981.

Schou, Anette, *Udpegningen af værdifulde kulturmiljøer i regionplanlægningen,* Miljø- og Energiministeriet, Skov- og naturstyrelsen 1999.

Sestoft, Jørgen: *Danmarks arkitektur II, Arbejdets bygninger,* Kbh 1981.

Slyngborg, Mette & Anette Gori, *KulturMiljø-metoden. Udpegning og afgrænsning af kulturmiljøer i planlægningen,* Slots- og Kulturstyrelsen, Esbjerg Kommune og Sydvestjyske Museer, Forlaget Liljebjerget 2018.

Stenak, Morten & Per Grau Møller, Danmarks kulturmiljøer i 25 år – status og ny viden, 2021.

Stenak, Morten: *SAVE Kortlægning og registrering af bymiljøers og bygningers bevaringsværdi,* Kulturministeriet, Kulturarvsstyrelsen 2011.

Stilling, Niels Peter: *Nye byer, stationsbyernes befolkningsforhold og funktion 1840-1940,* Selskabet for stationsbyforskning, 1987.

Thestrup, Poul, "Infrastruktur", i Vivian Etting & Per Grau Møller, *De kulturhistoriske interesser i landskabet,* Skov og naturstyrelsen 1997, pp. 198-215.

Thestrup, Poul, *På sporet 1847-1997: bind I, Til 1914 – Dampen binder Danmark sammen,* Odense: Jernbanemuseet 1997.

Thomassen, Peer, *Forsvundne stationer,* Bane bøger 1988.

Thomsen, Kristian Buhl & Jeppe Klok Due (Søren Bitch Chrisensen red.), *Århus godsbanegård – historie og kulturarvsanbefalinger,* rapport, Dansk Center for Byhistorie 2009.

Thomsen, Kristian Buhl: "Aarhus Godsbanegård 1923-2012. Fra godsterminal til kulturproduktionscenter", *Århus Stifts Årbøger* 2012, pp. 68-83.

Thor, Peter, *Jernbanen Ringe-Faaborg, Kulturhistorisk kortlægning og anbefalinger,* Faaborg Kulturhistoriske Museer 2009.

Thøgersen, Mette Ladegaard: *De rurale byer på Fyn. En definition, registrering og typologisering,* Syddansk Universitet 2002 (thesis).
Thøgersen, Mette Ladegaard: *Landdistrikternes Urbanisering. En analyse af der rurale byers opståen, udvikling og karakteristika ca. 1840-1960,* Syddansk Universitet 2007, PhD dissertation.
Tork, J.A. & R. Willerslev et. al.: *De danske statsbaner 1847-1947,* Generaldirektoratet for statsbanerne, Kbh. 1947.
Tønnesen, Allan m.fl.; *Hele samfundets eje. Bygningsfredning i 100 år,* Syddansk Universitet, 2018.
Tårnet på Østerport Station, *Arkitekten,* 85, 10, 24/5.
Vejle Godsbane, En undersøgende rapport, Studio Perspectives on Transformation AAA.
Vibæk, Jens, Debatten om Københavns 3. hovedbanegård, *Historiske Meddelelser om København* 1989, pp. 145.
Vibæk, Jens, Københavns anden hovedbanegård. Striden om banegårdsflytningen 1859-1863, *Historiske Meddelelser om København* 1971, pp.50 ff.
Værdifulde kulturmiljøer i København, København som hovedstad, 1.9, Hovedbanegården, Københavns kommune 2014.
Willer, Tine, *Den gule by,* Dansk Jernbane-Klub, 2010.
Zerlang, Martin: "Jernbanen i dansk litteratur", *Jernbanehistorie* 2023 b, pp. 7-27.
Zerlang, Martin: *Danmark set fra en togkupé,* Københavns, Gads Forlag 2023 a.
Østerby, Mads, *Danske jernbaners byggeri, et rids af et forløb 1844-1984,* Odense Universitetsforlag 1984.
Aagesen, Aage: *Geografiske studier over jernbanerne i Danmark,* København 1949.

Notes

1) Aage Aagesen, *Geografiske studier over jernbanerne i Danmark,* København 1949.
2) Rail network density in selected countries 2015 | Statista.
3) Martin Zerlang, *Danmark set fra en togkupé,* Københavns, Gads Forlag 2023. Martin Zerlang, Jernbanen i dansk litteratur. *Jernbanehistorie* 2023, pp. 7-27. Henry Nielsen & Dorte Fogh, *Frygt og fascination, Danske og udenlandske jernbanemalerier fra 1840 til i dag,* Aarhus Universitetsforlag 2011.
4) René Schrøder Christensen, Togrejsen og byen, in: Sissel Bjerrum Fossat (ed.) *Den sorte omstilling - fossile brændsler og livet i byerne,* Nord Academic/Gads Forlag, 2024, pp. 204-236.
5) Christensen 2024.
6) Per Grau Møller, *Fra Landsby til soveby. Landbebyggelsen og dens økonomiske og kulturlandskabelige forudsætninger på Fyn 1770-1965,* Odense Universitetsforlag 1990.
7) Christensen 2024.
8) Lars Bjarke Christensen, Jernbanernes udvikling i Danmark 1997-2022. *Jernbanehistorie 2021-2022,* 2023, pp. 23-177.
9) Steen Ousager, *"Bogenseslagteren", Historien om en lokalbane Bogense-Odense,* Syddansk Universitetsforlag/Danmarks Jernbanemuseum, 2022.
10) J.A. Tork & R. Willerslev et. al., *De danske statsbaner 1847-1947,* København: Generaldirektoratet for statsbanerne 1947.
11) Poul Thestrup, *På sporet 1847-1997: bind I, Til 1914 - Dampen binder Danmark sammen,* Steen Ousager, *På sporet 1947-1997: bind II, 1914-1950 - Krige og fornyelse,* Hans Chr. Johansen, *På sporet 1847-1997: bind III, 1950-1997 - Jernbanen i bilismens skygge,* Odense: Jernbanemuseet 1997.
12) Christensen 2023, pp. 23-177.
13) Per Boje, *Vejen til velstand - marked, stat og utopi - Hvorfor blev Danmark rigt - og ikke rigere? Tiden 1850-1930,* Syddansk Universitetsforlag 2020. Møller, 1990.
14) Aagesen 1949.
15) Ibid., p. 13.
16) Ibid., p. 39.
17) Jørgen Burchardt, Gods på vej, Vejtransportens danmarkshistorie bd. 1-3, Forlaget Kulturbøger/Danmarks Tekniske Museum, 2016, especially pp. 161-179, 189-237, 663-677,
18) Henrik Harnow, *Danmarks industrielle miljøer,* Syddansk Universitetsforlag 2011.
19) Jf. Bygningsfredningslov 1979, Henrik Harnow, *Danmarks industrielle miljøer,* Syddansk Universitetsforlag 2011, p. 41.
20) René Schrøder Christensen & Lars Bjarke Christensen, *Danmarks Jernbanemiljøer, Spor af jernbanens fysiske kulturarv,* Syddansk Universitetsforlag/Danmarks Jernbanemuseum 2022.
21) Christensen 2024.
22) An example of Sweedish research was presented in: Jan Olof Helldin, Tommy Lennartsson, Magnus Stenmark, Henrik Weibull, Anna Westin, Jörgen Wissman, Biodiversitet I jernbanehabitater – biologisk kulturarv og grøn infrastruktur. *Jernbanehistorie* 2019, pp. 7-35. Infranatur: https://www.bane.dk/da/Presse/Temaer/Biodiversitet.
23) Hanne Raabyemagle, N.P.C Holsøe og den "officielle" danske jernbanestation. *Fabrik og bolig* 1982. Hanne Raabyemagle, *Dansk jernbanearkitektur 1843-1920,* unpublished thesis, KU 1981.
24) M.G.B. Bindesbøll (1800-1856), J.D. Herholdt (1818-1902), N.P. Holsøe (1826-1895), H.E.C. Wenck (1851-1936), K.T. Seest (1879-1972), U.A. Plesner (1861-1933), K.O. Fisker (1893-1965)/ & Aa. Rafn (1890-1953). Knud Millech (Kay Fisker red.), *Danske arkitekturstrømninger 1850-1950,* Østifternes Kreditforening 1951. Harald Langberg, *Danmarks bygningskultur - en historisk oversigt,* bd. II, Gyldendal 1955. Vilh. Lorenzen, *Vore byer. Studier i bybygning V. Afviklingen af den senmiddelalderlige by fortsat. Byidealet under forvandlingens lov 1814-1870,* Gad 1958. Jørgen Sestoft, *Danmarks arkitektur II, Arbejdets bygninger,* København 1979/1981. Peter Thule Kristensen, "M.G. Bindesbøll og den Sydslesvigske Jernbane", in: Kasper Lægring & Badeloch Vera Noldus, *Skjulte skatte i grænselandet: dansk bygningsarv i Slesvig og Holsten,* Bianco Luno, 2010, pp. 202-213
25) K.A. Seest, in: J.A. Tork & R. Willerslev et. al., *De danske statsbaner 1847-1947,* Københavns: Generaldirektoratet for statsbanerne 1947, pp. 315, 319.
26) Sestoft 1979/1981.
27) Jørgen Hegner Christiansen, Gudhjembanens stationsbygninger, Fisker og Rafns entré i dansk arkitektur, *Architectura,* Nr. 15, 1993.
28) Thomas Kappel, Hans Banegaarde i moderne betydning, Heinrich Wencks købstadsstationer 1903-06, *Architectura,* bd. 16, 1994, pp. 59-88. Ulrik Jensen Tarp, Wencks privatbanebygninger: 1900, *Jernbanehistorisk årbog,* 2000. Raabyemagle, 1982, pp. 11-22. Per H. Gadegaard, Wenck 1851-1935, *Jernbanen,* Årg. 34, nr. 2, 1994, pp. 41-47.
29) Anne Christiansen, Kystbanens bygninger og stationsmiljøer del 1, *Jernbanemuseets Venner,* Årsskrift 2000, pp. 1-21, Kystbanens bygninger og stationsmiljøer del 2, *Jernbanemuseets Venner.* Årsskrift 2001, pp. 3-28.
30) Frederik Birkholt Kolding, "Som fugl Phønix af asken" – bygninger og stationsmiljøer på den fynske bane i årene omkring 1865. *Jernbanehistorie* 2015, pp. 56-83. Anders Myrtue, Dronning Louises Jernbane – anlæggelsen af banen og den tidligste udvikling i de rurale områder frem til ca. 1900. *Jernbanehistorie* 2015, pp. 109-131.
31) Jørgen Hegner Christiansen, Undervejs – til lands, til vands og i luften. Landevejskroer, stationer, bilisme, broer, skibsdesign og lufthavne, in: Nan Dahlkild (red.), *Huse der har formet os. Arkitekturhistorien bag danskernes institutioner og offentlige rum,* Museum Tusculanums Forklag/Danmarks Kunstbibliotek 2015, s. 22. Jørgen Hegner Christiansen, Høje Taastrup Station, Arkitekter DSB bygningstjenesten i samarbejde med Jacob Blegvad A/S arkitektkontor, *Arkitektur DK.* 7, 1988, pp. 314 ff.
32) Knud Erik Bech (ed.), *Arkitektur politik,* DSB 2004.
33) Thomas Kappel, Roskilde Station 1847-1997, *Banens byggeskik,* Roskilde Museums Forlag 1997.
34) Lauge Bock, Henrik Bygholm, Vagn Clemmensen, Peter Haagen & C.A. Kierkegaard, *Frederikshavns Jernbanestation,* Nordtryk 1979.
35) Helge Erlandsen & Ida Haugsted, *Frederiksberg banegård og jernbanearkitekturen 1844-1864,* Frederiksberg gennem tiderne XXV, 2002.
36) John Poulsen, *Københavns banegårde,* bane bøger 1986. Steffen Moe, Søren Birch og Cyril Olsen, *Historien om et succesfuldt renoveringsprojekt, Københavns Hovedbanegård.* Projekt Kh 08, Grontmij A/S & Public Arkitekter A/S, 2011. Jens Vibæk, Debatten om Københavns 3. hovedbanegård, *Historiske Meddelelser om København* 1989, p. 145. Jens Vibæk, Københavns anden hovedbanegård. Striden om banegårdsflytningen 1859-1863, *Historiske Meddelelser om København* 1971, pp.50 ff. C.J. Carlsen, *Banegaardsanlæggene i Kjøbenhavn* 1911. Christian Larsen, Da København fik sin hovedbanegård nummer tre, *Siden Saxo,* nr. 3, 2011, pp. 30-37. E.L. Parbøl, *Det Sjællandske Jernbaneselskab, Københavns Station 1847-1864,* unpublished manuscript, 1969, Danmarks Jernbanemuseum.
37) Ole Edvard Mogensen, *Struer station - fra rangerhest til udlicitering,* OEM Consult 2012.
38) Ole Edvard Mogensen, *Den forsvundne landstation,* OEM Consult 2009.
39) Kim Furdal og Jørgen Toft Jessen: *Stationsbygninger i Sønderjylland,* Sønderjyllands kulturmiljøer nr. 6. Aabenraa 2004. Morten Flindt Larsen, Københavnske bystationer. *Jernbanehistorisk årbog* 1998, pp. 3-12.
40) Lise Astrup Frandsen, *Af banen! DSBs Centralværksted i København - fra statslig arbejdsplads til privat virksomhed,* Københavns Bymuseum/Dansk Jernbane-Klub 2007. Supplementing literature is: Tine Willer, *Den gule by,* Dansk Jernbane-Klub, 2010. Steffen Dressler, Centralværkstedet i København, *Jernbanemuseets Venner.* Årsskrift 1998, pp. 11-16.
41) Kristian Buhl Thomsen & Jeppe Klok Due (Søren Bitch Chrisensen ed.), *Århus godsbanegård - historie og kulturarvsanbefalinger,* rapport, Dansk Center for Byhistorie 2009. Kristian Buhl Thomsen, "Aarhus Godsbanegård 1923-2012. Fra godsterminal til kulturproduktionscenter", *Århus Stifts Årbøger* 2012, pp. 68-83. *"Centralværkstederne – et projekt om fredede industribygningers fremtidige anvendelse",* Miljø og energiministeriet, skov og naturstyrelsen 1997.
42) Jens Bruun-Petersen, 1898-vogterhuse – især "Model 1898". *Jernbanehistorisk årbog* 1998, pp. 13-30.
43) Ole Edvard Mogensen, *Signalhuse,* OEM Consult 2011.
44) Morten Flindt Larsen, Statsbanernes vandforsyning af damplokomotiver 1. del, *Tog i Tiden* 2008 pp. 34-49; 2. del, *Tog i Tiden* 2009, pp. 14-25; 3. del, *Tog i Tiden* 2010, pp. 16-27.
45) Chr. R. Jansen (red.), *Stationsbyen - Rapport fra et seminar om stationsbyens historie 1840-1940,* Universitetsforlaget i Aarhus, 1979.
46) *Nyt fra Stationsbyen* 1-12, 1982-1986. Kim Clausen & Peter Dragsbo, Den vestjyske stationsby, *Folk og forskning* 4, 1981. Kim & Peter Dragsbo Clausen, Stationsbyen – et historisk bymiljø, *Arkitekten* 18, 1982, pp. 357-380. Kim Clausen & Peter Dragsbo, Stationsbyundersøgelserne. Arbejdet i Ribe og Ringkøbing amter, *FRAM* 1982, pp. 82-102. Kim Clausen & Peter Dragsbo, De nye byer i Vestjylland, Flemming Just (ed.), *Arbejdsrapport om Vestjyllands udviklingshistorie ca. 1750-1914,* Esbjerg 1984, pp. 143-156. Peter Dragsbo, Station towns, *Ethnologia Scandinavica* 1986, pp. 130-140.
47) Niels Peter Stilling, *Nye byer, stationsbyernes befolkningsforhold og funktion 1840-1940,* Selskabet for stationsbyforskning, 1987. Margit Baad Pedersen, Stationsliv: *Karise 1880-1940,* Selskabet for stationsbyforskning 1987. Jørgen Fink, *Butik og værksted, erhvervslivet i stationsbyerne 1840-1940,* Selskabet for stationsbyforskning 1992.
48) Mette Ladegaard Thøgersen, *De rurale byer på Fyn. En definition, registrering og typologisering,* Syddansk Universitet 2002. Mette Ladegaard Thøgersen, *Landdistrikternes Urbanisering. En analyse af der rurale byers opståen, udvikling og karakteristika ca. 1840-1960,* Syddansk Universitet 2007. Mette Ladegaard Thøgersen: Bysystem og urbanisme ca. 1840-2000 – historie og historiografi, in: Søren Bitsch Christensen, *Den moderne by,* Aarhus Universitetsforlag/Dansk Center for Byhistorie 2007.
49) Niles Boje Groth & Christian Fertner (ed.), *Stationsbyer i dag,* Center for strategisk byforskning/Arkitektskolen i Århus, 2013.
50) Peter Dragsbo, Stationsbyer. Poul Thestrup, Infrastruktur. in: Vivian Etting & Per Grau Møller, *De kulturhistoriske interesser i landskabet,* Skov og naturstyrelsen 1997, pp. 262-289, pp. 198-215.
51) Morten Stenak & Per Grau Møller, *Danmarks kulturmiljøer i 25 år - status og ny viden,* 2021, s. 5 ff. Allan Tønnesen et al., *Hele samfundets eje. Bygningsfredning i 100 år,* Syddansk Universitet, 2018. Jannie Rosenberg Bendsen & Mogens A. Morgen, *Fredet - Bygningsfredning i Danmark 1918 til i dag,* Strandberg Publishing 2018. Caspar Jørgensen, The listed industrial Heritage in Denmark 1918-2023. *Fabrik & Bolig,* 2023, s. 26-43.
52) Ibid.
53) Bendsen & Morgen, *Fredet - Bygningsfredning i Danmark 1918 til i dag,* Strandberg Publishing 2018, p. 135.
54) Ibid.
55) Stenak & Møller, 2021, p. 6.
56) Svend Hovard, Om stationsfredninger, *Jernbanen* 1991, pp. 128-132.
57) Anne Christiansen, Danske statsbanestationer – en registrering. *Fabrik og Bolig* 1980, 2, pp. 14-20.
58) DSB Bygningstjenesten, *Bygninger og anlæg, Registrering og vurdering,* DSB 1980, Danmarks Jernbanemuseum.
59) Hanne Raabyemagle & Poul Vitus Nielsen, *Fredningsværdier i DSB's stationsanlæg,* Arbejdsrapport, Miljøministeriet/Planstyrelsen 1990, p. 2.
60) Bruhn Jensen Rix Design Arkitekter MAA, DSB, *Skitter og hegn, En registrering of analyse af hegnsproblemer i DSB 1982,* DSB 1982.
61) *Fredede bygninger,* Slots- og kulturstyrelsen, november 2023.
62) Morten Stenak, *SAVE Kortlægning og registrering af bymiljøers og bygningers bevaringsværdi,* Kulturministeriet, Kulturarvsstyrelsen 2011. Bendsen & Morgen, 2018, p. 217.
63) For example Herning kommune 2003, *Kulturarvsatlas Nordfyns Kommune* 2020.

The new railway and its architectural heritage: Copenhagen Metro 2019 (photo: Fl. Wedell, 2021, DJM).

64) Anette Schou (ed.), *Udpegningen af værdifulde kulturmiljøer i regionplanlægningen,* Miljø- og Energiministeriet, Skov- og naturstyrelsen 1999. Stenak & Møller, *Danmarks kulturmiljøer i 25 år – status og ny viden,* 2021.
65) Several authors in an anthology mentions this: Eske Wohlfart, Erland Porsmose, Mette Guldberg in: Nicolai Carlberg & Søren Møller Christensen (red.), *Kulturmiljø – Mellem forskning og politisk praksis,* Museum Tusculanums Forlag, 2003.
66) Per Grau Møller, *Hvad er et kulturmiljø?,* Ubirex 2022, p. 116.
67) Stenak & Møller, 2021, p. 7.
68) Vivian Etting & Per Grau Møller, *De kulturhistoriske interesser i landskabet,* Skov og naturstyrelsen 1997.
69) Mette Slyngborg & Anette Gori, *KulturMiljø-metoden. Udpegning og afgrænsning af kulturmiljøer i planlægningen,* Slots- og Kulturstyrelsen, Esbjerg Kommune og Sydvestjyske Museer, Forlaget Liljebjerget 2018.
70) For example: Beate Knuth, Federspiel Kulturarv – et begreb til forhandling. *Nordisk Museologi* 2012, 1, pp. 4-19. Johan Hegardt & Marcia Sá Cavalcante Schuback, *Kulturarv En begreppspolitik,* Södertörn Philosophical Studies 32, 2022, Bernard Eric Jensen,"At forvalte kulturarv – en identitetspolitisk arbejds- og kampplads" in: Annika Alzén, & Peter Aronsson (ed.), *Demokratiskt kulturarv? Nationella institutioner, Universella Värden, Lokala Praktiker,* Linköping Universitet, 2006, pp. 37-59.
71) Simon Ostenfeld Pedersen, Mogens Andreassen Morgen, Mathilde Kirkegaard, Nina Ventzel Riis & Sidse Martens Gudmand-Høyer: *Kulturmiljø. Stedets fortælling – mellem fortid og fremtid,* Strandberg Publishing 2024, p. 263 ff.
72) Per Grau Møller, Kulturmiljøregistrering, *Fortid og Nutid,* 2001, pp. 1-88. Per Grau Møller, Morten Stenak & Mette Ladegaard Thøgersen, Kulturmiljøregistrering – i praksis. *Fortid og nutid* 2005, pp. 192-220. Per Grau Møller, *Hvad er et kulturmiljø?,* Ubirex 2022.
73) Caspar Jørgensen og Vibe Ødegaard, *Museernes arbejde med Industrisamfundets Kulturarv. Arbejdsrapport fra seminar den 28. august 2003 på Nationalmuseet,* Kulturarvsstyrelsen 2004.
74) *Industri industri, 25 stk. dansk kulturarv,* Gad 2008, pp. 106-113,
75) *Industrisamfundets kulturarv, Regional indberetning af industriminder i Københavnsregionen i henhold til Kulturarvsstyrelsens brev j. nr. 2003-300-0001 forbindelse med satsningsområdet "Industrisamfundets Kulturarv",* Arbejdermuseet, Københavns Bymuseum, Nationalmuseet, Kroppedal, Det Regionale Faglige Kulturmiljøråd for Københavns og Frederiksberg Kommuner, Det Regionale Faglige Kulturmiljøråd for Københavns Amt.
76) *Industriminder i Frederiksborg Amt,* 2004.
77) Niels-Holger Larsen, *Bornholms industrihistorie 250 år – Fra drømme, virkelyst og storhedstider til nedgang, afvikling og forfald – eller omlægning og udvikling,* Bornholms Museum, februar 2005, p. 57. Niels-Holger Larsen, *Industriminder på Bornholm - Fra stenbrud til silderøgerier Bevaring og Information,* Bornholms Museum, februar 2005.
78) www.herning.dk/media/vyrjnn1g/herning-kommunes-kulturarealer-og-miljoeer.pdf; Nielsen, u.a. *38 kulturmiljøer i Odder Kommune* 2022.
79) Katrine Højring & Ole Hjorth Caspersen. (2001), *Indikatorer for kulturmiljø og landskab under forandring.* Park- og Landskabsserien nr. 33, Skov & Landskab (FSL), Hørsholm, 2001.
80) Peter Thor, *Jernbanen Ringe-Faaborg, Kulturhistorisk kortlægning og anbefalinger,* Faaborg Kulturhistoriske Museer 2009.
81) Thomas Tram Pedersen, *Kortlægning af kulturhistoriske og landskabelige værdier ved Amagerbanen langs Uplandsgade,* Rapport, PlanScape for Københavns Kommune 2021.
82) *Kulturarvsatlas* Nordfyns Kommune 2020.
83) *Værdifulde kulturmiljøer i København, København som hovedstad, 1.9, Hovedbanegården,* Københavns kommune 2014.
84) Notat, bilag 7-Vurdering af bevaringsværdier og kulturhistoriske spor, Plan, Analyse, Ressourcer og CO2.reduktion, Teknik og Miljøforvaltningen, Københavns Kommune, 2021.
85) *Vejle Godsbane, En undersøgende rapport,* Studio Perspectives on Transformation AAA.
86) *Kommissorium for ekspertudvalg til udpegning af nationale kulturmiljøer, Kulturministeriet,* Indenrigs- og Boligministeriet 27/9 2022. *Oversigt over nationale interesser i kommuneplanlægningen,* Plan- og landdistriktsstyrelsen, 2023. *Kort.plandata.dk,* Plan- og landskabsstyrslen.
87) Stenak & Møller, 2021.
88) Stenak & Møller, 2021, p. 41.
89) Jørgen Hegner Christiansen, DSB renoveringer og restaureringer, *Arkitektur DK, 3,* 1986. https://renover.dk/projekt/oesterport-station-modernisering/. Tårnet på Østerport Station, Arkitekten, 85, 10, 24/5.
90) Christensen & Christensen, 2022, pp. 262-273.
91) Lene Floris: *Stationsbygningen i Gelsted,* Realdania By & Byg 2024.
92) J. Buthke, Larsen, N. M., Østenfeld Pedersen, S., Bundgaard, C., & Boye, A.M. *Modulsystemer i bygningskulturarven: Transformation af funktionstomme bygninger med væsentlig kulturarvsværdi gennem modulsystemer og digital produktion.* Arkitektskolen Aarhus 2021.
93) *De historiske stationsbymidter som kulturarv – udvikling eller afvikling*
94) Rodney Harrison and Colin Sterling (ed.), *Deterritorializing the Future Heritage in, of and after the Anthropocene,* Open Humanities Press: London 2020.

The Swedish West Coast Line

From National Romanticism to transport rationalisation: Historic environment, cultural heritage, and railway landscapes as ecosystem services

HENRIK RANBY

INTRODUCTION

This article is about railway landscapes, using a Nordic example of the Swedish Västkustbanan or West Coast Line (VKB). The VKB runs between the Öresund Sound and the Göta River, joining the southern county of Skåne with the city of Gothenburg and ultimately the capital of Denmark with the capital of Norway. When the line was built in the 1880s, it connected two expansive regions, each known for its rapid industrialisation and its ports, shipyards, industries, and foreign trade. The line followed the Swedish west coast, helping the sugar industry in north-west Skåne, contributing to the growth of the seaside resorts of Ängelholm, Torekov, and Båstad, and connecting cities in the county of Halland – Laholm, Halmstad, Falkenberg, Varberg, and Kungsbacka – and benefitting the seaside resorts there too.[1)] Places such as Lindome, Kållered, and Mölndal (one of the earliest industrial towns) were brought closer to Gothenburg, and some 40 small towns in Skåne and Halland were connected by rail.[2)] I will consider the history of the VKB and its landscape from south to north, keeping to the sequence in which the line was constructed.

Almost 140 years after it was built, the VKB is still an important route for railway freight and long-distance and regional passenger traffic. The recent addition of the Öresund Bridge to the south has increased commuting and the labour market has expanded. The VKB is more than that, though: it is a railway landscape rich in both tangible and intangible cultural heritage. Rail passengers see the countryside of north-western Skåne and Halland, ranging from the flat Ängelholm plain and unmistakable county boundary of the Hallandsås Ridge, past southern Halland's wealthy farming district, the gentle hills and plains of Susedalen, and on to the rugged wildness of the west coast's fjords, lakes, and forests. In places, the coast itself is visible.

In my book *Åkdon, blick och landskap* (2020, 'Transport, gaze, and landscape') I remark on the paucity of research about the VKB. In the standard work about Swedish station buildings, Gunilla Linde Bjur only mentions Halland in passing, while thus far I have only studied the Skåne–Halland section of the line.[3)] I have argued for wide-ranging interdisciplinary research about the VKB, for which this article is the first step, though it is in the nature of a preliminary study to pinpoint the key topics rather than offer conclusive results.[4)] The VKB, being an inter-Nordic connection, lends itself to discussion in a Nordic journal such as *Fabrik og Bolig*, especially as it runs through country that was Danish until the seventeenth century.

RAILWAY LANDSCAPE AS ECOSYSTEM SERVICE AND HISTORICAL RESOURCE

How does a railway interact with its historic environment and landscape? The unobstructed views of the countryside, the railway heritage: should they be seen as resources which the physical environment offers passengers, local communities, and the region? And are they resources or services that a sustainable society should capitalise on?

The term *järnvägslandskap* or 'railway landscape' has been used by Eva Gustavsson and Johan Bergkvist, although both take a narrower view than I would wish and are generally concerned with the immediate areas around railway stations.[5)] Taking into account the specifics of historic environment management and its favoured models of historic landscape, human geography, and landscape analysis, I instead propose a broader definition: A railway landscape is a landscape whose character, identity, and accessibility are defined by the presence of a railway, and in which railway infrastructure is a prominent feature.[6)]

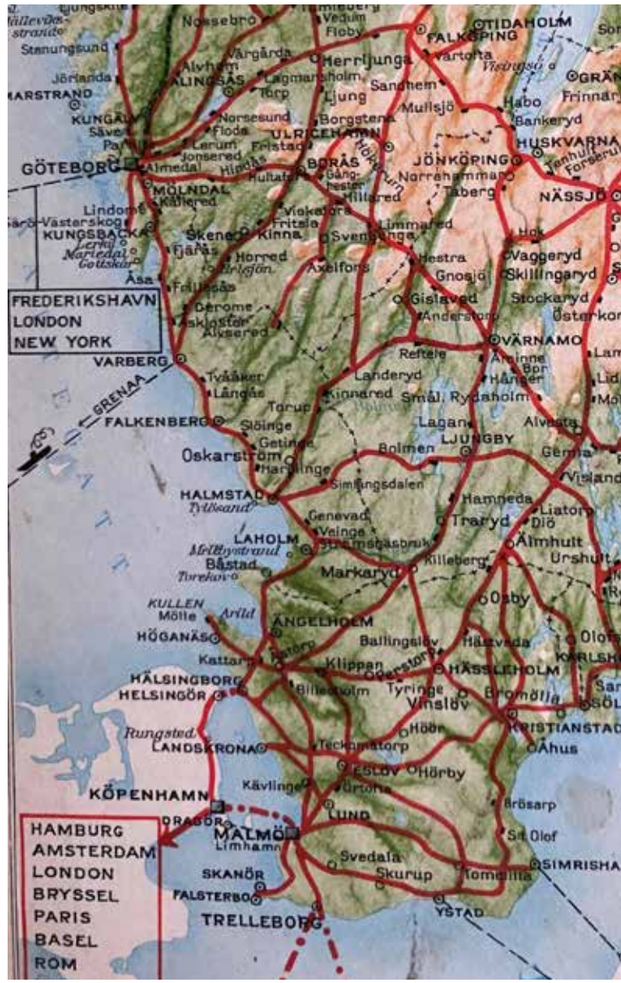
My definition is informed by the work of Clas Florgård, a professor of landscape architecture, although he does not explicitly use the term railway landscape.[7)] As I see it, a railway landscape is both a common asset and a common responsibility, as the European Landscape Convention would have it, and is an umbrella term for a variety of values and benefits – cultural, ecological, aesthetic, social, and economic.[8)]

In nature conservancy, it is usual to use 'ecosystem services' to refer to the services we get 'for free' from nature.[9)] For Naturvårdsverket or the Environmental Protection Agency (NVV), 'cultural ecosystem services' by definition add to quality of life and give people a wealth of experiences from outdoor recreation and natural and cultural heritage.[10)] The NVV holds that cultural ecosystem services must be linked to specific ecosystems, and are not applicable to man-made cultural heritage such as urban areas, churches, castles, or railway stations and bridges, lengthmen's cottages, and railway engine sheds.[11)]

The NNV and the Boverket, or the National Board of Housing, Building, and Planning, are tasked by the government to communicate ecosystem services to the other government agencies responsible for spatial planning.[12)] Boverket's project ESTER, like Trafikverket or the Transport Administration, has extended the definition of cultural ecosystem services to include the historic environment, but there are even more interpretations than that.[13)] Conservation research singles out 'cultural landscapes' and 'the historic environment' as sustainable, identity-shaping resources.[14)] Knowledge of the historical past is fundamental to understanding and valuing cultural ecosystem services. One key issue is the linking of cultural ecosystem services with cultural heritage or the historic environment.[15)] Several Swedish environmental goals highlight the importance of ecosystem services in community planning (something most local authorities are now working towards).[16)] Ecosystem services can increase cross-sector collaboration and counteract the silo effect.[17)]

The Swedish Transport Administration had a hand in the NVV's campaign about ecosystem services. Cultural ecosystem services are mentioned in the Transport Administration's call for 'urgent research and innovation' in the period 2021–2026 under the heading 'Research problem – Landscape Historic Environment'.[18)]

Recognising the railway landscape as a resource also means acknowledging its historical importance. How has the VKB changed since it was built? How were its railway landscapes managed in the twentieth century, with what discourses and on what premises? What has happened to long-standing, historical railway landscapes as the VKB gradually changes? How was the railway landscape valued, what interest was there in protecting it, and could we today make better use of the railway's historic environment and landscape as resources, integrating them into sustainable infrastructure planning?



The railway network of Southern Sweden with the West Coast Line to the left. Map från 1960. Statens reproduktionsanstalt.

THEORETICAL BASIS

I have argued elsewhere that in the industrial age, all modes of transport (in which I include the railways) have been instrumental in the history of landscape and in shaping experiences of landscape. There is a strong bond between transport, gaze, and landscape; modes of transport, like perceptions of the landscape, have a central part to play in cultural history and the creation of historic environments; and wheel tracks can be seen almost everywhere in the – transport – landscape: a cultural history without carts, railways, bicycles, motorbikes, mopeds, cars, or buses is almost unthinkable and would give the wrong impression of the past.[19)]

This recognises the part the railways played in creating characteristic historic environments, providing access to the countryside, and influencing perceptions of the landscape: Sweden's characteristic cultural heritage ranged from station buildings to railway towns, from railway bridges to station gardens; there was access to the countryside for visitors, but also for passengers watching from passing trains; and the landscape as a both natural and cultural experience, meaning a resource or ecosystem service that offered quality of life and a wealth of experiences from outdoor recreation and nature and cultural heritage. The railways' impact on perceptions of the landscape spanned aesthetics, regional identity, nation-building, Scandinavianism, and world view. For many long-distance passengers, the impression of the landscape (here in Halland) would be overridingly what they could see from their seats, framed by the carriage window.

I have emphasised how important it is that research into historic environments absorbs the lessons of art history, perception, and visual experience. The railway carriage is a moving viewpoint where passengers view a landscape: vistas at high speeds and at the lower speeds near stations the same landscape's towns and cities.[20)] The phenomenon was already well known to nineteenth-century authors, and was highlighted in the late twentieth century by Wolfgang Schivelbusch and Rune Monö.[21)] It is a perspective commonly found in landscape research: or, as it has been said, 'roads and railways are decisive for people's opportunities to experience the landscape'.[22)]

My recent book stops in the early 1970s and does not continue on to the changes to the railways, and by extension the railway landscape, in the mid-1980s on. In this article I shall therefore address different questions about the assessment and management of railway landscape during the renewal of the VKB between 1985 and 2024, and how it is assessed and managed today.

NATIONAL ROMANTICISM AND THE RAILWAY LANDSCAPE

The oldest stretch of the VKB dates to 1885, the same year as the Tourist Association was founded, with its motto 'Känn ditt land', 'Know your country'. The National Romantic concept of landscape took shape at the end of the nineteenth century, encouraged by Selma Lagerlöf's *Nils Holgerssons underbara resa genom Sverige* (1906-1907, *The Wonderful Adventures of Nils*) and the interest in local history, seen, for example, in various county histories by the railway official and land historian Mårten Sjöbeck.[23)] In this, a knowledge of school geography – from reading *Nils Holgersson* to learning about the regions and cities, natural resources, commerce, natural and cultural heritage, and the names of rivers as mnemonic rhymes – was essential to Swedes' regional and national rootedness, and created collective points of reference and identity. The regions together built the nation.[24)] The railway network was instrumental in the National Romantic concept of landscape: it united the vast length of Sweden and offered views of countryside, townscapes, cultural heritage, and what can be called 'national icons', such as the Kullaberg peninsula, Laholm Bay, Varberg Fortress, and the Lion Redoubt at the southern entrance to Gothenburg.[25)]

The National Romantic idea of the VKB was cemented by its inclusion as one of the five decorative panels in the main concourse of Gothenburg Central Station, painted by Filip Månsson (1864–1933). The railway lines are picked out in gold on faux archaic maps, which show ships coming into harbour and the iconic sights along the way.

The National Romantic landscape was also on show in the central concourse of Stockholm Central Station (completed in 1927)

FILIP MÅNSSON: The West Coast Line as a wall painting in the main concourse of Gothenburg Central station (1930). Railways in gold and landmarks emphasized. H. Ranby 2023.

in the heritage murals by the artists John Ericsson and Natan Johansson. The west coast was included, as there was a painting of Varberg Fortress from the south.[26)] I take the subtext of the murals to be that the railway that binds the nation together and gives people access to different regions, landscapes, and historical monuments.

The National Romantic railway landscape was associated with aesthetics and pride, but also with a certain topographical eagerness to explore and understand. It was evident from around 1900 in the sheer number of photographs and postcards of railway stations and bridges or views from trains, and in the 1930s the new topographical genre of aerial photo postcards.

The National Romantic railway landscape – the railway as a link to magnificent views, landscape, nature, and historical monuments – should not thought specifically Swedish, as it was anchored in industrialism's visual culture across the board in art, literature, and popular culture. The nineteenth century often privileged the visual over the other senses.[27)]

The railway map mural in Malmö Central Station (by the Skeppsbron entrance), though smaller than the one in Gothenburg, is done in the same style and covers the entire European railway network in 1924, from Narvik in the north to Tunis in the south, from Lisbon in the west to Ankara in the east. It too includes ships and occasional map animals (such as a camel in the Sahara).[28)] The internationalism of the motif was probably considered appropriate for a terminus with the ferries to Copenhagen just outside.

HALLANDÍS LANDSCAPE – A BRIEF CHARACTERISATION

According to the Council of Europe Landscape Convention, 'landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors'.[29)]

Halland is an elongated county, bounded to the south by the Hallandsås Ridge, to the west by the Kattegat, and to the east by the forests of the southern Swedish highlands. The northern border with the county of Västergötland and the city of Gothenburg has never been as definitive. The county has a relatively mild coastal climate and is usually counted among the Old Danish or Eastern Danish provinces, sometimes called Skåneland. Halland is crossed east to west by four main rivers: Lagan (which runs through the town of Laholm), Nissan (Halmstad), Ätran (Falkenberg), and Viskan.

The land rises to meet the coast, shielding the inland areas. The picture is one of thick forest to the east, green river valleys, wide sandy beaches to the south and rugged shores as you move north, and a similar divide between southern Sweden's fertile plains and the rocky hills of the north-west, as is very obvious around Varberg.

The town of Tvååker is said to mark the border, including the shift in dialect from rolled Rs to guttural Rs. It was also roughly the same boundary in architectural idiom between the peasant houses of Skåne Halland (East Danish) and the more typically Swedish building styles of western Sweden.[30] Folk art largely comprised textiles, ceramics, and painted furniture and hangings. Medieval Halland also stood out for its urban culture, where its towns were fortified and often had castles. There was also the Cistercian monastery of Ås, founded at the end of the twelfth century by monks from Sorø in Zealand.[31] Laholm and its castle, Lagaholm, were strategically placed on the Lagan to control transport and travellers, both north-south by land and east-west by water; Old Halmstad was known for its half-timbered buildings; Kungsbacka was once Denmark's northernmost town; while Varberg has since been moved and has a post-medieval grid street plan.

