In the late 20th century, many Western cities and towns entered a process of de-industrialisation. What happened to the industrial places that were left behind in the course of this transformation? How were they understood and used? Who engaged in their future? What were the visions and what was achieved?

*Hope and Rust: Reinterpreting the industrial place in the late 20th century* examines the conversion of the redundant industrial built environment, into apartments, offices, heritage sites, stages for artistic installations, and destinations for cultural tourism. Through a wide-ranging analysis, comprising the former industrial areas of Kopparadalen in Avesta, Sweden, the Ironbridge Gorge Museum in Britain, and Landschaftspark Duisburg-Nord in the Ruhr district of Germany, a new way of comprehending this significant phenomenon is unveiled.

The study shows how the industrial place was turned into a commodity in a complex gentrification process. Key actors, such as companies and former workers, heritage and planning professionals, as well as artists and urban explorers, were involved in articulating values of beauty, authenticity and adventure. By downplaying the dark and difficult aspects associated with industry, it became possible to showcase rust from the past fuelled with hope for a better future.

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HOPE AND RUST
Reinterpreting the industrial place in the late 20\textsuperscript{th} century

Anna Storm
Industrial society has changed thoroughly during the last half a century. In many Western cities and towns, new patterns of production and consumption entailed that centrally located industrial areas became redundant. The once lively workplace and urban core became silent and abandoned, gradually falling into decay.

In recent decades, the former industrial built environment was reinterpreted and reused as apartments, offices, heritage sites, stages for artistic installations and destinations for cultural tourism. Companies and former workers, heritage and planning professionals, as well as artists and urban explorers, were some of the actors involved in the process.

The overall aim of the study is to contribute to an understanding of this transformation, and hence it addresses questions about what happened to the industrial places that lost their original function and significance. How were they understood and used? Who engaged in their future? What were the visions and what was achieved?

Three former industrial areas are examined from a historic perspective and with a critical hermeneutic approach: Koppardalen in Avesta, Sweden, the Ironbridge Gorge Museum in Britain, and Landschaftspark Duisburg-Nord in the Ruhr district of Germany. Included in the results that challenge previous research, the study claims that the key figures were often newcomers to the place, and white-collar professionals, rather than former workers asserting a historic perspective from below on the basis of a crisis experience.

In general, the study shows how the redundant industrial place became an arena for visions of the future in the local community, and, furthermore, how it was being turned into a commodity in a complex gentrification process. The place was given new value by being regarded as an expression of the overall phenomenon of reused industrial buildings, and, simultaneously, as a unique and authentic entity. In the conversion of the physical environment, the industrial past became relatively harmless to many people, because the dark and difficult aspects were defused in different ways. Instead, the industrial place was understood in terms of adventure, beauty and spectacle, which included rust from the past as well as hope for the future.

Key words: industrial history, history of technology, cultural history, industrial heritage, hermeneutics, museology, Sweden, Avesta, Ironbridge, Duisburg, 20th century, reuse, place, materiality, authenticity.

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Stockholm in January 2008,
Anna Storm
The traveller

A traveller at the beginning of the 21st century looks out of the window of a train. He or she sees a large, neat six-storey brick building with symmetrical rows of windows that are newly painted and have corresponding shades. The building stretches along the track close to a railway station and the centre of a middle-sized Western European town. How can this view be spontaneously interpreted? Perhaps the traveller’s first thought is “Oh, they have a textile mill in this town” or perhaps it is rather “Oh, another regional college or business park.” I believe the second interpretation has successively become more common, at least among travellers without previous knowledge or their own experience of, relatively speaking, older industrial built environments.

What can then be regarded the most adequate interpretation? If the building was a textile mill and it is presently used as a school or business park – can it be considered a former mill, or is it really in the first place a school or a location for small enterprises? Which group of people have priority of interpretation of their previous or present workplace: the former textile workers or the present teachers, students and entrepreneurs? And what about the real estate owners, urban planners, architects, historians and politicians? A chosen interpretation will not only assert the building as being primarily a former mill or a new school, but will also characterise it in terms of meaning and value.

The traveller’s interpretation of the view from the train is one expression of more general and complicated processes that have exerted an influence on individuals and places all over the Western world, where symbols and material structures have been placed in new contexts and given new significance. Reused industrial places are today a common feature of many cities and towns, but it has not always been like that. With a historic perspective it is possible to follow how this phenomenon emerged and developed during the second half of the 20th century. It has not only been a process of contamination and material decay, during which large-scale buildings and structures have become security risks, but also a process of political controversies and negotiations about what should be remembered.
Gradually, the reused industrial place moved from being the exception to the rule, and managing the transformation became a knowledge and an experience that could be shared. Individuals and groups with different associations to the place, with memories of its past and ambitions for its future struggled together or in disagreement to define its new meanings. The industrial place was a monument over something lost, as well as a problem representing an ambiguous past and an often uncertain future. Sometimes the negotiations between national and regional authorities, local actors and commercial interests ended in a demolition of the redundant industrial place. At other times the outcome was a transformation of the site into a place for tourists or into dwellings. There has not been one single solution applicable to all the places, nor has there been a single characteristic in the negotiation processes. Nevertheless, apart from the many national and regional differences, this study’s examples, gathered from several countries and periods of time, identify a discernable logic and a number of common denominators between the reused places.

In the study, three places are examined more closely, namely redundant industrial areas of Avesta in Sweden, Ironbridge in Britain and Duisburg in Germany. All three illustrate how the reinterpretation and reuse process has been crucial in the search for a local future, that is, how negotiations about the past, with regard to meanings attributed to artefacts and the built environment, have become decisive in the search to meet contemporary needs. The memory and oblivion of individuals and collectives, the creation of monuments and heritage sites and the reuse of the built environment for new purposes, all signify local place bound manifestations of changing cultural, political and economic relations within a wider geography.

In the course of the 20th century, the factory became the most prominent symbol of the industrial society, both in a physical sense and as an imaginative tool. A production environment with people, machinery, buildings and surroundings became easily recognisable and somehow understandable as had its metaphorical expressions. The factory as a symbol also encompassed what could be labelled a duality, with bright and dark aspects existing side by side. While the assembly line, the salary work and the smoke from the chimneys, on the one hand spoke of beauty, modernity and progress, on the other hand they also spoke of pollution, suppression and the extinction of the individual. This duality certainly affected those who were or had been industrial workers but also included almost everyone living in the industrial society.

The changes in industrial production patterns that began in the 1970s – sometimes called the third industrial revolution – implied that many Western cities and towns, because of closedowns or relocations, faced the challenge of a centrally located redundant industrial area. Certain branches encountered the structural crisis earlier. The textile industry, for example, was hit in the late 1950s and 1960s, while iron and steel works began to stand unused to a
1. INTRODUCTION

In many places where the factory ceased to be a workplace and a production unit, individuals and societal organisations had to deal with its dual symbolic qualities and often an ambivalent attitude was recognised and articulated in different ways. Old industrial buildings in many communities are said to represent “a common and proud, though often painful, past.” In short, industrialisation left a physical legacy and “an overwhelming emotional ambivalence that dominates our attitude towards this most important period of our past.” It has been suggested, however, that time will erode this ambivalence and when the “generation that worked in the factory disappears, there is no doubt that their industrial culture by many people will be embraced by the same sentimentality that has for many centuries marked the peasant culture.”

In the late 20th century, the redundant or outdated industrial built environment has to a various extent been torn down, left as ruins, or adapted

The factory, with smoke from the chimneys and different buildings and structures for each moment of the production process, has become a prime symbol of the industrial society, both as a material reality and a generally understood metaphor. Paper mill outside Norrköping, Sweden. Photo: Anna Storm, 2003.

larger degree in the 1970s and 80s. The mill or factory that had had the best location in relation to waterpower and transport could not fulfil the needs of modern industry or was no longer competitive on a world market and was therefore abandoned.

...
and reused for new kinds of activities. In the case of reuse, previously company owned industrial symbols, artefacts and milieus have in large numbers been turned into projections of visions of the future in local communities. How is it that former industrial places – with all their ambiguity – have been reinterpreted to represent a new future with the past as a reference? This is the topic of the present study.

The aim and questions

Redundant industrial places do, in many respects, epitomise what I suggest to name the *materiality of a post-industrial situation*. The place is a material reality and the meanings attached to the place are often expressed through the physical environment. Knowledge that is difficult to articulate verbally, like an experience of loss and uncertainty of the future, could be visible in the changing materiality. The built environment, a skyline, the way one moves around in a city or town, the smell, sound and sight of hot slag in front of you while your back is freezing cold because of the non insulated blast furnace plant, the tacit knowledge that becomes relevant only in relation to the physical tool or the colour of the flames, the structures of transportation and storage that are readable and transparent to those who know it by heart – this materiality has become redundant.