In the nineteenth century, from having been poor, barren country with drifting sand and moorland, Halland became farmland that produced grain for export, a development seen first on the large country estates following the land redistribution in the lowlands between 1825 and 1850.[32] Pine trees were planted to stabilise the sand around Laholm Bay. Fishing and shipping were Halland's traditional industries and its coastal towns supplied the inland areas. Varberg was already a noted spa and bathing resort in the early the nineteenth century. Halland is known as the county Selma Lagerlöf glossed over in *The Wonderful Adventures of Nils*, but even she captured its key features in a few sentences.[33] On the other hand, Karl Nordström's and Nils Kreuger's paintings of Varberg Fortress are among the more atmospheric National Romantic accounts of the region.[34] In terms of art, the National Romantics of the Varberg colony were followed later by the landscape artist Arvid Carlsson (a member of the Halland Circle) and the surrealist Halmstad Group.[35]

JOHN ERICSSON/NATAN JOHANSSON: The Varberg Fortress. Wall painting in the main concourse of Stockholm Central station (around 1927). H. Ranby 2023.

Typical landscape of southern Halland. H. Ranby 2023.

As for museums, Halland is generally associated with Bocksten Man, a remarkably well-preserved medieval 'bog body', and with the lead-filled brass button supposedly said to have been the bullet that killed King Charles XII at the siege of Fredriksten Fortress in 1718. Sjöbeck summarised the character, landscape, and buildings of Halland in 78 pages, illustrated with his own photos. However, his interest was the historic landscape, and he hardly mentioned the railway.[36]

Halland has long been a through route, far easier to journey through than the forests of southern Småland and around Göinge. True, the Hallandsås Ridge used to be a notorious haunt for highwaymen, but as early as c.1070 there was a route north for Adam of Bremen to describe, going over the Hallandsås Ridge, along the Halland coast, and then striking north-east into Sweden along the Viskan Valley. There were other routes that followed the river valleys, such as the Nissastigen, a historic road that ran alongside the River Nissan. An ancient or medieval road running north-south through Halland has been identified, which became known as Kungsvägen (lit. the king's road), a name associated with the Danish-Norwegian union in 1380 and communications between Copenhagen and Kristiania (now Oslo). Improved after Halland became Swedish in 1645, the road is largely still in use, with milestones at regular intervals.[37] What would be the A2 trunk road and most recently the E6 motorway thus has a thousand-year history. As Sjöbeck said in his description Halland's communications that in most people's minds the county was associated with public thoroughfares, and 'many Halland sayings are only truly intelligible when viewed in terms of transport'.[38]

THE ARCHITECTURE AND CHARACTER OF THE VKB

In Sweden, the railway network was planned so the main lines were built by the government (what would later become Swedish State Railways or SJ) and the rest were built privately by joint stock companies. Among the first government construction projects were the Västra Stambanen or Western Main Line (VSB) between Stockholm and Gothenburg and the Södra Stambanan or Southern Main Line (SSB) between Malmö and Falköping, where it connected with the VSB. Both lines were built from south to north, from Gothenburg and Malmö to Stockholm. The first sections came into operation in 1856. The VKB was completed in 1862, the SSB in 1864. The branch lines were built by cities, local authorities, landowners, and large businesses, helped by government concessions and loans. Despite being built privately, the majority went on to be nationalised in the twentieth century. From the start, Sweden held to what known as an *antikustprincip* or anti-coast principle. It was considered best for the country to bring the railways to less developed inland regions. The coast had existing communications such as coastal shipping and steamboat traffic. It also meant the main lines were less vulnerable to potential attacks by foreign forces.[39]

The VKB started off as a collection of branch lines that were subsequently linked. Malmö, Landskrona, and Helsingborg, Skåne's main cities, vied to establish connections up the coast and to boost their rural hinterlands' food production and foreign trade, especially once Denmark had to abolish the tolls in the Öresund Strait in 1857. Until 1896 the VKB name was kept for the Helsingborg-Gothenburg stretch, but in the twentieth century it came to include several lines that terminated at Malmö and Helsingborg.[40] I concentrate on the three railways that together formed the main line between the international train ferry in Helsingborg (1892–2000) and Gothenburg.

As early as the mid-1870s, Halland was unusual in having no railway. The first lines to be built ran north-east from the coast, connecting to the publicly owned national rail network and bringing inland Småland and Västergötland closer to Halland's ports.

Skåne-Halland Railway.
The Sinarpsdal walley
at the Bjäre peninsula.
Postcard. O. Blad.

Skåne-Halland Railway.
Laholm railway station.
Postcard sent in 1905.

The Halmstad-Nässjö Järnvägar or Halmstad-Nässjö Railway (HNJ) opened its line between Halmstad and Värnamo on 1 September 1877 and the final stretch from Värnamo to Nässjö on 21 December 1882. The Warberg-Borås Järnväg or Varberg-Borås Railway (WBJ) opened in 1880. Large brick station buildings were built as the Halmstad and Varberg terminuses, both in a restrained style inspired by medieval architecture. Varberg Station was designed by the Stockholm architect S. F. Mellin in 187.[41)]

The plans for a west coast line were championed by the grain merchant, member of parliament, German honorary consul in Helsingborg, and train enthusiast Petter Olsson (1830–1911) from his base in north-west Skåne. By starting the Skåne-Hallands Järnväg or Skåne-Halland Railway (SHJ) to build the line between Helsingborg and Halmstad and the Åstorp–Höganäs branch line, Olsson benefited his home city and its port as well as his commercial interests in the brick and sugar industry.[42)] The background to the SHJ was long and complex, and it came with a series of technical challenges such as crossing the Hallandsås Ridge and building the long steel viaduct through Helsingborg. As with all railways, it was a question of balancing the requirements of sufficiently low gradients and curve radii with holding down construction costs, added to which were endless negotiations with local stakeholders and shareholders, which affected the route taken. The plan was to have stations at regular intervals, and their loading ramps and goods sheds meant agricultural produce could be shipped out and construction supplies and the like could be brought in. The line was completed in 1885. Railway architecture was synonymous with brick buildings in a relatively restrained style, with larger station buildings such as Kattarp and Laholm built with symmetrical frontispieces and the smaller ones with an L-shaped plan (Ödåkra, Mjöhult, Båstad, Eldsberga). Most railways took a similar approach to their architecture, with individualised designs for larger city stations and standardised buildings in a handful of sizes for the small stations.[43)] The austerity of the SHJ's architecture has been credited to Olsson and his brickworks, perhaps as an expression of his Protestant ethic and teetotalism. The SHJ was known for its brick buildings – even its goods sheds and warehouses. In Sweden, red-painted timber goods sheds were the norm.

From Helsingborg, the SHJ ran over a long steel viaduct with views of the Öresund and the castle of Kronborg on the far shore, and wound through the Pålsjö beech forest and on across Skåne's north-western plain. At Ängelholm it rejoined the coast at the mouth of the River Rönne before cutting inland as Kullaberg Point came into view, bypassing the Bjäre Peninsula and running north from the town of Skälderviken to cross the Hallandsås Ridge. The open plains were by thick forest up on the ridge. From its highest point at Grevie (104 m above sea level), it ran down through a cutting and the beautiful Sinarpsdal Valley to the town of Båstad, where after another cutting there were a sweeping views of Laholm Bay and on across the southern Halland plain with its country estates. It crossed the southernmost of Halland's rivers, the River Lagan, in Laholm near the ruins of Lagaholm Castle, and continued across the plain past small towns such as Eldsberga and Trönninge to Halmstad, and from 1916 the industrial landmark that was its ironworks.

The next section of line between Halmstad and Varberg was completed in 1886 by Mellersta Hallands Järnväg or the Central Halland Railway (MHJ),thanks largely to hitherto railwayless Falkenberg, where, like every Swedish town, local interests wanted a railway connection. They had the vocal backing of Olsson in Helsingborg, who was keen for the line to continue north.[44)] Varberg was less interested, but there the county council gave large subventions to help fund construction. The railway would be of great importance for Halland's dairy industry.[45)] MHJ stood out for its decorative railway architecture in Renaissance Revival and medieval styles, for which it brought in the Gothenburg architect Adrian Crispin Peterson (1835–1912).[46)]

Trains crossed River Nissan by a steel bridge and came into Halmstad Norra, an elegantly neo-Renaissance, pavilion-like station, all patterned brickwork and decorative carving.[47)] Falkenberg's two-storey station was even more palatial, with brickwork and plaster facades, again in a Renaissance Revival style. Originally, it even had high Renaissance gables.[48)] In Falkenberg, Peterson had the chance to design more of the townscape than the station. He may had have a hand in another brick building for the MHJ, with carved decoration similar to Halmstad Norra, and he certainly designed Falkenberg's new church, completed in granite and concrete in 1892, which stood in a park near the station. The civic centre was evidently a point of pride for the town in the late nineteenth century.

Gothic Revival architecture left its mark on the medium-sized country stations (Harplinge, Slöinge, and Tvååker) – two-storey, villa-like buildings complete with corner turrets and rich ornamentation – while even the seven smallest stations (Gullbrandstorp, Brännarp, Getinge, Heberg, Skreanäs, Långås, and Himle) had vaguely medieval facades. The basic design could be scaled down or up according to local conditions while remaining essentially the same.

Continuing up out of Halmstad, passengers were treated to one of the most appealing vistas, the rolling hills along the River Susesån. Once across the River Ätran they pulled into Falkenberg with views of the old city centre with its panelled houses and Sankt Laurentii Parish Church, followed by the nineteenth-century civic centre and the station. Sjöbeck chose the River Ätran as the marking the boundary between Skåne-like southern Halland and the more distinctively Swedish northern Halland.[49)]

After a long, flat, straight stretch north of Falkenberg, the railway again rejoined the coast at the sands at Apelviken, south of Varberg. Grimeton Radio Station has been a prominent landmark in the flat, rural landscape since the 1920s. After Hästhagaberget the rugged coastline was increasingly evident, and, passing through deep railway cuttings, the imposing bastions of Varberg Fortress came into view as the train neared Varberg. This station, built by the WBJ, was completed in 1880.

The northernmost section of the VKB between Varberg and Gothenburg was completed in 1888 by Göteborg-Hallands Järnväg or the Gothenburg-Halland Railway (GHB), though behind the project was Sweden's largest private railway company, Bergslagernas Järnvägar or Bergslagernas Railways, which wanted the Oslo-Copenhagen line finished. That international connection had been on the cards ever since the Dalsland railway came into operation in 1879.[50)] Yet progress with the final section was sluggish. Olsson continued his efforts and secured the help of the Gothenburg merchant Oscar Dickson, which has been regarded as decisive.[51)]

The GHJ also built in brick. It favoured richly patterned designs in red and yellow brick. The Gothenburg architect Hans Hedlund (1855–1931) is said to have designed the stations in Kungsbacka and Mölndal (later Fässberg and then Mölndals Nedre, now demolished). They were built as two-storey buildings with frontispieces oriented to the sides.[52)]

Larger L-shaped station buildings were built in the medium-sized towns of Fjärås and Lindome, of which Fjärås remains. The L-shape was a standard model of station used by the SHJ too. The GHJ's examples had heavily decorative masonry with quoins. As their appearance is reminiscent of Kungsbacka and Mölndal, it can be assumed Hedlund had a hand in them. Smaller station buildings were built in brick with frontispieces and narrow platform canopies to the side: Åskloster, Backa, Åsa, and Anneberg.[53)]

Leaving Varberg on the GHJ line, past the old railway roundhouse (demolished in 2018), there was a marked change in the landscape, as southern Sweden gave way to western Sweden. Having crossed the mouth of the River Viskan by two truss bridges and along the coastal plain, at Stråvalla the line turned inland towards the hills, passing the Fjärås Bräcka ridge, where it left the plains behind and the forest was denser. After Fjärås and Kungsbacka, it soon came to the River Mölndalsån, a valley with an industrial landscape that led via Krokslätt and Almedal to south Gothenburg, with Mölndals Kvarnby and its river rapids to the east.[54)] As early as 1887, the GHJ had built an industrial spur there for the paper manufacturer, AB Papyrys.[55)] Continuing north, there were Krokslätt's factories – the first built in 1877 and a notable expansion after 1890 – and at Almedal the Lyckholm brewery (1880) with its magnificent director's mansion. Until 1968, the railway ran to the east of the Gårda district, with its industry and the county governor's residence, and past Olskroken before turning westwards to cross the viaduct into its Gothenburg terminus, Bergslagsbanan Station (from 1930 Gothenburg Central Station). Skansen Lejonet or the Lion Redoubt at the southern entrance to Gothenburg was the main historic landmark and the 80-metre-tall gasometer built in 1933 (and demolished in 2017) was its industrial counterpart.

Central Halland Railway.
The line at the Varberg Fortress.
Swedish Railway Museum.

As passengers experienced it, the VKB differed from the SSB because it largely ran through open country, with a variety of vistas of farmland, hills, sea, and forest. Unlike many Swedish railway lines, there were no large forests. For much of the route, the railway ran alongside the old Riksväg 2 road, a link to past travel experiences shared by many over the years.

The SHJ originally had the old two-axle side-door compartment carriages, but in 1887–8 the three VKB companies jointly invested in new bogie carriages: modern and elegant, they had end platforms, electric and overhead lighting, and heating. The VKB had a more sophisticated air. In first and second class, the compartments had upholstered seats, armrests, and headrests, and could be made up as beds. It was an opulent railway experience that marked out the VKB as something exceptional.[56] It was ahead of SJ, which did not introduce bogie carriages until 1891.[57] In 1892, Danske Statsbaner or Danish State Railways (DSB) opened its Helsingborg–Helsingør train ferry, which connected to SHJ in Helsingborg's north harbour. Other changes in the private railway era meant that an extension was added the station building in Varberg in 1893 and a new station was built in Almedal in 1894 as the terminus for the Gothenburg–Borås railway.[58]

NATIONALISATION AND THE VKB, 1896-1985

Nationalisation, consolidation

The VKB was of national, strategic interest from the first, and that increased when the train ferry service to Denmark opened, all of which was used to justify its nationalisation in 1896, when it became part of state-owned SJ. SJ immediately launched a series of construction projects along the VKB. The track was changed for stronger rails. Ångfärjestationen, later Helsingborg F, was built in Helsingborg in 1898. A large timber station building, it was intended to be temporary station and had a negligible southern Swedish character; instead it was built in the Old Norse style reminiscent of stations in northern Sweden. It bore more than passing resemblance to both the Ångfärjestation or Steam Ferry Station (1895) in Malmö and Frihavnsstationen or Free Port Station (1895) in Copenhagen.

Several other station buildings were rebuilt or extended, including Båstad and Ängelholm. As early as 1906, it was noted that SJ had added 13 station buildings to the VKB, made alterations to 8 and rebuilt 1.[59] The new stations included Gullbrandstorp (1897), Lisbro and Skreanäs (1898), Söndrum (1907) and Kållered (1909).[60] By 1920 there were engine sheds with turntables in Helsingborg, Ängelholm, Halmstad, Varberg, Kungsbacka, and Gothenburg.[61]

In the 1900s there was a plan for the VKB to continue into Norway via the Bohusbanan, which had opened in 1903, but it came to nothing because of the dissolution of the union between Sweden and Norway in 1905. The proposed bridge at the Swedish–Norwegian border over the Idefjord was never completed, the Bohusbanan ended at Strömstad, and trains continued to go through Dalsland and Kornsjö to reach Norway.[62] The 1920s saw the rerouting of the line south of Varberg, completed in 1920, the modernisation of Falkenberg Station in 1925, and in 1928 the construction of a long plate girder bridge over the River Nissan by AB Götaverken.[63]

The station building at Brännarp Station was rebuilt in 1921.[64] Söndrum had a new station in the National Romantic style, which opened in 1922. There was a National Romantic timber station in Hede too, while Anneberg was rebuilt along the same lines in 1925. Several one-storey L-shaped stations were built: Båstad, for example, and Eldsberga and Trönninge. Major change came to the railways in Gothenburg in 1930. In future, the terminus for the VKB trains was SJ's Central Station, not Bergslagsbanan Station as earlier..[65]

The democratic ambitions of the Swedish Model were evident in the fact that from 1928 to 1988 all SJ's passenger rolling stock (apart from the royal train) was painted a uniform brown. Being state-owned, the VKB's locomotives and carriages were the same as the rest of SJ, although the best carriages and fastest locomotives were reserved for the most important lines, of which the VKB was one.

Electrified, modernised

Near the VKB line a large hydroelectric plant was built at Lagan near Laholm in 1932, clearly visible to VKB passengers. It was needed to meet the SSB's demand for electricity for the Nässjö–Malmö section. A temple-like granite building, it was designed by the architect Salomon Sörensen and his son Arnold Salomon-Sörensen to fit in with the sensitive historic environment of Lagaholm Castle ruins.[66]

The project to electrify the VKB ran from 1933 to 1937 and in 1939 the line's first double track was laid between Gothenburg and Almedal.[67] Like Frillesås, the new Halmstad Norra was built as a restrained, modern, brick building with a pitched roof to fit in with the surrounding functionalist housing estate in north Halmstad. Almedal Station was far more modernist. The old Halmstad Norra survived, but in Almedal the 1880s station building was demolished.[68]

Station modernisations in the inter-war period saw flushing toilets replace the old dry toilets, the addition of central heating, and the installation of the characteristic curved platform canopies (Helsingborg F, Halmstad, Falkenberg, and Varberg). Falkenberg Station's high Renaissance gables were replaced by a hipped roof at some point between 1925 and 1936, judging by the postcards.

Several nineteenth-century stations were rebuilt and rendered in the mid twentieth century. Vallberga was one, Åsa another. Where the work done in Folke Zettervall's time as SJ's chief architect (1895–1931) retained much of the original character, functionalism and a new chief architect, Birger Jonson, left more of a mark. Ornamentation was removed and brick buildings were rendered in the best functionalist manner. The results at Peterson's villa-like stations on the old MHJ section of the line was especially brutal. The tall corner turrets at Harplinge, Slöinge, and Tvååker were replaced by low-pitched roofs. It is almost as if modernism wanted to castrate nineteenth-century architecture.[69]

Compromised

Between June 1940 and August 1943, most of the German troop transfers through Sweden used the VKB. German soldiers travelled in carriages leased from SJ to move between occupied Denmark and Norway, for example between Helsingborg and Kornsjö. It was not only soldiers on leave, however; large quantities of goods and materiel were transported on German freight wagons. The transports were supervised in the towns and cities by the Swedish police. It was politically controversial and violated Sweden's neutrality so it had to be discreetly handled to avoid demonstrations and sabotage. Trains crossed at night at places such as Vejbyslätt, where the Swedish military was stationed to keep track of operations. Derailments were not unknown, suspected to be sabotage. The German troop transfers have often been singled out as part of Sweden's appeasement of Nazi Germany. Sweden only ended the agreement when it considered Germany to be sufficiently weakened to no longer pose a threat.[70] There were press reports of German rolling stock on the VKB even after August 1943. One in *Arbetar-Tidningen* on 7 September 1943 noted that a passenger carriage, a travelling post office carriage, and 14 goods wagons, all German, had been ferried across from Helsingør to Helsingborg, from where they were heading north pulled by a Swedish electric locomotive. The article was censored but the original survives in Gothenburg University Library.[71]

Central Halland Railway.
Halmstad Norra (North) station,
designed by the architect Adrian
Crispin Pettersson. H. Ranby 2023.

Rationalised

The government bought Bergslagernas Järnvägar in 1947 and with it Dalslands Järnväg. In the post-war period, competition from road traffic went up and the railways were rationalised. In 1956 third class was abolished in Sweden, as in many other European countries. From the mid-1950s it was the car, not the train, which was seen as a right and the great social leveller in Swedish welfare state.[72] The switch from rail to road, especially sugar beet, reduced freight traffic at Skåne's rural stations. The system of resident lengthmen was discontinued in 1956, after which the lengthmen's cottages became redundant. The government's new transport policy in 1963 meant all forms of traffic had to bear their own costs, which put SJ in a difficult financial situation as car ownership soared. Most of the smaller stations were closed, and later a number of old stations were demolished. Trains no longer stopped in Vallberga from 1962, Veinge from 1963, or Vejbyslätt from 1968, for example.[73] Around 1970–72, stations such as Almedal, Mölndal, Kållered, Lindome, Anneberg, and Åsa closed.

In several cases, a station closure were followed by the demolition of the station building and other buildings. That was the case at Almedal, Mölndal, Skreanäs, and Slöinge. It seems more were

Central Halland Railway. Falkenberg railway station, designed by A. C. Pettersson. In this picture with its original decorative gables. Swedish Railway Museum.

Central Halland Railway. Tvååker railway station by A. C. Pettersson. Postcard.

demolished in Skåne than in Halland, perhaps because of individual SJ managers' attitudes in the various administrative districts.[74)]

A major change in Gothenburg was the construction of the Gårda Tunnel in 1968, then Sweden's longest railway tunnel. It was necessitated by the expansion of the E6 motorway, which was built on the route of the old railway. The new E6 was constructed to run alongside the railway for long stretches in Halland north of Halmstad, for example, and from the Björkäng motorway service station. The VKB and the E6 even cross at several points in Halland. The motorway expansion led to some route changes, for example at Getinge.[75)]

By the mid-1980s, the VKB was still essentially single track and followed its original route. It had locomotive-hauled trains with SJ-brown carriages that stopped only in towns and cities, not at rural stations. The Helsingborg–Gothenburg journey took over three hours with stops in Ängelholm, Båstad, Laholm, Halmstad, Falkenberg, Varberg, and Kungsbacka.

DOUBLE TRACKS, NEW ROUTES, AND COMMUTERS, 1985-2024

In the mid-1980s, a major renewal of the VKB began, albeit in stages. Double tracks and changes in route meant capacity improved and travel times were significantly shorter. It was a complicated process that has taken 40 years. There has been something of a railway renaissance, which was sparked by the government's new rail policy in 1979, which promoted regional projects for commuter trains and the like.[76)]

In 1985, the route north of Halmstad was redrawn. That year the Halmstad-Bränninge line was straightened and the old line via Halmstads Norra and Söndrum was removed and removed. In Helsingborg a railway tunnel was built under the city and the new station for through traffic, Knutpunkten (lit. The Junction), was completed in 1991. The steel viaduct in northern Helsingborg was replaced with a concrete viaduct. The project made the old Helsingborg F Station redundant, and the opening of the Öresund Bridge connecting Malmö and Copenhagen in 2000 meant the Helsingborg–Helsingør train ferries were no longer needed either.[77)]

Further north, the Kungsbacka–Gothenburg section was double-tracked in 1992. In 1993, an underground railway station was added at Liseberg, serving the amusement park. The line past Tvååker was closed on 4 April 1993 when a new double-track section opened between Hamra and Torebo.[78)]

In 1993, a project to run a tunnel under the Hallandsåsen Ridge was also launched, prompted by the steepness of the climb, the curves, and the problem of leaves on the track. After endless geotechnical problems and environmental scandals, it was finally completed in 2015, the double track greatly increasing capacity on the VKB.[79)] A new station was added on the outskirts of Båstad. On the initiative of the city council, a new red brick station building was built that echoed the old: Båstad had wanted to preserve something of its identity.[80)] The fact the station building was not oriented to be visible from the train does detract rather from what was a well-intentioned project.

In Halland, Eldsberga–Halmstad was double-tracked in the early 1990s, followed by Båstad–Eldsberga, following a new route, in 1996. Laholm was now bypassed, and a station was built on the outskirts in 1996.[81)]

In the 2000s, something similar was done in Falkenberg, where a new double-tracked route skirted the city and a new station was built on the outskirts (2008). In both the Öresund and Gothenburg regions, commuter train traffic evolved with the advent of the Pågatågen regional rail system in Skåne (1983) and Västtrafik in Gothenburg (1988). The SJ brown era gave way to trains in bright, sometimes garish, colours. When the Öresund Bridge opened in 2001, the Öresundståg train network became a factor across the whole of southern Sweden, linking Skåne, Gothenburg, and Karlskrona to the east.

In north-west Skåne, passenger rail growth has meant that old stations have been resurrected in new guises (Ödåkra, Kattarp, Förslöv) and new stations have been built (Maria, on the outskirts of Helsingborg). In the Gothenburg region, Kållered reopened in 1991, Lindome in 1992, Anneberg in 1992, and Åsa in 2013, while a new station was built in Hede.

In Gothenburg, construction of Västlänken or the West Link began in 2018: an underground railway tunnel north of Almedal linking the VKB and VSB with through trains and new stations at Korsvägen and Haga.[82)] On 10 December 2023, the double-track Ängelholm–Helsingborg Maria stretch was inaugurated. A double-track railway tunnel is under construction under the old station area in Varberg, which is expected to be completed in 2024.[83)]

Future projects include a possible new route into Helsingborg, the stretch through Pålsjö forest being single track, as is the tunnel into Helsingborg Central Station (formerly Knutpunkten).[84)]

In the past 40 years, the VKB has been rebuilt so much it deserves to be thought of as a new railway. If road transport and cars were seen as the modern alternative in the post-war period, after the mid-1980s it is the railways which have experienced expansion and investment. Public confidence in the railways has risen significantly, as have society's transport needs.

The modern rail system makes a sharp distinction between freight and passenger traffic. Station buildings with ticket offices have been replaced first by ticket machines and then by ticket apps.

CULTURAL LANDSCAPE, HISTORIC ENVIRONMENT, CULTURAL HERITAGE

Any railway will change in the course of 140 years. Is it still the same railway people use now? The VKB appears to be a palimpsest, the old railway partially scraped away and overwritten by decades of new infrastructure. Some railway environments remain relatively untouched (Falkenberg is one), while in some old railway towns it is difficult even to trace the route.

What links people's perception of reality and their memories of the landscape to landmarks, rail routes, familiar stops, and typical station buildings? Do carriage windows still frame Halland's landscape and shape passenger perceptions of the county? What will remain in the long term and how can a historic environment perspective be reconciled with contemporary requirements for efficient transport?

The VKB embodies a variety of cultural heritage. At its most tangible it is what the railway has created: physical historic environments in the form of the surviving station buildings and other railway buildings such as lengthmen's cottages and other staff housing, engine sheds, goods sheds, bridges, etc. The historic environment also includes its brownfield land, sometimes converted into cycle paths. Some historic railway heritage is divorced from the modern railways because of rerouting, so it is no longer in sight of rail passengers as at Stureholm, Ingelsträde, Halmstad Norra, Falkenberg, Tvååker, and Getinge. Others, like Heberg and Åsklosster, are still close to the current double track. Among the privatised stations there are both good examples of building conservation (Fjärås, Getinge) and buildings in a terrible state of disrepair. In 2021, the Transport Administration did inventory Halland's railway land and property, but it was limited to the busy main lines and did not cover the areas from which the railway had retreated.[85)]

Alongside the tangible historic environment, the VKB also represents a more abstract heritage of history and stories, discourses and worldviews, literature, photos, and recollections. Together, this creates a rich and varied cultural heritage, partly documented in writing and images, partly in fleeting, generation-specific memories that gradually fade if they are not recorded.

In considering art and visual culture in Sweden before 1809, Lena Johannesson (1997) finds the cultural landscape and its content and symbols, whether historical or contemporary, to be central to people's acquisition of knowledge and their grasp on time and place, and it is the human gaze, taking in the landscape – and the transfer of experience that involves – which is largely what make people cultural beings.[86)]

The earliest, official image of the VKB was presented in guidebooks, in postcards that proudly presented railway stations at their best, and in various accounts of railway history.[87)] [88)] The National Romantic paintings in the city stations have already been mentioned. Then there were literary descriptions by the likes of Elin Wägner, and Sjöbeck's county histories.[89)]

Street and road names were also part of the cultural heritage of rail. The road layout was often changed when a new railway station was built. Hence in most towns and especially railway towns there will be a Järnvägsgatan (Station Street) or a Banvägen (Railway Road) or similar. The place names remain even in places that no longer have a railway.

The dark legacy of the German troop transfers has regularly

Gothenburg-Halland Railway. Åskloster railway station, designed by the architect Hans Hedlund. Postcard.

been brought up by Nordic historians, and for example has been highlighted in Ängelholm's local history yearbook in 2008 and an exhibition at the Railway Museum in Ängelholm in 2014.[90] It is also the setting of Hans Alfredsson's alternative history novel (1996) about rail sabotage in Pålsjö Forest, which results in Sweden being drawn into the Second World War. In Helsingborg, the debate flared up when the question of when conserving or demolishing Helsingborg F was discussed between 1991 and 2016.[91]

Generally speaking, the post-war railway discourses were characterised by the generation-specific loss associated with station closures and railway towns losing their *raison d'être*. Today, those are events so far back in time that only pensioners have personal memories of the rural stations being in operation.[92]

It has been behind not only the bitter cynicism about rail policy, but also a burgeoning railway nostalgia, which was as good as institutionalised in the large number of railway enthusiasts, postcard collectors, model builders, local historians, etc. Historical material has been published as books (for example, the yearbook *Spår*) and in magazines such as *Tåg*, and more recently a range of websites with railway data. YouTube gives people the chance to see the VKB from the train driver's seat, and not only the current line, but also old single track over the Hallandsåsen Ridge.

Every passenger who uses the VKB will have their own associations, memories, and ideas linked to generations, individuals, and situations. For me it is childhood ski trips to Norway in the 1970s or commuting to college in the 1980s, though however personal they may be others in my generation will have experienced the like.

"The station is the gateway to adventure. As a child, I stood here late on Friday evenings in the February murk with my family. The skis had been checked in and, rocked by the regular rhythm of the rails, the sleeper would take us to Oslo, and then onwards to Norway's mountains. ... Right here is where adulthood starts. The brown carriages begin to roll, past the towering concrete silos in Norra Hamnen, past Roskildegatan with the café where I drank hot chocolate with whipped cream, past the Functionalist white cube of the Concert Hall, the Karantänen gallery, incessantly barking dogs, the marshalling yard, up onto the old steel viaduct over the Fri bad beech, and into the beech trees of Pålsjö forest. This train will take me to Gothenburg, where I'm going to train as a conservation officer. I am leaving my home town with enthusiasm: 'Bye then, petty bourgeoisie, judging people by the brands they wear down Kullagatan!' And the train speeds on across the plain, snaking through the hills and curves of Sinarpsdal Valley and down to Halland's open country."[93]

Cultural heritage will always age, cultural amnesia is a fact of life, and the 1980s are already long gone. Today's student will feel differently about the VKB, perhaps having never having queued for the ticket office, been over the Hallandsåsen ridge, seen the power station at Lagaholm, or watched that particular station sign – TVÅÅKER – come into view. Whose cultural heritage counts? How recent can cultural heritage be? Is a travel centre from the 1980s cultural heritage? People's view of the landscape will always have multiple dimensions – and be difficult to grasp. It is partly required and learned, whether at school or from county histories, travel programmes, postcards, etc., when it is part of people's socialisation as citizens. It is also partly people's own perceptions, their individuality, what they see, their memories, and how collective impressions come together to form a sense of, say, Halland.

Cultural heritage of a more recent vintage, in this case after 1985, has as far as the VKB is concerned not seen much interest in the historic environment management terms. There is as yet no temporal distance to the advent of double track and all it entails. Heritage management rarely considers anything thought 'contemporary' to be a historic environment, and therefore it is not assessed or valued. Cultural heritage issues become generational issues, and things are singled out and valued only once they are cultural *history* or threatened with destruction.[94]

MANAGING HISTORIC ENVIRONMENT RESOURCES

I hold that cultural landscape, the historic environment, and cultural heritage are resources that add value to people's experiences and well-being. The investment was written off long ago, leaving sustainable resources that create identity and community and can help the hospitality and tourist industries. To discuss such perspectives on the VKB, we need both the history and a sense of the cultural heritage, to which we should add the history of cultural heritage and how it has been valued and treated.

A landscape of the The Swedish State Railways: The ruins of Lagaholm Castle, the Laholm hydroelectric plant and railway bridges over the Lagan river. Postcard/O. Bladh.

THE DEVALUATION OF MODERNISM

For much of the twentieth century, Sweden underrated its nineteenth-century architecture. It began with National Romanticism and only escalated with Functionalism. That devaluation at first meant a 'restyling' renewal and later demolition. It also included railway towns as a whole, which according to Ellen Key were 'disgustingly ugly'.[95] Modernist, rationalist ideology had no place for past ideas of style or neatness, let alone a well-tended station flowerbed.[96] According to the architecture manifesto acceptera (1931), modern Sweden had no need for the 'outgrown forms of an old culture'.[97]

Falkenberg railway station, nowadays closed. The curved platform canopies (1920s) and the catenary system (1930s) are typical for the Swedish State Railways. H. Ranby 2023.

The welfare state was largely about material standards and economic growth. It was a modernist, rationalist society not much given to thinking about the past, and even less so if it were not immediately profitable. The cultural heritage conservationists of the day were not interested in station buildings from the nineteenth century.

Notions of the National Romantic railway landscape seem to have gradually faded away. For a generation endlessly told to travel by train, private cars promised to open up the landscape in the 1950s.[98] International mass tourism brought new landscape experiences abroad. Yet it would be wrong to say it spelled the end of the idea that railways meant landscape experiences. Railway tourism in the shape of the Inland Line in northern Sweden was one such venture, as was the poster campaign 'See Sweden – Take the train'. The Interrail Pass, started in 1972, has brought decades of affordable rail travel and a community of landscape experiences to young people.

Since the early twentieth century, SJ has been careful to curate the history of the railways.[99] It was ably abetted by huge numbers of train enthusiasts (generally men), who documented, compiled, and published data in bulk, although more often than not they were bogged down in the detail rather than attempting to see the bigger picture. Only around 1970 did a real understanding of nineteenth-century cultural heritage dawn. It was a time when Sweden's railways were a morass of axed lines, closed stations, and demolitions in the wake of the 1963 transport policy and an economic downturn.

TRANSPORT RATIONALISM AND A MUCH-REDUCED LANDSCAPE EXPERIENCE

In my 2020 analysis of transport and landscape I left off in the 1970s. I did not address the railway landscape in the thoroughgoing changes to rail travel after the mid-1980s. In understanding today's VKB and how best to manage railway landscapes as ecosystem services, that past will be important. What follows is an outline of the last 40 years, to be fleshed out by future research.

For decades, views on the modern railways have been dominated by a discourse I have termed 'transport rationalism'. To compete with other forms of transport, the goal has been to transport passengers and freight quickly from A to B and in a safe way to minimise accidents and suicides. This and the growing prioritisation of health and environmental concerns have reinforced the success of the modern railways. Transport rationalism is an implicit, 'self-evident' discourse among decision-makers. In *SJ 125 år* (1981), SJ's then director general Bengt Furbäck said shorter journey times (because of faster trains) and greater traffic safety were two fundamental requirements for the railway revival he believed was underway following the government's 1979 transport policy.[100] A couple of essays in the sequel, *Järnvägen 150 år, 1856–2006* (2005), hint at the essential factors in the VKB's development since 1985. The new authority Banverket or the National Rail Administration (1988–2010), the greater health and safety demands under the Planning and Building Act (1987), the government's insistence on high speeds and improved safety, for example by removing level crossings, and the environmental guidelines on noise pollution were some of the parameters for railway construction.[101] Johan Bergkvist has argued that the National Rail Administration was uninterested in architecture and gave little thought to rail history, but rather it was free marketeers and environmental (meaning health) issues which dominated.[102]

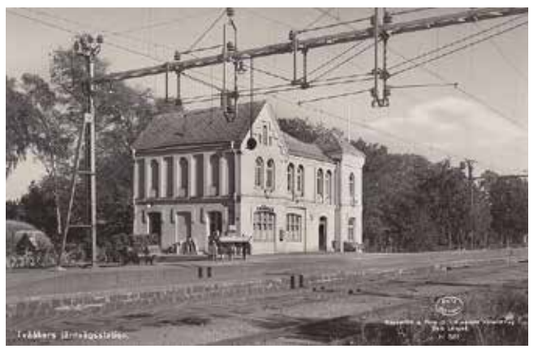
The tunnel under the Hallandsåsen Ridge, begun in 1993, was a clear example of transport rationalism. The purpose of the project was faster transport from A to B and increased capacity. The existing railway over the ridge was mostly considered a technical problem (leaves on the line) and its aesthetic qualities were basically uninteresting.[103]

However, transport rationalism is more complicated than that. The head of strategic urban and regional planning at the National Rail Administration, Olov Niska, said rerouting the line at Falkenberg was caught between the extremes of government interest and the local authority's monopoly on planning. The city council wanted to free up land in a central location, the county council wanted to avoid significant changes to the urban environment, while SJ and the regional transport operator Hallandstrafiken wanted to run double track through the city. However, local politics meant it would be impossible to carry out a railway expansion within the city because of deep-seated objections to compulsory purchase orders. With no clear regional support, the railway was 'pushed out of the centre'.[104] Niska's essay highlighted that transport rationalism was not only driven by government objectives, but also by local political circumstances, and that local democracy might not always provide the ideal conditions for effective, long-term railway planning.

The consequences of transport rationalism for the railway landscape seem to have escaped people. Photos of trains passing through beautiful Swedish landscapes were still routinely published, but railway journeys in the dominant discourse were experiences centred on nature, landscape, or culture; Karin Boye's adage 'it is the journey which is worth our while' no longer applied.[105] SJ's old slogan 'See Sweden – Take the train' was increasingly doubtful. Somewhere along the way, the experiential aspect of rail travel had been completely disregarded. And despite the National Rail Administration publishing a special aesthetic guide for projects, Banestetik (1993). At one point it addressed the perspectives I too consider important:

"There is no reason to try to hide or camouflage the railway ... The railway is an important part – in many cases a positive addition – to our landscape, provided it interacts with nature in a beautiful way. It is through personal involvement in the design of the whole, parts, and details that a beautiful railway can be created. Managing and advancing the historical legacy of our railways, created by previous generations, is an important undertaking." [106]

Ödåkra railway station with its idyllic garden. Electrical train coming in from Helsingborg. Postcard from the 1930s.



Tvååker railway station. The tower has been shortened and catenary is installed. Postcard around 1950/O. Lilljeqvist.

German soldiers on leave at Helsingborg Ferry Station (1940-1943). Swedish Railway Museum.

The superficiality of the travel experience relates to speed, of course. The faster one travels, the more cursory the picture.

The rerouting of the VKB between 1985 and 2024 has resulted in a considerable reduction in passengers' landscape experiences, their picture of Halland, and the cities' opportunities to present themselves. The Bjäre Peninsula and Sinarpsdal Valley have been lost to passengers; the views of Skälderviken and Laholm Bay greatly reduced; the seaside resort of Båstad is out of sight; Laholm does not appear to be a town, and its medieval castle ruins and monumental power station cannot be seen from a train. Further north, Falkenberg, which previously presented two faces with old timber buildings and the new nineteenth-century city centre, has disappeared. The original role of the railway station as industrialism's window on the world – the way a city or town presented itself to outsiders – seems irrelevant in a transport-rationalist communications regime. In Halland, several places lost much of their railway town identity when the VKB was rerouted. Tvåker, once a key Swedish cultural border marker, no longer exists in the railway landscape.

The Varberg Tunnel, completed in 2024, has separated the railway from the coast around Apelviken, and hidden not only the views of Varberg Fortress, but also the entire visual presentation of the city centre.[107] In the Transport Administration's information film about the Varberg Tunnel (2019), the historic railway is presented as standing in the way of urban development or as a barrier with life-threatening level crossings and a single-track transport bottleneck. Trains in urban environments bring nothing but problems. The new station, 10 metres below street level with a modernist box on top, is presented as an attractive, vernacular building and a significant environmental improvement. The film has censored all the cultural history and landscape experiences of the old line. The historic station building or the Station Park, later the English Park, do not rate a mention, nor the iconic views of Varberg Fortress or across the Kattegat at Apelviken. Not a word about the demolition of the WBJ's old railway roundhouse to make way for the project.[108]

The West Coast Line with double track. A "Öresund train" passes Skrea church south of Falkenberg. H. Ranby 2023.

A railway landscape soon to disappear. The West Coast Line at the Varberg Fortress. H. Ranby 2023.

The historic environment perspective is wholly absent from the film, and so too the idea that passengers' experiences of nature and culture should be considered a resource. The transport-rationalist perspective predominates. Historical qualities such as Varberg having been a railway town since 1880 or any number of popular cultural phenomena that all indicate people find trains fascinating are neglected. The city's interest in expanding seawards with its Västerport development is presented as decisive and desirable. This is transport rationalism combined with a local willingness to expand.

Another example is the Skåne town of Ödåkra, a short way north of Helsingborg. It was built as a typical railway town with an L-shaped station building, a goods shed, rows of neat houses on either side of the railway lines, and a large industrial employer – here a distillery. The station building was demolished in 1983, hollowing out Ödåkra's identity as a railway town. When the new double track opened in 2023, noise barriers had been put up along a 2-kilometre stretch of the VKB, which has proved controversial. There has been talk of a 'Berlin Wall'. Evidently, an older era's enthusiasm for a well-ordered society is being pitted against modern transport rationalism.[109]

The level crossing in the middle of town has been removed, replaced by a grade-separated crossing further north. The new commuter station has been fitted with a modernist grey noise barrier. The focus for railway passengers and road users on Björkavägen alike is no longer the old railway town's neat nineteenth-century villas with their verandas and turrets (as in Vintapparvägen). The community has been cut in half and no longer presents itself as was once intended, as a social unit. In terms of its historic environment, it is difficult to find anything positive about the new Ödåkra.

The planned renewal of Helsingborg's northern approach may remove the Pålsjö beech forest, the Öresund Strait, and Kronborg Castle from view. How West Link will affect the approach to Gothenburg remains to be seen. Will passengers cross Gothenburg without even having seen Gothenburg?

The implementation of a fast, functional, and rational transport system between 1985 and 2024 has come at the price of an extensive reduction in passengers' landscape experiences. Nature, topography, sea, and iconic cultural landmarks have disappeared from sight; urban environments and station towns no longer control how they are presented, because that is left to rationally functional but often nondescript stations. People soon christened the new station outside Laholm the 'Little House on the Prairie' from the Laura Ingalls Wilder books and TV series, underlining its bleakness and lack of context.

The VKB's passengers today have no sense of Båstad, Laholm, or Falkenberg as historical cities, and it seems likely Varberg and Helsingborg will soon join the list. There seems to be no interest in people being able to see Kullaberg or Varberg Fortress. Remarkably, there has been no reaction to speak of from local council communications officers, event and destination developers, tourism stakeholders, or brand consultants. Diminished experiences have been a non-issue.

When passengers' common frames of reference, learnt in school geography lessons and literature, vanish from view, so too does a National Romantic notion that landscape and cultural memory bind a society together. Everything is smoothed out and Halland loses part of its character when the VKB goes underground.

Denmark can be mentioned as an example of a different approach to historic railway landscapes. For Kystbanen or the Coast Line between Copenhagen and Helsingør, inaugurated in 1897 and one of Denmark's busiest lines, modernisation and electrification (1982-86) has been combined with the conservation of the old station buildings and other key elements in the historic environment.[110)]

Transport rationalism also stands in stark contrast to the popular cultural references to rail journeys through varied landscapes – and of course the associated visual experiences. Interrailing is familiar to millions; the rail journeys through stunning countryside and over iconic viaducts in J. K. Rowling's Harry Potter books are a common reference for younger generations.[111)]

TRAINS ARE THE PROBLEM

Greater recognition of safety, environmental, and health challenges means that trains operating in densely populated areas are more frequently viewed as problematic. In the nineteenth century trains were something to be proud of and fascinated by, but today they are best hidden behind noise barriers and embankments or in cuttings and tunnels. In descriptions of landscape, railways are often presented as a wound, a barrier, or a detriment to the landscape, and not as adding something positive. Conceptually, this is alien to the idea of trains and rail travel, scenery, or views in popular culture as something positive or fascinating.

HISTORIC ENVIRONMENT MANAGEMENT AND RAILWAY STATIONS

What has the response been when it comes to historic environment management? Old-style heritage conservation was object-oriented. The focus was station buildings, not station gardens or railway landscapes.

The government's cultural conservation agencies first turned their attention to railway buildings in the late 1960s. Riksantikvarieämbetet or the National Heritage Board (RAÄ) and SJ collaborated in 1968 on inventorying the country's stations, on the initiative of Arkitekturmuseet or the Architecture Museum. The date was sent to RAÄ for processing. The project concentrated on station buildings. While the data-processing was underway, interest in Sweden's industrial heritage continued to grow, resulting in the new cultural policy adopted by Parliament in 1974 (Proposition 1974:28).

When RAÄ finished working through the data, lists of station buildings were sent out to the usual statutory consultees, who in this case were the regional antiquarians and county archivists. In 1983, RAÄ produced a new list of the station buildings still in SJ's possession, which ranked station buildings according to a range of criteria. It noted that 130 station buildings were of special historical or architectural interest and should be officially listed as historic monuments. SJ accepted about 50 of them and on 21 August 1986 the government announced that 55 railway buildings (not all of them station buildings, for example the Östra Årstabron Bridge) would be listed as statliga byggnadsminnen (state-owned historic buildings).[111)] Previously, that had been limited to railway buildings at Fryksta in Värmland and Buttle on the island of Gotland, along with Lund (4 March 1972) and Vansbro (15 May 1975).[112)]

At the same time in the 1970s as arrangements were made to safeguard some of the country's railway stations, SJ was busy demolishing others. Academic critics of the demolitions raised their concerns in a special issue of *Nordic Journal of Settlement History and Built Heritage* about railways and the built environment in 1986. Erik Nordin feared there was a fire sale to pre-empt any new policy to protect Sweden's railway history in all its forms.[113)]

Take the Skåne sections of the VKB as an example. According to Linde (1975), the stations at Ormastorp and Västraby were demolished in 1975.[114)] The station buildings in Ödåkra, Kattarp, Hasslarp, Vegeholm, Rögle, and Mjöhult were demolished between c.1975 and 1985.[115)] In Höganäs, the local council demolished the station building at Höganäs Övre in c.1977 followed by Höganäs Nedre in c.1980. Several stations on the Hallandsås Ridge (then in Kristianstad County) and in southern Halland were demolished around the same time. A century after SHJ began operations, most of its buildings were razed to the ground.

Yet a closer look at the station buildings in Halland reveals a different picture. Although some were indeed demolished, there is no indication of a rush to demolish the county's railway architecture. The architectural heritage of the MHJ, GHJ, and SJ has survived. No station buildings in Halland have been listed as historic monuments, though.[116)] Sometimes it has been possible to repurpose them. Falkenberg's railway roundhouse, for example, has taken on a new lease of life as commercial premises.

The most controversial of all the VKB station buildings was Helsingborg F (formerly Ångfärjestationen), built by SJ after nationalisa-

The West Coast Line becoming a "subway". The new station in Varberg. Visulent.

tion and closed in 1991. It became the Tivoli rock club, was threatened with demolition, investigated as a potential historic monument, and finally moved to the other end of Sundstorget Square, largely thanks to local opinion. It was never listed, though a couple of 1920s platform canopies remain to mark where it once stood.[117)]

The Transport Administration's recent inventory of Halland's railway land and properties was published in 2021. It is limited to the land adjoining the line and does not include any properties that have ended up off the current route.

HISTORIC ENVIRONMENT MANAGEMENT AND RAILWAY LANDSCAPES

Historic environment managers have struggled to spell out the value associated with railway landscapes. Admittedly, historic *monument* management slowly but surely became historic *environment* management by the late 1980s, emphasising its holistic approach. Yet the older sort of building-oriented thinking continued, and a change in terminology did not automatically make it an effective tool when dealing with questions of landscape. The government probably assumed the local authorities would act using their powers under the Planning and Building Act (1987) and the Natural Resources Act (1987, included in the Environmental Code). To this day, the majority of local authorities instead focus their planning resources on population and housing growth than on conservation. In hindsight, a backlog of cases, negative precedent set by the courts under the Planning and Building Act, budget restructuring, the questionable management of areas of national interest, a neoliberal interest in ownership and property rights, and a fixation on regional and local growth almost guaranteed expectations would not be met. All too often the result was *theoretical* historic environment management with limited real-world impact.[118)]

The new station at Ödåkra with soundboards. Trafikverket.

Getinge railway station. No railway here any longer but a building preserved by a new owner. H. Ranby 2023.

One of the perennial problems for historic environment management is the number of stakeholders and consequent lack of coordination and continuity involved in any decision about the railways. Until the 1980s, decisions were made by SJ. Between 1988 and 2010, the National Rail Administration was responsible for the railway network, while after 2001 Jernhusen provided the commercial property management services for the stations. The books *Banestetik* (1993) and *Spår i landskapet* (1999) published by the National Rail Administration were its first attempt to make a distinction between railway landscape and technical infrastructure.[119)]

After 2010, the Rail Administration and the Road Administration merged to become Trafikverket or the Swedish Transport Administration. In 2013, Bergkvist called for proper consideration to be given to the cultural, historical, and aesthetic factors in railway construction and network management.[120)] Asked in 2023 whether there has ever been a concerted, holistic approach to the VKB's history, both the county antiquarian Emma Östholm and the head of Kulturmiljö Halland Malin Clarke answered in the negative.[121)] I received much the same answer in 2017 from Mats Riddersporre at Skåne county council about the stretch over the Hallandsåsen Ridge, that the rerouting of a main line with real consequences for people's landscape experiences was not considered a historic environment concern at all, but was an internal issue for the Transport Administration. This despite it being described in older guidebooks as one of the most beautiful railway journeys in Sweden. The regions' historic environment management and legal authority does not seem to extend to railway landscapes.[122)]

A HOLISTIC APPROACH TO THE HISTORIC ENVIRONMENT AS A RESOURCE?

Given the VKB's history, the question remains how its landscape, cultural heritage, and historic environments could be recognised as a resource and integrated into Sweden's rail renewal plans. Is there an alternative to transport rationalism? How can the existing understanding of the railway landscape as a source of experiences and well-being be realised in urban and regional planning and transport planning?

These days, historic environments and cultural landscapes are accounted resources, as is well established internationally and nationally.

Of the UN Sustainable Development Goals (2015), Target 9.1 is 'Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all'. It should be possible to interpret 'quality, reliable, sustainable' infrastructure that supports 'human well-being' as something that maximises the value of the railway landscape's historic environment. Target 11.4, meanwhile, is 'Strengthen efforts to protect and safeguard the world's cultural and natural heritage'.[123)]

The premise of the Council of Europe Landscape Convention (ELC), ratified by Sweden in 2011, is that the landscape is a 'common resource' and a shared responsibility. The value of landscapes are multiple: cultural, ecological, aesthetic, social, and economic. The ELC exists to improve the protection, management, and planning of European landscapes.[124)]

Since 2014, one of Sweden's official National Cultural Environment Goals has been 'A landscape management perspective in which cultural heritage is utilised in the development of society'. It underlines the idea that the cultural landscape is a resource – surely something that is equally valid for railway landscapes.[125)]

Sweden's Historic Environment Act (1988) opens with the words 'The protection and conservation of our cultural heritage is a matter of national concern. Responsibility for cultural heritage is shared by all. Both individuals and public authorities shall demonstrate consideration and care with respect to cultural heritages. The person who is planning or executing work shall ensure that damage to cultural heritage is avoided or limited'.[126)]

Protection for railway landscapes is also found in the Railway Construction Act (SFS 1995:1649, revised as SFS 2022:373), which states that 'When planning, building, and maintaining railways, consideration must be given to both individual interests and public interests such as environmental protection, nature conservation and the historic environment. An aesthetic design shall be sought' (2018:1417). Further 'When a railway is built it shall be located and designed as to achieve the purpose of the railway with the

Kungbacka railway station, a preserved building at a station still in use. H. Ranby.

least intrusion and inconvenience without unreasonable expense. Consideration shall be given to the urban and landscape profile and to natural and cultural heritage qualities.'

The international and national ambitions for the historic environment support the view that railway landscape is a resource, and are included in the Transport Administration's various policy documents, in historic environment strategies and goals, and in in-depth descriptions of key research and innovation.[127] According to the Transport Administration's Objectives for 2030 (2018:235), everyone should work to maintain and strengthen biological diversity and the cultural values of landscape. The adaptation of infrastructure to landscape is covered by the Transport Administration's *Ecological and Cultural Heritage standards* (TDOK 2015:0323).

In the Transport Administration's proposal for research and innovation projects, it states that the landscape is the foundation of a sustainable society and a sustainable transport system. The transport system is not adapted to the surrounding landscape but affects the natural and historic environment so much that it is a key reason Sweden is failing to meet its environmental quality targets and national historic environment targets. Infrastructure can contribute, though, by making the natural and historic environment accessible to the public, and it is crucial for regional development. The adaptation of infrastructure to the landscape thus turns on a range of cultural, biological, social, and economic factors in sustainable development.[128]

This is not entirely positive. The railways are seen as an *intervention* in the landscape rather than a resource. I can only agree when it acknowledges the railways made the historic environment more accessible.

The Transport Administration has announced it wishes to develop the processes and tools with which to integrate historic environment work into the early stages of strategic, physical, and maintenance planning, the development of methods of digitally documenting the historic environment in question (for example in historic railway environments), research into the synergies between the historic environment and other sustainability goals, and the recognition of cause and effect in landscape and the historic environment. Further research is needed to gauge the historic environment's and landscape's importance for society, crisis management, and public health in urban and rural areas; the historic environment's and cultural landscape's importance for sustainable development; and the historic environment's importance as a resource in a circular economy.[129] The Transport Administration's landscape guidelines call for a robust knowledge base and transparent landscape analyses.[130]

In the end, there are so many formulations about cultural landscapes and historic railway environments in the Transport Administration's documentation that the way is open to almost any railway construction project, however marginal its advances on a strictly transport rationalist approach, whether using existing new methods of analysis and developing alternative methods with which to identify ecosystem services along railway routes.

The realisation of such ambitions and their subsequent impact seems to hinge on the people taking the decisions – their professional training, competence, and status in the organisation and how many are involved. The international and national policy documents have all-encompassing interpretive frameworks. Is it an engineer, a biologist, or a cultural historian who is consulting them? Which occupations dominate? Who has the deciding say? Can there ever be a consensus about what ecosystem services are, and will it mean that the railway landscape with its cultural memory is seen as a resource worth conserving?

Some formulations plainly assume the railway is an intervention in the landscape (and does damage which must be minimised or compensated for), rather than creating landscape, or at least contributing specific qualities to the landscape, such as the historical and aesthetic qualities I have singled out.

The Transport Administration does not own the issue, of course. Local authorities, as in Falkenberg and Varberg, can have a great deal of influence on railway planning. The valuable historic environments sidelined by rail renewal plans and duly sold off are a question for the regional and local authority planning authorities and historic environment management. It demands not only knowledge, but also empathy and insight into the character of railway towns and the railway landscape as a resource, but the outcomes could range from embankments repurposed as cycle paths to cultural protection for station buildings under the Historic Environment Act and the Planning and Building Act, all thanks to an appreciation of the value of former railway structures such as access roads, railway gardens etc.

Decommissioned railways can be used as pedestrian and cycle paths, as seen along the VKB and elsewhere. Such historic landscapes can be a resource long after the final train, as borne out by a TV series broadcast recently in Sweden. In *Walking Britain's Lost Railways* (2018) Rob Bell follows the network of paths made from disused railways. They are walks replete with flashbacks to the golden age of rail, magnificent views, and the quiet pleasures of the present.[131]

RESULTS

After 140 years of operation, the VKB has a complex railway landscape with multifaceted cultural values from its station environments, landscapes, and views. The literature is thin, but it is clear the VKB played an important role in the history of both the Nordic region and the Swedish west coast. Since 1900 it has been altered and modernised, but in recent years the changes have become more pervasive with double tracks, new sections, and tunnels. I have found that the rail renewal after 1980 did not capitalise on the impressive cultural and historical values of the railway landscape. Historic environment management has had next to no impact on rail renewal. A transport-rationalist view of rail has dominated, studiously neglecting the VKB's historical railway landscape and passenger experiences. In the Transport Administration's policy documents and statements, however, there are signs of a change. Landscape, cultural heritage, and aesthetics are singled out, which promises a better balance between landscape, cultural heritage, and efficient infrastructure. In 2023, however, there were ongoing railway projects such as at Varberg and Ödåkra, where the tensions between transport rationalism and cultural heritage had turned into outright conflict.

FURTHER RESEARCH

This preliminary study has outlined the issues of the ecosystem services associated with railway landscapes and shown that it is possible to capitalise on them. There are multiple pathways for further inquiries. More research is needed about rail renewal, planning processes, and the interplay of government, the regions, and local authorities after 1980. However good or poor the outcome, the complexity of the processes also warrants analysis as negotiations of transport policy.

Methods to identify different railway landscapes and their character, views, and content can speak to the better use of the railway landscape as a resource, and can in turn be applied in future rail planning, for example by the Transport Administration.

ABSTRACT

The article considers the railway landscapes of the Swedish West Coast Line (VKB) between Skåne and Gothenburg, which forms part of the Copenhagen-Oslo rail connection. The author sets out the history of the VKB from three joint stock companies in the 1880s to nationalisation in the 1890s, and subsequent changes over 140 years, told through the medium of Halland's landscape and its varied nature, towns, and landmarks as seen by railway passengers.

In the early twentieth century, what is best called a National Romantic view of railway landscape was in the ascendant. Since the 1980s, the VKB has been converted to double track. Much of the line has been moved, new tunnels have been added, etc. The requirements of speed, safety, and noise reduction have gradually removed many of the railway landscape experiences. The author calls for fresh methods of analysis and project planning to better use the ecosystem services which railway landscapes have to offer future infrastructure planning. The formal foundations are already in place in international and national conventions, laws, and policy documents.

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References

Alf Åberg, *Konsul P. Olsson: En märkesman i Hälsingborgs historia.* Helsingborg: Killbergs, 1953.

Sarah Andersson & Malin Weijmer, *Kinnekullebanan ur ett lokalt perspektiv: Samtal om banan, landskapet och framtiden.* Gothenburg: Göteborgs universitet, Institutionen för kulturvård, 2013. gupea.ub.gu.se/bitstream/handle/2077/35070/gupea_2077_35070_1.pdf?sequence=1&isAllowed=y

Gunnar Asplund, Gregor Paulsson, Sven Markelius, Uno Åhrén, Eskil Sundahl & Wolter Gahn, *Acceptera.* Stockholm: Tiden, 1931.

Lars Berggrund, 'Järnvägen och miljön', in Karin Rosander, Lars Olov Karlsson, Johan Bergkvist, Göran Fält & Robert Herpai (eds), *Järnvägen 150 år 1856-2006.* Stockholm: Informationsförlaget, 2005.

Johan Bergkvist, *Landskapsarkitektur i järnvägslandskap: Platsernas förändring i historiskt perspektiv.* Licentiate thesis, Uppsala, SLU 2013. pub.epsilon.slu.se/10429/1/bergkvist_j_130510.pdf

Ulla Berglund, Malin Eriksson, Jenny Nord, Andrew Butler, Hans Antonson, Karin Hammarlund, Per Hedfors & Ann Åkerskog, *Om landskap och landskapsanalys för väg- och järnväg: Ett kunskapsunderlag med fokus på begrepp och exempel.* SLU Rapporter Institutionen för stad och land 2011:1; Uppsala: SLU 2011. pub.epsilon.slu.se/8253/1/berglund_u_110707.pdf

Gunnar Carlsson & Vägverket, *Motorväg E6 i Halland.* Gothenburg: Vägverket Region Väst 1996.

Crary, Jonathan, *Techniques of the observer: On Vision and Modernity in the Nineteenth Century.* Cambridge, MA: MIT.

Ingegärd Eliasson, Igor Knez, Ewa Ljungdahl, Ola Hanneryd & Eva Karlsson, *Fjäll som kultur?* Östersund: Länsstyrelsen i Jämtlands län, 2015.

Clas Florgård, 'Infrastrukturens landskap', in Johan Bergkvist & Banverket (eds), *Spår i landskapet: Hur järnvägen format stad och land.* Borlänge: Arena, 1999.

Forsström 1986.

Bengt Furbäck, 'Med SJ mot framtiden', in Lars Olov Karlsson & Carl-Axel Alrenius (eds), *Statens järnvägar 125 år.* Örebro: Gullers, 1981.

Per Gedin, *När Sverige blev modernt: Gregor Paulsson, Vackrare vardagsvara, funktionalismen och Stockholmsutställningen 1930.* Stockholm: Albert Bonniers, 2018.

Göteborg och Västkusten: Kanal- och järnvägsresorna mellan Stockholm och Göteborg jämte beskrifning öfver talrika sidoutflykter för turister i Öster- och Västergötland, Halland, Bohus och Dal. 2nd edn, Stockholm: Albert Bonnier, 1896.

Eva Gustavsson, 'Järnvägslandskapet', in Karin Rosander, Lars Olov Karlsson, Johan Bergkvist, Göran Fält & Robert Herpai (eds), *Järnvägen 150 år 1856-2006.* Stockholm: Informationsförlaget, 2005.

Eva Gustavsson, Ingegärd Eliasson, Susanne Fredholm, Igor Knez, Lars Göran Nilsson & Maria Gustavsson, *Min plats i biosfären.* Göteborgs universitet, Institutionen för kulturvård, 2019. hdl.handle.net/2077/62574

Stellan Haverling, *Kungsvägen genom Halland: Bidrag till halländsk kulturhistoria och underlag för vägminnevårdsprogram.* Gothenburg: Vägverket Region Väst 1996.

Lena Johannesson, *Konst och visuell kultur i Sverige före 1809.* Stockholm: Signum, 2007.

Bo Kjessel, Banestetik*: Banverkets policy och mål gällande järnvägens estetik och miljö.* Borlänge: Banverket, 1993.

Selma Lagerlöf, *Nils Holgerssons underbara resa genom Sverige.* 2nd edn, Stockholm: Albert Bonniers, 2008.

Gunilla Linde Bjur & Krister Engström, *Stationshus: Järnvägsarkitektur i Sverige.* Stockholm: Balkong, 2010.

Anna Lindgren, *Staten som trädgårdsmästare: Järnvägens planteringar från naturförsköningskonst till testamente.* PhD thesis, Gothenburg: Acta Universitatis Gothoburgensis, 2022.

Rune Monö, *Njutningen av att åka tåg.* Stockholm: Carlsson, 1988.

Olov Niska, 'Järnvägsplanering: Från Nils Ericson till Miljöbalken', in Karin Rosander, Lars Olov Karlsson, Johan Bergkvist, Göran Fält & Robert Herpai (eds), *Järnvägen 150 år 1856-2006.* Stockholm: Informationsförlaget, 2005.

Nordic Council of Ministers, *Kulturarv og økosystemtjenester: Sammenhenger, muligheter og begrensninger.* TemaNord 2015:540; Copenhagen: Nordiska ministerrådet, 2015.

Erik Nordin, Järnvägarnas kulturminnesvård – erfarenheter från Gävleborgs län, *Bebyggelsehistoriskt tidskrift/Nordic Journal of Settlement History and Built Heritage"* nr. 12, 1986.

Björn Olofsson & Louise Didriksson, *Hallands järnvägsmiljöer: Inventering av kulturmiljöer, nulägesanalys och åtgärdsförslag, 2021.* Report TRV 2020/9982; Borlänge: Trafikverket, 2022. urn.kb.se/resolve?urn=urn:nbn:se:trafikverket:diva-5437

Carl Olofsson, *Sveriges järnvägar.* Stockholm: n.p., 1921.

Nils-Olof Olsson, *The Swedish West Coast through the artist's eye,* tr. Paul Britten Austin. Limhamn: Färgtrappan AAA, 2004.

Henrik Ranby, 'Kullaberg ställt på sin spets: Bergets betydelser och transformationer', in Johan Stenström & Anders Palm (eds), *Kullabygden: Naturrikedom och kulturtradition.* Tolfte Krapperupssymposiet 2021; Gothenburg: Makadam, 2023.

Henrik Ranby, *Åkdon, blick och landskap: Om relationer mellan kommunikationer, kulturmiljö och landskapssyns med huvudexempel från Kullahalvön, Skåne.* Gothenburg: Makadam, 2020.

Henrik Ranby, *Harald Boklund: Kosmopolitiskt, regionalt och nationalromantiskt i Skånes arkitektur 1890-1930.* Lund: Arkitekturmuseet, 2002.

Henrik Ranby, *Henriks byggnadsvård: Kulturarvsarbete mellan teori och praktik.* Gothenburg: Göteborgs universitet, Kulturvård, 2014.

Katarina Saltzman, *Inget landskap är en ö: Dialektik och praktik i öländska landskap.* Lund: Nordic Academic Press, 2001

Wolfgang Schivelbusch, *Järnvägsresandets historia: Om rummets och tidens industrialisering under 1800-talet.* Hedemora: Gidlunds, 1984.

SFS 1988:950 Kulturmiljölag [SFS Svensk författningssamling, Swedish Code of Statutes].

Mårten Sjöbeck & Järnvägsstyrelsen, *Halland: En landskaplig orientering vid betraktandet av Halland från statsbanornas tåg och under utfärder.* Stockholm: Seelig, 1931.

Mårten Sjöbeck & Järnvägsstyrelsen, *Skåne: Färdvägar och vandringsstigar utgående från statsbanorna.* 2nd edn, Stockholm: Seelig, 1936.

SOU 2013:68 *Synliggöra värdet av ekosystemtjänster: Åtgärder för välfärd genom biologisk mångfald och ekosystemtjänster* [SOU Statens offentliga utredningar, Swedish Government Official Reports].

Statens järnvägar 1856-1906: Historisk-teknisk-ekonomisk beskrifning i anledning af Statens järnvägars femtioåriga tillvaro, 4 vols. Stockholm: Kungliga Järnvägsstyrelsen, 1906.

Statens järnvägar 1906-1931: Minnesskrift i anledning av de svenska statsbanornas 75-åriga tillvaro, 2 vols. Stockholm: Kungliga Järnvägsstyrelsen, 1931.

Bengt Sundberg, 'Göteborg–Hallands järnväg: Sista länken mellan Oslo och Köpenhamn', *Tåg* 2, 1985a.

Bengt Sundberg, 'Mellersta Hallands järnväg', *Tåg* 8, 1985b.

Svenska Järnvägsklubben, *Järnvägsdata med trafikplatser.* Rev. edn, Stockholm: Svenska Järnvägsklubben, 2009.

Sveriges järnvägar hundra år: *Minnesskrift utgiven av Kungl. Järnvägsstyrelsen med anledning av Statens järnvägars 100-årsjubileum 1/12 1956.* Stockholm: Kungliga Järnvägsstyrelsen, 1956.

Sveriges statsbanors stationshus i bilder. Stockholm: Allt om hobby, 1981 (first pub. 1925).

Trafikverket, 'Riktlinje Landskap', report 2015:0323 version 3.0, 11 Mar. 2019. trvdokument.trafikverket.se/Versioner.aspx?spid=4570&dokumentId=TDOK 2015%3A0323

Trafikverket, 'Fördjupade beskrivningar av angelägen forskning och innovation för åren 2024–2029', report 2024:002, 4 Jan. 2024. trafikverket.diva-portal.org/smash/get/diva2:1824191/FULLTEXT01.pdf

Edvin Trettondal, *Bygden som blev Mölndal.* Mölndal: Mölndals stad, 1959.

Ann Mari Westerlind & Ivar Eklöf, *På väg: En metod för kulturmiljövård i regional trafik- och miljöplanering.* Stockholm: Riksantikvarieämbetet, 1994.

Pablo Wiking-Faria, 'Karl Nordströms och Nils Kreugers målningar av Varbergs fästning, in id (ed.), *Varbergs fästning och dess roll i Hallands historia.* Varberg: Hallands kulturhistoriska museum, 2013.

Pablo Wiking-Faria (ed.), *Hallands historia: Gränsland genom tiderna.* Halmstad: Hallands akademi, 2022.

Christer Winberg, *Hur Västsverige blev västsvenskt.* Gothenburg: Göteborgs universitet, 2000.

Notes

1) Ranby 2020, 149–263; www.bohuslansmuseum.se/samlingar-och-historia/gamla-historiska-artiklar/badorten-varberg/
2) Olofsson 1921, 156, 160–161; Trettondal 1959.
3) Linde Bjur & Engström 2010; Ranby 2020, 149–263.
4) Ranby 2020, 587.
5) Gustavsson 2005 & Bergkvist 2013.
6) For landscape analyses, see Westerlind & Eklöf 1994.
7) Florgård 1999, 128–134.
8) www.raa.se/samhallsutveckling/internationellt-arbete-och-eu-samarbete/europaradet/europeiska-landskapskonventionen/
9) SOU 2013:68 *Synliggöra värdet av ekosystemtjänster.*
10) www.naturvardsverket.se/amnesomraden/mark-och-vattenanvandning/ekosystemtjanster/vad-ar-ekosystemtjanster/
11) Madeleine Larsson, Swedish Environmental Protection Agency, personal communication, 18 Oct. 2023.
12) www.boverket.se/sv/PBL-kunskapsbanken/teman/ekosystemtjanster/verktyg/ester/
13) www.boverket.se/sv/PBL-kunskapsbanken/teman/ekosystemtjanster/verktyg/ester/
14) Saltzman 2001; Andersson & Weijmer 2013; Eliasson et al. 2015; Gustavsson et al. 2019, Ranby 2020, Lindgren 2022.
15) SOU 2013:68 *Synliggöra värdet av ekosystemtjänster.*
16) Eliasson et al. 2019.
17) Eliasson et al. 2022.
18) trafikverket.diva-portal.org/smash/get/diva2:1824191/FULLTEXT01.pdf
19) Ranby 2020, 535.
20) Ranby 2020, 18–22.
21) Ranby 2022, 227–228, 235–248; Schivelbusch 1984; Monö 1988.
22) Berglund et al. 2011, 4. All translations are my own unless otherwise noted.
23) Lagerlöf 1906–1907; Sjöbeck & Järnvägsstyrelsen 1931, 1936.
24) Ranby 2002, 21–33.
25) See, for example, Ranby 2020, 240–246.
26) sv.wikipedia.org/wiki/Stockholms_centralstation
27) Crary 1990.
28) The painting is in poor condition with no obvious signature. www.bebyggelseregistret.raa.se/bbr2/show/bilaga/showDokument.raa?dokumentId=21000001825063&thumbnail=false
29) In Swedish, *landskap* also means province, as in the old administrative divisions; Ranby 2020, 42.
30) Winberg 2000, 27.
31) Sjöbeck & Järnvägsstyrelsen 1936, 110.
32) Winberg 2000, 175.
33) Lagerlöf 1908, 682–684.
34) Wiking-Faria 2013.
35) Olsson 2004; Wiking-Faria 2022.
36) Sjöbeck & Järnvägsstyrelsen 1936, 9–86.
37) Haverling 1996.
38) Sjöbeck & Järnvägsstyrelsen 1936, 9: 'kommer bilden av denna provins att ofta tecknas mot bakgrund av trafik, och många halländska yttringar bli helt begripliga endast när de speglas mot begreppet samfärdsel'.
39) Svenska Järnvägsklubben 2009, 314.
40) For Helsingborg–Gothenburg, see Svenska Järnvägsklubben 2009, 319.
41) sv.wikipedia.org/wiki/Varbergs_station
42) Åberg 1953, 169–188.
43) Ranby 2020, 149–178.
44) Åberg 1953, 186.

45) Svenska Järnvägsklubben 2009, 171; see also Sundberg 1985a, 1985b.
46) Linde Bjur & Engström 2010, 149.
47) banvakt.se/varberg-falkenberg-halmstad/halmstad-norra/
48) sv.wikipedia.org/wiki/Falkenbergs_gamla_station
49) For the medium-sized stations, see Sjöbeck & Järnvägsstyrelsen 1936, 106-107.
50) sv.wikipedia.org/wiki/G%C3%B6teborg%E2%80%93Hallands_J%C3%A4rnv%C3%A4g
51) Åberg 1953, 186–187; www.svenska-lok.se/pbane_main.php?s=394&g=d
52) sv.wikipedia.org/wiki/M%C3%B6lndals_Nedre_station
53) www.stiglundin.se/jarnvag/18116953/vkb/linje/almedal.htm
54) Trettondal 1959.
55) Trettondal 1959, 107.
56) Ranby 2020, 182–183.
57) Olofsson 1921, 102.
58) varberg.se/download/18.7f5983ed15bd8f2b82138188/1494228003325/Varbergs%20j%C3%A4rnv%C3%A4g.pdf
59) Ranby 2020, 184–187.
60) Olofsson 1921, s. 156.
61) Olofsson 1921, 157 & 161.
62) sv.wikipedia.org/wiki/Bohusbanan
63) varberg.se/download/18.7f5983ed15bd8f2b82138188/1494228003325/Varbergs%20j%C3%A4rnv%C3%A4g.pdf; Statens järnvägar 1931, ii. 167-168, 324; banvakt.se/varberg-falkenberg-halmstad/bro-nissan/
64) banvakt.se/varberg-falkenberg-halmstad/brannarp/
65) *Statens järnvägar* 1931, ii. 136. 1930 www.jarnvag.net/banguide/lund-goteborg
66) www.magasinlaholm.se/kraftverken-i-lagan/
67) www.jarnvag.net/banguide/lund-goteborg
68) banvakt.se/varberg-falkenberg-halmstad/halmstad-norra/banvakt.se/olskroken-almedal-fjaras-varberg/almedal/
69) banvakt.se/varberg-falkenberg-halmstad/tvaaker/ banvakt.se/varberg-falkenberg-halmstad/harplinge/
70) Ranby 2020, 187.
71) molndal.vansterpartiet.se/om-oss/folkets-historia/
72) Ranby 2020, 448.
73) Ranby 2020, 188.
74) Ranby 2020, 188.
75) Carlsson & Vägverket 1996, 39 & 78.
76) Furbäck 1981.
77) www.jarnvag.net/banguide/lund-goteborg
78) www.jarnvag.net/banguide/lund-goteborg
79) www.jarnvag.net/banguide/lund-goteborg
80) www.hd.se/2014–10–17/gamla-stationen-inspiration-till-nya
81) www.jarnvag.net/banguide/lund-goteborg
82) www.jarnvag.net/banguide/lund-goteborg
83) varberg.se/varbergvaxer/byggprojekt/varbergstunneln/foljbyggetavvarbergstunneln.4.69ac5f51763826ac124f891.html; www.jarnvag.net/banguide/lund-goteborg
84) sv.wikipedia.org/wiki/V%C3%A4stkustbanan
85) trafikverket.diva-portal.org/smash/get/diva2:1682979/FULLTEXT01.pdf
86) Johannesson 2007, 12.
87) *Göteborg och Västkusten* 1896.
88) Olofsson 1921; *Statens järnvägar* 1906; *Statens järnvägar* 1931; *Sveriges statsbanors* 1981.
89) Sjöbeck & Järnvägsstyrelsen 1931, 1936; Ranby 2020, 221, 240–246.
90) Ranby 2020, 187.
91) Ranby 2020, 566–567.
92) Ranby 2020, 546–547.
93) Ranby 2014, 24.
94) Ranby 2020, 545–548.
95) Ranby 2020, 224; Key 1913, 9.
96) Lindgren 2022.
97) Asplund et al. 1931, preface (on jacket).
98) Ranby 2020, *passim*.
99) Ranby 2020, 555–556.
100) Furbäck 1981, 5; Florgård 1999, 135.
101) Niska 2005; Berggrund 2005.
102) Bergkvist 2013, 19–22.
103) Ranby 2020, 558.
104) Niska 2005.
105) Karin Boye's 'I Rörelse' ('In motion') in her collection of poems *Härdarna* (1927, 'The Hearths').
106) Kjessel 1993, 18.
107) gis.trafikverket.se/portal/apps/webappviewer/index.html?id=d9583c4044fa4fb1a10018282884a864
108) www.youtube.com/watch?v=0a0-KKAiIRw
109) www.hd.se/2023-01-18/bullerskydd-genom-odakra-jamfors-med-berlinmuren
110) en.wikipedia.org/wiki/Kystbanen
111) Forsström 1986, 174–175; Ranby 1988a, 94–95.
112) Linde Bjur & Engström 2010, 439.
113) Nordin 1986, 147.
114) Linde 1975, map 60.
115) Ranby 2020, 561.
116) sv.wikipedia.org/wiki/Lista_%C3%B6ver_byggnadsminnen_i_Hallands_l%C3%A4n
117) Ranby 2020, 566–567.
118) Ranby 2014a, 126.
119) Kjessel 1993; Florgård 1999.
120) Bergkvist 2013, 91–92.
121) Emma Östholm, county archivist, personal communication, 18 Oct. 2023; Malin Clarke, head of Kulturmiljö Halland, personal communication, 18 Oct. 2023.
122) Ranby 2020, 558.
123) www.globalamalen.se/om-globala-malen/
124) www.raa.se/samhallsutveckling/internationellt-arbete-och-eu-samarbete/europaradet/europeiska-landskapskonventionen/
125) www.boverket.se/sv/PBL-kunskapsbanken/teman/kulturvarden/andra-Styrmedel-for-kulturvarden/kulturmiljomalen/
126) www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/kulturmiljolag-1988950_sfs-1988-950/
127) www.diva-portal.org/smash/get/diva2:1372257/FULLTEXT01.pdf
128) Trafikverket 2024, 33–34.
129) Trafikverket 2024.
130) Trafikverket 2019.
131) kunskapskanalen.se/program/75246/vandring-langs-overgiven-ralssasong-1-avsnitt

The railway landscape and more-than-human heritage

– an Essay

MIKKO ITÄLAHTI

ABSTRACT

In the contemporary Finnish inventories and discussion on cultural heritage and heritage environments, it has become somewhat commonplace to distinguish three discrete, yet interrelated aspects: Architectural history, history itself and the value of the landscape. Within these three different aspects of heritage values listed above, the landscape-related one are apparently the most vaguely elaborated, and generally accepted and satisfactory criteria have not been developed so far.

In this essay I will be focusing on landscape-related heritage values as a category, that has the potential to transcend the nature-culture dichotomy, thus also paving the way for a new understanding of "culture" in cultural heritage studies.

I will employ the concept "more-than-human", notably proposed by David Abram in 1996, simply as a substitute for "nature". In the mainstream environmental philosophy of the recent decades, the latter has been seen as increasingly problematic, as it appears to imply humanity as being separate from the rest of nature (and historically has been used exactly for the purpose of such demarcation).

These recent post-humanist critiques, questioning the culture-nature dichotomy, have also echoed through heritage discourses during the recent years. Especially inspired by the concept of ruderal heritage developed by the human geographer Caitlin DeSilvey, heritage is here understood as products of human – non-human relations, past and present, that are manifested in the landscape.

I will ask, how the more-than-human heritage becomes visible in the Finnish railway landscapes, through selected case examples presented through photographic material. This photographic material has been mostly produced during the ongoing heritage inventories of the Finnish railway network carried at the Finnish Railway Museum, while also accompanied by examples produced in relation to my arts-based doctoral research project, still undergoing in the Aalto University School of Arts, Design and Architecture, Finland.

Firstly, I will discuss the relation between heritage and landscape, and then move on towards heritage dimensions of the (Finnish) railway landscape. I will begin by noting the difference between landscape as a panoramic view from the train, and the railway as tangible heritage environment, or landscape. It is claimed that these two are interlinked, and the connection is made visible through Wolfgang Schivelbush's notion of 'foreground', as well as that of 'proximity', proposed by Finnish geographer J.G. Granö already in the early 20th century.

The emergent qualities in the proximity of railway, especially vegetation in the railway embankment and its surroundings, are seen as important contributors of landscape heritage values – both as the foreground of the passenger's view, and as material and living "objects" or properties in the railway environment as a heritage landscape. I will discuss their connections, before finally taking on examples of more-than-human heritage in some more limited, distinctive heritage "sites" related to the railway, such as abandoned alignments and railway guard's cottage sites. These may not be relevant to the passenger experience of landscapes, but they still offer an insightful, parallel perspective to the more-than human heritage in railway landscapes.