The knowledge and experiences connected to it has, to a large extent, also become redundant and by being reused the place has changed in a material sense. The changed materiality has affected its meanings – a previous production environment standing unused or adapted to new activities signifies other meanings than before. The new meanings have, in turn, influenced the materiality of the place – its decay, its demolition or reuse. The dialectic between a changing materiality and changing meanings constitute a reinterpretation process, and the overall aim of this study is to contribute to an understanding of such processes; why they have taken place, what they have signified in the late 20th century Western world and, not the least, how the places in a post-industrial situation have been affected.

In order to trace some important characteristics of this phenomenon of reinterpretation and reuse, the present study addresses the following questions:

- In what contexts have the redundant industrial place attracted attention?
- What actors have been involved in the processes of reinterpretation and reuse, and what have been the issues of negotiation, conflict and agreement?
- What has been the outcome of the reinterpretation of the industrial place – in its materiality and meanings – and how is this outcome to be understood?
Theoretical considerations
Industrial revolutions – industrial pasts

As industrialisation, the way of relating to the industrial past differs in pace and character between countries, regions and branches. Furthermore, the analysis of a series of changes depends on which perspective is chosen. From an economic-historian’s point of view, the process of industrialisation has been marked by three decisive stages, or industrial revolutions, and from an industrial heritage aspect it can be argued that each one of these three industrial revolutions has corresponded to a particular way of relating to the recent past. Although this is a rough simplification, and even though the study focuses on the third revolution and the correlating societal response concerning the industrial past, this conceptual pair makes up one frame for the following analysis, and needs a somewhat more elaborate presentation.

The first industrial revolution brought about technology such as steam power and in some countries also railways. It gained momentum in Britain during the last decades of the 18th century and spread to other parts of the Western world during the first half of the 19th century. One distinctive feature of this period of change was that the work process was split into elements and carried out in a certain building, a factory. Earlier forms of production that constituted prerequisites or represented other possible ways of development, like the workshops and the company towns had certainly existed. These forms did not necessarily cease with the first industrial revolution but a shift
was nevertheless discernable. Corresponding to this shift was a public and societal response that intended to save some traces from what was perceived as a vanishing agricultural way of living. The factories and the steam-powered machinery along with urbanisation were seen as threats. At this stage, industry represented novelty and innovation and hence almost an antithesis to the past.

The second industrial revolution, with electrification and rationalisation, took place around the turn of the 20th century. The important change during this period was that the worker, instead of being paid for a ready-made product, was paid according to the time spent in production. Industrial leaders were hence eager to control the workforce, in order to ensure they were actually working in the most efficient way. Two main solutions appeared: scientific management and the assembly line. Frederick W. Taylor often represents the scientific management in which each element of the work was analysed in order to reduce the need for skilled people and to maximise productivity. The assembly line is connected to Henry Ford and especially to the production of cars. While the assembly line regulated the pace of each work element, the workers had only to adapt. The resulting mass production furthermore corresponded to mass consumption. The aim was that the production, for example, of cars would be so cost effective that the worker could afford to buy a car himself. The factory of the second industrial revolution is described by Håkon W. Andersen as a “unit factory” in two senses: it made possible the mass production of standard units, and it was in itself a unit comprising and controlling the entire production process. Beside car factories, steel works are regarded typical unit industries.

A conscious defining of some industrial techniques and built environments as belonging to the past appeared with the second industrial revolution. During this period, the function of the identified industrial past, among other things, meant to work as a contrast to the modern industry and the modern society as a whole. By displaying new machinery beside the old, the new stood out as even more modern. This was also a time when the Western countries in more general terms established institutions that were to deal with the past, in order to form a foundation of the modern society. Eric J. Hobsbawm strengthens this picture by showing how a great many political and social traditions were invented during the three or four decades before the First World War. Even if he does not connect the new interest in the past directly to changes in industrial production, but rather to the decline in old traditions and the democratisation of politics, his analysis is related to the modern project of which the industrial past then formed a part as well.

The period between the second and the third industrial revolution, approximately from the 1930s to the 1980s, is termed by Maths Isacson “the high industrial period.” With a peak in the decades around the mid-20th century this period shaped images of the future that, to a minor extent, included references to the past. Instead, the future was marked by social and
material progress that conquered space and transformed everyday life with materials such as plastic, concrete and asphalt.\(^{18}\) Furthermore, in the 1960s and the early 1970s, the real breakthrough of futurology occurred, that is, research about the future.\(^{19}\)

The third industrial revolution, which was connected to the structural crisis that had its major impact during the 1970s and 80s, was marked by flexible specialisation, increasing consumption and global markets.\(^{20}\) The form of production that developed has been called the “network factory” and from this period onwards, the symbolic values of products have become almost as important as the actual price.\(^{21}\) If the unit factory correlated to the class society and a buy and sell relation, the network factory of the third industrial revolution correlated to the consumption society, where the production process no longer was the centre of interest, but rather what was possible to sell.\(^{22}\)

By avoiding the term “post-industrial” and instead labelling the changes of the 1970s and 80s a third industrial revolution, a number of economic historians emphasise a continuing industrial production as the basis of society.\(^{23}\) They assert that the concepts of post-industrial or “post-modern,” often used to describe the contemporary society, set a misleading and too strong focus on the differences between the periods before and after the 1970s. A similar argument is proposed by David Harvey, who suggests that “even though it has been a ‘sea-change’ in cultural as well as in political-economic practices since around 1972” these changes “appear more as shifts in surface appearance rather than as signs of the emergence of some entirely new post-capitalist or even post-industrial society.”\(^{24}\) The key question seems to be not if the 1970s brought thorough changes, but if these changes are to be labelled something including the prefix “post,” and by that indicating a break and a focus on what no longer characterises society. Some of the discontinuities of the late 20\(^{th}\) century have been stressed by Zygmunt Bauman who draws attention to all these people who believed they were “forever settled” in a place – be it in geography, in society or in life – and who woke up just to find it no longer existing or accommodating, while neat streets “turn mean, factories vanish together with jobs, skills no longer find buyers, knowledge turns into ignorance, professional experience becomes liability, secure networks of relations fall apart and foul the place with putrid waste.”\(^{25}\)

For this study I have chosen to comprehend the Western society since the 1970s as characterised by a third industrial revolution, including profound changes as well as seminal continuities, as well as images of the future that have became subject to change. The optimistic expectations of the 1960s were, during the following decades, replaced by notions about the future more often based on references to the past. A general Western questioning of society, fast changes in the industrial landscape and structural crises contributed to a greater awareness of, and interest in, the past.\(^{26}\)
other things, attention grew in giving industrial milieus and artefacts status as history and heritage, although the opposite was also present. The industrial archaeologist and museum critic, Kenneth Hudson, wrote in the introduction of his book, *The industrial past and the industrial present*, published in 1967, that “people who recommend that money and time should be devoted to the history of technology can all too readily be accused of fiddling while Rome burns.” However, Hudson continued to assert that technological and business history “is a source of strength, not of weakness.” Parallel to the redundant factory being seen as a potential museum object or heritage site, a commercially driven adaptation of the outdated industrial built environment within the realm of city planning and regional development took place. In the latter case the goal was often the creation of fancy stages for cultural events or providing urban areas with fashionable apartments, based on a new appreciation of industrial aesthetics. In these various reinterpretation processes the bright and dark aspects, the duality of the factory, became emphasised or neglected according to the notion of the past sought after.

![In Lowell, Massachusetts, in the United States, some of the former textile mills have been converted into museums or heritage sites (left), while others are being reused as office space or apartments (right). Photos: Anna Storm, 2005.](image)

To conclude, in the contemporary consumption society that followed the third industrial revolution, there are places which, in their meaning and their materiality, are marked by a post-industrial situation – places where industrial production once happened but no longer does. These places are my object of investigation. And even though there, more or less, has always been abandonment of outdated structures and buildings, as well as adaptation and reuse, this study asserts that the reinterpretation and reuse of industrial places in the late 20th century is a significant feature of investigation in an attempt to understand how, during this period, the Western world has related to its past and its future.
Reinterpretation of an industrial place

Reinterpretation is a concept closely connected to the hermeneutic circle, which describes a perspective concerned with the achievement of knowledge and understanding. The hermeneutic circle has two main stages, one during which the human subject finds itself close at hand, within reach of the details, and one where he or she takes a step back to a position from which the totality is discernable. The detail affects the understanding of the totality, which in turn implies a new understanding of the detail. The hermeneutic circle thus becomes a spiral moving between detail and totality positioned in layers towards an increasingly richer or fuller knowledge and understanding.\(^{29}\)

Interpretation and reinterpretation correspond to the dialectic between detail and totality. One level of understanding, that is, one interpretation, is continuously replaced by a new level of understanding, that is, a reinterpretation has taken place. The reinterpretation becomes established and turns into the valid understanding or, in other words, the legitimate interpretation. The use of reinterpretation as a theoretical concept for this study thus implies a search for understandings that in some respects are regarded novel and challenging in relation to the previous interpretation.