My methodological orientation also emphasizes the importance of the visual and photographic medium. Photographs are not innocent "windows" to the reality of things, although under certain conditions they may enable the sensory, material world to speak for itself, through its own forms. The assertive, argumentative power of photographs, however, seems dependent on the visual qualities of the photographs themselves.

This essay emphasizes the connection between heritage and landscape. My main argument in this essay is that heritage in general, but especially that of the railway, involves a strong more-than-human dimension, which suggests looking at heritage in new ways, to make sense of the historical relations between human and non-human worlds, while also embracing change, emergence and resulting temporal depth, that is constantly being produced by temporal processes and non-human agencies, at work in the landscape. This kind of dynamic understanding of heritage also opens towards a utopian, future-oriented view; that of an increasing awareness of coexistence between human and nonhuman worlds.

The structure of this essay is the following: before discussing empirical cases, I will set the ground by discussing the landscape dimension of railway heritage, by briefly addressing the landscape in the railway journey experience, and how railway landscape has

been addressed in Finnish heritage discourse thus far, moving then on to recent critiques of anthropocentric heritage understandings, that also seem to underline the fundamental connectedness of heritage and landscape. Then I will discuss the concepts of landscape and the related notion of proximity or foreground, as that is the spatial range where material qualities of the railway environment and the panoramic view from the moving train are interlinked. Then, through a set of empirical cases, I finally turn towards the railway as heritage landscape, as well as to a few heritage 'sites' related to the railway – the typical heritage approach – and discuss the more-than human aspects and processes like vegetation and ruination for their landscape-related heritage values.

INTRODUCTION: VIEW FROM THE TRAIN

I still remember that train journey somewhere in Eastern Finland. Looking down from the window of a train carriage, running on a high embankment, I was mesmerized by the view of the passing forest interior. Large, dark spruces towered just at the root of the high embankment, among them rocks covered by thick, soft carpets of moss. Occasionally the railway crossed a dark-watered creek. The train ran so slowly it was possible to get a clear view of all this. Yet still, we were on a journey taking us hundreds of kilometers just in a matter of hours, and all this beauty was almost an illusionary view between the towns of Oulu and Joensuu. I remember being fascinated by the peculiar spatial experience, that, for a lack of better words, could be described as tensioned polarity between the train interior and the outside, which, albeit separated by just a touching distance from each other, so distinctively belonged to very different spatial realms. It was like sitting on a front seat watching a theatre play or a movie; yet, the experience involved a very acute sense of realness, a testimony to the existence of a world out there, much larger than any individual, independent of their will and more surprising than their wildest imaginations. If I was left out there standing by that tree, how could I make it home from here?

The metaphor of the railway journey as theatre, movie or even a concert, dates already to the early days of railroads. In his classic, The Railway Journey, Wolfgang Schivelbusch writes how, through the advent of railways, visual culture as a whole was transformed by a new way of apprehending the landscape, he calls *panoramic vision*.[1] In this mode of seeing, the train rendered the world as a spectacular, kaleidoscopic collection of visions and impressions, detached from their original spatial realms.[2] In a very similar tone, the author Juhani Aho published fiercely enthusiastic accounts on his train journeys in newspapers[3] and short novels in the 19th century Finland.[4] Much more recently, Finnish movie director and historian Peter von Bagh[5] has been writing on the historical, mutual bond of the railway and cinema, and especially on the railway journey as a cinematic experience.

As has been reminded by the classic work of Schivelbusch, as well as John Wylie,[6] among others, (see also Henrik Ranby's article in this volume!) landscape in a modern sense, for us, is born from movement, and the railway has had a profound influence on popular ideas of landscape. Clearly a significant part of the cultural heritage of the railway has been the unique way the landscape can be apprehended by the train passenger.

Thus, my main argument in this essay is that heritage in general, but perhaps especially that of the railway, involves a strong landscape dimension. The (railway) landscape not only beckons questions on the past, present and future human – environment relations, but also, like in the example above, seems to suggest that the processual, dynamic change over the course of decades, the work of more-than-human agencies like vegetation, may have a very impactful, yet often overlooked role in creating the heritage landscapes of the railway, although these new meanings are still to be explored.

RAILWAY LANDSCAPE IN FINNISH CULTURAL HERITAGE DISCOURSE (OR THE LACK OF)

In 1999 Banverket, The Swedish authority for the railway network, commissioned an essay collection *Spår I landskapet - Hur järnvägen format stad och land*.[7] Many of the writings included in the collection take the view from the train as a significant part of the railway heritage.

In Finnish cultural history, the aesthetic and spatial experience of the railway landscape has been powerfully described by, and

Image 1. Travel memory, view from the railway embankment. Eastern Finland, photo Mikko Itälahti 2016.

recorded in the work of pictorial arts, popular music, and fine arts literature.[8] Alongside the historical and contemporary writers mentioned above, a very comprehensive picture on how the railway has resonated in the popular culture of the 19th and 20th century Finland has drawn together by Matti Rinne.[9] Some researchers have written on how the movement facilitates landscape experience, including in relation to the railways.[10] However, the actual landscape along the railway, especially outside the station areas, has received very little attention from heritage researchhers and practices: this applies both to the landscape as view from the train, as well as to the railway as a material heritage landscape.

In the broader context of Finnish cultural Heritage and landscape inventories, a threefold understanding of the heritage, apparently suggested in 1989 by the Finnish Heritage Agency, has become somewhat commonplace during the last decades. In this framework, cultural heritage environments are understood as comprising of building historical or architectural, historical, as well as *landscape values*.[11] More recently, for example, the 'historical stratigraphy' of, or the layers of history inherent to, heritage sites have been receiving attention.

It seems obvious that of the above-mentioned heritage dimensions, the landscape-related one has been most vaguely elaborated. The value of landscapes have typically been seen exclusively in connection with built environments regarded as possessing otherwise valuable heritage; in Finnish railway heritage discourses, the railway station buildings[12] with their adjacent parks and residential areas[13] were for a long time the only railway environments regarded as having heritage values. In 1998 a national agreement for preservation of historical station areas was reached, including station park areas.[14] Going a bit further, the building heritage inventory in the Länsi-Uusimaa (*Västra Nyland*) province noted in 1993, that railways in general possess values related to "industrial romanticism".[15] Yet the heritage perspective has been quite solely focused on built environments, and therefore has not been in a position to recognize heritage potential in trackside landscapes that mostly spans the spaces between station areas.

Challenges to the inventory practices posed by recent research in critical heritage, stressing the mutual bonds between heritage and landscape, contextuality, dynamism and becomingness, are still largely to be met. The ongoing cultural heritage inventory of the Finnish railway network, for its part, aims to address this, yet the practice is still based on evaluation criteria and a framework which emphasizes worth building historical values.[16]

ANTHROPOCENTRIC HERITAGE, (RAILWAY) LANDSCAPE AND THE RECENT POST-HUMANIST CRITIQUE

In this essay I maintain that landscape could be a category that transcends the longstanding culture – nature dichotomy, and that the deep connection between heritage and landscape suggests that this actually is the case for heritage, too. This way of thinking has been encouraged by a few recent turns in culture and landscape studies, that need to be briefly summarized.

For at least the last couple of centuries, and at least in the industrialized West, humans have been seen as the most important, if not the only "actors" contributing to the production of "cultural heritage". These anthropocentric presuppositions, for long taken for granted and still built in the authorized heritage discourses, have been forcefully challenged during the last ten or so years within the field of critical heritage studies.[17)]

The question on the continued relevance of the dichotomic categories of nature and culture seems especially to surface when considering landscape-related heritage values. The ongoing turn, that could be called *post-humanist,* is of course connected to increasing awareness on how climate and biodiversity crises are fundamentally rooted to the enlightenment worldview of human primacy and western atomism; and a realization that studying human culture without acknowledging our fundamental dependency on the non-human world has been, and would be, contributing to worsening the ecological crisis.[18)]

Recent academic work on critical heritage and landscape, in connection with the now commonplace labels of posthumanism, new materialism and non-representational theory, has emphasized connections between heritage and landscape; somewhat in contrast to traditional approaches of heritage *as* object preservation, while also questioning the taken-for-granted dualisms of material-immaterial, culture-nature, and indeed, destruction, preservation. Heritage and landscape have been approached with a greater sensibility towards more-than-human powers and agencies shaping temporally deep landscapes. Cultural geographer Caitlin DeSilvey has been arguing, in a way that seems especially relevant regarding to the landscape dimension of heritage, for a more dynamic understanding of heritage, which would mean a shift towards understanding heritage sites not so much as "specimens", somehow preserved thin slices of time, but rather as a processual, constantly emerging landscape-bound dynamic process.[19)] Understood this way, the memory is renewed, rather than erased, through forces like ruination and plant reclamation.[20)] Through the perspectives of *ruderal heritage and curated decay,* as presented by DeSilvey, heritage could be seen not only – or so much – as testimonials of historical events, societies, beliefs and politics, but as an active process, making sense of the historically changing and evolving interrelations of human and nonhuman worlds *in the present,* while also acknowledging the active role of species other than humans.[21)]

This shift seems to point towards the revitalized relevance of landscape values. Heritage would become appreciated and apprehended through aesthetically inclined openness towards the sensuous surfaces and the "own-voice" of the material and non-human objects and sites in their contemporaneity.[22)] This, of course, is not to say that traditional, historically focused and conservationist approaches to heritage should be abolished altogether, but a change in perspective would potentially expand the scope of "heritage" and call for new practices of stewardship.

The questions related to definitions and ontologies of landscape – roughly revolving around debates on whether the landscape is 'just' an image or 'a way of seeing', or indeed a physical area – have been the subject of a vast body of work over the years, which is impossible to adequately summarize here. My understanding of the concept *landscape*, however, owes a lot to the recent post-humanist and new materialist thinking. To sum up, posthumanism has been used as a general label to describe an emerging train of thought, especially in environmental philosophy, that sees traditional humanities as limited and even problematic precisely because of its inherent anthropocentrism. New materialism, on the other hand, is a related stance that criticizes the traditional idealism of humanities, which, broadly speaking, stresses the human mind and cultural creations like language as the most fundamental layers of reality. New materialism, on the contrary, places the emphasis on material objects, conditions and webs of interaction. The "new" in new materialism is used suggest how the view is seen as having revitalized relevance in an era of ecological multi-crisis, after several decades when idealism all but dominated the intellectual climate of cultural studies in the West.

The developments have also led to the restoration of sensuous experience as a "legitimate" – if perhaps just one possible – way to apprehend the material or more-than-human world.[23)] Inspired by these trains of thought, by landscape I simply mean here the sensuous experience of the environment. This is not to deny the cultural underpinnings of landscape vision, yet however, I maintain that landscape is a way to apprehend, and an encounter with, the more-than-human world. As an experience it derives its power from a sense of realness, from the certainty that the subject truly experiences a connection with the more-than-human world much larger that exists independently of themselves, in infinite richness, across vast spatial and temporal scales.

In the very heart of the experience of landscape lies an experience of temporality. However, as David Harvey has warned, this might perhaps too easily overemphasize the thin slice of "here and now" (the typical focus of non-representative and phenomenological accounts), when the subject's experience is brought to the fore of the investigation.[24)] He has argued in favor of *heritage sensibility* as a new kind of understanding, a bridging ontology, that could fruitfully connect the perspectives of heritage and landscape studies – the affective power of the present experience, with the temporal depth through understanding of change, provided by heritage studies.[25)] For the purposes of this essay, his idea could emphasize links between landscape as an impression or experience, and as a physical environment; also between tangible and intangible heritage.

For example, the landscape as a view from the train is certainly an important part of the cultural heritage in the Nordic countries and other industrialized parts of the world. Yet, while the experience as such perhaps is something we could term as "immaterial heritage", there is a connection between the intangible and tangible; the more-than human agencies and temporal layers, especially vegetation, in the proximity of the railway not only contribute to the cinematic power of the railway journey, but also to the sense of temporal depth in the heritage landscape of the railway.

RAILWAY LANDSCAPES: PROXIMITY

While the culture-historical accounts of landscape experiences during the railway journey have likened the experience to cinema or panorama, the view of the railway in the landscape, as a physical feature, might appear entirely different. However, the qualities of the railway as a landscape feature and of the landscape as a view from the train are connected, and even considering the passenger's view from the train, these connections can be highlighted when devoting a closer look (sic!) at the spatial range of the proximity.

The railway passenger's landscape experience is shaped by various material prerequisites – speed, but also the view from a carriage window, at a perpendicular angle to the train's direction (see image 2). Also, the railway embankment itself orchestrates the experience of land as a landscape, through filling the recessions of the physical terrain with high embankments and lowering the hills by rock cuttings and tunnels. The railway infrastructure contributes to the sense of effortless, almost incorporeal movement through the environment. Especially passages on higher embankments might evoke a feeling of flying.[26)] Yet still, as importantly noted by Ludvig Rasmusson, a very important aspect, that contributes to the power of this experience, is the fact that the passenger typically cannot see much of the railway infrastructure in their view.[27)] As a contrast, the passenger in the car on a motorway is always surrounded by "road landscape" that forms the foreground of their view.

This observation brings us to the interesting notion of the foreground. Schivelbusch indeed emphasizes that, to gain access to the wonders of panoramic seeing, early passengers had to learn to give up trying to perceive the foreground details, but instead to focus on general impressions of more distant objects.[28)] He adds that this, according to him, marked a significant departure from the experience of the premodern travel, noting that landscape's *foreground* was "the range in which most of the experience of preindustrial travel was located".[29)] He also goes on to argue that losing of the foreground was traumatic and perhaps contributed to the popularity of photography; through which the intimate foreground details, lost in reality, could be retrieved: "The intensive experience of the sensuous world, terminated by the industrial revolution, undergoes a resurrection in the new institution of photography".[30)]

Schivelbusch's notion of the foreground resonates powerfully with the idea developed by Finnish geographer J.G. Granö in quite a different context. In his seminal work, first published in 1929 in German under the name *Reine Geographie* (a year later in Finnish as *Puhdas maantiede* and in English only in 1997 as Pure Geography).[31] Granö also makes a very interesting distinction between the closest environment he calls *proximity* and the more outlying *landscape*. Granö writes that "proximity is a close, intimate world we always inhabit and the context in which we perceive our geographical object with all our senses". He goes on further to add that "[t]his arena of our lives and activities is surrounded by the distant environment, or landscape, nothing more than a field of vision more or less tinged with blue by the air".[32] Furthermore, according to Granö, a multisensory experience of proximity clearly surrounds us up to the distance of approximately 20 meters, and is separated from the proper landscape by a fuzzy transition zone.[33]

Granö's ideas have enjoyed a revived interest in the recent few decades, and they certainly possess some important merits. Yet his definition of landscape as the distant view or environment still is just one possibility. Another, probably older, meaning of landscape is "terrain".[34] Sure, sensual experiences of the proximate and the distant environments are qualitatively different; the closest surrounding is central to the subject's experience of the environment, producing sensations of actuality, of truly 'being there'. Yet (Granö withstanding) we are always in some kind of proximity, that gives context and sense of life to all kinds of landscapes.

How then, is the railway passenger's experience of proximity? I have discussed the concept of proximity in relation to the landscape experience and the railway journey in greater length elsewhere.[35] Yet it actually seems that Schivelbusch, and some early accounts, like a Juhani Aho's vivid description in the novel *Rautatie* [Railway],[36] are better read as descriptions of the cultural shock that the railway journey caused in the first place, not so much as universally valid descriptions of the passenger's condition. I am arguing that even in my travel memory above, it was the qualities of the most proximate landscape outside the coach, and its accurate sensations, that made the journey experience so powerful. Although the train was a special train running at a limited speed, that speed, based on historical evidence discussed by Schivelbusch, as well as more recently by Rebecca Solnit, would probably still have been dazzling to many of the 19th-century travelers, at least on their first railway journeys.[37] We are capable of adapting, even learning. As a testimony to this, Lisa Warsen & Stina Sjöström remarks how refreshing it may be to suddenly notice some small yellow flowers (coltsfoot) growing next to the railway, even from the Swedish X2000 train on the full speed.[38] Yet, especially on the trains running at more casual speed like museum trains, the precision we, the citizens of the age of speed, are today capable in apprehending the close proximity of the railway is remarkable.

MORE-THAN-HUMAN HERITAGE IN THE RAILWAY LANDSCAPE: EXAMPLES FROM FINLAND

As proximity or foreground, the concrete railway environment plays an important role in shaping the visual landscape experience of the railway passenger. I will now turn to discuss the railway as material heritage environment, in the context of Finnish railway landscapes. These case examples are represented by photographs, mostly produced during the ongoing heritage inventories of the Finnish railway network, commissioned from the Finnish Railway Museum by the Finnish Transport Infrastructure Agency. Some of the images, like in the introduction chapter (image 1), are produced in relation to my yet unfinished doctoral dissertation underway at the Aalto University school of Arts, Design and Architecture, Finland.

For case examples, I have selected photographs that exemplify the various dimensions of more-than-human heritage phenomena in the Finnish railway landscapes.

Photographs, as has been thoroughly discussed in the fields of photographic research and history of photography, are not innocent windows to the reality out there; yet their affective power seems to stem from the specific way how they may enable for the sensory, material world to draw itself visible, using its own "voice" and forms. Still, the affective qualities, and thus the assertive or argumentative power of photographs is dependent on the visual qualities of the photographs themselves, such as their composition. Thus, the selection of cases is essentially about the selection of photographs that seem aesthetically powerful in their expression of more-than-human qualities in heritage landscapes. The photography-based visual method is thus highly qualitative and naturally inclined to draw attention to the singular and unique; yet, the analytical concern for validity of the choices and their relevance to the general heritage dimensions in the Finnish railway landscape is considered part of the research practice. Through selected case examples of photographic material, I will ask, how the more-than-human perspective becomes intertwined with heritage in the Finnish railway landscapes.

Image 2. Helsinki – Oulu, photo Mikko Itälahti June 2015.

The image 2 shows a view from the South – North mainline from Helsinki (Helsingfors) to Tampere (Tammerfors). The section between Helsinki and Hämeenlinna (Tavastehus) was opened in 1862 as the very first railway in Finland and continued further north to Tampere in 1876. For the railway passenger, the open, yet variable agricultural landscapes in the provinces of Kanta-Häme and Pirkanmaa form a panoramic experience that has been witnessed by numerous previous generations of train passengers. Regardless of this obvious cultural significance, this, as well as other comparable travel landscapes too, still lack an official recognition as railway heritage.

The actual stretch of agricultural land seen in image 2, however, belongs to a selection of nationally valuable cultural landscapes, curated by the Finnish ministry of environment, as an area called *Sääksmäen ja Tarttilan kulttuurimaisemat.* The official description of the landscape heritage values in the area, given by the ministry, however, does not mention the railway at all.[39] However,the railway passengers are undoubtedly a significant "audience" to enjoy the landscape views offered by the area. Moreover, it could be argued that the matured presence of the busy mainline, today an electrified double track still retaining its original, one-and-a-half century old alignment, creates a very remarkable layer of cultural landscape; in connection with the surrounding agricultural landscape with prehistorical continuities, this unity could be interpreted as an interesting hybrid of agricultural, industrial and more-than human heritage, with a strong sense of the vital present and historical continuation also in place.

This kind of static, evaluative view "on the site" is typical to standard heritage inventories and professional practices. Yet, as pointed in the discussion on the importance of proximity, or foreground, for the railway passengers' landscape view, the appearance of the railway as a physical feature forms also a point where these different perspectives may fruitfully intertwine (see image 3).

The discussion above pointed towards the importance of this close range, even for the railway passenger. Sometimes, like in the case I began this essay with (the proximate forest interior experienced from the train), the proximity could lie in the very core of the landscape experience even for the railway passenger. Still more often perhaps, all too easily neglected is the role of the proximity in connecting the passenger with the view of a larger area, or the "landscape proper" in the traditional sense, through a (more or less) fuzzy transitional zone. Yet still, the physical qualities of this rail-

Image 4. An industrial branch in Sipoo, that was experimentally left without chemical herbicide for about ten months. Olavi Karasjoki / VR, 6.8.1968. Finnish Railway Museum collections, VR1:10653.

way proximity remain important, as they contribute to the sensation of "immediacy" and actuality, and in its most cinematic height, the sensation of almost incorporeal, dance-like movement through landscape. All this implies that the railway, as a physical feature, becomes seamlessly integrated into the fabric of (heritage) landscape via the visual appearance of the more-than-human matter, and its qualities emerging from the constant temporal change and from the state of becomingness.

The being of the railway as a temporally deep heritage landscape results from the historical design and materials, as well as from various emergent outcomes of its long-standing coexistence and interaction with its surroundings. Purely as a topographic feature, the railway interacts with its surroundings, including hydrological circumstances, nutrient flows, exposition, and microclimate. The railway embankments might pose barriers for the movements of animals and community development.

Image 3. A matured railway line introduces diversity and visual variation into the landscape. Porvoon museorautatie / Borgå museumjärnväg, photo Mikko Itälahti autumn 2022.

Image 5. Linaria repens growing in the railyard. Uusikaupunki, photo Mikko Itälahti summer 2023.

Image 6: Heritage landscape of post-industrial reclamation. Lohja, photo Mikko Itälahti autumn 2021.

Also from the railway being inherently a stop-centered mode of transport, it interestingly follows that the railway embankment between the stations actually might be one of the most inaccessible and peripheral spots in its influence area, from the human point of view.[40] In areas otherwise subjected to the intensive use of humans, for example agriculture, the railway embankment might form a kind of a reserve, a refuge, for various plant and animal species.[41] According to Matthias Qviström, paraphrasing Eva Gustavsson, the railway forms a hedge-like feature in the intensively cultivated landscape of Skåne.[42] The current geological epoch of Anthropocene, characterized by the omnipresent influence of humanity even in the most remote reaches of the earth left, only emphasizes the diversity value of even small-scale "pockets of wildness".

To use the vocabulary influenced by new materialism, the railway as a material feature has unique "powers" to constrain movements, emergence, and interactions of some (human-borne) entities while, correspondingly, allowing similar possibilities for some (non-human) others.[43] All these emergent properties and agencies, over an extended period, contribute to the emergence of hybrid heritage landscape in a constant state of becoming, across the borders of human and nonhuman regimes.[44] Thus, the heritage landscape of railway is not only something that was created decades ago, but something that is constantly becoming, an evolving outcome of longstanding processes that may be experienced today. This also points to how ruderal heritage is about temporal depth and openness towards change, rather than a "a slice of time", a mere reference to a certain point in the past. For example, the "neat look" of the railway embankments of the 20th century were first achieved through the vast human labor dedicated to the maintenance of the track. Still in the 1930's the track superstructure was weeded by hand, and hay from the slopes was cut for fodder,[45] but by the mid-20th century, the use of chemical herbicides replaced manual labor, which, in turn, were phased out due to environmental legislation introduced in the 1970's.[46]

In consequence, the remaining track beds built of sandy esker gravel (instead of today increasingly more common rock crush), have today re-emerged as preferred habitats for many vascular plant species as well as fauna dependent on them, while their suitable habitats have generally been in sharp decline, especially due to major changes in agricultural production practices. Some species, while contributing to biological diversity, also carry very specific cultural memory. For example, the above image 5. shows a colony of the plant *linaria repens*, that migrated to southwestern Finland along with the ballast unloaded from sailing ships. The only known habitats for this species in Finland are harbors and railyards in the Southwestern corner of the country. These values, however, have thus far been mostly noted by botanists and classified solidly under "biodiversity values". Yet, could they not (in their context) be validly seen as resulting from, and be a memory of, historically changing human– nonhuman relations and, therefore, cultural heritage?

Forest environments along the railways, as well, may also exhibit considerable temporal depth and heritage values. In some cases, due to the dynamics elaborated above, the railway may have contributed to the *preservation* of the pre-existing forest in its vicinity. Or, as in the next example, played a part in the process that has manifested itself as rewilding and as re-introduction of properties already once lost.

The image 6. above shows a broadleaf trackside forest near the southern shore of Lojo Sjö, the largest lake in the continental southwest of Finland. The area is naturally characterized by herb-rich, hemiboreal broadleaf forests, found in Finland only in the very southwestern coastal and archipelago areas. The typical non-human characters of this landscape are, for example, massive oaks and acers, as seen in the image 5 growing next to the Hyvinkää–Hanko (Hyvinge–Hangö) railway. For the most part of the 20th century, this, however, wasn't the case, as the southern shore of the lake Lohjanjärvi (Lojo Sjö) emerged as one of southern Finland's industrial hearths in the late 19th century. A steam-powered sawmill, *Kyrskstads Ångsåg*, opened in 1875 in Virkkala (Virkby), where the

Image 7. Industrial landscape in Virkkala, Lohja, around the mid-1950's. Photo: Olavi Karasjoki / VR, Finnish Railway Museum collections.

railway aligns with the lakeshore, and was accompanied in 1887 with *Lojo Kalkverk*, a large plant that specialized in the production of cement and agricultural limestone.[47] This industrial development was in the first place, firstly, by the transportation possibilities provided by the Hyvinkää-Hanko railway, opened in 1873, excess, remove the water route, as well as the unique limestone bedrock suitable for the production of cement and agricultural lime. Also, a branch railway to the plants from the Kyrkstad station (from 1906 onwards Kirkniemi / Gerknäs), was opened in 1876. The image 7. shows a view from the mid-20th century, the area still in the height of industrial activity. The viewpoint of that image can be located to some 50 meters left (or north) from that of the above image 6. The trackside forest to the left in image 6 is approximately where the field used for storing logs for the Kykstads sawmill, to the right in image 7, was still located in the 1950's.

In this landscape, the wild traits have been partially able to recover due to changes in economic structure. The Lojo Kalkverk complex was closed in 1994, and the Kyrkstads sawmill already at an earlier instance. Yet, the actual outcome has been also very likely been influenced by the presence of the railway itself, especially perhaps by the barrier effect imposed by the railway embankment on development and other human activities like passage. The forested landscape in image 6 is a narrow stretch of some 50 meters in width, squeezed between a road (also seen in image 7) and the railway. Here, this stretch could be seen as an example of *post-industrial heritage* – perhaps prompting a utopian narrative of *de-colonization* of the more-than human world and the possibility of respectful coexistence between humans and other species.

In the above case, the forested stretch left to the railway in the image 6, is still included within the borders of a nationally significant building heritage site *Virkby kalkverk och samhälle* (RKY, Valtakunnallisesti arvokkat rakennetut kulttuuriympäristöt, byggda kulturmiljöer av riksintresse).[48] The description of the heritage site, however, only discusses the historical significance of industry and its building heritage, while remaining completely silent on emergent, more-than human layers of the site.

In contrast to place-specific histories of landscapes like Virkkala, the forest views along the railway do also exhibit more general 'more-than-human' heritage values. I began this essay with a view of the forest from the train window, which arguably should form a particularly important trope of the visual heritage of the Finnish railways. In the passenger's view of the forest landscape, the matured forest along the railway is an emergent feature, that may allow for apprehension of the more-than-human world in an aesthetically powerful way.

It, indeed, appears that the railway has sometimes contributed to the preservation of pre-existing forest environments, if only because private landowners have, for whatever reasons, avoided forest cuttings next to the railway. The very proximate track appears to be often more mature than the surrounding forests. The largest trees are typically found where light has been abundantly available, just on the border of the actual railway property, an opening stretching out 8-12 meters from the center of a single track-line. Consequently, the often narrow, belt-like stretches of forests in the railway proximity regularly exhibit diversity values. For example, in grid-based visualization of the national *Zonation* model, that assesses potential importance of forest-covered areas for biological diversity, the areas in the vicinity of Hyvinkää-Hanko railway, often displayed a pronounced potential for the estimated presence of coarse woody debris.[49]

Thinking, then, about the railway through the forest as a heritage "site", it appears that the defining characteristic of such landscape is the relatively narrow right-of-way the railway line occupies, which also speaks of a relatively small land-use "footprint" of the railway, in comparison to road transport systems. The railway right-of-way forms an alley-like space amid the forest. The railway and the surrounding forest community may have matured in a dialectical fashion, which contributes to the sense of temporal depth in such a landscape (image 8).

Through a recent shift in the Finnish railway maintenance, the continuity of these forested railway sections as views and more-than-human heritage sites has become endangered. A historically remarkable change has resulted from the establishment of "railway

Image 8. The railway alignment through a spruce forest. Hyvinkää-Hanko -railway, photo Mikko Itälahti autumn 2021.

Image 9. view from a train over a clear-cut railway protection zone, photo Mikko Itälahti.

protection zone" in the railway law of 2007, that typically extends to the distance of 30 meters on both sides of a single-track line, measured from the center of the track.[50] The law assigns the railway administrator a right to remove vegetation from the protection zone, when assessed to be a risk factor.

Still in 1987, the State Railways had maintained that "the trees within the falling distance from the track require constant monitoring".[51] In a distinct departure from this selective policy, the complete clearcuts, i.e. elimination of all the wooded vegetation from within the established protection zone, has become a common practice in the 21st century, especially outside of urban areas, in the woodlands typically classified as "economy forests", that overwhelmingly make up most of Finland's surface area (image 9). This shift has resulted in very significant qualitative changes to how the railway relates to the surrounding landscape, and correspondingly, also in the landscape experience of the railway passenger. In the forested sections, the important proximate range of the landscape view now increasingly resembles a managed transportation landscape, that also cuts off the passenger from the vital more-than-human landscape, displaying temporal depth through the longstanding work of more-than-human powers.

EXAMPLES OF LANDSCAPE-RELATED VALUES IN SOME RAILWAY HERITAGE SITES

I will finally discuss the significance of emergent and nonhuman properties for landscape values on some specific sites exemplifying the historical development of the railway infrastructure.

The narrow rock cuttings on the Porvoo museum railway, near Veckoski rapids in the river Mustijoki (Svartsån), some 50 km northwest from Helsinki, can, on the one hand, be seen as examples of "built" heritage structures. As such, to provide an example, they reflect the resources available in the late 20th century, when the branch railway from Kerava (Kervo) to Porvoo (Borgå) was built. Originally, the line, open by 1874, was aligned along the northern bank of the Mustijoki river. The alignment, however, was moved slightly northward in 1890, away from the clay bank that proved to be very unstable already during the initial establishment of the line.[52] The realignment necessitated two rock cuttings, that had been avoided at all costs in the first place. These cuttings on the new line section, when taken into use in 1890, was undoubtedly the largest of their kind on the Kerava–Porvoo branch line (image 10).

In all, a series of three rock cuttings – the westernmost of them still belonging to the original alignment and being the very site where construction work began in 1872 – form a distinct landmark-like feature for the contemporary museum railway passenger, contributing to the powerful sensory experience of the landscape proximity. Their narrow width retains a distinctively historical character. In comparison with the standards of today, their overall scale appears very modest, even humble. Yet for the contemporary eye, the actual sense of a temporally deep heritage site is greatly enhanced by emergent more-than-human qualities, like the large colonies of common polypody (*Polypodium vulgare*) now thriving on the more shadowy southern wall. The narrow rock cuttings through the rocky masses form a distinctive hybrid environment, kind of a gorge with an authentic cellar-like micro-climate, reminiscent of how heritage values of a site, like the historical sense of temporal depth, cannot be reduced to original design properties.

Another illustrative example of more-than-human heritage values is offered by an orphaned section of a railway embankment on the southern bank of the Raisonjoki river, in the city municipality of Turku (Åbo). The building of the railway between Turku and Uusikaupunki (Nystad) was ratified by the senate of Finland in 1917.

Image. 10 Söderveckoski, Porvoon museorautatie, photo Mikko Itälahti autum 2022.

Due to large-scale unemployment problem in the city of Turku in the aftermath of the First world war and the newly acquired Finnish independence, the beginning of the construction works was prioritized, even though the alignment within the Turku municipality still remained undecided. Works on an alignment according to an alternative, Proposal III, began in 1918. Yet in the spring of 1921, another proposed alternative, Alignment IV, was ultimately chosen instead (due to the harbour expansion plans by the city of Turku), which resulted in the abandonment of a nearly complete embankment, as well as bridge foundations at the Raisionjoki river.[53]

As a testimony to the nonnecessity and arbitariness of any technological choice, and reminder of political turbulence of the mid 1910's, some 100 meters of the abandoned embankment, as well as the bridge foundation, has avoided redevelopment and remains clearly visible, surrounded by the lush broadleaf grove (image 11). Today, the green belt surrounding Raisionjoki is an increasingly important recreational area in the Turku urban area, home for some 230.000 inhabitants, which probably will work in favour of preserving the more-than human values in the times ahead.

Image 11: Proposed alignment III for Turku–Uusikaupunki railway in the city of Turku, abandoned uncompleted in 1921, photo Mikko Itälahti spring 2023.

Image 12: Lost heritage? A site of a guard hut abandoned probably over a century ago, Hyvinkää–Hanko railway, photo Mikko Itälahti autumn 2021.

However, in an imagined scenario where the emergent non-human community, like the mighty trees, were to be eliminated from the site, a traditional view within authorized heritage discourses would probably maintain that no harm would necessarily be caused to the heritage values, given the built structure (the embankment) in itself was not touched. Still, it seems evident that the mature forest environment does importantly contribute to the sensory experience of temporal depth and "authenticity" exhibited by the site. Massive birches, bird cherries and oaks are not only testimonials to the most favourable climate found anywhere in the Finnish mainland, but also to a whole century of time, that has been able to pass here relatively undisturbed.

Finally, I have chosen a recurring feature of Finnish railway landscapes, abandoned guards' huts, to exemplimfy Caitleen DeSilvey's (2017) probably most controversial claim, that even ruination could be seen as a contributive process, leading to emergence of the new more-than-human heritage values.

Before draisines came into use in the 1890's, the railway guard's huts on the Hyvinkää-Hanko railway were, on average, spaced by no less than some three kilometers away from each other. However, with the vastly improved mobility the draisines provided for the railway guards, and through the rationalization they enabled, the number of guard huts were deemed excessive. Some of these buildings were directed to be utilized differently, while many, especially in the most remote watershed areas, were demolished and their plots abandoned already by the turn of the 20th century. Yet, to date, these tiny plots of land, with typically spanning only a few hundred square meters, frequently can be found still as part of the railway property, and, mostly due to their negligible size, become ruderal "wastelands" left to their own devices.

One such example was found in the heritage inventory of Hyvinkää-Karjaa (Karis) section, in the north-eastern corner of Vihti municipality, at the northern fringe of Uusimaa (Nyland) province, some 40 km north of Helsinki. In this site, the Hyvinkää-Hanko railway winds through a mosaic of fieldplots and gently sloping hills belonging to a large glacifluvial terminal moraine formation called *Salpausselkä,* that forms a major watershed area separating coastal plains from the inland's lake region.

A humble cavity is all what remains from a ground cellar that belonged to a guard's cottage, on a plot abandoned over 100 years ago (image 12). The cellar probably once had a brick vaulting, but the material has been re-used for unknown purposes already long ago. Other artefacts include a stone foundation of a sauna building, a pile of rocks that probably was the foundation for the baking/heating oven, and a short section of stone wall on the northwestern corner of the site. Even so, can we say that the heritage values on this site have largely been lost, as the standard criteria for evaluating heritage values would suggest?[54)]

In the words of Caitlin DeSilvey, the attitudes towards ruined heritage sites can be roughly classified as approaches seeing the glass as either *half-empty* or *half-full*.[55)] The half-empty side, to date dominating in authorized heritage discourse, tends to see loss and destruction in these sites, with most of the heritage value severely diminished or at least threatened. On the contrary, the more alternative half-full approach favorably directs attention towards decay as new kinds of temporal layers and processes, that may suggest their own productive meanings in relation to the past.

In this fashion, although the architectural-historical value at the abandoned guard hut sites, like the one above (image 12), have been undoubtedly lost, they could be seen as having acuired something (in the domain of more-than-human landscape values) in exchange; these sites, having fallen outside the standard human economic uses as "wastelands", exhibit extraordinary evidence for the passage of time, as well as a *sense* of temporal depth and continuity. Within the temporal-material fabric of the site, the minimal anthropogenic remains, slowly collapsing and being buried under accumulating layers of sediment, remains a testimony to the history of the transport system management and its geographic extent, the partially self-sustaining livelihood of railway guards, amid other, emergent heritage values still genuinely part of the railway landscape. The massive trunk of dead aspen, fallen over a long bygone root cellar, provides an authentic testimony to the passage of time, while also providing a microcosmic habitat for new inhabitants, invisible fungus and insects species dependent on dead wood debris that is largely lacking in industrially managed forest areas. This site that has averted the "normal" fate of Finnish forest habitats, practices of streamlined forestry management precisely *because* of it being a former railway guard hut site in a relatively remote watershed area and still part of the railway property.

Tree individuals from older generations are typical characters, regularly met in these abandoned guard hut sites. Theytree individuals from older generations, that began their lives probably when the plots were still inhabited. Silver birches (*betula pendula*) have a distinctive place in Finnish vernacular building heritage as yard trees. Massive branches and a wide crown still clearly indicate that a mighty individual depicted in image 13, found from another abandoned guardian hut site on the Hyvinkää-Hanko railway, once grew in an open environment where light was abundantly available. The feralized yard trees and other vegetation, generally showing surprising endurance, are still a living memory of human-nonhuman co-habitation, while a younger generation of genuine forest characters have also regularly found a refuge among their half-feral peers from these pocket-size microperipheries.

Image 13: Yard birch on a guard hut site abandoned before 1940, Hyvinkää–Hanko railway, photo Mikko Itälahti Autumn 2021.

CONCLUSION / SUMMARY

Railway landscapes and their values take various forms: as the views from train, as material assemblages of landscapes, and as special heritage sites, testimoning to their particular histories. Drawing from work developed in critical heritage studies, and especially the cultural geographer Caitlin DeSilvey's concept of ruderal heritage, it was argued that landscape-related heritage values are also emergent and created by more-than human actors and processes like reclamation by vegetation, ruination and weathering.

New ways of understanding heritage have formed during recent years in the fields of critical heritage and landscape studies; ways that generally question the anthropocentric presuppositions of human supremacy and the role of humans as the sole creators of cultural heritage, which still seem to underlie the standard approaches in authorized heritage discourses. Through a lens provided by these new understandings of heritage, the railway landscapes of today can be understood as having been enriched by more-than-human actors and creations in multiple ways.

Through a selection of empirical examples from Finland, this essay aimed at pointing out how the co-existence of the railway, with its more-than-human surroundings and processes over time, has produced new kind of heritage landscapes with distinctive temporal depth. This is not to defy the significance of built objects and traits of the railway for heritage, but to instead suggest an extended understanding of heritage itself. Through the concepts of emergence, temporal depth, and co-existence, I aimed at highlighting heritage values that do not derive their meanings from the planned intentions of historical human societies.

These emergent properties that were brought about without or even against human intentions, have typically been deemed meaningless in standard authorized heritage discourses. Yet these could be seen as important contributors of railway heritage environments today and their temporally deep quality. These emergent properties, and their possible meanings, still call for further exploration and elaboration. Yet it seems clear that solely for the purpose of widening the anthropocentric view of "culture" it would be useful to develop sensitivity towards the hybrid outcomes, where human creations are intertwined with nonhuman agencies and materialities, producing temporally deep more-than-human heritage landscapes; they could be seen as valuable and interesting outcomes of sustained human-nonhuman interaction, even when the processes they exhibit might work against utilitarian human purposes.

These emergent and landscape-bound heritage properties, however, also seem to call for new kind of attitudes and approaches in heritage stewardship. These more-than-human aspects probably cannot be maintained through traditional conservationist heritage strategies, but rather, they seem to call for a completely new kind of respect and sensitivity towards the more-than-human lifeforms and diversity beyond the anthropocentric evaluations of heritage and landscape.

Literature

David Abram, *The spell of the sensuous: Perception and language in a more-than-human world.* New York: Vintage books, 1997 Available: *https://projects.iq.harvard.edu/files/retreat/files/abram_the_spell_of_the_sensuous_perception.pdf*

Juhani Aho, *Rautatie.* Helsinki: WSOY.

Juhani Aho (1889), Rautatiejunassa, In: *Lastuja, Kolmas kokoelma.* Helsinki: WSOY, 1929.

Jane Bennett, *Vibrant matter: A political ecology of things*. Durham: Duke university Press, 2010.

Johan Berqkvist, & al. (eds., 1999). *Spår i landskapet: Hur järnvägen format stad och land.* Stockholm: Arena & Banverket.

Lewi R. Bryant, *Onto-Cartography. An ontology of machines and media.* Edinburgh: Edinburgh University press, 2014.

Caitlin DeSilvey, *Curated Decay: Heritage Beyond Saving.* Minneapolis: University of Minnesota Press, 2017.

Caitlin DeSilvey, Ruderal Heritage, in: R. Harrison, & C. Sterling, (eds.), *Deterritorializing the Future: Heritage in, of and after the Anthropocene.* London: Open Humanities Press, 2020, pp 289–312. available: *http://www.openhumanitiespress.org/books/titles/deterritorializingthe-future/*

Johannes Gabriel Granö (1929). *Pure geography.* Baltimore: John Hopkins university press, 1997.

David Harvey, Landscape and heritage: trajectories and consequences, *Landscape Research,* 2015, DOI:10.1080/01426397.2014.967668.

Rodney Harrison, Beyond "Natural" and "Cultural" Heritage: Toward an Ontological Politics of Heritage in the Age of Anthropocene, *Heritage & Society* 8:1 (2015), pp. 24–42. DOI: 10.1179/2159032X15Z.00000000036

Rodney Harrison, & Colin Sterling (eds.), *Deterritorializing the Future: Heritage in, of and after the Anthropocene.* London: Open Humanities Press, 2020. Available: *http://www.openhumanitiespress.org/books/titles/deterritorializing-the-future/*

Antti Hyry, *Junamatkan kuvaus.* Helsinki: Otava, 1962.

Tapio Heikkilä, *Visuaalinen maisemaseuranta. Kulttuurimaiseman muutosten valokuvadokumentointi: Teksti,* Helsinki: Musta Taide & Taideteollinen korkeakoulu, 2007.

Mikko Härö, Läntisen Uudenmaan rakennusten ja maiseman kulttuurihistoriallinen inventointi. Lohja: Läntisen Uudenmaan seutukaavaliitto, 1993.

Marketta Hyvärinen, Värdeobjektskriterier för Trafikverkets trafikledsnät. Trafikverkets undersökningar och utredningar 25/2017. Helsinki: Liikennevirasto/Trafikverket, pp. 49-51. Available: https://www.doria.fi/handle/10024/143766

Mikko Itälahti, Distanced visuality, embodied proximity? Literary and photographic images of Finnish travel landscapes from the premodern journey to the railway era. In: Goldie, Chris & Darcy White (eds.). *Proximity and distance in Northern landscape photography.* Bielefeld: Transcript, 2020, pp 81-10. DOI: 10.14361/9783839449509-006

Mikko Itälahti, Kulturarvsinventering av järnvägsmiljöer mellan Kervo och Borgå: Banavsnitten Kervo–Sköldvik och Olli–Borgå. *Trafikledsverkets publikationer* 31/2023. Helsinki: Väyläviraston / Trafikledsverket, 2023. Available: *https://www.doria.fi/handle/10024/187142*

Mikko Itälahti, Kulturarvsinventering av banavsnitten Åbo–Nystad och Reso-Nådendal. *Trafikledsverkets publikationer* 88/2023. Helsinki: Väyläviraston / Trafikledsverket, 2023. Available: *https://www.doria.fi/handle/10024/188465*

Järnvägsavtalet: Programmerat bygnadsskyd. Ely-keskus, 1998. https://www.ely-keskus.fi/web/ohjelmallinen-rakennussuojelu/rautatiesopimus

Timo Kalanti, Maailma ruumiissa In: Arto Haapala & Ossi Naukkarinen (eds.), *Mobiiliestetiikka: Kirjoituksia liikkeen ja liikkumisen kulttuurista.* Helsinki: Erikoispaino, 2014.

Martti Linkola et al., *Maisematoimikunnan mietintö - landskapskommissionens betänkande.* Komiteanmietintö 1980:44. Helsinki: Valtioneuvosto.

Markku Nummelin, *Turun–Naantalin-Uudenkaupungin rautatie.* Helsinki: Kustantaja Laaksonen, 2018.

Matthias Qviststöm, Om järnvägen och det otidsenligt landskapet. In: J Berqkvist & al. (eds), *Spår i landskapet: Hur järnvägen format stad och land.* Stockholm: Arena & Banverket, 1999, pp. 139–151.

Monimuotoisuudelle tärkeät metsäalueet Suomessa, Helsinki: Suomen ympäristökeskus / Finlands miljöcentral, 2018. Open-access GIS dataset, available: *https://www.avoindata.fi/data/fi/dataset/monimuotoisuudelle-tarkeat-metsaalueet-high-biodiversity-value-forests-2018-zonation-fin-eng-sw*

Ludgvig Rasmusson, Utsikt från ett tåg. In: J Berqkvist & al. (eds), *Spår i landskapet: Hur järnvägen format stad och land.* Stockholm: Arena & Banverket, 1999, pp. 9–20.

Ratalaki / Banlag 2.2.2007, 37§, available: *https://finlex.fi/sv/laki/ajantasa/2007/20070110*

Virkby kalkverk och samhälle, Rky: Byggda Kulturmiljöer av riksintresse. Museovirasto/Museiverket. *https://www.kulturmiljo.fi/read/asp/rsv_kohde_det.aspx?KOHDE_ID=4988*

Matti Rinne, *Aseman kello löi kolme kertaa - Suomen rautateiden kulttuurihistoriaa.* Helsinki: Otava, 2001.

Stanislav Roudavski & Julian Rutten, Towards more-than-human heritage: arboreal habitats as a challenge for heritage preservation. *Built Heritage* 4:4 (2020). DOI: 10.1186/s43238-020-00003-9

Yuriko Saito, *Everyday aesthetics,* Oxford: Oxford university press, 2007.

Wolfgang Schivelbusch (1977), *The railway journey: Trains and travel in the 19th century,* Oxford: Blackwell, 1980.

Stina Sjöström & Lisa Warsen, Från tåget ser man tussilago, in Berqvist et al, 1999 pp. 115–125.

Colin Sterling, Critical heritage and the posthumanities: problems and prospects. *International Journal of Heritage Studies,* 26(11) (2020), pp. 1029-1046. DOI: 10.1080/13527258.2020.1715464

Zachris Topelius (1863), Mirabeau-täti, In: *Talvi-iltain tarinoita 2,* Helsinki: WSOY, 1910.

Seija Valanto (1982): *Suomen rautatieasemat vuosina 1957–1920.* Museoviraston rakennushistorian osaston julkaisu no. 11. Museiverket, Helsinki.

Valtakunnallisesti arvokkaat maisema-alueet (Nationellt värdefulla landskapsområden): Kanta-Häme, Helsinki: Ympäristöministeriö / Miljöministeriet. Available: *https://www.ymparisto.fi/sites/default/files/documents/VAMA%202021_4%20Kanta-H%C3%A4me_0_1.pdf*

Valtionrautatiet 1912–1937, Osa / Del II. Helsinki: Rautatiehallitus / Järnvägstyrelsen, 1937.

Valtionrautatiet 1962–1987. Helsinki: Rautatiehallitus / Järnvägstyrelsen,1987.

Saara Vilhunen, Kulttuurimaisemien inventointi ja arvottaminen. Aalto-Yliopisto, Arkkitehtuurin laitos, 2010. Available: *https://aaltodoc.aalto.fi/handle/123456789/3357*

Peter von Bagh, *Junassa.* Helsinki: WSOY, 2011.

John Wylie, A Landscape cannot be a homeland, *Landscape research* 4/2016, pp. 408-416. DOI: 10.1080/01426397.2016.1156067

Notes

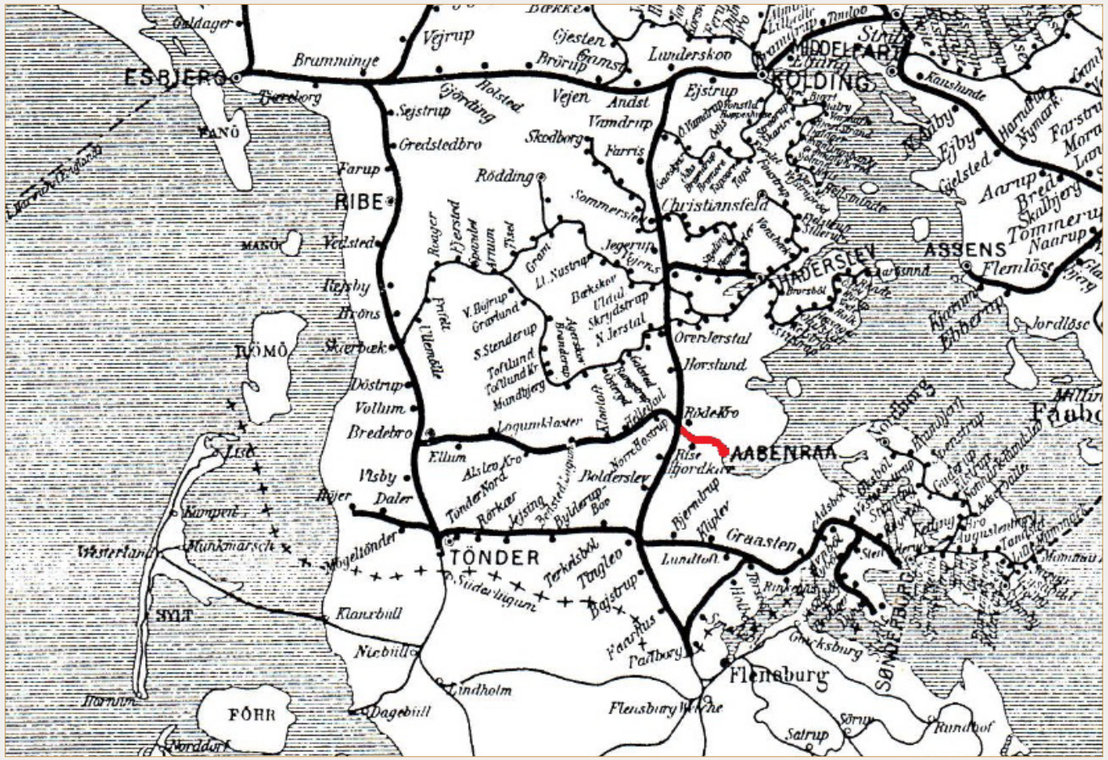
1) W. Schivelbusch (1977), *The railway journey: Trains and travel in the 19th century,* Oxford: Blackwell 1980 pp. 63–66.
2) Schivelbusch, p. 66.
3) J. Aho, Yöllinen konsertti Kouvolassa: Rautatietunnelma vuodelta 1890, *Helsinki: Päivälehti,* 1.9.1890.
4) J. Aho, Rautatiejunassa, In: *Lastuja, Kolmas kokoelma,* Helsinki: WSOY 1889/1929
5) P. von Bagh, *Junassa,* Helsinki: WSOY 2011
6) J. Wylie, A Landscape cannot be a homeland, In: *Landscape research,* 4/2016, pp. 408-416.
7) J. Berqkvist & al. (eds.), *Spår i landskapet: Hur järnvägen format stad och land,* Stockholm: Banverket & Arena 1999
8) cf. Aho (1889, 1890); A. Hyry, *Junamatkan kuvaus,* Helsinki: Otava, 1962; Z. Topelius, Mirabeau-täti (1863), In: *Talvi-iltain tarinoita 2,* Helsinki: WSOY, 1910.
9) M. Rinne, *Aseman kello löi kolme kertaa: Suomen rautateiden kulttuurihistoriaa.* Helsinki: Otava, 2001.
10) Cf. T. Kalanti, Maailma ruumiissa. In: Arto Haapala & Ossi Naukkarinen (eds.) *Mobiiliestetiikka: Kirjoituksia liikkeen ja liikkumisen kulttuurista.* Helsinki: Erikoispaino, 2014.
11) Härö (1993); S. Vilhunen, *Kulttuurimaisemien inventointi ja arvottaminen.* Espoo: Aalto-Yliopisto, arkkitehtuurin laitos, 2010.
12) S. Valanto, Suomen rautatieasemat vuosina 1957–1920. *Museoviraston rakennushistorian osaston julkaisu* no. 11. Helsinki: Museovirasto / Museiverket, 1982.
13) cf. M. Linkola & al, Maisematoimikunnan mietintö – landskapskommissionens betänkande. *Komiteanmietintö* 1980:44, p. 104.
14) Järnvägsavtalet: programmerat bygnadsskyd. Ely-keskus, 1998.
15) M. Härö, *Läntisen Uudenmaan rakennusten ja maiseman kulttuurihistoriallinen inventointi.* Läntisen Uudenmaan seutukaavaliitto 1993.
16) See M. Hyvärinen, Marketta, Värdeobjektskriterier för Trafikverkets trafikledsnät. *Trafikverkets undersökningar och utredningar 25/2017.* Helsinki: Väyläviraston / Trafikverket, 2017.
17) R. Harrison, *Beyond "Natural" and "Cultural" Heritage: Toward an Ontological Politics of Heritage in the Age of Anthropocene.* Heritage & Society 8:1 (2015), pp. 24–42; R. Harrison, & C. Sterling (eds.), Deterritorializing the Future: Heritage in, of and after the Anthropocene. London: Open Humanities Press, 2020.
18) C. Sterling, Critical heritage and the posthumanities: problems and prospects. *International Journal of Heritage Studies,* 2020, pp. 1029–1046.
19) C. DeSilvey, *Curated Decay: Heritage Beyond Saving.* Minneapolis: University of Minnesota Press, 2017.
20) C. DeSilvey, Caitlin. Ruderal Heritage. In: R. Harrison & C. Sterling (eds., 2020), pp. 289–312.
21) S. Roudavski & J. Rutten, Towards more-than-human heritage: arboreal habitats as a challenge for heritage preservation. *Built Heritage* 4:4 (2020).
22) Y Saito, *Everyday aesthetics.* Oxford: Oxford university press, 2007.
23) cf. J. Bennett, *Vibrant matter: A political ecology of things.* Durham: Duke university Press 2010; D. Abram, *The spell of the sensuous: Perception and language in a more-than-human world.* Vintage books, New York 1997.
24) D. Harvey, Landscape and heritage: trajectories and consequences, In: *Landscape Research,* 2015. DOI: 10.1080/01426397.2014.967668
25) D. Harvey (2015).
26) W. Schivelbusch (1980), p. 62.
27) L. Rasmusson, *Utsikt från ett tåg.* in: J. Berqkvist et al (eds.), 1999, p. 15.
28) W. Schivelbusch, pp. 63–66.
29) Schivelbusch, p. 65.
30) Schivelbusch, ibid.
31) J. G. Granö (1929), *Pure geography,* Baltimore: John Hopkins university press 1997.
32) Granö, p. 18.
33) Granö, ibid.
34) Cf. T. Heikkilä, *Visuaalinen maisemaseuranta. Kulttuurimaiseman muutosten valokuvadokumentointi: Teksti.* Helsinki: Musta Taide & Taideteollinen korkeakoulu 2007, p. 24.
35) Cf. M. Itälahti, Distanced visuality, embodied proximity? Literary and photographic images of Finnish travel landscapes from the premodern journey to the railway era, in: Goldie, Chris & Darcy White (eds.), *Proximity and distance in Northern landscape photography,* Bielefeld: Transcript 2020, pp. 81–106.
36) J. Aho, *Rautatie,* Helsinki: WSOY 1884.
37) cf. R. Solnit, *River of shadows: Eadweard Muybridge and the technological wild west,* New York: Penquin 2003.
38) See S. Sjöström & L. Warsén, *Från tåget ser man tussilago,* In: Berqvist et al. (eds.), 1999, pp. 115-125.
39) *Nationellt värdefulla landskapsområden: Kanta-Häme: (Egentliga Tavastland),* Helsinki: Ympäristöministeriö / Miljöministeriet, 2020, pp. 38–41.
40) M. Qviststöm, *Om järnvägen och det otidsenligt landskapet.* In: Berqkvist, J. & al (eds.), 1999.
41) Qviström, pp 146–147.
42) Qviström, ibid.
43) Cf. L. R. Bryant (2014).
44) Harvey (2015).
45) VR=Valtionrautatiet 1912–1937. Osa / Del II. Helsinki: Rautatiehallitus / Järnvägstyrelsen, 1937, p 209-210
46) VR=Valtionrautatiet 1962–1987. Helsinki: Rautatiehallitus / Järnvägstyrelsen, 1987. p. 351.
47) *Virkby kalkverk och samhälle.* Rky=Byggda Kulturmiljöer av riksintresse. Helsinki: Museovirasto / Museiverket, 2009.
48) *Virkby kalkverk och samhälle.* ibid.
49) *Monimuotoisuudelle tärkeät metsäalueet Suomessa.* GIS-Dataset (Open Access), Helsinki: Suomen ympäristökeskus / Finlands miljöcentral, 2018.
50) Ratalaki / Banlag 2.2.2007, 37§.
51) Vr (1987), p. 351. Translated from Finnish by the author.
52) M Itälahti, Kulturarvsinventering av järnvägsmiljöer mellan Kervo och Borgå: Banavsnitten Kervo–Sköldvik och Olli–Borgå. *Trafikledsverkets publikationer 31/2023* Helsinki: Väyläviraston / Trafikledsverket, p. 141.
52) M. Itälahti, Kulturarvsinventering av banavsnitten Åbo-Nystad och Reso-Nådendal. *Trafikledsverkets publikationer* 88/2023. Helsinki: Väyläviraston / Trafikledsverket, pp. 124–126.; Nummelin, Markku (2018). Turun-Naantalin-Uudenkaupungin rautatie. Helsinki: Kustantaja Laaksonen, 2018, pp. 12-13.
52) cf. M. Hyvärinen (2017), pp. 49–51.
52) DeSilvey (2017), p. 2.

Aabenraabanen

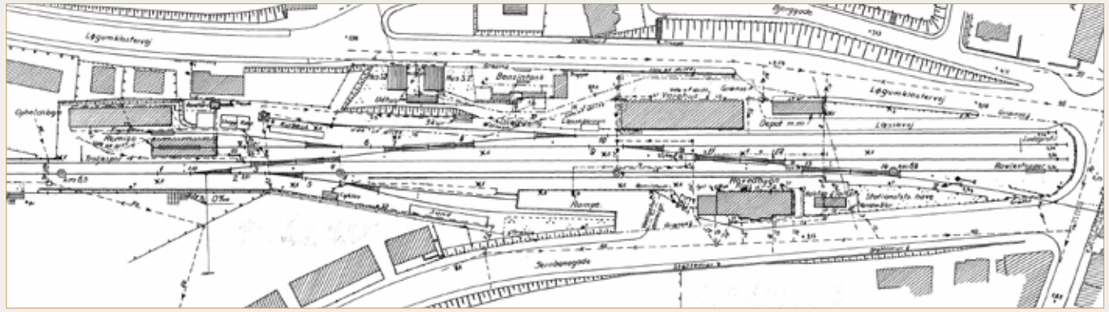
– fra infrastrukturelt anlæg til fredet fortidsminde

LARS BJARKE CHRISTENSEN

Efter flere års dialog med ejerne af Aabenraabanen, Aabenraa Kommune og den lokale befolkning kunne Slots- og Kulturstyrelsen i februar 2024 offentliggøre, at den 6,7 kilometer lange, nedlagte jernbanestrækning mellem Rødekro og Aabenraa i Sønderjylland, var blevet udpeget som et fredet fortidsminde.[1)] Fredningen er på mange måder unik. Slots- og Kulturstyrelsen har gennem årene fredet udvalgte stationsbygninger, remiser og broer, samt enkelte banedæmninger med og uden jernbanespor. Det er dog første gang, at en hel jernbanestrækning – et koncentrat af et samlet jernbanesystem – er udpeget som beskyttet fortidsminde.



Udsnit af DSBs jernbanekort fra 1929 med Aabenraabanen mellem Rødekro og Aabenraa markeret med rød farve. Aabenraa Amtsbaner var nedlagt i 1926 og ses derfor ikke på kortet. Kilde: DSB Køreplan 1929.



Sporplan over Aabenraa station i 1959 med det vidt forgrenede spornet. Yderst til venstre ses strækningssporet mod Rødekro. I nederste højre hjørne det gamle havnespor. Endnu i 1959 var såvel stationsbygningen som det nordligere beliggende pakhus bevaret. Vest for stationsbygningen ses læsserampen, og længst mod vest ses remisebygningen. Kilde: Danmarks Jernbanemuseum.

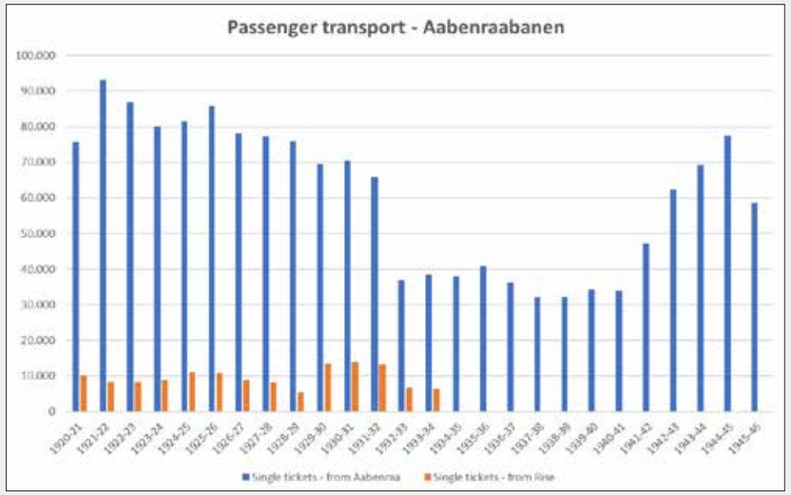
Denne korte introduktion til Aabenraabanen er inddelt i tre dele. Allerførst opridses banens historie med brede penselstrøg fra anlæggelsen i 1860erne til nedlæggelsen ved årtusindskiftet, herunder ses der på lokalsamfundets og de rejsendes oplevelser med banen. Dernæst ses der på banens bevarede fysiske elementer, i et forsøg på at vise den transformation som jernbanestrækningen har gennemgået gennem årene, og for at vise betydningen i bevaringen af banen i kraft af dens mange bevarede elementer. Afslutningsvis skitseres vejen fra infrastrukturelt anlæg til et fredet fortidsminde.

AABENRAABANENS HISTORIE

I jernbanens formative år i midten af 1800-tallet, opstod der diskussioner om etableringen af et jernbanenet i hertugdømmerne Slesvig-Holsten samt i Jylland. Ikke mindst gav spørgsmålet om hvor de nye jernbaner skulle placeres anledning til debat, og også bekymring om hvorvidt en direkte jernbaneforbindelse mellem Jylland og Preussen ville øge den tyske indflydelse i hertugdømmerne og i Danmark. En livlig diskussion, som det vil føre for vidt, at komme ind på i denne artikel.[2)] I 1862 fik det britiske jernbaneentreprenørkonsortium Peto, Brassey & Betts imidlertid koncession på anlæggelse af en jernbane fra Flensborg til Vamdrup – grænsen mellem hertugdømmerne og kongeriget. Firmaets ledende mænd var allerede på dette tidspunkt velanskrevne inden for anlæg af jernbaner, og havde allerede stået for anlæggelsen af jernbaner i Storbritannien, Frankrig, Rusland, Norge, Canada og Australien.[3)] Peto, Brassey & Betts kom også til at stå bag anlæggelsen af mange af de første jernbaner i hertugdømmerne, i Jylland og på Fyn. Arbejdet med anlæggelsen af den sønderjyske længdebane gik hurtigt i gang, og allerede i 1864 – midt under krigen mellem Danmark og Preussen/Østrig og kun få dage inden fjendens succesrige storm på den danske stilling ved Dybbøl – blev banen mellem Flensborg og Rødekro åbnet for driften. I 1866 fulgte den resterende del af strækningen til den nye dansk-tyske landegrænse ved Vamdrup. Den nord-sydgående længdebane var allerede fra starten tænkt som en primær hovedbane i det slesvig-holstenske jernbanenet med sidebaner til blandt andet Tønder og Haderslev.[4)]

Også i købstaden Aabenraa havde man et stort ønske om at blive koblet på jernbanenettet, der allerede i 1850erne var i fuld gang med at sprede sine fangarme udover Europa. Selvom Aabenraa var en betydelig søfartsby, så var man bange for at miste terræn og indflydelse, hvis ikke der også blev etableret en jernbaneforbindelse til byen – med den øgede samfærdsel og eksport som man ventede at banen ville bringe. Således havde man fra byens side sendt deputationer til kongen i 1856, 1857 og 1861 med ønsket om en jernbane.[5)] Som følge af det meget kuperede terræn ved Aabenraa og Haderslev, blev den direkte nord-sydgående jernbaneforbindelse (Flensborg-Vamdrup) lagt noget inde i landet via Rødekro og Vojens, og i stedet besluttedes det i 1862 at anlægge to sidebaner fra henholdsvis Rødekro til Aabenraa og fra Vojens til Haderslev, så de betydelige købstæder og søfartsbyer også blev koblet på jernbanenettet. Oprindeligt havde jernbanekonsortiet ikke noget ønske om anlæg af en bane til Aabenraa, men dette blev dog indarbejdet i den endelige koncession. I midten af 1860erne rendte det britiske jernbanekonsortium imidlertid ind i vanskeligheder, og efter Danmarks afståelse af hertugdømmerne, solgte selskabet sine aktiviteter i de slesvigske baners driftsselskaber til bankierkonsortiet Erlanger & Söhne i Frankfurt a. M. i 1865, der drev banerne videre i selskabet Schleswigsche Eisenbahn Gesellschaft.[6)] Når banerne var anlagt af den engelske jernbaneentreprenør, overgik driften af og ejerskabet til banen til Schleswigische Eisenbahn Gesellschaft.[7)] Aabenraabanen blev således bestilt af danskerne, koncessioneret og delvist planlagt af englænderne, mens tyskerne stod for anlæggelsen og driften af banen.

Navnlig de store højdeforskelle mellem Rødekro og Aabenraa vakte vanskeligheder ved projekteringen af banen, og der overvejedes flere mulige placeringer af banestrækningen. I foråret 1867 havde man efter fornyede terrænundersøgelser dog lagt sig fast på et linjeforløb fra Rødekro, ned gennem Rise-dalen til det lavtliggende område ved Aabenraas nordlige byport. Et forløb, der godt nok betød omfattende jordarbejder, men som sikrede en mindre højdeforskel og mindre skarpe kurver, end tidligere forslag. Strækningsforløbet betød dog, at banen ville passere over Mølleåen adskillige steder på vejen ned gennem Rise-dalen, ligesom vandløbet måtte omlægges adskillige steder langs strækningen.[8)]



Antal solgte enkeltbilletter fra henholdsvis Aabenraa og Rise i perioden 1920-46. For Rises vedkommende standsede optællingen i driftsåret 1933-34, hvorfor data for de følgende år ikke kendes. Kilde: DSBs årsberetninger 1920/21-1945/46.

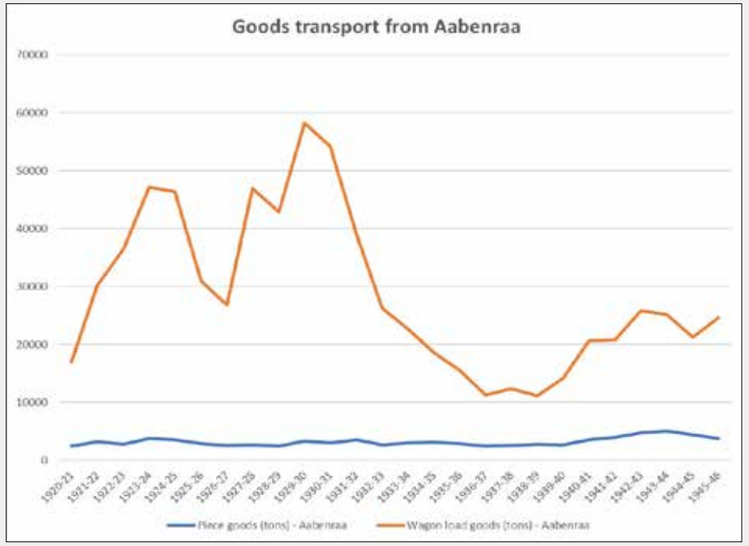
Antal udførte togkilometer på Aabenraabanen fordelt på de enkelte driftsår. Antallet af togkilometre viser hvor mange kilometer der er kørt med tog på banen og viser således togproduktionen på Aabenraabanen. Det ses således, at der var størst aktivitet på Aabenraabanen i 1920-30erne og igen i 1950erne, men at trafikken faldt i takt med motoriseringen af vejnettet i efterkrigsårene. Kilde: DSBs årsberetninger 1920/21-1970/71.

Mens projekteringen af banen havde taget noget tid, så skete selve anlæggelsen af banen på relativ kort tid. Således kunne Aabenraabanen indvies den 11. september 1868 og blev i de første år drevet af det private tyske jernbaneselskab frem til 1883, hvor banen blev overtaget af Königliche Preussische Staats-Eisenbahn Verwaltung – de preussiske statsbaner.[9] Allerede få dage efter banens indvielse rejste den preussiske kong Wilhelm 1 med banen, da han under en charmeoffensiv i hertugdømmerne skulle rejse med toget fra Aabenraa til Tønder. En rejse man fra kongehuset side – helt berettiget – frygtede at de dansksindede ville anvende til demonstrationer mod preussernes konge, idet en deputation af dansksindede borgere fra Aabenraa få dage tidligere var rejst med toget sydpå for at få foretræde for kongen. Et forsøg der var mislykkedes.[10]

I modsætning til mange andre danske jernbanestrækninger er der endnu ikke udarbejdet en grundigere gennemgang af Aabenraabanens historie, en såkaldt banemonografi, omend kildematerialet er til stede.[11] Aabenraabanens historie er mangefacetteret, men om banens tyske tid skal i denne sammenhæng som et eksempel blot fremhæves træk af persontrafikkens historie og de rejsendes oplevelser.

I banens første år kørte der dagligt tre togpar – tre tog i hver retning – som kombinerede gods- og persontog. Ved århundredeskiftet var antallet steget til seks tog i hver retning, men under 1. verdenskrigs knaphedstid faldt antallet til fire tog dagligt i hver retning. Et gennemgående træk i nogle af de bevarede arkivalier fra begyndelsen af 1900-tallet er klager fra Aabenraa over de få tog og dårlige forbindelser til omverdenen. I foråret 1911 klagede magistraten i Aabenraa således over de lange skiftetider i Rødekro til de sydgående tog, hvor de rejsende måtte vente mellem 30-40 minutter ved togskifte. Magistraten beklagede sig desuden over de dårlige ventesalsfaciliteter i Rødekro og pegede på de nationalpolitiske interesser der lå i at skaffe bedre skiftetider til det sydgående tog.[12] Atter i 1915 gav Aabenraas magistrat sin mening til kende om den elendige prioritering af Aabenraabanen i et malende brev til jernbanedirektoratet i Altona om rejselivets besværligheder og manglende persontog til Rødekro: "Forbindelsen mod syd er så absolut den vigtigste. Som tilstandene er lige nu må mange mennesker rejse om aftenen og overnatte uden for hjemmet. Omkostningerne og tidstabet mærkes stærkt af de rejsende, især af feriegæsterne. Kun få har råd til den luksus at tage en vogn til Rødekro. Rejsebesværlighederne medfører, at nogle ture endog må aflyses. Som situationen er lige nu, må de fleste mennesker gå til fods fra Aabenraa til Rødekro. I så tilfælde må de afsted kl. 3½ om morgenen og ankommer normalt til Rødekro svedige og støvede eller fuldstændig gennemblødte, for så at starte deres rejse i støvet eller vådt tøj. Undertegnede har ofte måtte tage en vogn og har i den forbindelse haft lejlighed til at iagttage dette personligt. Alene på en enkelt dag ankom 26 rejsende til Rødekro fuldstændig gennemblødte. De fleste af dem var feriegæster, som kun havde et sæt tøj med på rejsen. [...] En forbedring af forbindelsen mod syd vil derfor blive hilst velkommen. Blandt borgerne forstår man heller ikke hvorfor forbindelsen mod nord, som der er behov for, skal afskaffes. Nødvendigheden af at spare kul og smøremidler er selvfølgelig indlysende, men vores korte rute til Rødekro på 6,7 km bør ikke komme i betragtning. Flensborg har således forbindelse mod syd syv gange dagligt, Aabenraa tre gange. Haderslev har forbindelse til alle tog til Flensborg. Selvom vores by er mindre, beder vi om at der tages hensyn til vores forretningsforbindelser og, at Aabenraa ikke behandles hårdere end højst nødvendigt. [...] En forbedring af såvel den nordgående som sydgående jernbaneforbindelse fra Aabenraa, vil derfor blive modtaget med stor taknemmelighed her i byen. Såfremt der ikke sker en forbedring af trafikforbindelserne, vil de dansksindede desuden få mulighed for at forårsage yderligere ophævelser og beklagelser. Jeg skal derfor venligst anmode om en positiv behandling af vores ønsker, og en forbedring af forbindelserne såvel nord- som sydpå."[13]

Men hvordan var en rejse på Aabenraabanen i den tyske tid? Ikke mange rejsende har skrevet om deres oplevelser af den ca. 15 minutter lange togtur mellem Rødekro og Aabenraa, men en sjælden undtagelse er skolelærer J.H. Jensen, der levende har berettet om sine indtryk, da han den 7. juni 1920 iført sit fineste tøj, jaket og stribede bukser, steg ombord i et stopfyldt tysk tog ved den dansk-tyske landegrænse med en 4. klasses-billet i hånden, for at rejse til sit nye kald som skolelærer i en lille landsby et stykke uden for Aabenraa. Men inden han nåede så langt, måtte han



Godstransporter på Aabenraabanen afsendt fra Aabenraa station fordelt på henholdsvis stykgods og vognladningsgods i driftsårene 1920/21-1945/46. Kilde: DSBs årsberetninger 1920/21-1970/71.

skifte tog i Rødekro: "I Røde Kro steg kun få passagerer ud, og i løbet af et par minutter var stationsterrænet som blæst. Jeg stod ene tilbage med min håndbagage. Efter nogen søgen lykkedes det at finde en jernbanemand. Han oplyste, at toget til Åbenrå var den lille stamme, der holdt langt ude ved et sidespor, og der ville det blive holdende de næste to timer. Derudover bekræftede han, at Åbenrå indtil videre rent jernbanemæssigt fungerede som verdens ende. Altså måtte man sidde de næste to timer af her på stedet. Stationsbygningen var øde og tom, det så ikke ud til, at der var sket nævneværdigt med den, siden den engelske jernbaneingeniør, mr. Peto, afleverede den for 57 år siden, og stationsbyen, som jeg tog i øjesyn i et ophold mellem et par byger, virkede heller ikke fængslende. Alene den grusbelagte bygade med dens mylder af vandfyldte huller dæmpede lysten til at gå på opdagelse. Et kort krydstogt fik mig hurtigt til at søge tilbage til udgangspunktet. Men hvorfor sidde tiden af på ventesalens umagelige træbænke? Åbenråtoget holdt jo derude, og de udstandne strabadser på fjerde burde kompenseres med en anden klasses billet til den sidste strækning. Det lykkedes faktisk at få en mand kaldt til billetlugen, og med rejsehjemmel til en kupe med polstrede sæder begav jeg mig ud til den tålmodigt ventende togstamme. Tilfældet ville, at jeg udvalgte mig netop den kupe, hvor en konduktør lå og fik sig en middagslur. Som stukket af en bi for han op, jeg opfangede lige et forskrækket blik, inden han forsvandt ud af den modsatte dør, idet han dukkede hovedet, som ventede han et nakkedrag eller i det mindste en byge af skældsord. Hvad var det? At en dansk jernbanemand kunne blive overrasket i en lignende situation, var tænkeligt, men han ville ganske bestemt have fundet en mere værdig sortie. Det var nok anden gang, jeg mødte preusseråndet. Også ventetider får en ende. Det gav et ryk i toget, og et øjeblik efter gled det ud fra stationen. Aldrig glemmer jeg, hvordan landskabet skiftede karakter i løbet af minutter. Vi kørte ned gennem en dejlig dal, indrammet af skovklædte bakker og med smågenge og frodige marker i bunden. Hvor var det smukt, og hvor varede det kort. Snart holdt toget ved Åbenrå station, der til forveksling lignede den, toget lige havde forladt. Mr. Peto havde åbenbart forgrebet tanken om typehuse. Nu blev det spændende. Var nogen taget ud for at hente mig? Det spørgsmål blev hurtigt besvaret. I løbet af et par minutter var perronen tom. Kun en drager iagttog på afstand den desorienterede unge mand med kufferterne. Måske var der bid. Det var der, for hvad andet var der at gøre end at søge ind på et hotel for at få en tiltrængt bid brød og samtidig overveje situationen."[14)]

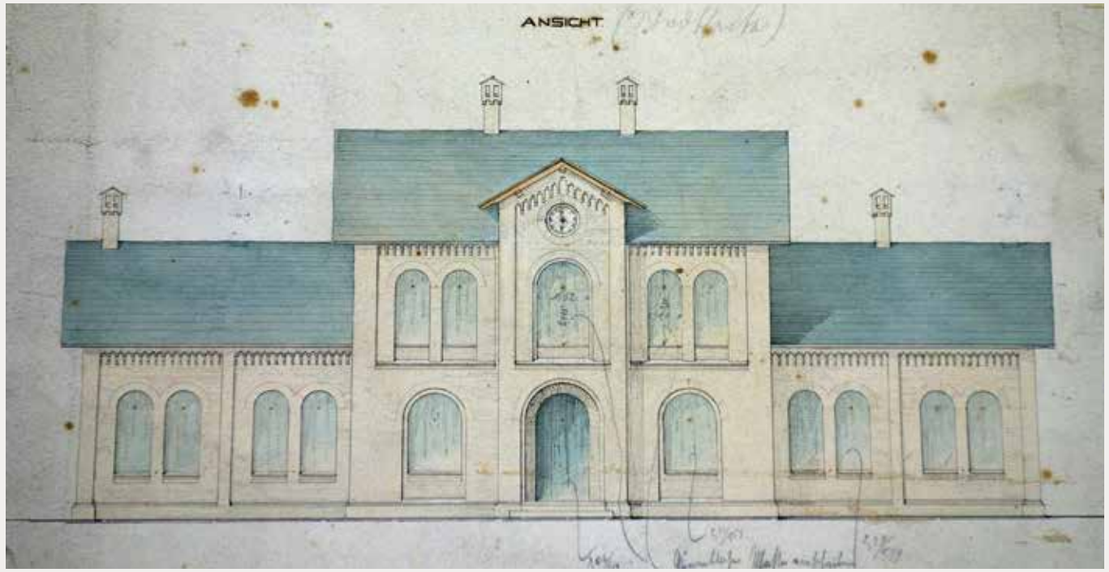
Efter Tysklands nederlag i 1. verdenskrig afholdtes som en konsekvens af Versailles-traktaten i Slesvig i 1920 en folkeafstemning om det fremtidige nationale tilhørsforhold. I Nordslesvig stemte langt størstedelen for en fremtidig tilknytning til Danmark, der ikke bare stod til en markant geografisk udvidelse. Danmark stod også til at overtage et fuldstændig nedslidt sønderjysk jernbanenet: "Efter 4 Aars ødelæggende Krig, hvorunder Vedligeholdelsen af Banerne i de Egne, hvor der ikke foretoges Troppetransporter, havde været indskrænket til det mindst mulige, og efter yderligere et Aar, hvor Tyskland var klar over, at de sandsynligvis skulde af med de paagældende Banestrækninger og der derfor overhovedet intet gjordes ved dem, var Banerne i den nu danske Del af Sønderjylland i en yderst slet Forfatning", skrev DSBs generaldirektør Peter Knutzen med nogle års afstand til begivenhederne. "En af Statsbanernes Ingeniører, der kort før Overtagelsen var nede for at besigtige Anlæggene, fortæller saaledes, at Svellerne paa Strækningen Røde Kro – Aabenraa da var saa raadne, at han efter et Par Gange at have trådt en Svelle i Stykker ved at gaa i Sporet, ikke turde fortsætte hermed for ikke at skabe yderligere Ødelæggelse. I den Køreplan, som Statsbanerne udgav pr. 1. Juli 1920 for de sønderjyske Strækninger maatte Maksimalhastigheden for flere af Strækningerne, deriblandt den ovennævnte fra Røde Kro til Aabenraa da ogsaa paa Grund af svagt Spor sættes helt ned til 25 km pr. Time"."[15)] At der vitterligt var tale om et fuldstændigt nedslidt baneanlæg, vidner en intern DSB-bestilling fra 22. juni 1920, hvor materielforvalteren i Århus blev bedt om hurtigst muligt at sende 4000 træsveller, 16.000 svelleskruer, 3000 laskebolte,10.000 spiger og 4000 underlagspladser til Rødekro station, idet Aabenraabanen var så dårlig vedligeholdt, at den ikke kunne anses for driftssikker.[16)] Skønsmæssigt kunne kun 20 % af svellerne genanvendes, mens resten måtte udskiftes i tiden efter Genforeningen.[17)]