Another central dialectic is that between explanation and understanding. The interpretive process begins and ends – the point of departure and also the goal – is understanding. Explanation, however, constitutes a necessary step back from the subjective position, and by means of distance, a critical perspective is made achievable.\(^{30}\) Paul Ricoeur, who explored the relation between time and narrative and also the relation between memory, history and forgetting from an interpretative perspective, expressed, as an old man at the turn of the 21\(^{st}\) century, his fears for too much of both memory and forgetting in a society he found obsessed with commemoration activities. Taking his point of departure in some of the most difficult events of the 20\(^{th}\) century, such as the Holocaust, he asked for a legitimate politics of the memory.\(^{31}\) He thus positions himself, certainly not as a positivist, but as a critic towards a too relativistic approach. Some interpretations are better than others. There is no absolute truth, but – as in legal processes in court – neither complete relativism or arbitrariness. A critical hermeneutic approach hence makes it possible to regard the reinterpretation of the industrial place as a political activity and furthermore to unite a consciousness about historical continuities with a search for challenging attitudes. The contemporary use of the past, of history or heritage, has always in a broad sense political implications.\(^{32}\)

In this study the reinterpretative perspective is valid for how I understand and describe the investigated actors and processes, but also for how I regard my own researching activity. Reinterpretation is thus to be considered relevant theoretically as well as methodologically, and also constitutes an underlying narrative frame in the following chapters.
What then characterises the object of reinterpretation in this study – the place in a post-industrial situation? While the industrial context has been dealt with above, it is now time to turn to place as an entity and an arena of investigation. If the historians and economic historians were the principal guides to my understanding of industry, geographers are the prominent figures in the following. According to Yi-Fu Tuan, geographers have approached the study of place from two main perspectives, and from my point of view it is possible to relate these to the hermeneutic approach.33 One perspective regards place as a point in a spatial system, which could correspond to the reinterpretative stage of seeing from a distance, trying to understand the larger picture. The other perspective regards place as a unique artefact that can be experienced by the senses, which hence corresponds to the reinterpretative stage of being close at hand. Somehow confirming this understanding, Tuan rhetorically asks if it is “possible to stay close to experience in the study of place and yet retain the philosophical ideal of systematic knowledge?” and immediately answers “yes” with the qualification that the key lies in the nature of experience.34

What is then the nature of experience? In order to develop a “sense of place” in Tuan’s terminology, one must also know the past – one’s own past preserved in the built environment as well as that of the village or city. He thus emphasises how a place can be constituted by memory and history, objectified in things that can be seen and touched.35 Ricoeur expresses something similar when he claims that “places ‘remain’ as inscriptions, monuments, potentially as documents”, and that buildings could be “inscribed in urban space like a narrative within a setting of intertextuality.”36 Also Doreen Massey suggests that memory is fundamentally spatial in character, because the real events of the past, to which the memory refers, have actually taken place some time and somewhere.37

A connection between place and memory in terms of meanings of the materiality can thus be established. What are the possible consequences of this link? David Harvey refers to an idea of a contemporary rootlessness that could possibly be met by the security of the home, that is, a place where personal memories are firmly established in the materiality. His own argument is, however, that despite how seductive this might sound, one has to be cautious. By asserting the familiarity of the home as a secure place in which to be in a changing world, one probably also includes strong elements of exclusiveness, neither possible nor wanted in Harvey’s vision of society. Another potential outcome of the correlation between place and memory is suggested by Kevin Lynch, who takes his point of departure in people’s perceptions of the city environment. Lynch argues, “the external physical environment plays a role in building and supporting [a personal] image of time” and “a desirable image is one that celebrates and enlarges the present while making connections with past and future.”38 In this way Lynch stresses the positive opportunities of a
time dimension in the experience of a place, not limited to the idea of a safe home. However, he notes that when a “place changes rapidly […] people no longer ‘know how to behave’” hence identifying the novel and unpredictable character of the reinterpretation activity.39
1. INTRODUCTION

When one is not sure of where one belongs, questions of identity, connected to both time and place, appear. Reinhart Koselleck asserts that the divergence between the space of experience and the horizon of expectation has increased in modern society ever since the mid-19th century. The possibility of orientating towards the future on the basis of past experiences has thus successively diminished. Although identity is a noun it works like a verb, something that has to be created, changed or maintained, which Bauman describes as a “project.” The meaning of places can thus be regarded an issue of fundamental importance, while the solidity of identity, according to Bauman, has been lost in contemporary society.

Memory and expectations of the future are thus related to place, and are, in addition, the basis for the selective and interpretative actions leading to what we call history. History differs from fictional stories in its claims of telling about the past in a way that corresponds to a bygone reality. In this way history becomes a kind of verified memory, but which is nevertheless created to meet contemporary needs and ideals. Corresponding to the relation between memory and history, I suggest that a designated industrial heritage – one way the place in a post-industrial situation has been given new meaning – can be regarded as a selected and confirmed memory of the industrial past. The political aspects of a reinterpretative act thus include not only explicit notions about what has really happened, but also agreement or conflict about what is to be regarded important and appropriate.

While time is partly examined above as an important aspect connected to orientation and identity, it is in addition relevant for social relations. Massey asserts that places are in fact processes, and as such, moments in a network of social relations and understandings. I agree with this description and suggest that this is yet another facet of the reinterpretative perspective. When every new moment in a network of relations and understandings, in some sense, is a new place, the place is continuously created in a process of interpretation and reinterpretation.

To conclude this discussion about place and its relevance in trying to understand the reinterpretative activities connected to the materiality of the post-industrial situation, Harvey notes that place has to be one of the most multi-layered words in our language, while Tuan asserts that places are the centres of meaning. I believe both depictions are useful and enlighten the complexity of the concept of place. It is therefore not surprising that the late 20th century has witnessed an intense struggle over the meaning of certain places. What is its symbolic quality, how could it be used or changed, for instance, when searching for a new identity or cultivating a marketing image? The place in a post-industrial situation – a material reality loaded with meanings – hence becomes a prime empirical source for the detection and analysis of the reinterpretation processes.
Delimitations

The empirical focus chosen for this study is former iron and steel industry, located in heavily industrialised regions where metal manufacturing once formed a backbone in the community. Furthermore, iron is a material which carries centuries of narrative layers. From the Eddic poems to the iron of modernity, the material comprises both the good and the evil. The 20th century steel works are furthermore closely connected to the branches they have served: the railway, the building industry, the armaments industry and the car industry – corresponding to communication possibilities, skyscrapers, weapon systems and the car society.

One could object that this empirical choice reflects a Western stereotype of how industry is and has been understood, among other things, in terms of company towns with a skilled male workforce struggling in a hard and dangerous environment. However, this is on the contrary the main motive for the delimitation. The simplified picture is to be regarded here as emblematic and thus a significant object for reinterpretation when a post-industrial situation has occurred, not the least when today’s making of semi products most often lack the national glory that earlier marked the iron and steel industry in many countries.

It could furthermore be asserted that such a large extent of the reused industrial places so far represent either textile mills or storage buildings and
that the specific characteristics of these building types therefore should be put at the forefront.\textsuperscript{48} Michael Stratton has made a distinction between what he calls conventional buildings, like a mill or a warehouse, and process-specific industrial structures, like an iron and steel work, pinpointing the latter as being more difficult to reuse.\textsuperscript{49} These special reuse challenges will, together with the emblematic conception, on the contrary make a former iron and steel plant a particularly interesting empirical object to investigate.

The former iron and steel structures, examined in the following, have been subject to reinterpretation and reuse in order to meet public and private interests, and this study attempts to look at both. The division in interests mirrors different actors and goals, but is also a tool to analyse two different logics influencing the changes. The public logic here concerns reuse for museums and educational purposes and is articulated in terms of a search for a confident identity and a sustainable future society. The private logic, on the other hand, concerns reuse for housing purposes and commercial entertainment and is expressed in image building and tourism strategies. The two logics interrelate and overlap, not the least in how public bodies lately have begun to be more actively involved in local trade and industry development. Nevertheless, the division helps the observation of, for example, professional fields that act in different arenas, like the fields of heritage and planning respectively. Taking the two logics into consideration has meant a broader spectrum of previous research to relate to, while many academic disciplines deal with only one of the aspects. The balance between the two in this study implies overweight for the public logic and the heritage perspective, while, for example, the economic prerequisites within the planning perspective are more rudimentarily treated.

I have chosen a geographical focus on the Western world, meaning Western Europe and North America. Here, an abundance of places in a post-industrial situation was one significant consequence of the third industrial revolution and so a feature in a wealthy society that had to be managed on a large scale. Within these overall boundaries, the former industrial area of Norra verken – later renamed Kopparalen – in Avesta, Sweden, is investigated at a detailed level. Two other places, the Ironbridge Gorge Museum in the Midlands of Britain and the Landschaftspark Duisburg-Nord in the Ruhr district of Germany, have – in line with the hermeneutic approach – also been examined in some depth, putting Avesta in perspective. In addition, a number of reinterpreted industrial places appear in the study, to contradict or to strengthen the main arguments, among them Norrköping, Eskilstuna, Gothenburg and Stockholm in Sweden, Helsinki in Finland, London in Britain, as well as Lowell, North Adams and Baltimore in the United States.