Trods vanskeligheder af forskellig art, så havde Aabenraabanen naturligvis betydning for infrastrukturen og samfundet generelt i området omkring Aabenraa. Ikke mindst i kraft af sin funktion som fødelinje til de smalsporede kleinbahner anlagt henholdsvis 1899 og 1901 til Gråsten og Løgumkloster. Æ Kringelbahn, som sønderjyderne med underfundig humor kaldte Apenrader Kreis-Kleinbahn, snoede og bugtede sig gennem det sønderjyske landskab, så mange mindre byer og flækker fik jernbaneforbindelse både til Aabenraa og til resten af Tyskland.[18)] Ligeledes anlagdes et efterhånden ret omfattede spornet til virksomhederne på havnen i Aabenraa, som – sammen med en markant udbygning af havnen i 1920erne – fik stor betydning for at jernbaneforbindelsen til Aabenraa blev bevaret helt frem til årtusindskiftet.[19)] At Aabenraabanen blomstrede op i årene efter Genforeningen ses også af at antallet af daglige tog steg til 16 tog i hver retning i 1930.[20)]

I Danmark dalede jernbanernes betydning i årene efter 2. verdenskrig som følge af motoriseringen på landevejene. I 1962 besluttede DSB således at erstatte størstedelen af persontogene på Aabenraabanen med rutebiler. Kun søndag aften kørte der persontog på banen. Årsagen til, at der ikke var tale om en total nedlæggelse af persontrafikken på banen skyldtes, at DSB på denne måde undgik at søge om koncession på rutebilforbindelsen, da rutebilerne (med en noget søgt forklaring) blot var et supplement til persontrafikken på banen. I 1960erne gennemførte Baneplanudvalget under Landsplansudvalget en gennemgang af rentabiliteten på en række jernbanestrækninger, og nåede i den forbindelse frem til at persontrafikken på Aabenraabanen burde nedlægges og helt erstattes af busser. Den endnu betydelige godstrafik på banen skulle dog opretholdes.[21)]

Den 7. oktober 1970 fremsatte ministeren for offentlige arbejder derfor en lov om indskrænkning af og eventuel senere nedlæggelse af visse statsbanestrækninger. Lovforslaget gav ministeren bemyndigelse til at indskrænke driften på strækningen Rødekro-Aabenraa til kun at omfatte befordring af vognladningsgods, og eventuelt også senere at nedlægge banen. I bemærkningerne til lovforslaget blev det fremhævet, at en del statsbanestrækninger gennem flere år havde haft en stærkt vigende trafik ikke mindst på grund af landevejstrafikken, som bedre kunne tilbyde dør-til-dør transport for såvel gods som passagerer.[22)] Såvel Aabenraa Kommune, Rødekro Kommune som Sønderjyllands amtsråd havde ingen indvendinger mod at persontrafikken blev nedlagt, men der var modstand mod at ministeren fik bemyndigelse til også at nedlægge banestrækningen.[23)] Nogen større debat vakte lovforslaget ikke i Folketinget, hvor det konservative medlem Mads Eg Damgaard pegede på, at transporten af vognladningsgods fra Aabenraa havn af f.eks. grus, sten og sand ikke var rentabel. "I det hele taget gælder det med hensyn til jernbanedrift som med hensyn til al anden drift, at så snart driften sker på skatteydernes bekostning, det offentliges regning, i for høj grad, så er det billigere ikke blot for hele samfundet, men som regel også lokalt at komme af med banen og få de rigtige økonomiske og effektfulde driftsmidler sat ind. Derved får man også en bedre udnyttelse af vejnettet", pointerede Mads Eg Damgaard, der samtidig foreslog at de nedlagte jernbaner kunne omdannes til stier til glæde for gående og cyklister.[24)] Persontrafikken på banen nedlagdes ved overgangen til sommerkøreplanen i maj 1971.[25)]

Godstrafikken på Aabenraabanen blev dog opretholdt i en længere årrække, og først i 2003 kørte det sidste godstog på banen.[26)] Standsningen skyldtes ikke mindst, at det kriseramte godsselskab DSB Gods omkring årtusindskiftet foretog betydelige nedskæringer, lukkede godsforbindelser og droppede betjeningen af størstedelen af landets byer.[27)] Den 12. december 2004 blev Aabenraabanen formelt spærret for trafik.[28)] Et af de sidste kommercielle tog var et prøvetog fra DSB i september 2004 i et forsøg på at finde en prøvestrækning til de dengang nye IC4-tog. Et forsøg der ikke faldt ud til Aabenraabanens fordel.[29)] I 2007 blev banen formelt nedlagt.[30)] I 2014 foretog Banedanmark et mageskifte med Aabenraa Kommune således at ejerskabet over banen blev over-



Opstalt af stationsbygningen i Aabenraa fra 1903. Kilde: Rigsarkivet, DSBs bygningstegninger, Aabenraa station.

draget til kommunen mod at Banedanmark til gengæld fik et areal til udbygningen af jernbanernes godsterminal i Padborg.[31)] Siden begyndelsen af årtusindskiftet har der således udelukkende kørt skinnecykler på Aabenraabanen i turistsæsonen. Man kan således i dag stadig tage på rejse ad Aabenraabanens skinner fra Aabenraa til Rødekro.

AABENRAABANENS FYSISKE ELEMENTER

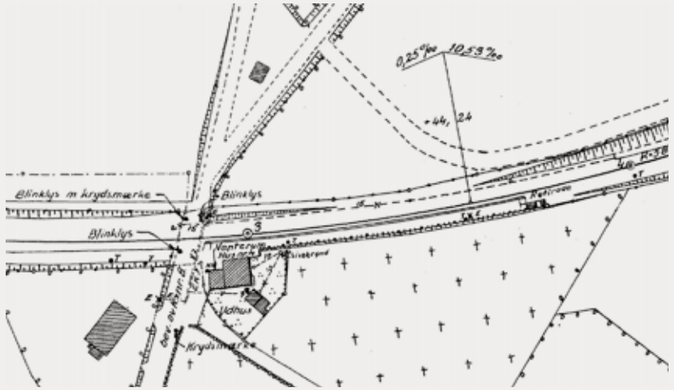
Siden 1860erne har Aabenraabanen i sagens natur gennemgået en række forandringer og forbedringer i forbindelse med jernbanedriften. Eksempelvis er sporet i form af sveller og skinner løbende blevet udskiftet og vedligeholdt. Aabenraabanen er således påvirket af og fremstår som et samlet jernbanesystem præget af 146 års historie fra åbningen i 1868 til salget af banen i 2014. Men grundstrukturen i form af banedæmningen og broerne er stadig den samme som i 1860erne, idet Aabenraabanen i hele sin levetid som aktiv jernbane fungerede som en sekundær sidebane til hovedbanenettet, hvorfor den i tidens løb ikke gennemgik de samme omfattende forandringer, ombygninger og udvidelser som andre af de første jyske jernbaner fra 1860erne (f.eks. Fredericia-Århus, Århus-Randers og Langå-Viborg). Det betyder, at man på Aabenraabanen finder en mindre, samlet jernbanestrækning som står intakt næsten som da jernbaneentreprenørerne forlod banebyggeriet i 1860erne. Banen er således repræsentativ for nogle af de ældste jernbaneanlæg som anlagdes i Danmark i midten af 1800-tallet.

Den fredede del af Aabenraabanen er ca. 6,2 km lang, idet den inderste del af sporet ved Rødekro station ikke er medtaget i fredningen, da det fortsat anvendes af Banedanmark. Arealet er dog omfattet af den såkaldte fortidsmindebeskyttelseslinje omkring den fredede jernbane, således at sporene kan anvendes og vedligeholdes, men ikke fjernes. Den oprindelige Rødekro station – som var magen til den endnu eksisterende stationsbygning i Aabenraa – blev også nedrevet i 1968 samtidig med at en ny bygning blev opført. Selve Aabenraabanen fremstår som et samlet – og enkelt – jernbanesystem med de to endestationer i henholdsvis Rødekro og Aabenraa. Undervejs passeres det tidligere Rise Billetsalgssted, som var det eneste sted, hvor togene standsede på strækningen for at udveksle passagerer i årene 1879-1971.[32)]

Centralt i baneanlægget er naturligvis banedæmningen (i jernbanetermer banens underbygning), der til hver side er flankeret af afvandingsgrøfter. Enkelte steder er banegrøften sammenfaldende med Møllebækken. Grundet egnens kuperede terræn, forløber banen på visse delstrækninger dels hævet over terræn og dels i dybe nedgravede gennemskæringer gennem bakkedrag. I gennemsnit har banedæmningen en bredde på ca. 9 meter og med varierende højde. Enkelte steder når dæmningen endog op på en højde af 6,5 meter og en bredde på 30 meter. Ved gennemskæringerne er banedæmningen anlagt i bunden af kunstigt gravede 6-7 meter dybe og i bunden 8 meter brede gennemgravninger med skrånende sider. Banens forløb gennem terrænet viser således det omfattende anlægsarbejde som udførtes med håndkraft i 1860erne for at skabe en jernbaneforbindelse fra den højtliggende Rødekro Station til havnebyen Aabenraa.

En særlig udfordring ved anlæggelsen af Aabenraabanen var de mange steder Møllebækken passerede under jernbanen eller hvor bækken måtte omlægges. Disse mange broer, der måtte opføres i den forbindelse, findes stadig i banedæmningen. Stenkisterne er af forskellige typer, dels af den såkaldte rammebro-konstruktion og dels buebroer med teglstenshvælv. Stenkisternes grundfundament er opført af lokale, kløvede kampesten, mens teglstenene i hvælvingerne med stor sandsynlighed stammer fra et eller flere af de sønderjyske teglværker, der lå ved østkysten i 1800-tallet og var grundlaget for den omfattende teglværksindustri som opstod og var så udpræget for egnen i de år. Stenkisternes udformning leder også tankerne hen på det britiske jernbanebyggeri i midten af 1800-tallet. Særlig karakteristisk ved Aabenraabanen er Sorte Bro, en teglstensbygget vejbro med trædække, der er ført over banen omtrent midtvejs mellem de to endestationer. Oprindeligt anlagt som en adgangsvej til blandt andet en privat ejendom. I 1800-tallet var det

Den bygningsfredede stationsbygning i Aabenraa i 2019. Bygningen ejes i dag af en privat virksomhed. Foto: Lars Bjarke Christensen



Sporplan over Rise Billetsalgssted fra 1959. Øst for vejoverskæringen ses selve billetsalgsstedet med udhus og venterum. Ved billetsalgsstedet syd for sporet ligger perronen. Et retiradehus er opført ved den østligste ende af perronen. Som det fremgår af plantegningen er overskæringen forsynet med blinklyssignaler. Kilde: Danmarks Jernbanemuseum.

usædvanligt med broer som adskilte vej- og jernbanetrafikken fra hinanden, idet det var nemmere og billigere at anlægge krydsninger mellem vej og bane i niveau. Sorte Bro er i dag enestående af sin art, idet de få lignende broer (f.eks. mellem Fredericia og Kolding eller ved Skive) fra det tidlige jyske baneanlæg i dag for længst er nedrevet. Sorte Bro, der er en af de ældst bevarede jernbanebroer i Danmark, er således den eneste tilbageværende af sin slags, og står endog i næsten oprindelig stand. Det har ikke været muligt at finde ud af hvem der har tegnet jernbanebroerne, men de er som nævnt af lignende type som man finder ved andre jyske og slesvigske jernbaneanlæg fra 1860erne. Dog ses det på en konstruktionstegning af Sorte Bro, at denne er signeret og dateret september 1867 af Fr. Steinschneider i Flensborg og kontrasigneret af jernbanekommissarius Hoffmann i Flensborg den følgende måned. I december 1867 blev tegningen godkendt i ministeriet for offentlige arbejder i Berlin. Flere instanser har således godkendt brokonstruktionen inden opførelsen kunne gå i gang.[33)]

Karakteristisk for Aabenraabanen er også det bevarede jernbanespor (i jernbanetermer, banens overbygning), der endnu i dag fysisk forbinder Aabenraa med resten af kontinentets jernbaner. Ovenpå banedæmningen ligger jernbanesporet i skærveballast (mindre stenskærver). I ballasten ligger træsvellerne, der for størstedelens vedkommende er udskiftet i 1950erne, hvilket ses af de indsatte svellesøm i hver enkelt svelle, der viser hvilket årstallet svellen er blevet imprægneret. Jernbaneskinnerne er fastgjort til svellerne med svelleskruer, der har en svag pyramideformet top. Denne top var med til at vise den ledende banemester, at hans banearbejdere havde skruet svellen fast i skinnen, og ikke anvendt den lettere, men usikre metode og banket skruen ned i træsvellen, idet svelleskruen i så fald ville have fået en flad top. Skinnerne er fastgjort til hinanden med stållasker. Skinnerne har en kortere længde (30 meter), der i ældre tid var med til at give togenes karakteristiske gang i sporet hver gang et skinnestød blev passeret. Omtrent midtvejs på strækningen ligger skinner med valsemærket "Krupp 1920", og på banegården i Aabenraa ses lignende valsemærker fra 1940erne. Banens skinner stammer således fra forskellige tidsperioder, herunder fra den store genopretningsperiode efter Genforeningen i 1920.

Langs banen ses forskellige opsatte markeringssten, hvor ikke mindst kilometerstenene i regelmæssig afstand langs banedæmningens sydside er karakteristiske. Kilometerstenene tjente blandt andet som vejledning til banearbejderne i forbindelse med sporarbejder. Stenene langs Aabenraabanen adskiller sig markant fra den i dag sjældne, men tidligere så karakteristiske DSB-kilometersten, som indtil årtusindskiftet sås langs alle statslige DSB-strækninger i Danmark. Kilometerstenene langs Aabenraabanen er af tilhuggede sten, og stammer fra banens tyske tid. Andre steder langs banen ses andre markeringssten, herunder sten med relation til det preussiske jernbanenet.

Et velbevaret element ved Aabenraabanen er også banens sikkerhedstekniske system. I disse år gennemføres en række moderniseringer af det eksisterende jernbanenet således at ubevogtede overkørsler i videst muligt omfang nedlægges, ligesom de fysiske signaler langs jernbanen afløses af de moderne digitale systemer CBTC og ERTMS, hvorved de fysiske jernbanesignaler i landskabet over en kort årrække forsvinder. Aabenraabanen har et – i kraft af banens simple opbygning, et strækningsspor og to endestationer – relativt beskedent signal- og sikkerhedssystem. Signalerne fra den tyske tid er naturligvis for længst afløst af nyere og danske jernbanesignaler. Ved udkørslen fra Rødekro Station står således det nu fredede udkørselssignal til Aabenraabanen, ligesom indkørselssignalet til Rødekro Station står et stykke ude langs strækningen. I øvrigt sammen med en stander med en såkaldt strækningstelefon fra 1960erne, så lokomotivføreren i påkommende tilfælde kunne stige ned fra lokomotivet, og ringe til fjernstyringscentralen, hvis signallampen ved indkørselssignalet i længere tid viste rødt lys – og dermed indkørsel forbudt. I en afstand af 400, 800 og 1200 meter foran indkørselssignalet til Rødekro er ligeledes opsat afstandsmærker, der viste lokomotivføreren hvor langt der var til indkørselssignalet, så hastigheden kunne tilpasses.

Langs strækningen passerer Aabenraabanen også flere steder over en række større og mindre veje. Ved nogle af de større veje som Hærvejen og Ringvej i Rødekro eller ved Toften i Aabenraa er der tale om sikrede overkørsler med forskellige lyssignaler både ved vejen som advarsel til de vejfarende og langs banen til lokomotivpersonalet. Dog er ingen af overkørslerne sikret med egentlige jernbanebomme. Andre steder langs strækningen – navnlig i skoven midtvejs på banen – findes flere mindre mark- og skovveje som passerer over banen. Flere steder er de gamle jernbaneled fra 1900-tallets begyndelse bevaret. Andre steder ses lodretstående jernbaneskinner efter fundamentet og hjørnepælen til leddene. Overkørslernes belægning er meget forskelligartede fra flisebelægning til svellebelægning. Foran de ubevogtede overskæringer langs banen ses flere steder de bevarede Giv Agt-skilte og andre markeringsskilte, der viste at lokomotivføreren skulle trække i lokomotivets tyfon eller fløjte for at advare gående og kørende inden passage af overskæringen. Langs banen står endnu også på lange stræk det delvist bevarede banehegn som skulle holde større dyr og uautoriserede personer ude fra jernbanens arealer. Som en del af sikkerhedsstrukturen langs banen ses f.eks. også ved Vestvejen i Aabenraa den i 1956 opførte vejbro over banen, som en hilsen fra den tid hvor Aabenraabanen kom under pres fra biler, lastbiler og busser.

Den enkeltsporede jernbanestrækning går gennem et varieret landskab. Visse steder var det nødvendigt at grave ned i terrænet ved anlæggelsen af banen for at etablere et jævnt fald/stigning på banen. Foto: Lars Bjarke Christensen.

Som nævnt findes i udkanten af Rødekro banens eneste standsningssted, Rise Billetsalgssted (i den tyske tid Ries Haltepunkt). Det kombinerede ledvogterhus og billetsalgssted ligger stadig ved den gamle grusperron, men bygningen er ikke omfattet af fortidsmindefredningen. Dog er bygningen omfattet af den såkaldte fortidsmindebeskyttelseslinje jf. naturbeskyttelseslovens § 18. Rise Billetsalgssted blev anlagt på stedet i sidste halvdel af 1800-tallet ved en eksisterende vejoverskæring. Det var ikke muligt at afsende godsforsendelser fra billetsalgsstedet, men muligt at stige af eller på toget.

En sporplan over Rise fra juni 1912 viser, at holdepladsen på dette tidspunkt bestod af et beboelseshus for billetsælgeren som også betjente jernbaneleddet. Beboelseshuset havde et køkken, soveværelse, kammer, toilet og dagligstue, der via en dør stod i forbindelse med venteværelset og billetsalget. Ved siden af huset lå en stald. Ved beboelseshuset – øst for vejen og syd for banen – ligger en 83 m lang perron for tog mod Aabenraa. Vest for vejen fandtes tidligere en 85 meter lang perron for tog mod Rødekro. I dag eksisterer kun den østlige perron ved billetsalgsstedet, hvor der alleryderst ses et betonfundament efter et retiradehus der blev opført omkring 1912.[34)] Mellem retiradehuset og billetsalgsstedet ses stadig et stakit delvist fremstillet af lodretstående, kasserede jernbaneskinner og dels af træ. Stakittet var med til at indramme perronen, præciserede adgangsvejen og sikrede, at de rejsende blev på det autoriserede areal indtil toget ankom.

Aabenraabanens største station var i sagens natur banegården i Aabenraa. Banegårdskomplekset har i tidens løb undergået talrige forandringer. Stationsbygningen og den tilhørende perron eksisterer endnu den dag i dag, mens pakhuset, remisen og andre funktionsbygninger er nedrevet. Trods disse forandringer står banegården som et fint og sjældent eksempel på en købstadsstation med et forgrenet spornet, der folder sig ud ved indkørslen til stationen. Oprindeligt var der opført en perronhal over sporene foran stationsbygningen, så de rejsende kunne stå i ly og læ for vind og vejr. Uvist af hvilken grund blev perronhallen dog fjernet på et tidspunkt mellem 1885 og 1903. Et andet eksempel på de mange ombygninger på banegårdsområdet ses ved læsserampen vest for stationsbygningen. Allerede i 1885 var der planer om at etablere et stikspor syd for læsserampen, men dette projekt blev aldrig realiseret. Omkring århundredeskiftet oplevede Aabenraa imidlertid en øget transport af godsforsendelser, hvilket førte til at man anlagde nye til- og frakørselsveje ved pakhuset nord for sporterrænet. I årene 1903-10 ombyggedes også læsserampen vest for stationsbygningen markant. Således anlagdes et nyt spor 6, der endte for enden af læsserampen, så det var muligt at foretage ind- og udladninger fra godsvognenes gavle, ligesom et nyt spor 7 blev anlagt syd for læsserampen, så der fortsat var mulighed for sideværts ind- og udladninger af godsvognene. Såvel spor som læsserampe eksisterer endnu i dag.[35)]

Et stenkast syd for læsserampen finder man også et bevaret betonbygget tilflugtsrum opført under 2. verdenskrig til beskyttelse af jernbanens personale og passagerer. At der vitterligt var behov for et tilflugtsrum ved de sønderjyske stationer ses af at allierede bombefly hele tre gange under besættelsen angreb Tinglev station, der i fugleflugtslinje lå kun 16 kilometer fra Aabenraa.

Et væsentligt element i banegårdsanlægget er de mange sporskifter, som gav mulighed for at rangere rundt med person- og godsvogne på stationen. Endnu ses flere steder de karakteristiske gule "oste", sporskiftetrækbukke og trækstange, der anvendtes til manuelt at stille sporskiftet. Også sporforbindelsen til havnen, eksistensgrundlaget for banen i de sidste mange år, er også delvist bevaret. Oprindeligt udgik havnesporet fra perronsporet nærmest stationsbygningen, men havnebanen blev i sidste del af 1900-tallet omlagt til det fjerneste, nordligste spor. Havnesporet er i dag fjernet, men endnu ses armaturet hvor jernbanepersonalet kunne tænde for de automatiske blinklys ved vejoverskæringerne ned mod havnen. Banegården i Aabenraa gennemgik seneste større ombygning i midten af 1980erne, hvor nogle af sporene omlagdes og såvel pakhus som remise blev nedrevet.

VEJEN MOD NATIONAL KULTURARV

"Banestrækningen Aabenraa-Rødekro er kort, men hører til en af de smukkeste i Danmark, går gennem en vidunderlig natur og viser et interessant tværsnit af et typisk dansk landskab med fjordens endemoræner mod øst og smeltevandsaflejringernes flade landskab mod vest. Desværre trafikeres denne strækning kun med persontog søndag aften, mens den øvrige trafik gennemføres med bus. Da tanken om veterantog er slået så godt an her i Danmark og der nogle steder er oprettet et par private banelinjer, fremsætter vi her den tanke, der måske kan forekomme urealisabel, men som ved nærmere eftertanke måske slet ikke er så dårlig endda". Med disse ord indledte turistchef Frands Gregersen, Turistforeningen for Aabenraa og Omegn, i 1967 sit brev til DSB. Et brev, hvor ideen om at omdanne den dengang 100-årige Aabenraabanen fra et infrastrukturelt anlæg til en seværdighed i sig selv, fostredes for første gang. I brevet slog turistchefen til lyd for at Aabenraabanen blev omdannet til en veteranbane med "et smukt, typisk damplokomotiv" med passende vogne. Måske kunne man på sigt også "muntres op med alskens hygsomme ting" som eksempelvis et jernbanemuseum i enten Aabenraa eller Rødekro.[36)] Man kan hævde, at dette forslag var det første spæde initiativ til bevaringen af Aabenraabanen som en kulturhistorisk attraktion. Et minde om fortiden.

Selvom der i årenes løb både kom til at køre veterantog og skinnecykler i turistsæsonen på den 6,7 kilometer lange sidebane, så har Aabenraabanen levet en noget hensygnende og stille tilværelse i forhold til andre dele af jernbanenettet. Mens mange andre strækninger enten er blevet moderniseret og udvidet eller på den anden side nedlagt og sporene taget op, så har Aabenraabanen lagt som en relikt i det sønderjyske kultur- og naturlandskab. Omend tiden visse steder naturligvis har sat sit præg på banen, navnlig omkring banegården i Aabenraa som har undergået forskellige ændringer, hvilket ikke har understøttet den kulturhistoriske fortælling på stedet.

Eksempelvis opstod der i 1980erne planer om at nedrive en række bygninger ved banegården i forbindelse med et lokalt ønske om en vejforlægning over baneterrænet, hvilket førte til at den daværende bygningsfredningsmyndighed i Planstyrelsen tog initiativ til en fredning af stationsbygningen, pakhuset og remisen, med henvisning til bygningernes arkitektur, sammenhæng og kulturhistoriske betydning med rødder i byens tidligste jernbanehistorie. Efter dialog med DSB og lokale myndigheder, besluttede Planstyrelsen at frede pakhus og stationsbygning, men trak senere fredningen af pakhuset tilbage på grund af klager fra kommunen og amtsrådet. I marts 1988 blev således alene stationsbygningen fredet. En bygning tegnet af arkitekten N.P.C. Holsøe til banens åbning, og som Planstyrelsen omtalte på følgende vis i forbindelse med fredningen: "Stationsbygningen, der er opført 1867, er efter en række nedrivninger af stationer i Sønderjylland den ældste og eneste tilbageværende af de større anlæg. Den er et smukt udtryk for den senklassicistiske murstensarkitektur på overgangen til de historiske stilarter. Pakhuset udgør en kulturhistorisk værdifuld del af banegårdsanlægget".[37)] Ved en senere vurdering af stationsbygningens fredningsværdier blev det fremhævet, at "de mange bevarede skinner nord for stationsbygningen og det mod vest synlige tracé, bidrager i høj grad til bygningens miljømæssige værdi".[38)]

Omtrent midtvejs på banen og midt ude i skoven passeres banen af en lidt større skovvej. Der er etableret flisebelægning i overskæringen. Ved vejen ses desuden en bom af nyere oprindelse opsat på gamle lodretstillede jernbaneskinner. Foto: Lars Bjarke Christensen.

Et Giv Agt-skilt i emalje opstillet nærheden af en jernbaneoverskæring. Skiltet signalerede til lokomotivførerne at de skulle afgive et fløjtesignal for at advare de vejfarende om at der kom tog. Foto: Lars Bjarke Christensen.

Knapt 36 år gik der fra fredningen af stationsbygningen til Slots- og Kulturstyrelsen i 2024 valgte at udpege Aabenraabanen som et fredet fortidsminde. Ideen til fredningen var opstået nogle år tidligere, idet styrelsen i forbindelse med en fredningsvurdering af Sorte Bro, var blevet opmærksom på banens unikke kulturhistoriske kvaliteter. Kombinationen af helheden set i sammenhæng med de mange enkeltelementer gør Aabenraabanen til noget helt særligt. I en pressemeddelelse i forbindelse med fredningen bemærkede styrelsen: "Aabenraabanen er en af de bedst bevarede jernbanestrækninger fra den tidlige industrialisering og et sjældent fysisk levn af dansk teknologihistorie. Banen, der er blandt de ældste jernbanestrækninger i Danmark, fremstår næsten intakt med mange velbevarede elementer helt tilbage fra banens anlæggelse i 1860'erne. Slots- og Kulturstyrelsen har derfor valgt at beskytte jernbanen og det omkringliggende terræn som et fortidsminde".

AABENRAABANENS KULTURHISTORISKE BETYDNING

Slots- og Kulturstyrelsen har tidligere fredet enkelte jernbanehistoriske bygninger og konstruktioner. Således gennemførtes omkring 1990 en fredning af en række jernbanebygninger, primært af stationsbygninger på de statslige strækninger fra før 1945. Ligesom styrelsen i samarbejde med Banedanmark i begyndelsen af det nye årtusinde har gennemført en udvælgelse og fredning af en række jernbanebroer fra perioden 1847-1925 på det eksisterende statslige jernbanenet. Dertil kommer fredning af mindre dele af banetraceer/-dæmninger med skinner (f.eks. Tønder, Bramming og Grindsted) og uden skinner (f.eks. Mors, Langå og Viborg). Ligeledes er de få bevarede dele af den private jernbane Nakskov-Kragenæs (1915-67) blevet fredet i 2010erne med baggrund i banens historie som fødelinje til sukkerfabrikkerne på Lolland, og som et eksempel på hvor hurtigt et omfattende infrastrukturelt anlæg på knapt 27 km næsten kan forsvinde fra jordens overflade, når dæmninger og trace ikke længere har en samfundsmæssig betydning. Størstedelen af Kragnæsbanen var således fjernet knapt 50 år efter nedlæggelsen.

Endnu udestår dog en nøjere gennemgang og udvælgelse af de bevarede jernbanehistoriske elementer og konstruktioner rundt om i kulturlandskabet. Eksempelvis er der ikke foretaget nogen gennemgang og udvælgelse blandt de mindre stenkister langs banerne, fokuseret på en bredere gruppe af jernbanebygninger eller bygninger fra efterkrigsårene. Et oplagt eksempel kunne være Virum station fra 1958 på strækningen Lyngby-Holte, som virkelig er en arkitektonisk og kulturhistorisk perle på det københavnske S-togsnet. Det kunne også være i dag sjældne elementer som læssekranen på stationen i Fakse Ladeplads. Eller dele af banedæmningen efter den midtsjællandske jernbane. Hvorvidt disse eller andre jernbanehistoriske elementer skal beskyttes for eftertiden, er selvfølgelig et spørgsmål til fremtiden.[39)] Med fredningen af Aabenraabanen er der dog taget et stort skridt med fredningen af et begrænset, men dog samlet jernbanesystem. En hel jernbanestrækning fra endestation til endestation.

I begyndelsen af 2000-tallet blev sporanlæggene fjernet fra en række nedlagte jernbanestrækninger såsom banen mellem Ringe og Korinth på Fyn eller Slagelse-Dalmose-Næstved med sidebane fra Dalmose til Skælskør på Sjælland. I stedet etableredes asfalterede cykel- og gangstier. Selvom omdannelserne af de gamle baner tilgodeså rekreative interesser, så skete det på bekostning af værdifulde kulturhistoriske interesser.[40)] En jernbane forstås bedst når sporanlægget i form af skinner og sveller stadig findes intakt. Selvom der findes enkelte andre også kulturhistorisk betydningsfulde nedlagte jernbanestrækninger såsom Assensbanen på Fyn, Randers-Auning på Djursland eller Nørre Nebel-Nymindegab i Vestjylland, så er fredningen af Aabenraabanen et væsentligt skridt på vejen for at sikre en historisk jernbane for eftertiden, så vores efterkommere om 50, 100 og 200 år stadig kan opleve en jernbanestrækning fra 1800-tallet med alle dens mange forskellige elementer.

Hvor Aabenraabanen på flere punkter er en værdig repræsentant for jernbaneteknologien fra midten af 1800-tallet og ikke mindst en velbevaret repræsentant for de første jyske jernbaneanlæg, så er Aabenraabanen på en række andre punkter ikke repræsentativ for den danske jernbanehistorie. Dette hænger navnlig sammen med Aabenraabanens korte længde, hvor der kun fandtes et enkelt mindre billetsalgssted uden sidespor midtvejs mellem banens endestationer. Banen var således også anlagt af hensyn til Aabenraa bys udvikling, mens mange af de andre jernbanestrækninger også skulle bringe fremgang og velstand til banens opland, og derfor bugtede sig gennem landskabet til gavn og glæde også for befolkningen på landet. En af de meget få velbevarede og i denne sammenhæng nok mere repræsentative jernbanestrækninger er Assensbanen mellem Tommerup og Assens. Assensbanen blev anlagt på Fyn mellem stationsbyen Tommerup på hovedstrækningen Odense-Middelfart, og købstaden Assens ved den sydvestfynske kyst. Langs den i dag nedlagte Assensbanen, der åbnede i 1884 og blev nedlagt i slutningen af 1900-tallet, findes udover selve jernbanesporet også en lang række af banens landstationer med bevaret spornet i form af sidespor og vigespor mv. En sikring af denne kulturhistorisk væsentlige jernbane burde overvejes.

Flere steder langs banen passerer banen over vandløb. Broerne er bygget ved banens anlæggelse og har igennem årene gennemgået forskellige mindre istandsættelser og moderniseringer. Foto: Lars Bjarke Christensen.

Flere steder langs banen passerer banen over vandløb. Broerne er bygget ved banens anlæggelse og har igennem årene gennemgået forskellige mindre istandsættelser og moderniseringer. Foto: Lars Bjarke Christensen.

Samlet set er banen mellem Rødekro og Aabenraa dog bemærkelsesværdig idet hele banen med dens dæmninger, broer, skinner, sveller, advarselsskilte, overskæringer, kilometersten mv. er et relikt i det såvel danske som sønderjyske kulturlandskab. Alene banens alder – banen er blandt de allerældste jernbanestrækninger i Danmark – og dens intakthed, gør Aabenraabanen til noget ganske særligt. En type industrianlæg, som ellers tidligere var meget udbredt, men som i dag er forsvundet. Omkring den bygningsfredede stationsbygning i Aabenraa findes således perroner, læsserampe, skinner og opstillingsspor for person- og godsvogne, der fortæller væsentlige elementer af jernbanens funktion i en købstad. Man kan i de bevarede elementer se fysiske spor af såvel gods- som passagertransporten, og dermed aflæse jernbanens forskellige funktioner i ældre tid. Hvor Assensbanen står som et velbevaret og mere typisk eksempel på en lokalbane med de bevarede landstationer, så er sporterrænet i Assens for få år siden desværre blevet ryddet.

Aabenraabanen fortæller også en vægtig historie om industrialiseringen og opbygningen af jernbanenettet i 1800-tallet, der bragte fremgang og velstand til Sønderjylland og Danmark. Ved Aabenraabanen er bevaret forskellige tekniske installationer, sikkerhedssystemer, konstruktioner og detaljer, som er udskiftet eller kraftigt ombygget på de endnu eksisterende jernbaner eller helt fjernet fra nedlagte banestrækninger. Banen og dens helhed rummer således en meget høj bevaringsværdi som ikke findes mange andre steder.

Baneanlægget er derudover et tydeligt eksempel på den teknologioverførsel der fandt sted i midten af 1800-tallet fra jernbanens oprindelsesland Storbritannien, hvor britiske ingeniører rejste til udlandet også udenfor imperiet for at bygge jernbaner. Mange af Aabenraabanens elementer bærer tydeligt præg af denne britiske, teknologiske påvirkning. Bevaringen af Aabenraabanen har således også betydning i et internationalt perspektiv.

Derudover har banen en direkte tilknytning til grænselandets særlige historie. Jernbanen var godt nok bestilt af den danske stat og skitserne til banen påbegyndt af engelske entreprenører, men ved krigen i 1864 blev det påbegyndte baneanlæg overtaget af Preussen. Jernbanen var frem til Genforeningen i 1920 en del af det statslige preussiske jernbanenet. Et banenet der – udover transport af mennesker og varer – også anvendtes til udbredelse af tysk tanke og kultur. Ved afstemningen i 1920 var der som et af de få steder i Sønderjylland tysk flertal i Aabenraa. Elementer fra denne tidsperiode i den sønderjyske historie er bevaret og kan aflæses i Aabenraabanens anlæg. Bl.a. viser renoveringsarbejder hvordan den danske stat i 1920erne måtte foretage genopretningsarbejde på banen efter overtagelsen af et nedslidt sønderjysk jernbanenet ovenpå Tysklands nederlag i 1. verdenskrig, ligesom der stadig er bevaret væsentlige elementer fra den tyske periode i form af bl.a. markeringssten. Aabenraabanen var endvidere fødelinje til de særlige sønderjyske amtsbaner (kleinbahner), der blev anlagt i den tyske periode. Aabenraabanens historie er tæt knyttet sammen til grænselandets historie og den internationale fortælling om jernbanernes udbredelse i løbet af 1800-tallet. Bevaringen af banen har således ikke kun et lokalt perspektiv, men også et internationalt udsyn.

En tur langs Aabenraabanen – enten på skinnecykel eller til fods – vil således give indblik i både jernbanernes teknologihistorie, banens bevarede fysiske elementer og såvel dansk som europæisk jernbanehistorie.

Litteratur og kildemateriale

Buch, Martin og C.I. Gomard 1933: "Danmarks jernbaner. Historisk og biografisk håndbog". Alex Kappels Forlag 1933.

Christensen, Lars Bjarke og René Schrøder Christensen 2022a: "Danmarks jernbanemiljøer. Spor af jernbanens fysiske kulturarv". Syddansk Universitetsforlag 2022.

Christensen, Lars Bjarke 2022b: "Den jyske nordvestbane – da jernbanen og krigen kom til Viborg 1863-64" i: "Fra Viborg-egnen 2022". Historisk Samfund for Viborg-egnen 2022.

Christensen, Lars Bjarke 2023: "Jernbanernes udvikling i Danmark 1997-2022" i "Jernbanehistorie. Jernbanernes teknologi og kulturhistorie 2021-22". Danmarks Jernbanemuseum, 2023.

Cox, John G. 2008: "Samuel Morton Peto (1809-1889). The Achievements and Failings of a Great Railway Developer". Railway & Canal Historical Society 2008.

Hvidtfelt, Johan og Peter Kr. Iversen 1967: "Åbenrå Bys Historie II. 1721-1864". Historisk Samfund for Sønderjylland 1967.

Jensen, Niels 1975: "Sønderjyske jernbaner". J. Fr. Clausens Forlag 1975.

Kaufhold, Holger, Eckhard Klein &Detlef Schikorr 2004: 150 Jahre Eisenbahn in Flensburg. Von derSüdschleswigschen Eisenbahn zur Deutschen Bahn AG". Gesellschaft für Flensburger Stadtgeschichte 2004.

Thestrup, Poul 1997: "På sporet 1847-1997. Jernbanerne, DSB og samfundet. Bind 1. Dampen binder Danmark sammen". DSB Jernbanemuseet, 1997.

Wilcke, Birger 1982: "Æ Kringelbahn – Aabenraa Amts Jernbaner". Dansk Jernbane-Klub 1982.

Tyskland, Landesarchiv Schleswig-Holstein
-Preussische Verwaltung 1867 bis 1946, Regierung zu Schleswig 1868-1946, Bauverwaltung, Eingleisige Staats- (Neben)bahnen, 4.6.3 Eisenbahnen, Nebenbahnen Zweigbahn Rothenkrug-Apenrade (LASH Abt. 309, diverse arkivpakker).