The time delimitation is approximately from the second half of the 20\textsuperscript{th} century to 2007. While the emphasis is, however, on the latter decades, the main analysis focuses on the different places and activities during their
1. Introduction

respective establishing phases. This implies a slightly displaced chronology that has to be taken into consideration in terms of the spirit of the time apart from the national and regional characteristics.

Previous research

Various traditions within different disciplines are of relevance for the present study. While some of them comprise political dimensions, others have the character of action research and all are marked by national characteristics.

The reinterpretation processes of the three industrial places that are examined more closely have not, as far as I know, been previously investigated. The story of how the industrial areas of Avesta, Ironbridge and Duisburg became reused for museum purposes, leisure activities and offices has been told by the leading actors themselves in the form of project programmes, evaluations and shorter articles, but not in a thorough manner by an independent scholar. Although the present investigation does not offer such an all-embracing examination since the questions are too specific, within its limitations it still constitutes a first attempt to analyse three intriguing local processes.

Another ambition of this study is to put together elements that have earlier mainly been looked upon separately. The materiality of the post-industrial situation has opened for an investigation where there is no ready-made frame of understanding. This is partially due to its amalgamation of a legacy of the past, an uncertain present, as well as visions, hope and fear of the future. The empirical material as well as the theoretical perspectives have thus had to establish connections between different arenas in order to deal with the research questions. I have for example chosen to treat the professional perspectives of heritage and planning as parallel and interrelated. In addition, I attempt to understand the activities of industrial archaeology, ecomuseums and dig-where-you-stand study groups as parts of a popular appeal established in the 1960s and 70s. Moreover, I explore the changing meanings of location and design as they have been asserted from below as well as an expression of gentrification. Since most of the Swedish historical research is presented only in Swedish, this study also contributes to the access of a Swedish body of literature in the field. The dig-where-you-stand activities have, for example, not been presented to non-Swedish speaking public before.

A contemporary approach towards the processes where urban and industrial places and landscapes change meaning is represented within several disciplines, among them anthropology, human geography, sociology and urban planning. I am especially influenced by Sharon Zukin’s investigations about how former industrial buildings in cities and towns in the United States have been turned into housing, galleries and museums in a gentrification process. Two other researchers who have a profound impact
on my understanding are Dolores Hayden and Kevin Lynch. They explored ordinary peoples’ experiences of the urban built environment, its changing appearance and meanings from perspectives that focused on time and power relations. Furthermore, in a more prescriptive manner, Tim Edensor’s mission to upgrade the official recognition of industrial ruins with examples mainly from Britain has been encouraging reading. Edensor argues that abandoned industrial places are not empty and useless, but instead necessary counter-areas within an all too well organised contemporary society. As such, they can question normative regimes of memory and materiality. My ambition has not been elucidating to what extent different perspectives are, possibly, inconsistent. Instead, the referred researchers have functioned as guides in my attempt to understand the empirical material.

In the research on industrial heritage, Marie Nisser established many of the essential perspectives – among them the need for international comparison – on which this study is based. She has additionally pioneered the articulation of an international historiography. The group of doctoral candidates Nisser supervised, and to which I belong, furthermore influenced the directions of my research, especially concerning how the physical environment can constitute a mine of empirical material. The present study hopes to contribute to this field of interest by situating the efforts to recognise the industrial past in relation to an understanding of three industrial revolutions. In addition, the theoretical approach of a hermeneutic understanding of place, along with the use of concepts such as liminality and gentrification is new to the field.

Three Swedish dissertations deal specifically with the reinterpretation of the industrial place. Annika Alzén investigated how a centrally located industrial area in the Swedish town of Norrköping successively became looked upon as cultural heritage during the period from 1950 to 1985. She asserts the process consisted of four phases, of which she explores the first three. The fourth phase which starts in the mid-1980s is characterised by Alzén with a “dramatisation” of the past in order to attract new activities to the former industrial area. In a critical way, the Norrköping case inspired the present study and the series of events described in Avesta chronologically follow on from where Alzén’s investigation ends.

Johan Samuelsson explored public historical narratives as they were expressed in the museum of the Swedish town of Eskilstuna from 1959 to 2000 in different exhibitions and events. On this basis he analysed the shaping of a municipal identity. During the investigated period, Eskilstuna changed from being an industrial town to a more diverse urban centre in a newly formed municipality. At the beginning of the 21st century, the museums of Eskilstuna were mainly located in former industrial buildings and the investigated narratives are thus also relevant with regard to the built environment. The Eskilstuna study comprises a group of key actors consisting mainly of politicians, civil servants and museum curators. It does not include,
for example, local history societies or private companies, something that the present study attempts to touch upon.

In conclusion, Gabriella Olhammar analysed a degenerated industrial area in the Swedish city of Gothenburg at the turn of the 21st century with the concept, “permanent-provisional state.” Her investigation is relevant to the present study in many respects, among them through the careful description of a place in a liminal situation – being in-between in time and space – open towards reinterpretation. Olshammar asserts, although in other words, that the liminal state has in fact become the new legitimate interpretation of the industrial area. All three dissertations mainly relate to the local and the national scale and thus differ from the present study, which aims to deal primarily with the local and the international level, and their interrelation.

Sources and source criticism

For the investigation of the reuse process of the former industrial area of Norra verken/Koppardalen in Avesta, Sweden, I used written sources kept in the ATA archives (Antikvarisk-topografiska arkivet) at the Swedish National Board of Antiquities, the municipal archives in Avesta, the archives of the local newspaper, Avesta Tidning, as well as the archives for the Johnson group of companies located in Ängelsberg. I mainly searched in these four archives for material directly concerning the industrial area. More recent municipal documentation including for example meeting protocols, broadcast recordings and video recordings that were not at the time filed away, I was able to find stored in the town hall in Avesta. I conducted fourteen interviews, participated in one meeting with a group of veteran iron and steel workers, and had numerous informal chats with people in Avesta. With regard to the conversations and interviews, the actors placed additional written sources at my disposal. Furthermore, I made use of photos, paintings and maps in combination with on-site observations on ten different occasions over a period of four years from 2003 to 2006.

For the study of the processes that have taken place in Ironbridge and Duisburg I combined in a similar way written sources with interviews and fieldwork. Privately owned published and unpublished documents about Ironbridge were placed at my disposal by Örjan Hamrin, Stuart B. Smith and Sir Neil Cossons. I travelled to Ironbridge once in the summer of 2006 for two days during which I visited eight of the ten individual museum sites of the area. In addition, I made use of the museum project archives located in the library of the Ironbridge Institute and interviewed three important actors.

Kersti Morger placed at my disposal privately owned published and unpublished written sources about Duisburg and the Internationale Bauausstellung Emscher Park. With the help of Tarmo Pikner I was also
able to use the reports produced within the research project “Flagships of the Ruhr.” I visited Duisburg twice, in the spring of 2002 and in the winter of 2007, each time for one day. Furthermore, I took part in a guided tour through the Landschaftspark Duisburg-Nord and conducted one interview with a key actor.64

For the analysis of heritage and planning perspectives, I used written documents that often functioned as both primary and secondary sources. While many of the books, conference proceedings and articles were placed at my disposal by Marie Nisser, who has a large private collection in the field, a number of titles were also found in public libraries and on the Internet.

My empirical material is thus, to some extent, filtered through the retrospect of a number of key figures. Their selective memories, their choice of which papers to keep, as well as what to inform about and exhibit, have undoubtedly affected my understanding and what I am able to tell. In contrast, at least with regard to Avesta and Ironbridge, there are several people who were able to give their, at times, contradictory versions, which hence increased the scope of my results.

The risk of misunderstandings in the interview situation due to language difficulties is, of course, always at hand. However, it is my impression that few misunderstandings occurred. Hopefully, any mistakes were corrected when most of the interviewees had the opportunity to read the text before its final version. The risk of misinterpretations due to a too familiar approach in the Swedish case is certainly also present and for me perhaps more difficult to observe. Since this aspect has been a matter of concern, I hope the Swedish readers corrected anything I may have taken for granted.65

Thesis outline

Following the first introductory chapter, chapter two investigates how the redundant industrial place was reinterpreted as heritage. The development of a professional heritage perspective is contrasted to radical activities within industrial archaeology, ecomuseums and dig-where-you-stand study groups of the 1960s, 70s and 80s, which challenged the official understanding of history and heritage.

In the third chapter we attend to the local level with a detailed study of the industrial area of Norra verken/Koppardalen in the town of Avesta in the Bergslagen region of Sweden. The industrial place is analysed with respect to its changing meanings connected to its changing materiality. While Norra verken/Koppardalen is also the empirical focus in the fourth chapter, the investigation here concerns the actors and their arguments in the negotiations about the local future. The main period of investigation in these two chapters is the late 1990s and the first few years of the 21st century.
A contrasting picture from Ironbridge Gorge Museum in the Midlands of Britain is launched in chapter five. Relating itself to the findings in Avesta, this chapter addresses questions about the articulation of industry in the heritage arena and about the local anchorage in a reinterpretation process. From Britain we move to the Ruhr district in Germany for yet another outlook. Chapter six examines the relation between a former industrial site – Landschaftspark Duisburg-Nord – the natural environment and the use of art respectively.

The results from the detailed study in Norra verken/Koppardalen in Avesta are thus put in contrast to two reused and reinterpreted sites that represent different geographical and period contexts. The periods in focus are the early 1970s when Ironbridge Gorge Museum was established and the early 1990s when the Landschaftspark Duisburg-Nord found its form. The sites in Britain and Germany were also chosen because they act as important icons in a historiography of the reinterpretation and reuse of former industrial places. Moreover, they were significant points of reference for the actors involved in the transformation process of Norra verken/Koppardalen in Avesta.

After analysing these three places, the seventh chapter attempts to supplement the professional heritage perspective sketched out in chapter two, with how professionals in planning, art and design approached the redundant industrial place. Taken together, a broader picture of the significance of the reinterpreted industrial place is suggested which has been known in its parts, but not, I claim, articulated in its entirety before. The thesis concludes with a section in which the various results are examined within a common frame of understanding.

The set of questions raised in this introduction are dealt with in all the chapters, and the structure, to some extent, corresponds to the theoretical and methodological considerations within the hermeneutic approach. This introductory chapter, which launches the conceptual pair of industrial revolutions and industrial pasts, as well as the heritage perspective of chapter two, could hence be read as a first suggestion of a broader pattern seen at a distance. Chapters three and four examine the texture of a local everyday reality in more detail. In chapters five and six, the sketched entirety and the detailed examination lead to the unveiling of new possible features characterising the reinterpretation of the industrial place in the late 20th century. Finally, in the seventh chapter the larger picture seen at a distance is revisited and enriched by new perspectives that did turn out to be crucial.

In combination, the different characters of the chapters hopefully renders the study a general relevance, contributing to our understanding of the materiality of a post-industrial situation – an understanding we will see is marked by hope and rust.
A team of workmen walk through the steel works area in the city of Chusovoi in the Ural mountains of Russia. The picture is taken at the beginning of the 21st century when a group of historians and heritage professionals visited the premises as one part of an international conference on the theme of industrial heritage. The visitors were unanimously thrilled to be able to see an operating Bessemer converter, a technique taken out of use in the Western world half a century ago and now shown in museums. However, the steel works with its Bessemer converter is also – evidently – the active workplace for a large number of people in Chusovoi, and in that respect not at all a place of the past. The pace of change, and consequently the experiences of what is past and what is present are certainly a complex issue, especially with regard to how redundant industrial equipment from more affluent parts of the world have often been dismantled and exported for reuse in Asian, Latin American or African countries. The places in a post-industrial situation hence elucidate material patterns in the contemporary global geography, and the third industrial revolution as having various implications depending on what point of view is chosen.

In the introductory chapter the conceptual pair of industrial revolutions and industrial past was launched, together with a critical hermeneutic approach of reinterpretation of the industrial place. One way the industrial place has been reinterpreted is as a heritage or memory site. In this chapter we look at the heritage profession as well as a number of heritage related organisations and phenomena that have come to influence the general understanding of the industrial past. The purpose is to outline a broader pattern relevant for the reinterpretation process seen through the lens of heritage, and the guiding questions are: How did industry become part of the established heritage? Who have, and who have not taken part in this process, and why? To begin with, the development of a general heritage perspective is briefly sketched out.
A team of workmen is on its way from a shift. Another team is visible further down the road. Chusovoi, Russia. Photo: Anna Storm, 2003.

The Bessemer converter represents a technology which, in many countries, is considered redundant and only to be found in museums. In other parts of the world, however, such converters are still in full production. Picture from Chusovoi, Russia. Photo: Anna Storm, 2003.
Development of a heritage perspective

Apart from personal and family belongings representing memory, when did a more general concern for the past emerge? A collective and societal attention to a bygone materiality created within a national framework, has developed during the last two centuries. In a first phase this consisted of the establishment of inventories, simply lists of buildings that were regarded valuable from a national historic perspective. In most European countries this phase of the articulation of an official heritage began in the mid- or late 19th century and three criteria dominated the selection: age, beauty and historical significance. Many countries explicitly defined the age criterion as a minimum. A building had to be at least of a certain age, usually fifty or a hundred years old, to be considered for heritage designation. There are certainly examples of both longer and shorter time perspectives. In Britain, for instance, the Royal Commission on Historical Monuments, founded in 1908, ended their scope in the year 1700, thus demanding that buildings must be at least two hundred years old to come into question. On the other hand, in 1970 the Ministry of Housing and Local Government set the official date limit for historical architecture to 1939 when they began to list inter-war buildings, consequently setting an age range of only thirty years.

The presupposed logical second step from inventory to protection and preservation, however, typically took several decades to realize. Hence, a second phase began during the first decades of the 20th century, characterised by the establishment of legislative instruments. However, the legislation was in general too weak to have any real influence on what was done to the listed buildings and instead it often depended on voluntary initiatives and the good will of landowners. In Sweden, a change in attitude towards older buildings and monuments, marked by a focus on social and economic aspects connected to an experience of thorough change and high growth rate was present in the 1920s. At the same time, intellectuals in Britain began to argue for the protection of rural parts of the country, which they saw severely threatened by growing cities and the consequences of increasing numbers of motorcars and thus tourists. Later, the Second World War became important for the diffusion of ideas of preservation policies between some European countries, among other things with lists of which monuments to safeguard, that were handed out to the combatants.

In the post Second World War years a third phase began, with the development of a professional practice followed by decisive changes in the approach towards the older built environment. The criteria for designating something as heritage were broadened and some tendencies are noteworthy here. The emphasis on the very old was stretched to also include the not so old. To an earlier focus on the large and spectacular was added an interest for the small and ordinary. The idea of heritage as a monumental building was replaced
The number of listed industrial heritage sites has increased dramatically during the last couple of decades. One site that was recognised early is Engelsberg ironworks in Sweden, originating from the late 17th century. Photo: Gabriel Hildebrand, RAÄ, 1997.

A site that heritage authorities are deliberating on at the present time is the Barsebäck nuclear plant in Sweden, built in the 1970s. The two nuclear reactors were taken out of use in 1999 and 2005 respectively. Photo: Bengt A. Lundberg, RAÄ, 2005.
2. HERITAGE, MEMORY AND POPULAR APPEAL

by a broader definition that embraced other building types and, for example, machinery and vehicles as well. Successively, whole landscapes and townscapes started to be recognised as heritage. The ongoing inventory work coupled with this widening of criteria led to inflation of designated heritage and, as a result, also to different kinds of ranking to support the professional priority of attention. Pierre Nora observed how it became impossible to predict what should be remembered and, as a consequence, the number of sites and artefacts connected to memory was enormously extended, and the memory institutions – of which the heritage institutions formed one part – were equally strengthened.

The heritage creation process in general relied on a few competing ideals, one of them concerning what was to be considered the most correct preservation policy. A well-known debate that arose during the 19th century, and stayed relevant during the 20th century as well, is associated with a couple of individuals; Eugene Etienne Viollet-le-Duc, John Ruskin and William Morris. The two basic principles could, in a simplified manner, be described as restoration to – what was decided to be – a building’s original shape or instead, minimal intervention with the purpose of leaving the building to change as a kind of living organism.

The first idea of restoration to original shape implies that there was a certain moment when a building appeared in a true way, and that this appearance should be the primary guidance to future owners and users. In practice, this means that features not belonging to the selected original shape, that is, elements added or removed, were to be replaced with elements analogous to the sought after shape. The second idea of minimal intervention looks upon a building as something that is born, grows, ages and dies. The role of the owners and users is therefore, when necessary, only to slow down the process of dilapidation through limited maintenance, stressing the value of patina and atmosphere. According to this view, a building should retain all its layers from the different periods of change.

The two ideals mark contemporary professional approaches to the built environment. To make a harsh generalisation, the first ideal could be related to professions such as architects and urban planners, who in this way demonstrate respect for the intentions of the original architect of the building, and attempt to create cities of “genuine” quality. The second ideal could then be connected to heritage professionals in general who care about all the traces from the past, with the aim of making them visible and understandable. Both ideals are represented in public and political opinions.

Probing into this seemingly easy division reveals that the attitude within the heritage professions is far more complex. The first ideal of restoring to original shape was apparent as official rhetoric and every day practice at least up to the 1970s. After this period, the heritage sector went through a radical transformation and the official rhetoric was dominated by the second ideal of minimal intervention. Nevertheless, many decisions in every day practice
remained influenced by the first ideal of an original shape. The reasons for
the survival of the original shape ideal are many, among others that it is often
regarded to provide superior aesthetics in terms of a homogeneous style, and
likewise pedagogical values in terms of clarity. Basic evaluation criteria of age
and beauty mentioned earlier were hence qualified.