Danmark, Rigsarkivet
Arkivalier afgivet fra Tyskland efter Sønderjyllands Genforening, Sønderjyske jernbanesager 1864-1920, pk. 11.
Aabenraa Købstad (1883-1915), Acta der Stadt Apenrade, pk 1269
Aabenraa Landråd (1868-1920), Verkehrpoli. Infrastruk. T.B. 13.II-T.B. 15.I pk 353 og Verkehrpoli.Infrastruk. T.B: 15.V-T.B. 16.15: Eisenbahn-Angelegenheiten 1869-1919.
DSB, Baneafdelingen, journalsager 1865-1949, N3 581/1919 pk. 3354-3367 (Genforeningen).
DSB, Baneafdelingen, Sporplaner og bygningstegninger, Rødekro, Rise, Aabenraa.
DSB, Baneafdelingen, Planbøger Sønderjylland (1895-1920).
DSB, Baneafdelingen, 2. og 3. distrikts banetjeneste, journalsager 1872-1973, BB-284/285 og BB-377

Danmark, Danmarks Jernbanemuseum
Aabenraa

Noter

1) Forfatteren til denne artikel er ophavsmand til forslaget om fredning af Aabenraabanen, og som ansat i Slots- og Kulturstyrelsen også involveret i arbejdet med fredningen. Processen som førte til udpegningen som beskyttet fortidsminde, vil ikke blive gennemgået i denne artikel. Det er naturligvis styrelsen som er ansvarlig for fredningens udformning. Alle oplysninger og synspunkter i denne artikel er forfatterens personlige betragtninger, og stammer fra offentligt tilgængelige kilder.
2) For yderligere informationer se f.eks. "Dansk Jernbanepolitik i Trediverne og Fyrrerne" af R. Berg i: Nationaløkonomisk Tidsskrift, bind 3, række 4 (1896); "Dansk Jernbanepolitik i Tiden fra 1850 til 1865" af R. Berg i: Nationaløkonomisk Tidsskrift, bind 3, række 6 (1898); "Opdagelsen af Jylland" af Steen Bo Frandsen (Aarhus Universitetsforlag 1996). Derudover findes et upubliceret manuskript "Jernbaneanlægene i Europa og Hertugdømmerne", som ikke fandt plads i DSB´s jubilæumsbog fra 1947. Manuskriptet findes i Rigsarkivet, DSB, Baneafdelingen, journalsager 1865-1949, O7 531/1944, pk. 5513.
3) Cox 2008.
4) Buch og Gomard 1933: 209ff.
5) Hvidtfelt og Iversen 1967:204f.; Danmarks Jernbanemuseum, Aabenraa.
6) Thestrup 1997: 127ff.
7) Kaufhold et al. 2004:37ff
8) Danmarks Jernbanemuseum, Aabenraa, Brev af 26/5 1867.
9) Jensen 1975: 17.
10) Dannevirke 14/9 1868; Dannevirke 16/9 1868; Dannevirke 18/9 1868.
11) Som inspiration for dem der ønsker at dykke længere ned i Aabenraabanens historie er der i kildefortegnelsen sidst i denne artikel forskellige henvisninger til arkivmateriale i danske og tyske arkiver.
12) Rigsarkivet, Aabenraa Landråd AD 02, 1868-1920 Verkehrpoli. Infrastruk. TB 15V-TB16, pk 355, Brev fra RED Altona fra Aabenraa Magistrat 11/2 1911.
13) Rigsarkivet, Aabenraa Købstad, BA 13 (pk. 1269), Acta der Stadt Apenrade betreffend Eisenbahnstation zu Apenrade und die Eisenbahn-Fahrpläne 1885-1917, Brev fra Aabenraas borgmester til RED Altona 11/9 1915.
14) Sønderjysk Månedsskrift 3/4-1973.
15) Rigsarkivet, DSB, Baneafdelingen, Journalsager 1865-1949, pk.3354, Artikel "Banerne i Sønderjylland siden Genforeningen" af generaldirektør Knutzen (1935)
16) Rigsarkivet, DSB, Baneafdelingen, Journalsager 1865-1949, pk.3358, Udsendelse af Materialer 1920-22.
17) Rigsarkivet, DSB, Baneafdelingen, Journalsager 1865-1949, pk.3361, Vurdering af de overtagne banestrækninger.
18) Wilcke 1982.
19) Danmarks Jernbanemuseum, Aabenraa, Aabenraa Handelsstand – Hundrede Aar af Morten Kamphøvener (1947).
20) Danmarks Jernbanemuseum, Køreplan 1930.
21) Baneplansudvalgets Betænkning I, Landsplanudvalget 1968.
22) Folketingstidende 1970-71, Tillæg A, spalte 865-880.
23) Folketingstidende 1970-71, Tillæg B, spalte 807-808.
24) Folketingstidende 1970-71, Forhandlingerne, spalte 3521-3522.
25) Jensen 1975:18.
26) Trafikstyrelsen, Screening af havneforbindelser og restbaner. Restbaner – teknisk gennemgang (Grontmij/Carl Bro 2009).
27) Christensen 2023: 37ff.
28) Danmarks Jernbanemuseum, Jernbanekilder.dk, datakort Rødekro-Aabenraa.
29) Folketinget, Trafikudvalget 2007-08 (2. samling), TRU Alm del spm. 658.
30) Folketinget, Trafikudvalget 2010-11 (1. samling), TRU Alm del spm. 480.
31) Banedanmark journalsag 14-05175.
32) Danmarks Jernbanemuseum, Jernbanekilder.dk, Datakort Rise.
33) Banedanmarks tegningsarkiv, Brotegning Sorte Bro (BDK bronummer 24981).
34) Rigsarkivet, 2001-3 Arkivalier afgivet fra Tyskland efter Sønderjyllands Genforening, Sønderjyske jernbanesager 1864-1920, pk 11, Acta specialia Ries Haltepunkt, Sporplan 1909, revideret 1912.
35) Danmarks Jernbanemuseum, Jernbanekilder.dk, Sporplan Aabenraa 1914; Rigsarkivet, 2001-3 Arkivalier afgivet fra Tyskland efter Sønderjyllands Genforening, Sønderjyske jernbanesager 1864-1920, pk 11, Acta specialia Apenrade Bahnhof.
36) Danmarks Jernbanemuseum, Aabenraa, Brev fra Turistforeningen for Aabenraa og Omegn til DSB 2. distrikt 8/2 1967.
37) Slots- og Kulturstyrelsen, Bygningsfredningsarkivet, Fredningsstyrelsen journalsag 621-8-142/86.
38) Slots- og Kulturstyrelsen, FBB – Fredede og bevaringsværdige Bygninger, Aabenraa Banegård.
39) Eksempler på den mangfoldige jernbanekulturarv fremgår bl.a. af Christensen et al. 2022a.
40) Christensen 2023: 88ff.

5-kilometersten langs Aabenraabanen. Afstandsstenene viste blandt andet banearbejdere og lokomotivførere hvor de befandt sig langs banen. Foto: Lars Bjarke Christensen.

Skinnestød på Aabenraabanen hvor to jernbaneskinner er fastgjort til hinanden. De korte jernbanespor gav i ældre tid anledning til togenes karakteristiske gang i sporet, hvor den rejsende både mærkede og hørte når togets hjul passerede over skinnestødet. Foto: Lars Bjarke Christensen

Centralværkstederne i Aarhus

Engang byens største arbejdsplads

AF JØRGEN HEGNER CHRISTIANSEN

Denne artikel er en beskrivelse af jernbaneværkstederne i Aarhus og deres udvikling fra 1862 og frem til 1996, hvor en mindre del af bygningerne blev fredet og istandsat til nye funktioner. Endvidere er det målet at skitsere problematikken omkring bevaring af store, bevaringsværdige industrianlæg i bymæssig bebyggelse og deres fremtidige anvendelse.

Med indvielsen af jernbanestrækningen Aarhus–Langå–Randers i 1862 fik Jylland sin første jernbane, når man fraser jernbanen Kiel–Altona, der åbnede 1844 i det daværende Slesvig-Holsten, som Danmark mistede 1864. Anlæggelsen var et led i den storstilede "Lov om Anlæg og Drift af Jernbaner i Kongeriget" fra 1861, der blandt andet også omfattede strækningen Langå–Viborg–Skive–Struer–Holstebro og en bane over Fyn: Nyborg–Odense–Middelfart.[1] Anlægget blev udført af det engelske entreprenørselskab Peto, Brassey & Betts, der også havde anlagt Danmarks første jernbane fra København til Roskilde.[2]

DE FØRSTE VÆRKSTEDER

I forbindelse med anlæggelsen blev der etableret et værksted for det rullende materiel, som lå på et areal mellem banegården og gaden Spanien, omfattende et trefløjet anlæg med kontor, grovsmedje, lokomotivreparationsværksted med seks spor, drejerværksted, snedkerværksted, vognreparationsværksted med seks spor samt malerværksted med to spor, hvor en hånddreven skydebro skabte forbindelse mellem sporene. Det tekniske udstyr omfattede en dampmaskine (til hjuldrejearbejde), en løbekran i lokomotivværkstedet og nogle få maskiner i drejerværkstedet. Derudover blev der opført en tjenestebolig i to etager med haveanlæg til maskinmesteren og værkføreren.[3] (Fig. 1)

Fig. 1. Den ældste del af Centralværkstederne er lokomotivværkstedet fra 1862, senere ombygget til reparation af rangerlokomotiver og tendere, senest til boogieværksted, kaldet "Spanien". Foto: CUBO Arkitekter.

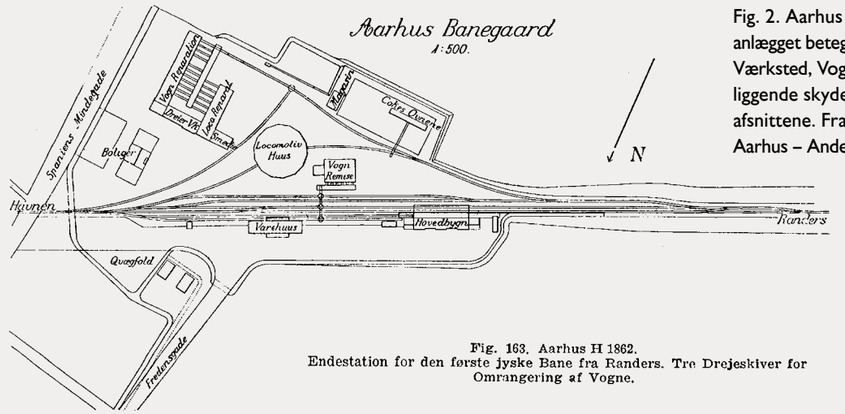


Fig. 2. Aarhus Banegaard 1862. Bemærk anlægget betegnet "Loco Reparation, Dreier Værksted, Vogn Reparation" og den mellemliggende skydebro til rangering mellem afsnittene. Fra Ib Gejl (red.): De skabte Aarhus – Anden Samling. Aarhus 1992, p. 92.

Fig. 163. Aarhus H 1862.
Endestation for den første jyske Bane fra Randers. Tre Drejeskiver for Omrangering af Vogne.

DET RULLENDE MATERIEL

Til den nyanlagte bane blev der indkøbt 4 lokomotiver fra England samt 11 personvogne, 1 postvogn, 3 bagagevogne med skruebremse, 6 lukkede godsvogne uden bremse og 6 lukkede godsvogne med skruebremse samt 45 åbne godsvogne. Alle vognene, også til de øvrige strækninger, blev leveret fra en fabrik i Randers, "Hvide Mølle", som Peto, Brassey & Betts havde anlagt til formålet.

I den første tid bestod værkstedets væsentligste arbejde i at samle de fire lokomotiver, der blev leveret adskilte pr. skib fra England, udført af indkaldte engelske montører. Da et femte lokomotiv ankom i 1863, klarede det danske personale det selv, under maskinmesterens ledelse.[4] Efterhånden oparbejdede værkstedet en sådan rutine, at de kunne samle nyindkøbte lokomotiver på tre dage, ganske vist i døgndrift.[5]

Interessant er det, at man til hele det nye banenet regnede med at skulle anskaffe 46 lokomotiver, men kun 39 tendere, fordi man forudså, at et betydeligt antal lokomotiver hele tiden ville være på værksted, og så var der jo kun brug for færre tendere.[6] Det siger noget om, hvor vedligeholdelseskrævende datidens lokomotiver var.

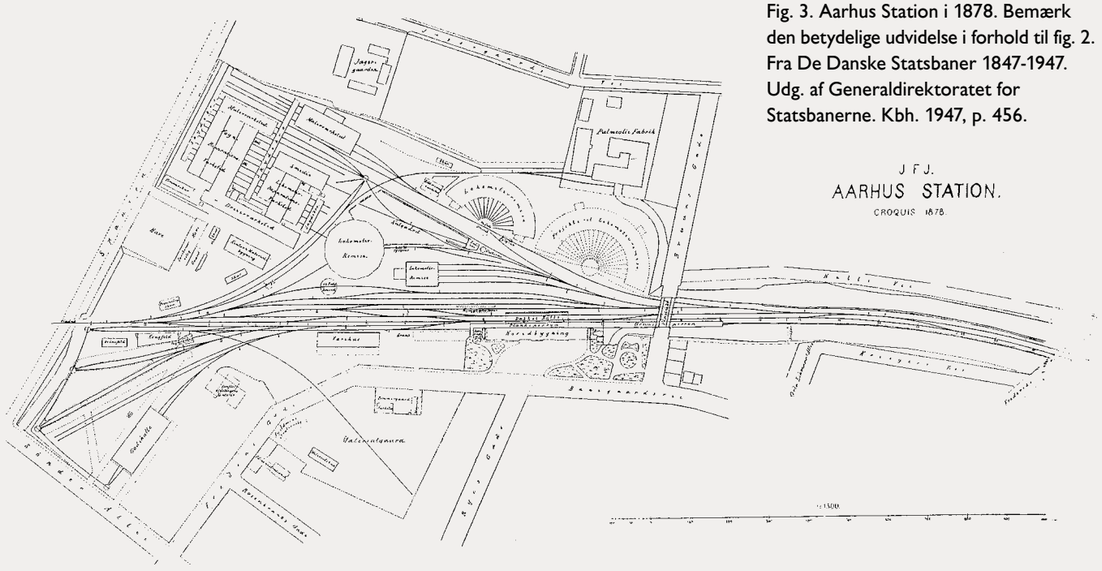


Fig. 3. Aarhus Station i 1878. Bemærk den betydelige udvidelse i forhold til fig. 2. Fra De Danske Statsbaner 1847-1947. Udg. af Generaldirektoratet for Statsbanerne. Kbh. 1947, p. 456.

Fig. 4. Luftfoto af Centralværkstederne i 1933. Skorstenen i midten markerer det fredede område med smedjen og boogierengøringsværkstedet, drejerværkstedet og boogieværkstedet. Nederst til venstre ses administrationsbygningen fra 1910 og lokomotivværkstedet fra 1911. Fra De Danske Statsbaner 1847-1947. Udg. af Generaldirektoratet for Statsbanerne. Kbh. 1947, p. 459.

UDVIKLINGEN AF DEN JYSKE LÆNGDEBANE

Krigen 1864 forsinkede den videre udbygning af jernbanenettet, men i 1868 kunne man indvie strækningen Aarhus-Skanderborg-Horsens-Vejle-Fredericia.[7)] Og dermed skabt forbindelse til jernbanen Nyborg-Odense-Middelfart-Strib (om end der først kom jernbanefærge til Fredericia i 1872), der var åbnet i 1865. Fra Fredericia havde der siden 1866 været forbindelse til Lunderskov, Vamdrup og Vojens (der nu lå i Tyskland), og derfra videre til Flensborg, Slesvig og Hamborg. Med åbningen af strækningen Randers-Hobro-Aalborg i 1869 var den jyske længdebane etableret, der gik under navnet "De Jysk-Fynske Statsbaner".

Udvidelsen indebar anskaffelsen af henved 30 nye lokomotiver fra England, der alle blev samlet i Aarhus, samt et betydeligt antal person- og godsvogne. Det skabte også et behov for udvidelser af værkstederne, i første omgang et nyt vognreparationsværksted vest for det oprindelige anlæg, suppleret med nye malerværksteder nord herfor. (Fig. 2) Derved voksede mandsskabstyrken også. Da Staten overtog banerne i 1867, var der omkring 100 mand på værkstedet, og i 1880, hvor De Danske Statsbaner (DSB) blev etableret, var tallet vokset til næsten det tredobbelte.[8)]

Fig. 5. Administrationsbygningen, Jægergårdsgade 97, opført 1910 af DSBs overarkitekt Heinrich Wenck, med Povl Baumann som sagsarkitekt. Foto: Jørgen Hegner Christiansen (JHC) 2023.

CENTRALVÆRKSTEDET

De nye organisationsstruktur gav anledning til at Aarhus-værkstedet skiftede navn til Centralværkstedet, idet det nu blev hovedværksted for det jysk-fynske distrikt, mens det tilsvarende værksted i København skulle forestå vedligeholdelse og reparationer indenfor det sjællandske distrikt. Udbygningen af værkstederne fortsatte op igennem 1880erne indtil hele området mellem banen og den nuværende Jægergårdsgade var udnyttet. Det blev derfor nødvendigt at indkøbe Jægergården i 1884, der lå på hjørnet af Spanien og Jægergårdsvejen, oprindeligt opført i 1724 som skovriderbolig for Marselisborg Gods, og siden 1856 ejet af politikeren M.P. Bruun. Efter Frederiksbjergs indlemmelse i Aarhus i 1874 påbegyndte han udstykningen af gårdens jorder til det nye bykvarter.[9)]

Udvidelserne medførte også en øget arbejdsstyrke, der omkring århundredeskiftet nåede op på omkring 750 mand. Indtil slutningen af 1920erne blev der stadig anlagt nye statsbanelinjer, således at den samlede længde nåede op på næsten 2700 km, men herefter gik udbygningen i stå. Omkring 1920 påbegyndte DSB udskiftningen af damplokomotiverne med dieselelektriske lokomotiver, leveret af Frichs Fabrikker i Åbyhøj, og det krævede opbygning af andre vedligeholdelses- og reparationsværksteder, foruden de eksisterende.[10)]

ADMINISTRATIONSBYGNINGEN

I områdets nordøstlige ende ved Jægergårdsgade opførte statsbanernes tegnestue, ledet af Heinrich Wenck, en ny administrationsbygning i 1910. Ledende medarbejder var Povl Baumann, der fik meget frie hænder til opgaven. Et på det tidspunkt helt usædvanligt eksempel på en meget disciplineret kontorbygning med sin stramme fagdeling, skiftende røde og gule skifter og få, men pyntelige detaljer.[11)] Bygningen rummede værksteds- og regnskabskontorer, øverst tjenesteboliger, og i kælderen indrettedes bl.a. laboratorium. Huset blev fredet i 1996 sammen med fire værkstedsbygninger i nabolaget.

Fig. 6. Det nye lokomotivværksted fra 1911, der afløste det tidligere fra 1883. Fra Ib Gejl (red.): De skabte Aarhus – Anden Samling. Aarhus 1992, p. 95.

I 1911 opførtes som nabo til administrationsbygningen et nyt lokomotivværksted, udstyret med elektriske løftekraner. Herefter blev det hidtidige lokomotivværksted brugt til reparationer af tendere og rangerlokomotiver, mens en del af det ældste værksted, kaldet Sibirien, blev degraderet til kedelbankerum.[12)]

I løbet af 1920erne havde antallet af ansatte rundet 1000, hvilket skal ses i sammenhæng med at DSB's vognpark næsten var for-

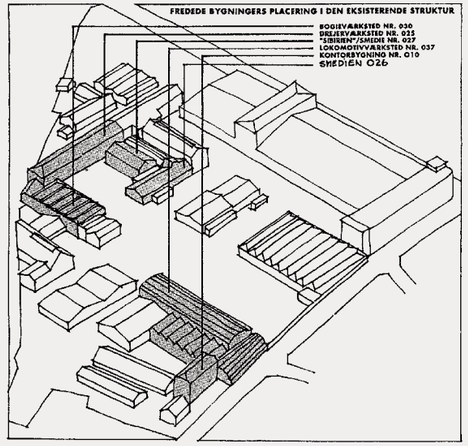


Fig. 8. Oversigtskort over de fredede bygningers placering med den daværende anvendelse. Fra CUBO's forslag til et udviklingsprojekt for de fremtidige anvendelsesmuligheder, 1997.

Fig. 7. Luftfoto af banegården og centralværkstederne fra slutningen af 1950'erne. Bemærk de omfattende nye vognværkstedshaller langs med Spanien bagest i billedet. Fra Ib Gejl (red.): De skabte Aarhus – Anden Samling. Aarhus 1992, p. 101.

Fig. 9. Det tidligere lokomotivværksted ombygget til DGI-Huset, set fra syd. Foto: (JHC) 2023.

Fig. 10. DGI-Huset set fra Jægergårdsgade. Foto: JHC 2023.

doblet siden århundredeskiftet og omfattede omkring 750 lokomotiver og motorvogne og næsten 15.000 vogne, hovedparten godsvogne. Omkring halvdelen af vognparken hørte under Centralværkstedet i Aarhus.[13)]

blev således bygget 1938-39 på hjørnet af Jægergårdsgade og Spanien, indeholdende motorværksted i stuen, kleinsmedje på 1. sal, sadelmagerværksted på 2. sal, snedkerværksted på 3. sal og øverst ingeniørkontorer m.v. Herefter gik man i gang med et meget omfattende projekt til nye vognværkstedshaller langs med Spanien, til afløsning af de gamle længere inde på grunden. Kun den første del af den planlagte 150 m lange bygning blev færdig, inden krigen satte en stopper for byggeriet i 1941. Resten blev dog færdiggjort i midten af 1950erne.[14)]

NYE UDVIDELSER

På grund af det efterhånden helt udbyggede areal måtte nye udvidelser gå i højden. Et nyt motorværksted i jernbeton på fire etager

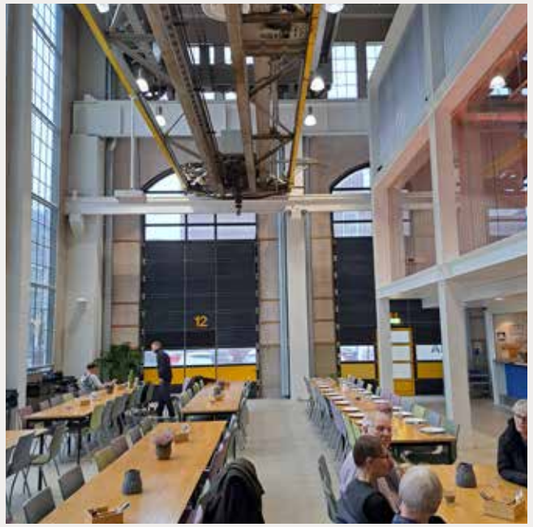


Fig. 11. Den nordlige ende af DGI-Huset med traverskran, indrettet til café. Foto: JHC 2023.

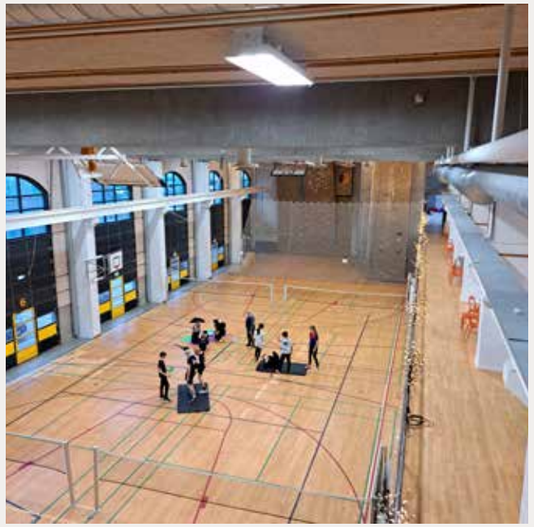


Fig. 12. Hal A i DGI-Huset med portsiden mod nordøst. Foto: JHC 2023.

Fig. 13. Hal B i DGI-Huset med vinduessiden mod nordvest. Foto: JHC 2023.

Fig. 14. Gården mellem DGI-Husets Hal B og Administrationsbygningen, med rampen fra Bruuns Galleri. Foto: JHC 2023.

BYENS STØRSTE ARBEJDSPLADS

På grund af de mange ødelæggelser og skader på togmateriellet under krigen samt materialemanglen, der medførte, at tingene skulle repareres igen og igen (navnlig de gamle damplokomotiver var meget arbejdskrævende) måtte mandskabsstyrken øges, og den nåede sit højeste i 1949 på omkring 1850, hvilket gjorde Centralværkstedet til byens største arbejdsplads.

CENTRALVÆRKSTEDET I TILBAGEGANG

Men i takt med at DSB i løbet af 1950erne udfasede damplokomotiverne og erstattede dem med nye og mere effektive dieselelektriske lokomotiver, blev reparations- og vedligeholdelsesbehovet væsentlig mindre, og samtidig blev en del af de mindre befærdede banestrækninger, der blev udkonkurreret af den udbyggede landevejstrafik, nedlagt.

Denne udvikling betød, at beskæftigelsen på Centralværkstedet var i stadig tilbagegang op gennem 1960erne og 1970erne, samtidig med at DSB koncentrerede en større del af værkstedsarbejdet på Centralværkstedet i København. I begyndelsen af 1980erne var antallet af medarbejdere ned på omkring 7-800, og da diskussionen om en total nedlæggelse begyndte i 1989 var antallet reduceret til omkring 450.

NEDRIVNING ELLER BEVARING?

I juni 1991 søgte DSB Aarhus Byråd om tilladelse til at rive hele Centralværkstedet ned, efterhånden som bygningerne blev tomme, i første omgang med planer om at etablere en midlertidig langtidsparkering på området. Men til DSB's store overraskelse sagde byrådet nej, og efterfølgende erklærede Det Særlige Bygningssyn stort set alle bygningerne for bevaringsværdige. Begrundelsen var at "Hver for sig og i forening illustrerer de ændringerne i udformningen af etage-, flade- og halbygninger til industriel brug fra 1862 og frem. Og flere af bygningerne er tillige af væsentlig arkitektonisk værdi".[15)]

Uddybende fandt Bygningssynet i november 1991, at

- Administrationsbygningen fra 1910, tegnet af Povl Baumann
- Vognrevisionsværkstedet, opført i 1911 som lokomotivværksted og udvidet 1932
- Boogieværkstedet, opført 1883 som lokomotivværksted
- Smedjen og boogierengøringsværkstedet, opført 1862 som lokomotivværksted, og udvidet og ombygget 1870-80 og 1930-32
- Drejerværkstedet fra 1862, udvidet 1882 og 1911

skulle indstilles til fredning, fordi de havde de særlige kulturhistoriske værdier, der kan begrunde en fredning af bygninger, der endnu ikke var 100 år gamle, og fordi de tilmed besad væsentlige arkitektoniske kvaliteter.

"Centralværkstederne omfatter de ældste bevarede jernbaneværksteder i Danmark, idet værkstederne ved Københavns første og anden hovedbanegård er nedrevet.

De ældste bygninger er opført 1862 samtidig med anlæggelsen af det første led i den jysk-fynske stambaner, jernbanen fra Århus til Randers. Anlægget er senere udvidet og ombygget, således at Centralværkstederne i dag rummer bygninger, der illustrerer værkstedsbygningernes forskellige udformning fra 1860-erne og frem.

Fra det enkle grundmurede etagehus, drejerværkstedet (bygning nr. 18), og hallebygningen (bygning nr. 16), der rummer det første lokomotivværksted, begge fra 1862, videre til det såkaldte "Sibirien" (bygning nr. 16).

"Sibirien" er en grundmuret hallebygning, opført mellem 1870 og 1880, i hvis indre ses to rækker murede bueslag, der har båret en løbekran til løftning af lokomotiver. Herved adskiller "Sibirien" sig fra andre samtidige hallebygninger.

Fig. 16. Indgangen fra gården til Boogieværkstedet, nu indrettet til showroom for bolia.com. Foto: JHC 2023.

Næste trin ses i boggieværkstedet (bygning nr. bygning nr. 13), en grundmuret fladebygning med shedtag fra 1883, der er blandt de ældste bevarede fladebygninger i Danmark. I denne bygning, der ligeledes oprindelig var lokomotivværksted, findes ingen løbekran, istedet løftedes lokomotiverne ved hjælp af mekaniske løftebukke.

Tilsammen danner disse bygninger et trefløjet anlæg omkring en skydebro, en for jernbaneværksteder karakteristisk anlægsform. Endelig er vognrevisionsværkstedet fra 1911 og 1932 (bygning nr. 2) et karakteristisk eksempel på den type hallebygning støbt i jernbeton, der udvikledes i tiden efter første verdenskrig.

Administrationsbygningen (bygning nr. 1), opført 1910 med Povl Baumann som arkitekt, er klart proportioneret og i modsætning til den øvrige bebyggelse i området fritliggende. Herved vises det, at huset er af en særlige karakter. Huset er placeret på områdets højeste punkt, hvorfra der er udsigt ud over hele centralværkstedet. Herfra styres virksomheden."

Det var således en stærkt begrænset del af det samlede værkstedsareal, der blev foreslået fredet, men nok et realistisk bud på hvad man mente at kunne komme igennem med ud fra en saglig vurdering af bevaringsværdi og genbrugsmuligheder.

Fig. 17. Boogieværkstedet, det oprindelige lokomotivværksted fra 1862, nu indrettet til showroom for boliga.com. Bemærk traverskranen, der hviler på sin egen underkonstruktion af murede buer. Foto: JHC 2023.

FORHANDLINGER

Dette udspil var et forsøg på at få DSB til at anvende de eksisterende bygninger som en ressource, men blev nok mere opfattet som en kæp i hjulet for de storstilede udviklingsplaner, DSB ellers havde udtænkt for området, bl.a. i form af et idéforslag fra maj 1989: *Århus Inter-City,* en helt ny bydel i tilknytning til banegården, i samarbejde med Henning Larsens Tegnestue A/S, der forudsatte en total rydning af grunden. Men også et forslag fra Magistratens 2. Afd. fra juni 1990, *"Centralværkstedsområdet – idéoplæg vedrørende Banegraven, Centralværkstedet og Rutebilstationen"*, der arbejdede med bevaring af kontorbygningen, vognrevisionsværkstedet fra 1911, vognværkstedshallerne langs med Spanien og drejerværkstedsbygningen i sin fulde længde mod nord. Resten skulle ryddes til fordel for erhvervs- og boligbyggeri samt et parkanlæg.

Efter en række forhandlinger bl.a. med kommunen og DSB og efter udarbejdelse af forslag til genanvendelsesmuligheder blev fredningen endeligt besluttet i 1996.

DGI-HUSET OG MOGENS DE LINDE

Herefter fremkom flere udviklingsprojekter for de fredede ejendomme, mens resten af det store område stille og roligt blev revet ned og sat til salg, så de forhindringer – udfra et developer synspunkt – var fjernet.

I 1996 udarbejdede Tegnestuen CUBO på opdrag af bygningsmyndigheden en rapport: *"Centralværkstederne – et eksempelstudie af fredede industribygningers potentiale for nye anvendelsesmuligheder"* som indeholdt et forslag til et udviklingsprojekt for de fremtidige anvendelsesmuligheder.

Konkret var der skitseforslag til indretning af boliger eller institutioner i drejerværkstedet, det samme i smedjen suppleret med et forslag til en multianvendelig sal med café. "Sibirien" eller boogierengøringsværkstedet havde flere muligheder, f.eks. kontorarealer eller kulturelle institutioner, men også som et fælleshus. Boogieværkstedet skulle bevares som ét stort sammenhængende rum, enten som sal med scenerum, eller institution, kontorarealer eller butikker med indbyggede rum (huse i huset). Vognrevisionsværkstedet fra 1911 havde også mange muligheder: Boliger (dog problematiske), åbne kontorarealer (med indskudte dæk), butikker, café, restaurant og biograf, eller sågar en højskole!

Rapporten førte til at DGI erhvervede vognrevisionsværkstedet i 2000 med henblik på at indrette det til Idrætscentret DGI-Huset i Aarhus. Projektet blev udarbejdet af Centraltegnestuen, som var en fælles tegnestue bestående af 3 X N Architects og Schmidt Hammer Lassen Architects, med NCC som totalentreprenør. Centret stod færdig i 2003.

Smedjen og boogierengøringsværkstedet, drejerværkstedet og boogieværkstedet blev erhvervet af Byggeselskabet Mogens de Linde i 2001, der engagerede CUBO Arkitekter til at istandsætte og ombygge dette samlede anlæg af de ældste dele af Centralværkstedet til konferencecenter, restaurant, kontorlokaler og showroom for bolia.com. Ombygningen modtog i 2007 Aarhus Kommunes renoveringspris med følgende begrundelse:

"Bygningerne er renoveret med de bedste håndværksmæssige traditioner og materialer i en gennemført kvalitet såvel på facade som i de smukke højloftede rum. Renoveringen er udført med en bevidst balance mellem udskiftning, istandsættelse og tilføjelse af nye elementer. Detaljer og materialevalg fremhæver på bedste vis de meget karakterfulde bygninger og rum som en smuk kombination af rustikke og forfinede materialer".[16)]

Fig. 18. Detalje af overgangen mellem Drejerværkstedets tidligere østgavl og den nye påbyggede gavl. Foto: JHC 2023.

Først i 2009 lukkede de sidste dele af Centralværkstedet efter 147 år som en økonomisk vigtig og dynamisk virksomhed for byen, og DSB satte de sidste arealer på 16.000 m² til salg.

Administrationsbygningen blev solgt til ejendomsselskabet Arkmedic, der lejer lokalerne ud til DGI Fonden, Aarhus Kommune og Search Partners.

STATUS

Når man besøger området idag er det umuligt at forstille sig, hvordan dette kæmpeområde tog sig ud for bare 25 år siden. Nye, store og meget dominerende bygninger har fuldstændig forrykket skalaen i området, og de fredede ejendomme skutter sig lidt i det fremmede selskab.

Dog må man sige at det rå, industrielle udtryk stadig skinner igennem, selvom mange af de oprindelige funktioner ikke længere er synlige. De store porte, bevarede traverskraner og sporadisk optrædende jernbaneskinner gør sit til at man stadig, med lidt god vilje, kan opleve en lille flig af hvad der engang var byens største industrianlæg.

Noter

1) Poul Thestrup: *Dampen binder Danmark sammen. På sporet 1847-1997. Jernbanerne, DSB og samfundet. Bind 1 · Til 1914.* Odense 1997, p. 122.
2) Ibid., p. 134.
3) Ib Gejl (red.): *De skabte Aarhus – Anden samling.* Udg. af Århus Byhistoriske Udvalg Erhvervsarkivet 1992, p. 92.
4) Ibid.
5) Note 1, p. 238.
6) Ibid, p. 123.
7) Ibid., p. 237.
8) Note 3, p. 94.
9) Ibid., p. 95.
10) Ibid., p. 97.
11) Hans Erling Langkilde: *Arkitekten Povl Baumann.* Kbh. 1991, p. 41 og 43.
12) Note 3, p. 97.
13) Ibid., p. 100.
14) Ibid., p. 99 og 101.
15) Jyllands-Posten 04.10.1991.
16) https://www.delinde.dk/nyheder/prisbelonnet-centralvaerksted
17) https://stadsarkiv.aarhus.dk/om-aarhus-stadsarkiv/nyheder/2019/ugens-aarhushistorie-centralvaerkstedet#:~:text=Da%20DSB%2C%20De%20Danske%20Statsbaner,over%201.850%20ansatte%20p%C3%A5%20v%C3%A6rkstedet.

Fig. 19. Drejerværkstedets nye østgavl. Den tidligere gavl var en senere påbygning og blev revet ned inden fredningen. Foto: JHC 2023.

Fig. 20. Boogierengøringsværkstedet, opført som lokomotivværksted i 1883 som udvidelse af det overfor liggende 'Spanien'. Taget er en af de ældste bevarede shedtagskonstruktioner i Danmark. Foto: JHC 2023.

Fig. 21. Indgangen til konferencecentret Centralværkstedet fra gården. Foto: JHC 2023.

Fig. 24. En af de oprindelige smedeesser, renoveret af CUBO Arkitekter. Foto: JHC 2023.

Fig. 22. Det tidligere Boogierengøringsværksted indrettet til konferencecenter. Bemærk shedtaget. Foto: JHC 2023.

Fig. 25. Rester af gamle tovspil på Drejerværkstedets gårdfacade. Foto: JHC 2023.

TICCIH Congress

– in Kiruna, 2025

SAVE THE DATES!
Congress: August 25 – 30, 2025.
Deadline of call for papers: TBA
Registration opens February 1, 2025.

The International Committee for the Conservation of the Industrial Heritage, better known as TICCIH, is the world organization for industrial heritage. TICCIH's goals are, among others, to promote international cooperation in preservation, research, and education of our industrial heritage. TICCIH is recognized by the International Council on Monuments and Sites (ICOMOS) as a designated consultant in all matters related to the study and preservation of industrial heritage. ICOMOS is the global non-governmental organization dedicated to conservation of the world's historic monuments and sites. In particular, ICOMOS' network of experts counsels UNESCO on properties to be added to the World Heritage List. Therefore, TICCIH advises on historically significant industrial sites for the World Heritage List.

Another important task for TICCIH is to arrange an international Congress every three years. The Congress is organized in co-operation with the national association in the country that hosts the event. The last Congress was held in Montreal, Canada in 2022 and was very appreciated by the delegates from all over the world. Sessions and panels with historians, conservators, museum curators, architects, archaeologists, students, teachers, and heritage professionals discussed a wide range of topics regarding industrial heritage. The next TICCIH Congress will be held in Kiruna, Sweden, in August 25 – 30, 2025.

The 19TH TICCIH Congress in Kiruna is organized by Luleå University of Technology, a leading university in the European Arctic, and the TICCIH sections in Sweden and Norway, in collaboration with Jernkontoret, the Swedish National Heritage Board, LKAB, the municipality of Kiruna and a range of leading actors within industry and civil society in the Scandinavian north.

Virdnejávr Dam and Alta hydro power station in Finnmark Norway, was opened in 1987 after massive controversies and protests 1978-1982, not least by local Sámi people. The dam is the highest in Norway, 145 m (476 ft) tall. Photo: Dag Avango

This will be the 19th Congress, but also commemorates TICCIHs 50 year-anniversery. TICCIH was founded 1973 at the The First International Congress on the Conservation of Industrial Monuments in Ironbridge, UK. The theme for the TICCIH 2025 congress in Kiruna is *"Heritage in action: legacies of industry in future making"*, which alludes to the global phenomenon of history and heritage being mobilized to support diverging desires and interests in our contemporary societies. Industrial heritage is increasingly becoming an important part of contemporary discussions about competing future visions.

The TICCIH 2025 congress focuses on tensions and controversies surrounding industrial heritage and its relation to wider tensions in present day society. It explores how we think about the past and about the future in the present, and how we construct historical narratives to connect the two, attach them to the built environments and artefacts, in order to get where we want to go. It is a theme that addresses key global issues connected to the UN sustainability goals, and the goal conflicts emerging between them, but also pathways to bridging tensions through the use of heritage as a communal platform. The theme also includes the issue of how we can work with contemporary industries as heritage and the heritage of the future. In addition to the overall theme there will be ten subthemes ranging from challenging and difficult questions regarding the relationship between industrial heritage, colonialism and inclusion. There are also forward-looking themes including post-industrial heritage, future generations and threats and possibilities which intertwine the industrial heritage. We are also welcoming discussions about how industrial heritage is used and represented in AI and popular culture.

The conference theme closely connects with the place where the congress will take place. Kiruna is a small mining-town in the Swedish Arctic with a rich industrial history. The town was officially established the year 1900 as part of large project to extract vast iron mineralization's in the region. However, people have inhabited the region for thousands of years. Steel making based on bog-ores in the area dates back 2000 years, while mining and early modern metals production dates back to the 17th century. The mine in Kiruna is still in operation and is the largest underground Iron ore mine in the world.

The Swedish National Heritage Board has designated Kiruna as a heritage site of national interest, with the motivation that its urban environment and industrial landscape represents a unique example of 20th century planning ideals for company towns. The town was established in 1900, to enable mining of the rich iron ore deposits in the mountains Luossavaara and Kiirunavaara, on the initiative of the mining company Luossavaara Kirunavaara Aktiebolag (LKAB). Kiruna was planned as a model company town, with an adjacent service and supply town as well as a railway area. Some of the most renowned architects, planners, and artists of the time were hired to contribute to its development. In 1948 the three areas merged and Kiruna was granted town rights. During the post-war period, the architect Ralph Erskine developed the spectacular architecture in the block Ortdrivaren in central Kiruna, as part of his vision of an arctic town.