When the industrial place has been reinterpreted as a heritage site, these
two ideals emerge as arguments in different actors’ opinions, for example,
when choosing to restore or create a site based on one frozen moment in time.
One example is to be found in the North of England Open-Air Museum at
Beamish, which was built to demonstrate an environment in 1825 and 1913,
in order to show the visitor a rural and an industrial society respectively.13
Also during the transformation of an industrial built environment to other
kinds of new use, for example, apartments or concert halls, the adaptive work
could strive to retain the present aesthetical impression or, instead, seek to
contrast existing features.

Together with a growing public awareness and appreciation of the
existing built environment, the widened conception of what constituted
heritage led to a shift in legislation in most Western European countries
during the 1960s and 70s. The radical political climate of the period was
mirrored in an emphasis on local management, on planning at the expense of
architecture, on milieus instead of single monuments and on considerations
of present and future use of buildings and areas. The public conscience then
favoured the small and old instead of the large and new, and the demolition
of residential and industrial built environments in many cities gave rise to
protest.14 A series of spectacular cases and polemic publications like “The
Erosion of History” and “The Rape of Britain” fuelled the debate.15 Two
demolitions that were brought to public attention, with implications for how
the heritage perspective was nearing industrial buildings, were the Euston
Arch and the Firestone Factory in London.16 The Euston Arch, inspired by
Greek architecture, constituted the original entrance to the Euston station in
London and was already threatened by destruction in the 1930s. After the
Second World War the issue was negotiated anew and the arch was finally
demolished in 1962, causing a storm of protest. The Architectural Review
characterised the event as “The Euston Murder.”17 The Firestone Factory was
a modernist building from the late 1920s, vacated and sold by the company
in 1979. Different heritage organisations requested its listing but the new
owners hastened, in fact over a weekend, to demolish it before the listing
could come into force. As a result, a large number of inter-war buildings,
including factories and power stations, were instead listed in great haste.18
The onset of the third industrial revolution thus demanded a new heritage
perspective with long lasting influences upon regulations and professional
practice, not the least with regard to remnants of industrial character.
Heritage and industry – a troublesome relation

Remains from the industrial past have been looked upon both in contrast to, and included in, these two hundred years of official heritage development. As noted in the introductory chapter, the factory and other industrial structures and artefacts initially made up the very contradiction to heritage. Annika Alzén compiled a list of major obstacles as to why industry could not easily be regarded cultural heritage. The factors she mentions are that industry and culture were regarded to be the exact opposites of each other, and that industry was seen as the emblem for the modern society. She also notes that the industrial remnants symbolised misery and poverty. Furthermore, industry was marked by change while cultural heritage was characterised by authenticity and constancy, and finally there were seminal economic and practical preservation problems. It seems as if almost everything spoke against the combination of industry and heritage. So how and where did they meet?

While the first industrial revolution brought about an interest for agricultural milieux, the second industrial revolution at the turn of the 20th century and next few decades entailed attention for the early industrial history in order to contrast the then modern industry. One peculiar example from the United States is the industrialist Henry Ford who in the late 1920s built a historic village outside Detroit in a nostalgic vision of a small New England town, which was also combined with a celebration of the great heroes of American industrialisation. The aim was in Ford’s words “to show how far and fast we have come” in a tone of optimism for the future, and which I understand as just another way to articulate the function of contrast.

The broader range of heritage criteria that accompanied the third industrial revolution was reflected in an increasing professional and public interest for industrial milieux as representing something actually belonging to the past. In 1973 a first international conference on the theme was held in Ironbridge, Britain, followed by a second conference in Bochum in the Ruhr district of Germany in 1975, and a third one in Grangärde of the Bergslagen region of Sweden in 1978. During the third conference, an international organisation was formed called “International Committee for the Conservation of Industrial Monuments.” The industrial place was, however, looked upon with scepticism and as a highly controversial heritage applicant from the point of view of many heritage organisations. Simultaneously, as the professional and public interest grew, the companies as owners and former users of the redundant industrial place seem, in general, to have taken a step back. When the built environment was no longer useful for practical purposes, the companies did not distinguish any other value. A possible history or historical image of the company dependent upon its material legacy was typically not identified.
Beside the “International Committee for the Conservation of Industrial Monuments,” international organisations dealing with heritage contributed to discussions around charters, conventions and codes of practice relevant for the industrial heritage. Their power to act was however quite limited. The impact, for example, of the World Heritage List, administered by UNESCO, has no doubt been profound, but probably not in connection with selection of the most important natural and cultural heritage sites in the world, but rather as a stimulus to national engagement, financing and legitimisation. The nomination process and the final appointment have for many industrial heritage sites enhanced their national prestige and possibilities of receiving financial support, partly through an increased number of tourists. The first industrial site to be appointed world heritage by UNESCO was Røros mining town in Norway in 1980, only two years after the very first world heritage designation. This official recognition was followed by the appointment of Ironbridge Gorge in Britain in 1986, Engelsberg Ironworks in Sweden in 1993 and Völklingen Ironworks in Germany in 1994. Specific for the number of industrial sites on the World Heritage List is that they, with a few exceptions, represent the three nations of Britain, Germany and Sweden, as well as the industrial branches of mining and iron and steel. This state of affairs further strengthens the relevance and emblematic character of the empirical focus in this study.

While international or world level interest has not been able to truly challenge the nation state as the main heritage-creating actor, regional and local perspectives have instead successively become more influential. To some extent, from the 1980s onwards this trend is the result of a more conscious way of looking upon heritage as an economic resource. History and heritage could serve as a kind of intrinsic value of a place, indicating continuity and distinctiveness, thus making it more interesting as a choice of location for companies and individuals, but also as a more direct economic asset in terms of property and as a base for tourism.

A new attitude

Does the broader definition of heritage criteria, the increasing number of redundant industrial places, a public experience of thorough changes and a few sites given official heritage status constitute an understanding of the entirety, the whole picture? Ola Wetterberg analysed a shift from “monument” to “environment” in Swedish building conservation during the early 20th century. He asserts the shift did not so much concern a difference in the kind of object that caught the heritage professionals’ interest, but rather concerned a difference in attitudes. The arguments for preservation that traditionally were mostly based on age, beauty and historical significance
during certain periods became supplemented or even exceeded by social and economic criteria. Wetterberg claims that this wider “environmental” attitude towards heritage prospered partly between 1900 and 1920, and partly in the 1960s and 70s. How was this change in attitude visible in the arenas where heritage and industry met during the latter period? In the search for an answer, I will, in the following, investigate the characteristics of three phenomena that implied a challenge to the established heritage structures: industrial archaeology, ecomuseums and dig-where-you-stand study groups. It is true that these activities emerged and flourished in different geographical and institutional contexts, but the fact that several individuals and ideas overlapped strengthens the relevance of trying to discern a larger picture. What marked the challenging attitude these phenomena represented, and which actors and arenas were involved?

In 1955 some enthusiasts in Britain asserted that industrial heritage was as valuable as any other heritage and invented the concept of “industrial archaeology.” This meant abandoned factories, old railway stations and derelict canals became identified as important by a greater number of activists. The activities of industrial archaeology were thus set in motion and grew during the 1960s. To a large extent the work was volunteer based and many times undertaken as a way of protesting against demolition, in a feeling that society was changing rapidly and thus destroying valuable traces of the recent past.

Examples of the activities in the 1960s include several conferences on industrial monuments, the publication of a journal and an introductory book, the BBC series of programmes on the theme, and the Council for British Archaeology that took on a National Survey of Industrial Monuments. The increasing interest also resulted in thousands of volunteer recordings of industrial milieus. Industrial archaeology also spread to Germany, France, Belgium and the United States.

In France in the early 1970s, an international movement striving to renew the idea of what constituted a museum, “new museology,” took shape as an experimental new museum type called the “ecomuseum.” The prefix “eco,” derived from the Greek “oikos” – meaning a house, living space or habitat – gives associations to ecology, ecosystem and economy. While these uses might suggest that ecomuseums primarily deal with the natural environment, this was however not the case. Instead, from the ecomuseum advocates’ point of view, while a traditional museum was represented by a building, collections, experts and a public, the ecomuseum was represented by a territory, heritage, memory and a population. It was a museum without walls, consisting of built environments still in their original location, scattered over a comparatively huge area, centred around a common theme and with a strong connection to local people and local development processes. The inauguration in 1974 of the Museum of Man and Industry, situated in the French district of Le Creusot and Montceau-les Mines in the southern part
of Bourgogne is often regarded as a starting point. Although France remained the foremost geographical centre, ecomuseums were formed in other countries as well, especially in Scandinavia and the French-speaking areas of Belgium and Switzerland. The keen reception by the Scandinavian countries can partly be explained by already existing networks of small museum sites that
resembled the ecomuseum concept, among them Husbyringen, a heritage and nature trail in the county of Dalarna in Sweden, developed in 1970.37 In France, there was a considerable growth in numbers of new ecomuseums in the mid-1980s, and when a plateau was already reached at the end of that decade about forty ecomuseums had been established in the country.38

The Swedish phenomenon “dig-where-you-stand” is said to have had its lightning spark in two books; Stiga vi mot ljuset: Om dokumentation av industri- och arbetarminnen (“Towards the light we ascend: On documentation of industry and workers’ memories”) by Gunnar Sillén and Gräv där du står: Hur man utforskar ett jobb (“Dig where you stand: How to explore a job”) by Sven Lindqvist, published in 1977 and 1978 respectively.39

Inspired by these two books, local study groups were established where people spent their spare time checking archives, conducting interviews and doing fieldwork in order to write the recent and local history of the ordinary people, in contrast to the history of the big companies. In general, perspectives of change and visions of the future were the mobilising forces. Sillén’s book was used as literature in over four hundred study groups in the late 1970s but was successively replaced by Lindqvist’s book.40 The latter was a handbook for amateur research, produced by one of Sweden’s biggest publishing firms, strongly supported by the press and sold in twenty-five thousand copies.41 The main phase of the dig-where-you-stand activities occurred between 1975 and 1985, and was characterised by intense work in the study groups, exhibitions and theatre performances.42 The interest thereafter diminished. It has been estimated that the number of study groups in Sweden between 1975 and 1985 reached ten thousand and involved about one hundred thousand people.43

Everybody’s history and heritage

How did industrial archaeology, ecomuseums and dig-where-you-stand study groups influence the then prevailing idea of history and heritage? One common denominator was the claim that everybody could – and ought to – participate in the creation of history and heritage. Storytelling was not an exclusive activity reserved for professional historians and museum curators. R. Angus Buchanan articulated this claim by asserting that industrial archaeology

is a study to which everybody can bring some expertise, whether it be the skill of the architect or engineer, the experience of the manual worker or housewife, or the craft of the teacher or historian, and expect to find a useful and rewarding field of investigation.44

For the ecomuseums, the focus was instead put on the museum as a process involving all the inhabitants of the region where the museum was active. At a
The book, Gräv där du står: Hur man utforskar ett jobb (“Dig where you stand: How to explore a job”), written by Sven Lindqvist and published in 1978, was a handbook for amateur research. It encouraged each and everyone to start writing their own local history, from a grass-roots perspective. Front cover: Bo Berling. Courtesy of the Bonnier group.
general level, Gregory Ashworth and Peter Howard suggest that heritage is to be understood more as a process than a product, while possible heritage is “all around, and can come into the process given the right circumstances.” The director of the Ecomuseum Bergslagen in Sweden, Ewa Bergdahl, formulated a vision for the future of the museum very much in line with this emphasis on the process. She referred to the body and soul of the museum as being the buildings and physical environment on one hand, and the local intellectual processes on the other. She asserted that the special identity of the ecomuseum was formed by being more of an idea than an institution, a process for the population and a mentality for museum professionals.

The dig-where-you-stand study groups went even further and asserted that the workers were experts of their work and therefore the best ones suited to write the history of that work. Since the upper classes were regarded to represent the enemy, a conflict perspective had to dominate the workers’ writing of history. The books by Sillén and Lindqvist were a combination of ideological appeals as well as concrete handbooks in documenting industrial milieus, and their purpose was to encourage each and everyone to write their own part of the history of industrial work. The title of Sillén’s book, Towards the light we ascend, was fetched from a paragraph in the Internationale, used by Sillén with an imagined question mark behind, but by most readers perceived with an imagined exclamation mark.

For industrial archaeology, ecomuseums and the dig-where-you-stand study groups, history and heritage were furthermore understood as having social and political implications. The early period of industrial archaeology was one of decline, and the public enthusiasm could partly be regarded as a way of contrasting and compensating the contemporary state of affairs with the glorious history of the early industrial revolution. The ambition with the ecomuseum was to widen the museum concept, from the artefact, and time and space, to encompass a fourth dimension, the society. Peter Vergo argued in the introduction to a book about the broader concept of new museology that “what is wrong with the ’old’ museology is that it is too much about museum methods, and too little about the purposes of museums.” The social role of museums was later developed, particularly in Portugal and Spain, while the mobilising and strengthening of the community was emphasised in the northern European countries. In France the museum concept was applied in attempts to convert former industrial sites and abandoned rural areas.

As a whole the endeavour of the new museology activities was to establish a consciousness about previous forgotten groups and cultures – the less privileged – such as ethnic minorities and industrial workers. In the dig-where-you-stand study groups a political ambition was obvious, because in many towns and villages the study group became an instrument in the fight against factory closedowns and threats of unemployment. This was expressed not the least through activities that extended into massive
local theatre plays involving amateurs as well as professionals. These plays, in Swedish “arbetarspel,” literally translated “workers’ plays,” typically based their story lines on actual historical events and findings from the research of the study groups. The plot was often one of a big strike or a similar decisive fight theme. Every part of the work with the play included both amateurs and theatre professionals in formally equal positions. One of the most well known workers’ plays depicts a strike in the Swedish mining village of Norberg. The play involved over four hundred people and summer performances were given outdoors for six years.54

Who were then the driving forces in the three phenomena? Was it primarily people outside the universities and established heritage institutions? The answer is both yes and no. In Britain, industrial archaeology was volunteer based. The priority of interpretation between amateurs and academics was nevertheless an area of conflict – in spite of the quotation earlier about a field “to which everybody can bring some expertise.” In some respects it led to a division where the amateurs stayed in the field with hands on recording and preservation, and the academics formulated their task as analysing the new knowledge in a broader historic context.55 In 1974, a national organisation was formed in Britain, called the Association for Industrial Archaeology, and according to Henrik Harnow, the division between academics and amateurs was still present in the beginning of the 1990s. The leading actors of the association at that time represented ambitions of high academic standard, although the majority of its members consisted of amateurs.56

Industrial archaeology in the United States differed from the activities in Britain in the sense that it did not involve a large number of volunteers or non-professionals.57 Instead, a variety of public and private organizations made up the actors of the field.58 The Society for Industrial Archeology in the United States was formed in 1971, although the starting point is placed four years earlier at a seminar where Kenneth Hudson, the author of the first book introductory on industrial archaeology, was the key speaker. The Society for Industrial Archeology from the beginning consisted mostly of professionals like museum curators, government officials in historic preservation and representatives of engineering societies.59 The establishment conference was held at the Smithsonian Institution in Washington DC and thus situated the society in a governmental context.60 Furthermore, the majority of the fieldwork was carried out by the Historic American Engineering Record, HAER, a federal agency that also offered “emergency recordings” and worked as consultant.61

For the ecomuseums the collaboration between amateurs and the often few employed museum professionals was emphasised, but also questioned.62 In general, the ecomuseums have involved a large number of volunteers, but the principal discussion about the sought after characteristics of the museum, was carried out among the museum professionals.63
In the dig-where-you-stand study groups, one basic idea was to de-
professionalize the interpretation of the past. This entailed that professional
historians criticised the extensive amateur research as lacking in understanding
of source criticism, as well as relevant research questions and context. In
addition, internal criticism directed towards the unorganised quality of
the activities also existed. Furthermore, many of the prominent fi gures
had a professional platform from where they raised the de-professionalizing
arguments. Sillén, for example, an architect employed at the National Board
of Antiquities, carried out a controversy against academics, museum curators
and antiquarian authorities about the priority of interpretation in history
writing, which caused an intense public debate.

Contexts of debate and diminishing radicalism

The three phenomena, industrial archaeology, ecomuseums and dig-where-
you-stand study groups, developed mainly within different contexts such as
archaeology, history of technology, labour history and museums respectively.
The very name of industrial archaeology caused a lot of debate – how was it
possible to put two such disparate concepts together? Among other things,
the archaeological approach was considered disputable for investigations of
such recent periods as the centuries following industrialisation. Although
questioned the name did remain, probably because in the end it revealed
more than it brought into confusion, by emphasising the fieldwork in
the material environment as a crucial technique. In the words of one of
the British participants at the third international conference on industrial
heritage, British industrial archaeology in the late 1970s was “certainly
alive but possibly somewhat confused.” A principal contradiction was
also present between, on one hand, those who regarded knowledge about
industry, technology and industrial architecture as the prime target of their
work, and on the other hand, those who focused on the social dimension of
the former working places. According to Marie Nisser, these two centres of
attention constituted the two main components of the field.

The Society for Industrial Archeology in the United States partly
developed as a kind of lobby organisation and consultant in city planning
connected to reuse of industrial buildings. In 1976 the society initiated and
sponsored a handbook about how to work with former industrial buildings.
In the society’s newsletter, the members were encouraged to suggest possible
case-studies for inclusion in the handbook defined as “[r]emodelings for
industrial, commercial, residential, and educational purposes […] as long
as they respect the original structure’s character.” In addition, the society
administered a register of consultants and firms that offered expertise
knowledge in the area of industrial archaeology.
Industrial archaeology also paved its way into the universities of both Britain and the United States with individual courses entitled “industrial archaeology.” The first class was run by the University of Birmingham in Britain in 1958. Fieldwork was carried out in Coalbrookdale – close to Ironbridge, which we visit later in this study – and in the early 1980s an institutional centre for the study of industrial archaeology and heritage was formed.\textsuperscript{72} In other countries the academic development was less pronounced.