Today Kiruna is also reputed for its relocation. The Kiruna Council issued a press release in 2004, stating that they would move the town in order to enable continued mining. The iron ore deposit reaches beneath the town, and the mining to a level 1365 meters below ground causes subsidence. Therefore, large parts of the existing town has gradually turned into an industrial area. In 2013, White Architects won the competition for an urban design plan for a new town centre. The design proposal is now being implemented, extending the town to the northeast. A new Town Hall, by Henning Larsen Architects, was inaugurated in 2018 as the first building in the new town centre. A few historic buildings have been relocated. In 2015, the first buildings were demolished in the neighbourhood closest to the mine.

Kiruna is situated in a region undergoing rapid change due to increasing global demands for metals. The European Arctic has been subject to a mining boom which is soon entering its third decade, now also fuelled by the green turn in energy. Simultaneously, it's a region where industrial companies establish new green industries, for producing carbon-dioxide free steel and renewable energy. To

The IORE (IronOre) are one of the worlds powerful electrical locomotives. Bombardier has produced 34 Co-Co locomotives to the mining company LKAB. They have been operating the Iron Ore Line since 2000, hauling up to 68 cars with about 8 500 tons of Iron ore from the mines in Kiruna to the harbors in Narvik. Every locomotive is named after a station on the line. Photo: Unknown

many, these industries raise hopes for a future of less carbon dioxide emissions as well as employment. To others they may represent a colonial intrusion into indigenous territories, or risk for environmental damage.

During the conference, participants will gain first-hand experience from this complex situation, discuss with and learn from several stakeholders, as will those planning to join pre- and post-conference tours.

But Kiruna is not only a mining-town. Located in the northern part of the Swedish Arctic, Kiruna is situated in a diverse region. The indigenous Sami population and the Tornedalian Meänkieli speaking national minority has been present in the area for many centuries. The cultural landscape is formed by reindeer husbandry, hunting, fishing, and cattle farming, but also iron making from the Iron Age and onwards. The Swedish state started to manifest itself in the coastal zone from the early 14th century, and expanding toward inland areas from the 16th century. Since the 19th century, largescale industrial developments have had an immense impact in the region. The mines, hydropower stations, transport infrastructure, and military defence have been conceptualised as a 'technological megasystem', which the National Heritage Board has designated as industrial heritage.

The copper mine in Aitik, outside Gällivare, is one of the largest open pit mines in Europe, 3,5 km long, 1,1 km wide, and 450 m deep. The mine was opened in 1968 and produces about 40 million tons annually, mostly copper but also molybdenum, gold, and silver. Photo: Dag Avango.

The iron ore deposits in Kiruna have been known since the late 17th Century but it was only after the railroad reached the mountains in 1899 that industrial mining really started, and the town Kiruna was established. The mine in Kiirunavaara is now the worlds deepest iron-ore mine, stretching about 1600 m down. Photo: Dag Avango

Today, the state-owned mining company LKAB is operating the world's largest underground iron ore mine in Kiruna, but also in Malmberget and in Svappavaara. LKAB supplies over 90% of the iron ore produced in the European Union. Other businesses have developed in the region, including space industry with Esrange, research stations in Abisko and Tarfala, and tourist sites such as the Ice Hotel in Jukkasjärvi, the Abisko National Park, and the Kebnekaise massif.

The ongoing relocation of the town centre and the development of new residential areas is a process where industrial heritage has a central role and is part of tensions regarding the past, of land use rights and about what a desirable future is. The town and the region is also subject to a new wave of industrialization including rare earth elements mining and the production of Co^2 free steel. This development takes place in lands where industry compete with traditional land uses of indigenous people and national minorities, such as Saami reindeer herders and Tornedalians, which causes growing tensions about land use and the future.

There will be several pre- and post-congress excursions offered at varying cost to choose from. Pre-congress excursions include visits to the Arctic Mine Fields and Hydroelectric Plants of Northernmost Sweden, the Center of the Green Industrial Transition in Sweden, and The Mid-Swedish Mining District Bergslagen. Post-congress excursions include visits to the Torne River Valley, an Oil-rigg in Stavanger, the Röros Copper Mine, and Svalbard.

The 19th TICCIH Congress in Kiruna is organized by Luleå University of Technology, a leading university in the European Arctic, and the TICCIH sections in Sweden and Norway, in collaboration with Jernkontoret, the Swedish National Heritage Board, LKAB, the municipality of Kiruna and a range of leading actors within industry and civil society in the Scandinavian north.

Roine Viklund *Catarina Karlsson*
Chair and Vice Chair Svenska industriminnesföreningen (SIM)

Homepage: https://ticcih2025-kiruna.se

Anmeldelser

Rene Schrøder Christensen og Lars Bjarke Christensen. Danmarks Jernbanemiljøer. Spor af jernbanens fysiske kulturarv, *fotos: Flemming Wedell, Syddansk Universitetsforlag & Danmarks Jernbanemuseum, Odense 2022, 288 s. ISBN 978-87-408-3430-7. 299 kr.*

De to forfattere er begge tilknyttet Danmarks Jernbanemuseum i Odense og har taget handsken op og skrevet en bog om kulturmiljøer, der har med jernbanen at gøre. Flere tidligere medarbejder på museet har været inde over, så det må betragtes som et institutionelt værk. Derudover er bogen fyldt med mange nutidige fotos taget af den fremragende fotograf Flemming Wedell. Indledningsvis skal fremhæves, at hvert hovedkapitel indledes med et Danmarkskort, der markerer, hvor fotos i kapitlet stammer fra – det er meget illustrativt og viser, at i stort set alle kapitler kommer vi godt rundt i landet. Bogen er organiseret i 5 hovedkapitler med et antal underkapitler, dertil kommer indledning og registre bagerst.

I indledningen gøres nogle overordnede overvejelser over jernbanens rolle i Danmarkshistorien. Det er 1800-tallets "vigtigste og mest dramatiske landskabsforandrende kraft, som efterlod sig spor overalt og skar det danske landskab igennem på kryds og tværs" (s. 7). Samtidig fremhæves, at beskæftigelse med jernbaner griber ind i mange andre "historier": industrihistorie, transporthistorie, arkitekturhistorie, kulturhistorie og mentalitetshistorie. Det er dette kapitelopdelingen til en vis grad afspejler. Derudover er der fuld bevidsthed om, at jernbanen hele tiden udvikles – og at synet på jernbanen ændrer sig. Det betyder, at der kan være dele af jernbanesporene, som ikke længere er i brug. Jernbanenettet nåede sit maksimum i 1929 med 5.500 km. spor, hvorefter nedlæggelser af jernbaner begyndte, fordi jernbanen gradvis tabte konkurrencen til biltrafikken (biler, lastvogne, busser) – men der kommer hele tiden nye baner til. Det indebærer også, at ikke alle dele af de opgivne jernbaner er bevaret, dels fordi de kan være overlejret af nyere anlæg på stedet, dels fordi bevaringsaspektet ikke har haft det samme fokus alle steder til alle tider. Kun få dele af jernbanen er fredet, og det meste er bygninger. Men der findes utallige små levn efter jernbaner i landskabet, som bogens mange fotos viser.

I kapitlet Jernbanens miljøer behandles spørgsmålet om sammenhængende miljøer fremfor enkeltstående elementer. Der skelnes mellem 'en hel jernbanestrækning med mange stationer og anlæg' og et jernbanemiljø, som altså er af mere begrænset omfang, men som er i fokus i bogen. I et underkapitel behandles 'byerne langs jernbanen' og de mange forskellige bytyper, som jernbanen berører, enten gamle købstæder eller nyanlagte byer som følge af jernbanen (ægte stationsbyer). Karakteristisk er, at jernbanen kommer på et tidspunkt, hvor byerne ikke har udviklet sig væsentligt og derfor kommer stationerne meget tæt på centrum af de gamle købstæder. I næste underkapitel kommer vi ud i landskabet og får indblik i de spor, som jernbanen sætter, når den er blevet opgivet, både i form af spor og dæmninger, broer og tunneller, som der senere er et særskilt kapitel om med vægt på fungerende anlæg, signalanlæg m.v. Velkendt er historien om 'den genfundne bro', der blev gravet fri 2014-15 på den nedlagte strækning mellem Horsens og Bryrup.

Næste hovedkapitel hedder "Jernbanen som system" og behandler det, man hælder i banerne som et rør, hvor det kommer ud i den anden ende, både mennesker og gods. Igen kommer sporanlæggene til behandling, især de store pladskrævende anlæg ved centrale stationer, som i København og Fredericia. Også nye anlæg som banen over Køge Nord, letbanerne i Århus og Odense samt metroen i København behandles. I samme kapitel kommer også mange bygninger i spil, især stationsbygninger, og de arkitekter, som har stået for deres tegninger; her fremhæves især Heinrich Wenck som den mest produktive. Også værkstedbygninger, remiser, vandtårne, stalde, og mere ydmyge bygninger som retirader og et enkelt ledvogterhus er blevet afbildet. Det sidste er sket i underkapitlet om sikkerhed og kommunikation, hvor ledvogterhuse tidligere udgjorde et væsentligt element og et markant indslag i landskabet ved krydsning mellem skinner og veje. I forbindelse med bygningen af broer fremhæves, at mange gravhøje måtte lade livet for at levere sten til anlæggene. Et særligt underkapitel er blevet viet til havnene, som hører hjemme i sammenhæng med jernbaner som knudepunkter på transporten af varer, der transporteres med skib. Det hører også naturligt hjemme i industrisamfundet.

Det næste hovedkapitel hedder jernbanens virksomhed – igen behandles her de produkter som jernbanen transporterede: Gods og dets opbevaring i særlige pakhuse, samt passagerer og deres ophold på stationerne. Fokus er desuden rettet mod medarbejderne i afsnittet administration og velfærd med tjenesteboliger og opholdslokaler. Også generaldirektoratets lokaler først på Gl. Kongevej og siden i Sølvgade er viet et opslag, ligesom privatbaners administrationsbygninger heller ikke er forbigået. Et underafsnit er viet til sammenhængen med militæret med vægt på de særlige anlæg, som har en militær forklaring. Militæret var jo i krigstilfælde dybt afhængig af jernbaner.

Et hovedafsnit har overskriften Jernbanen som industri. Det dækker over, at jernbanen er storforbruger af industrielle produkter som skinner og lokomotiver. I første omgang var de importerede, fra jernbanens moderland England eller fra Tyskland, senere kom der også gang i danskproducerede lokomotiver. Men materiellet skulle også vedligeholdes, og det medførte dels særlige bygninger (remiser) ved udvalgte stationer, dels organisering af arbejderne i kolonner, som kunne få opført små kolonnehuse ude i terrænet til deres ophold i pauserne. Endelig er et afsnit viet de forskellige produktioner, som gjorde brug af jernbanen til at fragte gods til og fra fabrikkerne. Det gjaldt f.eks. papirfabrikkerne tre forskellige steder i landet (Silkeborg, Dalum og Næstved) eller sukkerfabrikker, som også havde deres egne skinneanlæg med saftstationer. Men også mere ydmyge anlæg, som fandtes i stort tal rundt i landet fremhæves: mejerier og slagterier.

Et sidste kapitel er helliget jernbanens fysiske efterliv og omhandler særlige eringssteder, hvor personer med tilknytning til jernbanen har fået opstillet mindesten, især mindelunden i Fredericia; men også minder om togulykker, herunder bombninger under 2. verdenskrig. Sluttelig behandles bevarings- og især forfaldsproblematik på jernbanerelaterede anlæg. Meget er i forfald i landskabet, men der er også sket bevaring gennem at lægge nye funktioner ind i gamle anlæg (gentrificering). Enkelte bygninger er fredede, men de mange ydmyge spor efter jernbanen er som regel overladt til tidens tand. I øvrigt er en nedlagt banestrækning af Slots- og Kulturstyrelsen i foråret 2024 fredet som fortidsminde i kraft af dens særlige bevaringsværdier – det drejer sig om den korte bane Rødekro-Aabenraa, anlagt 1868 og endelig nedlagt i 2005 med den velbevarede og bygningsfredede Aabenraa Station. En banestrækning, som kun kort omtales i bogen.

Som det er fremgået, er det en fokuseret fremstilling, der behandler mange aspekter af jernbaner som fysisk kulturarv. Det er til tider en meget detaljeret fremstilling, som bliver resultatet, når man inddrager de mange fine fotos og læser de detaljerede billedtekster, der giver uddybende forklaringer på de lokale forhold som illustreres. Fokus er på den fysiske kulturarv, og de eneste personer, der bliver omtalt, er arkitekterne, som stod bag bygningsværkerne. Men bogen er i sin detaljerede struktur meget præget af gentagelser. Skulle de være undgået, skulle den nok have været struktureret anderledes.

Som omtalt lægges der vægt på at se jernbaneelementerne i sammenhæng. Der ses på sammenhængende miljøer, som er bevaret, og som har relevans for jernbanehistorie. Men der er flere problematiske forhold, som bliver konsekvensen af den valgte tilgang. I praksis forekommer denne tilgang at være lidt for snævert afgrænset, og bevirker, at enten kommer hele jernbanemiljøet ikke med – de linjeformede kulturmiljøer med sporene i landskabet – eller også afskæres der i forhold til bymiljøer.

Forfatterne kommer indirekte til at berøre kulturmiljøbegrebet, der officielt defineres som "et afgrænset område, der afspejler væsentlige træk af den samfundsmæssige udvikling". Ideelt set burde jernbane-kulturmiljøer være linjeføringen (sporene) med tilhørende bygningsanlæg og andre anlæg (signaler mv.), ligesom for en anden type infrastrukturkulturmiljø: veje. De er begge karakteriseret ved at være linjer i landskabet med tilhørende anlæg. Et problem ved fremstillingen er, at vi ikke rigtig får illustreret de linjeformede kulturmiljøer i deres helhed, som det jo egentlig handler om, men kun brudstykkevis.

En anden tilgang kunne være at forfølge og gennemfotografere en eller to udvalgte banestrækninger, en eksisterende og en ned-

lagt, for at illustrere hele det linjeformede kulturmiljø fra ende til anden med de udvalgte synlige elementer, der måtte være at se langs banen.

Bogens i praksis lidt snævre tilgang har formentlig at gøre med, at vægten er på fotos taget på jorden. En anden måde at gengive jernbanelinjerne på ville være at anvende topografiske kort, der kan vise traceerne i landskabet og sporanlæggene i byerne. Den kronologiske sammenhæng kommer fint frem i teksten, men synes ikke rigtig at komme til udtryk gennem de mange fine ny-optagne fotos. Her kunne historiske fotos og/eller kort have været anvendt. Ligeså er f.eks. ikke omtalt eller illustreret de omlægninger af banerne, der fandt sted f.eks. i byer som Viborg og Skive, og som må have afsat sig spor (!) i bybilledet. Og det er lidt synd, at der ikke er fokus på disse elementer i den visuelle del. Også dronefotos af jernbanestrækninger kunne være en moderne illustrationsmulighed.

Kulturmiljømæssigt kan man opfatte de byer, som stationerne ligger i, som by-kulturmiljøer, hvor stationsbygningerne indgår som tegn på, at de berøres af et jernbane-kulturmiljø, der strækker sig videre ud med sporene; altså stationerne kan indgå i to typer kulturmiljøer: infrastruktur og by.

Alt i alt er der mange roser til den flot udstyrede bog, men også nogle faglige tidsler, som handler om de valg og fravalg, som er truffet. Invester i den, læs den og bliv klogere på jernbanehistorien, for hvornår kommer der igen en så flot bog om dette landsdækkende emne.

Per Grau Møller

Anna Lindgren, Staten som Trädgårdsmästare. Järnvägens Planteringer från Naturförsköningskost till Testamente. *Göteborgs Universitet 2022. 214 sider ill. ISBN 978-91-7963-113-0. Fås også digitalt: https://gupea.ub.se/handle/2077/74044.*

Anna Lindgren har skrevet en koncis og inspirerende bog om parkerne ved de svenske statsbaners stationer og tjenesteboliger med fokus på vækstperioden 1855-1875 og forfaldsperioden 1955-1975. Afhandlingen indbragte forfatteren doktorgraden fra Göteborgs Universitet i 2022. Bogen har efterfølgende været med til at inspirere til dette temanummer af Fabrik & Bolig.

Historien er enkel, nemlig at der meget hurtigt indgik anlæggelse af parker omkring stationerne i forbindelse med etablering af stambanenettet i Sverige, og at parkerne blev opgivet igen fra 1950'erne og særlig hurtigt efter 1971 ofte til fordel for parkeringspladser og vejbaner.

Udover at præsentere eksempler på jernbaneparker er det en analyse af den administrative organisation, som udførte parkerne, og ændringerne i administrationens opfattelse, der er omdrejningspunktet i afhandlingen. Analysen gennemføres med afsæt i to nøglebegreber: modernitet og stigafhængighed. Afhandlingen består af fem kapitler. En indledning med redegørelse for materiale, metode og forskningsoversigt; en analyse af organisationen, parker, planteskoler og de bagvedliggende ideer 1855-1875, der bygger på Lindgrens licentiatafhandling fra 2020; en oversigt over perioden 1875-1955; en analyse af nedskæringer og nedlæggelser 1955-1975; og endelig en afsluttende analyse og diskussion af drivkræfterne bag forandringerne foruden en sammenfatning.

Anna Lindgren argumenterer for, at beplantningerne i midten af 1800-tallet sammen med de nye tekniske anlæg blev opfattet som en helhed. Det vil sige, at man ikke skelnede mellem nytte- og prydvækster, for prydvæksterne havde også en funktion eller var nyttige, de indrammede stedet og skabte orden. Ifølge Olof Eneroth (1825-1881), der fra 1864 havde ansvaret for parker og beplantninger ved Vestre Stambane, og som var en af fortalerne for den samtidige naturforskønnelsesbevægelse, var jernbanen *"en hel Kulturström, som med ens bryter sig fram genom våra bygder, och på den strömmen kommer smaken farande"* (citat fra side 67). Den nye teknik hørte således sammen med en ny kultur, hvori smag, haver og skønhed indgik. Også de to chefarkitekter Adolf Edelsvärd (1824-1919) og Folke Zettervall (1862-1955), hvor af den sidste delvis var uddannet i København, mente, at de smukke beplantninger ved næsten alle stationer havde bidraget til at styrke befolkningens skønhedssans.

Lindgren gør den interessante iagttagelse, at det ikke er lykkedes for hende at finde nogen instruktion om anlæggelsen af parkerne ved de nye jernbaner, antagelig fordi der ikke findes nogen. Det tolker hun som udtryk for, at der har været konsensus i hvert fald i jernbaneorganisationen om at plantningerne hørte med til en moderne jernbane. De var en del af normen ved midten af 1800-tallet. Samtidig indgik jernbanerne og deres parker som en del af nationsopbygningen. I modsætning til vognene, der var indrettet til tre forskellige klasser, og de større stationer der tilsvarende havde tre forskellige ventesale, var jernbaneparkerne fælles, et sted hvor alle kunne sidde på bænkene blandt blomster og vækster eller promenere på grusstierne.

Lindgren dokumenterer desuden, at anlæggelsen og vedligeholdelsen af jernbaneparkerne og driften af egne planteskoler fra 1860'erne blev indlejret i den centrale administration af de statslige jernbaner på et niveau lige under Bandirektøren (den øverst ansvarlige), at trædgårdsdirektørerne var præget af et forskønnelsesønske, at det forblev virksomt indtil 1950'erne, og at der på den måde var etableret en stigafhængighed, der var indlejret i organisationen og dens kultur. Men denne kultur kom under afgørende pres fra bilismen.

Med afsæt i kulturgeografen Allan Preds skelnen mellem industriel modernitet og høj modernitet, hvor bl.a. bilen og gennemfart blev idealer, ses opbygningsperioden som en del af den industriel modernitet og nedbygningsperioden som forbundet med højmoderniteten. Anna Lindgren henviser også til sociologen Zygmunt Bauman, der beskriver, hvordan bilen gjorde det muligt at bevæge sig hurtigt fra punkt til punkt uden at stoppe og uden at se sig om, hvad der skulle ændre opfattelsen af det offentlige rum. Ifølge en anden kendt sociolog, Richard Sennett, ændrede det offentlige rum fra at udgøre en arena for ophold til et gennemfartsrum.

Efter Anden Verdenskrig tabte stationerne deres rolle som symboler for det moderne og som offentlige bygninger. I stedet blev målet for de svenske statsbaner, at stationsområderne skulle være effektive trafikpladser, der lettede hurtig passage. Det var i hvert fald delvis et resultat af bilismens stigende indflydelse og en reduktion af det samlede jernbanenet. Igen kombineres analysen af de fysiske ændringer med en undersøgelse af de bureaukratiske forandringer. Her ses et mønster, der begynder med en række rapporter med forslag om forskellige tiltag en form for "sweet talk", der ikke nødvendigvis blev realiseret, efterfulgt af mere hårdtslående tiltag som udplacering af parkområdet i organisationen og fra 1961 af faldende bevillinger.

Udover at understrege stationsparkerne, planteskolerne og beplantningerne ved tjenesteboliger og langs banerne som en vigtig del af de samlede stations- og jernbanemiljøer gennemfører Anna Lindgren mange oplysende og inspirerende analyserne. Men måske kunne diskussionen udvides til også at omfatte stationsparkerne i relation til landskabsarkitekturen efter 1945 og ikke kun i perioden 1855-1875, samt ikke mindst til den landskabsarkitektur, produktionsanlæg har indgået i?

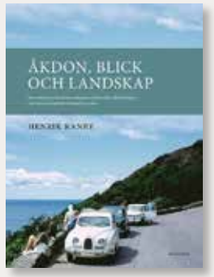
I dele af den amerikanske litteratur tales om "the machine in the garden", og hvor det blandt andet fremgår, at det litterære billede af den amerikanske fabrik før Borgerkrigen indgik i en pastorale – i modsætning til den engelske fabrik med dens røgskyer og underernærede arbejdere. Et eksempel er fabriksbyen Lowell (med vanddrevne tekstilfabrikker), hvor de besøgene efter de mange rejseberetningerne så forgæves efter høje skorstene og sort røg. Med "den rationelle fabrik" kom der rygende skorstene, men efter 1945 blev grønne omgivelser igen et ideal (Steven High, s. 74-91). Set i forhold til denne stærkt forenklede sammenfatning er det måske ikke så overraskende, at de nye jernbanestationer blev kombineret med parker, men snarere at de svenske statsbaner forlod eller stærkt nedtonede det grønne ideal fra 1950'erne, en periode hvor grønne industrikvarterer blev udlagt ikke alene i USA, men også i Danmark og antagelig i Sverige. Det er ikke nødvendigvis i modstrid med Lindgrens analyse, men kunne understrege den voldsomme omstilling af stationerne, der skete.

Endelig skal det noteres, at der mangler et register.

Caspar Jørgensen

Litteratur

Steven High, *Industrial Sunset. The Making of North America's Rust Belt 1969-1984.* University of Toronto Press 2003.



Henrik Ranby, Åkdon, Blick och Landskap. Om relationer mellan kommunikationer, kulturmiljö och landskapssyn med huvudexempel från Kullahalvön, Skåne. *Göteborg: Makadam 2020. 676 side illustreret. ISBN 978-91-7061-309-8. Pris 495 skr.*

Henrik Ranby har skrevet en inspirerende bog om køretøjers betydning for landskabet og landskabsopfattelsen med området mellem Kullen og Söderåsen i Skåne som eksempel. Det er en lang bog og også en ambitiøs bog.

Formålet er for det første at dokumentere kommunikationsmiljøer. For det andet at udvikle vehikuloginen, det vil sige viden om køretøjer. For det tredje at øge forståelsen af det industrialiserede agrare landskab, kulturmiljøer, landskabsopfattelser, design og visuel kultur. For det fjerde i højere grad at anvende idehistorie, kunst- og litteraturhistorie i kulturmiljøforskning. Og endelig for det femte at skabe et forbedret videngrundlag for den regionale og kommunale planlægning.

I beskrivelsen af sin tilgang er forfatteren rundt om flere faglige traditioner. Afsættet er Gregor Paulssons Svensk Stad og i det hele taget kulturhistorie som diskuteret af Peter Burke i What is Cultural History og Frykman og Löfgren Den Kultiverade Människan. Ranby ligger særlig vægt på forskellige aktørers skiftende opfattelser og gengivelser af landskaber over tid, som han mener har været underprioriteret indenfor bygningsbevaring. Som en anden inspirationskilde henviser han til den tyske kulturhistoriker Wolfgang Schivelbuschs undersøgelse af jernbanerejsens historie i 1800-tallet. I fortsættelse heraf peger Ranby på de forskellige synsindtryk, som skiftende typer køretøjer giver, og den forskellige status køretøjerne giver. Samtidig skaber forskellige transportsystemer særlige kulturmiljøer som landevejskroer, færgesteder, stationssamfund og bilismens benzinstationer, campingpladser, sommerhusområder og sovebyer.

Det er også en vigtig pointe for Ranby, at det geografiske område er en del af Skåne og ikke ligger ved en universitetsby. Dels fordi meget forskning er præget af et hovedstadsperspektiv, dels fordi meget forskning undervurderer Skånes rige og komplekse historie under industrialiseringen. Hertil kommer, at Skåne er den del af Sverige, som har det tætteste jernbanenet.

Bogen er opdelt i seks kapitler foruden indledningen. I det første kapitel skitseres køretøjerne, blikket og landskabet fra oldtiden til renæssancen i området ved Kullen, Kullabygden. Kapitlet afsluttes med et forsøg på at forstå middelalderens landskabssyn. I det næste kapitel er det perioden fra renæssancen til industrialismen, som sammenfattes.

Herefter beskrives anlæggelsen af jernbanen mellem Malmø og Göteborg eller rettere den del af strækningen, som blev anlagt af Skåne-Hallands Järnväg (fra Helsingborg til Halmstad) indviet 1885 og med særlig vægt på tværbanen fra Åstorp til Höganäs. Banen blev anlagt af et privat selskab, men med betydelig tilskud fra kommuner og stat. De alternative planer for linjeføringen gennemgås og de vigtigste aktører præsenteres særlig konsul Olsson, der var købmand i Helsingborg med betydelige industri interesser og fra 1870 tillige godsejer.

Herefter præsenteres banens forskellige ingeniører og bygmestre, deres bygninger og det rullende materiel. Sammenlignet med analysen af de førindustrielle vogne er omtalen af lokomotiver og vogne kortfattet. Derpå kommer en registrering af kulturmiljøet, dog ikke ved banen mellem Helsingborg og Ängelholm, men ved banen mellem Åstorp og Höganäs med hovedvægten på stationerne.

Endelig afsluttes kapitlet af en analyse af Kullen i litteratur og maleri med nogle digressioner om jernbanen i europæisk og svensk litteratur og erindringer. Kulturmiljøgennemgangen nævner blandt andet stenbruddet vest for Söderåsen, men beskriver kun stationsmiljøet ved Åstorp på et detaljeringsniveau, der gør det muligt at forstå, hvilke bygninger det består af. Det samme gælder de øvrige stationsmiljøer, mens man gerne ville vide noget mere om stenkulsminen ved Nyvång, sukkerfabrikken ved Hasslarp og ikke mindst kul- og leranlæggene ved Höganäs.

En gennemgang af den interne transport i disse anlæg havde været relevant, ligesom man savner en inddragelse af Jean-Paul Darphins bog om sukkerfabrikker.

I det fjerde kapitel er det den korte jernbane Höganäs-Mölle, der på tilsvarende vis gennemgås. Banen åbnede 1910 og lukkede 1963. den tjente især badegæster, mens Åstorp-Höganäs var anlagt af hensyn til den lokale industri og storlandbruget.

I femte kapitel er det landevejene og de forskellige køretøjer cykler, biler, busser mv., de tilhørende kulturmiljøer og landskabsopfattelser, der præsenteres. Endelig afsluttes bogen ikke af en sammenfatning men af et kapitel, der diskuterer kulturarv, forskellige bevaringsstrategier og køretøjernes betydning som kulturarv. Hver kapitel afsluttes af en sammenfatning, og de fleste af en eller flere ekskurser.

Sammenfattende argumenterer Ranby for, at jernbanen ændrede landskabssynet dels ved at tilgængeliggøre landskaber, der tidligere havde været svære at komme til, dels ved skabe en ny måde at se landskabet på – gennem et bevægeligt vindue. Strindberg talte om et spredt landskabssyn og Schivelbusch om et panoramisk blik. Med henvisning til Orvar Löfgren argumenterer Ranby for, at der i borgerskabets optik skete en opdeling af landskabet i et produktionslandskab med stenbrud, stenkulminer, sukkerfabrik inde i landet på slætten, og et fritidslandskab eller konsumtionslandskab med smukke udsigter centreret om Kullen og kysten. Jernbanen Åstorp-Höganäs udgjorde rygraden i det industrialiserede landbrugslandskab, mens den korte bane fra Höganäs til Mölle mere havde karakter af en udflugtsbane. Ranby konstaterer også, at selvom der findes ældre eksempler, skete der en eksplosion i antallet af både kunstneriske landskabsbilleder og i fotografiske postkort fra slutningen af 1800-tallet.

I forhold til vejnettet ændres det kun i begrænset grad i første halvdel af 1900-tallet, men kvaliteten af kørebanerne forbedres, det vil sige de bliver gradvist ombygget til bilkørsel. Desuden noterer Ranby i overensstemmelse med ovenstående, at interessen for den middelalderlige Kullavägen inde i landet aftog, mens den fokuserede på kystvejene. Efter 1950 etableres et motorvejsnet, men det berører kun den østlige del af landskabet. Endelig konstaterer Ranby at den nye bebyggelse fra slutningen af 1900-tallet begynder at vende bagsiden til vejene, der bliver til transportkorridorer.

Det er en stofmættet bog, som jeg kun har refereret punktvis. Der er mange informationer og mange overbevisende enkeltanalyser.

Ideen med at konfronterer de skiftende færdselsnet med køretøjer, bebyggelse og landskabsopfattelse er både spændende og inspirerende. Men bogen er blevet for lang, flere af kapitlerne kunne hver være en selvstændig bog. Det lykkes ikke rigtig at få analyseret, hvordan færdselsnet, køretøjer og landsskabsopfattelse hænger sammen eller påvirker hinanden. Beskrivelserne og digressionerne tager overhånd. Men hvis man som læser vælger at læse bogen som en registrant, er den nybrydende både ved at inddrage landskabsopfattelsen og ved sit emne. Arbejder man med kulturmiljøregistrering og bevaring – eller skal en tur til Skåne – er der al mulig grund til at orientere sig i bogen.

Bogen er forsynet med sted- og personregister.

Caspar Jørgensen

Simon Ostenfeld Pedersen, Morgens Andreassen Morgen, Mathilde Kirkegaard, Sidse Martens Gudmand-Høyer og Nina Ventzel Riis: Kulturmiljø. Stedets fortælling mellem fortid og fremtid. *København Strandberg Publishing 2024. 320 sider ill. ISBN: 978-87-944-1813-3. Pris 349,95 kr.*

Arkitektskolen i Aarhus har i samarbejde med forlaget udsendt en stor bog om kulturmiljøer. Den er en parallel til bogen om bygningsfredning, der udkom i 2018 og blev anmeldt i F&B 2019. De to bøger er opbygget på nogenlunde samme måde med mange eksempler på kulturmiljøer samlet i fire blokke, der er placeret indimellem bogens 11 kapitler, således at præsentationen af konkrete kulturmiljøer fylder godt halvdelen af bogen. Med afsæt i Svend Aukens kronik om kulturmiljø fra 1994, i fredningsog planlovgivning samt internationale konventioner gennemgås idéerne om bevaring af kulturmiljøer, der ses som mere end isolerede enkeltbygninger og som dynamiske frem for statiske. Norge og Sverige fremhæves som værende langt foran Danmark, og det konstateres, at der ved den seneste større revision af bygningsfredningsloven i 1997 blev afvist at regulere samlinger af bygninger gennem statslig fredning, men at det er en lokal opgave, en opgave for den kommunale planlægning. Endelig gennemgås de efterhånden mange forskellige registreringsmetoder, der er udviklet i Danmark.

I det sidste kapitel præsenterer Arkitektskolens egen registreringsmetode for kulturmiljøer. Bogen nedtoner betydningen af originalitet eller uforanderlighed, og fokuserer på at indfange den kulturhistoriske og arkitektoniske værdi foruden helheden eller sammenhængen i kulturmiljøet. Samtidig forsøger den at vurdere kulturmiljøets potentiale for turisme, bosætning, erhverv og kultur. Det er en følge af den stigende erkendelse af, at bygninger ikke er og aldrig har været uforanderlige, tænk bare på Kronborg Slotskirke, der har været hestestald, og at det ikke rigtig giver mening at ville føre en bygning tilbage til sin oprindelige urtilstand. Derfor giver det heller ikke mening at lægge alt for stor vægt på en bygnings eller et kulturmiljøs autenticitet, men der er tale om en balance. Målet med metoden er for Arkitektskolen at give de kommunale beslutningstagere et redskab til at prioritere ved udarbejdelsen af kommuneplan, lokalplan så vel som ved udarbejdelsen af strategiske udviklingsplaner. Målgruppen for bogen er planlæggere i kommunerne, arkitekter og rådgivere i praksis, fagfolk på museer, studerende og andre interesserede.

Det er en veltilrettelagt og velargumenteret bog, hvor billeder og kort understøtter teksten. Sammen med forgængeren om bygningsfredning udgør den et solidt grundlag for bygnings- og bebyggelsesbeskyttelse. Men det hindrer ikke, at den kan diskuteres og suppleres.

Bogen kan til en vis grad opfattes som en udfoldning af nogle af tankerne bag den daværende Kulturarvsstyrelses kulturarvskommune projekt, hvor kulturarv blandt andet blev opfattet som en ressource, og som noget dynamisk.

Bogen har en normativ karakter. Den fortæller hvordan det burde være, og hvordan man burde gennemføre en registrering. Hvilke kulturmiljøer der rent faktisk er beskyttede og har udviklet deres potentialer, fremgår ikke.

Flere steder får man som læser indtryk af, at der gives en historisk fremstilling af, hvordan idéerne om beskyttelse af bebyggelseshelheder vinder frem, og man får næsten indtryk af, at det er en uundgåelig historisk nødvendighed. Men man kunne godt ønske sig en nærmere begrundelse for, hvorfor bevaring er så godt, ligesom den historiske analyse kunne være mere præcis.

Særlig vægt tillægger forfatterne miljøminister Svend Aukens introduktion af kulturmiljøbegrebet i 1994, de opfølgende ændringer af bygningsfredningsloven og planloven i 1997, og den (angivelige) efterfølgende liberalisering under Anders Fogh Rasmussen, hvor Aukens efterfølger Hans Christian Schmidt fra Venstre stoppede opfølgningen, så integrationen af kulturmiljøer i kommunernes fysiske planlægning har ladet vente på sig. Der er ikke tvivl om, at det er en retorisk virksom argumentation, men jeg er ikke sikker på, at det er en dækkende historisk analyse. For spørgsmålet er, om ikke Aukens initiativ, der jo var forankret i centraladministrationen, var en implementering af en nyliberal dagsorden i form af decentralisering, udgiftsneutralitet og regelforenkling, der var blevet introduceret under Schlüter-regeringen allerede i 1983 (jf. Folketingstidende 1983, side 2380 ff.), og altså videreført under de skiftende Nyrup-regeringer. Det må også konstateres, at tidligere initiativer for at beskytte større helheder i nogen grad underbetones, selvom enkelte nævnes. Det gør, at fremstillingen får en skævhed, fordi den fremstår som en historisk analyse, samtidig med at der er kludder med kronologien og den politiske kontekst. Men i realiteten er det en fremlæggelse af en registreringsmetode, ikke en historisk undersøgelse.

Arkitektskolen i Aarhus' metode til Screening af Kulturmiljøer (SAK) er en blandt flere, hvis mål er at indfange og vurdere bevaringsværdier med så lille et ressourceforbrug som muligt. Fælles for de forskellige metoder – SAVE, KIP, Kulturmiljø-metoden og SAK – er brugen af arbejdsgrupper med lokale deltagere fra kommune, foreninger og organisationer for på den måde at have steder, hvor spørgsmål om afgrænsning og udvælgelse kan diskuteres. Samtidig kan det også være et greb til at åbne op for, at flere forskellige synsvinkler eller fortællinger kan komme til orde, for på den måde at undgå en enkelt dominerende fortælling. Men netop afgrænsningen og udvælgelsen af kulturmiljøerne eller de bevaringsværdige bygninger og landskaber er nok det bløde punkt i de forskellige metoder. Man kunne sætte mere ind på at præsentere og diskutere den eksisterende litteratur om det pågældende kulturmiljø, og dermed hvilke fortællinger man ønsker at fremhæve med registreringen.

Som nævnt består godt halvdelen af bogen af en præsentation i ord og billeder af kulturmiljøer, som arkitektskolen har registreret efter SAK metoden – 35 i alt. Hvordan miljøerne er udvalgt fremgår ikke, men set ud fra en industribevaringssynsvinkel kan man glæde sig over, at ganske mange er industrimiljøer, heraf syv fabrikker, en stationsby, to havne og fire tekniske anlæg eller godt og vel en tredjedel af eksemplerne. Det må siges at være udtryk for, at interessen for bevaring af det industrielle miljø er betydelig – i hvert fald på arkitektskolen. To af fabriksmiljøerne omfatter også arbejderboliger, Danfoss og Dania, mens arbejderkvarterene i byerne glimrer ved deres fravær. Mange af miljøerne er gamle kendinge, men der er også nyopdagelser som Heering Likørindustri på Stevns og Fabers (rullegardin) Fabrikker på Fyn. Derudover kan der være grund til at fremhæve Det Lollandske Dige fra 1870'erne med en længde på 63 km og adskillige pumpestationer og kanaler, Den Gamle Lillebæltsbro med vej og Store Vildmose som kulturmiljøer af en betydelig størrelse. Som altid kan man diskutere afgrænsningerne af kulturmiljøerne. Ved Det Lollandske Dige er kanalerne for eksempel ikke kommet med på kortet, og ved stationsbyen Skørping kunne man have ønsket, at de to banestrækninger umiddelbart nord for byen var taget med, fordi de viser den oprindelige banes slyngede forløb og det udrettede 2. spor. Men det ændrer ikke ved, at de kortfattede tekster giver lyst til at vide mere og ikke mindst til at beskytte helhederne. Samtidig er det lykkedes lige så stille at udbygge det bebyggelseshistoriske billede af Danmark.

Alt i alt har forfatterne og Arkitektskolen i Aarhus leveret et nyt og bedre vidensfundament for bygningsbevaring, end der tidligere har eksisteret.

Caspar Jørgensen

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Henrik Ranby, b. 1965, is an art historian and associate professor in conservation at the University of Gothenburg. He has written several books on architecture, heritage and built environments in Southern Sweden. The book *Åkdon, blick och landskap* (Vehichles, gaze and landscape) Makadam, Göteborg 2020, is a broad study of transportation with chariots, trains, bicycle and cars as well as transportations as a part of landscape and cultural history. Together with professor Ingegärd Eliasson, Henrik Ranby has 2025 started a new research project on the railway landscape, funded by the Swedish Transportation Board.

Roine Viklund, b. 1968, Senior Lecturer in History of Technology at Luleå University of Technology (LTU) and also affiliated to Centre for Regional Science (CERUM), Umeå University. He has a PhD in History of Technology from LTU and a MA in English. He has published several books and articles about historical perspectives on mining and railways in northern Sweden, but he has also written Luleå's official 400-year history in two volumes. Viklund is National representative for The International Committee for the Conservation of the Industrial Heritage (TICCIH) Sweden (SIM) and Chair of the Organization Committee for the upcoming TICCIH 2025 Congress in Kiruna.