Sven Lindqvist, the author of the book, \textit{Dig where you stand}, was inspired by industrial archaeology and one chapter in his book presents the activities going on in Britain. This chapter was also pre-printed in one of the major daily newspapers, \textit{Dagens Nyheter}, in Sweden and therefore reached even more readers.\textsuperscript{73} Lindqvist also gave a lecture on the topic at the third industrial conference on industrial monuments in Sweden in 1978, the year his book was published.\textsuperscript{74} However, the dig-where-you-stand study groups never established a formal organisation, even if the educational organisations within the trade unions formed a kind of backbone for the activities.\textsuperscript{75} Gradually, the activities found a form and the radical aspects diminished.\textsuperscript{76}

It is sometimes asserted that the activities of the dig-where-you-stand study groups were in a kind of way prolonged in so called “work life museums,” although some investigations contradict this.\textsuperscript{77} These work life museums, or work place museums, are run by volunteers, often former workers, and are based in former industrial buildings. According to Ewa Bergdahl, these volunteers keep a lot of tacit knowledge alive concerning certain machinery and work procedures, but the stories they are able to tell lack many important pieces if one is attempting to understand industrialisation, especially in terms of large scale industrial processes and infrastructure.\textsuperscript{78} In general they do not represent a political force, striving for revision of the official history. At the beginning of the 21\textsuperscript{st} century, the number of work life museums in Sweden was estimated to be more than one thousand.\textsuperscript{79}

Finally, many of the ecomuseums, and especially those founded early in the 1970s and 80s, were established in former industrial regions and dealt directly or indirectly with themes related to industrial or technological processes and de-industrialisation.\textsuperscript{80} The ambitions of the museum professionals adhering to the visions of new museology strived to turn the past into a social resource with emancipatory possibilities. The ecomuseum challenged the established institutions in some countries, while the new museology ideas took shape under other headings elsewhere, such as neighbourhood museums in the United States and open-air museums in Britain.\textsuperscript{81}
This chapter asserts that industry became part of the established heritage partly by means of a new attitude and a widening of criteria within the heritage profession throughout the 20th century, and partly by activities like industrial archaeology, ecomuseums and dig-where-you-stand study groups which in the 1960s and 70s challenged existing ideas and practices. The radical spirit of the last-mentioned period, together with rapid changes in the industrial landscape, formed two important prerequisites for the growing public and professional interest in the old industrial environments. Common denominators for industrial archaeology, ecomuseums and dig-where-you-stand study groups were the emphasis on everybody’s right to take part in the history and heritage creating process, and the understanding that history and heritage have social and political implications. In all three phenomena, the relation between heritage professionals and those who, in this respect, were amateurs, was also an issue of debate. Many times the driving forces seem to have been individuals with a professional platform, although the activities involved large numbers of volunteers.

The redundant industrial place was recognised and its value asserted in the different heritage related contexts of archaeology, history of technology, labour history and museums. During the late 1980s, it seems as if the radical aspect of the activities – where it had been prominent – diminished. This change was perhaps most clearly discernable in the dig-where-you-stand study groups. However, the tendency is strengthened by other indicators, for example, the plateau reached in creation of ecomuseums in France as well as the formation of an academic centre for the study of industrial archaeology and heritage in Ironbridge, Britain. The industrial past had, I believe, been incorporated into the heritage arena, together with some challenging ideas, while other parts of the radical agenda were left out. Hence, the industrial place also lost some of its difficult character, and the dark and problematic aspects were reinterpreted to fit into the new understanding of heritage.

While this chapter attempts to outline a broader picture of a heritage perspective related to the reinterpretation of the industrial place, the following one looks more closely at the details, to the stones and bricks of a local materiality in a post-industrial situation. The place for this investigation is the Norra verken or Kopparalen industrial area in the company town of Avesta in Sweden.
HERITAGE, MEMORY AND POPULAR APPEAL
The bison

In a square in the town of Avesta, Sweden, stands a bison sculpture made of stainless steel. It is male, muscular and slightly oversized compared to its living model. The pedestal is built of dark green slag stone, and on a signpost the passers-by can read that the bison represents timelessness and strength, just like stainless steel is said to stand for strength and immortality. The European bison has taken on different roles in Avesta. During the first half of the 20th century, there were about ten live animals that were being cared for in a fenced park just outside the town by the owner of the local iron and steel company. Throughout the entire century the company brought customers to the park to see the impressive animals. The visit, together with a dinner of roast bison and perhaps a gift in the form of a small bison sculpture, was supposed to influence the customers when they later were about to choose an iron and steel contractor.

In 1952 the bison was incorporated as the fundamental element of the company’s logotype, and soon it became a valuable trademark. The idea of the similarity between the bison and the stainless steel, the strength and the immortality, sent a clear message to the customer. The value of the bison can be illustrated by the fact that throughout the 20th century the company employed a special bison keeper. In addition, for more than three decades, the company had its own artist whose main occupation was to create sculptures and fancy goods in stainless steel, with the bison as the most frequent theme. When the company was to inaugurate a new sheet rolling mill in 1976, the large stainless steel sculpture was unveiled and placed on a small hill just outside the company’s industrial area, clearly visible from the road which carried most of the traffic passing through Avesta. Until 1989, when a new through road was built, the bison sculpture functioned as a landmark and distinctive feature for the town.

From 1984, the iron and steel company began to merge with other companies and, gradually, the once strong connection between the industrial management and the town of Avesta weakened. The iron and steel company, that at the most had employed 3 600 people in the late 1960s, had a workforce
of about 1 000 twenty years later. From the 1980s the number of inhabitants began to decrease and at the beginning of the 21st century there were about 22 000 people living in the municipality, one third of which in the central town of Avesta – a reduction of about 5 000 people. While Avesta is located 160 kilometres northwest of the Swedish capital of Stockholm, the time
distance for train commuters is approximately one and a half hours. Beside
the iron and steel works, now with a Finnish owner and named Outokumpu,
one larger industry, the cardboard factory Stora Enso Fors Bruk AB employing
730 people, is situated fifteen kilometres outside Avesta and like Outokumpu
dominated by a male work force and with a foreign owner. Avesta is still
labelled an industrial municipality, in spite of the fact that the public sector
employs more people than private industry. The number employed in large-
scale industry is, however, comparatively high, 29 percent, while the number
of small entrepreneurs is far below national average.

In 2001 the European bison disappeared from the logotype. The company
also removed the sculpture from its hill, which caused an indignant reaction
from the inhabitannts of Avesta. The local manager however assured that the
bison was in safe keeping and would to be placed elsewhere in the town. If
it not had done so before, the company then became aware that the bison
had not just been a trademark but had also become an icon for the town. In
consultation with representatives for Avesta municipality, the iron and steel
company decided to move the sculpture to the square between the town hall
and the shopping street, that is, the most prominent place of the town.

The company symbol had become a symbol for the town, and one of
its material expressions, the stainless steel sculpture, was in a physical sense
moved from the industrial area to the town centre. The European bison that
for half a century had represented work and the future would through its
move represent a new future with the past as a reference. Another paragraph
on the signpost close to the sculpture is illustrating: “To the inhabitants
of Avesta the bison became a symbol for continuity and confidence in the
development of Avesta society [...] In 2001 the bison disappeared from the
company logotype, but in the hearts of the people of Avesta it will always
remain.” The wording shows that a symbol can remain constant while at the
same time its meaning does change.

In Avesta, not only the bison as a symbol became subject to change,
but also the industrial area where the iron and steel company was originally
established, and where previously there had been a copper works. In the
following, the changing meaning and changing materiality of this industrial
area is investigated. What has characterised it in a physical sense, how has it
been looked upon and used?

A place in the forest, along the river

Avesta industry has for centuries been centred on forestry and metal industry.
In 1636 a copper works was established on a site along the river Dalälven.
The ore was transported from the copper mine in the town of Falun, about
seventy kilometres northwest of Avesta. Besides producing raw material for
household goods and roof plates, for a long time all Swedish copper coins were manufactured in Avesta. The main localisation factor was the two falls in the river that were used as a source of energy. The chosen place was also beneficial with regard to exportation of products through the harbour city of Västerås, and because of the surrounding woodland needed to make charcoal to fuel the smelting processes. At the end of the 18th century the copper works was internationally known for its size and advanced technology, and had no counterpart in Sweden and perhaps not even in Europe.

In many aspects Avesta and its early development followed a more general pattern. Previous to the development of the electricity transmission system – in most Western countries up to the end of the 19th century – industrial production, as a rule, had to be located close to waterpower, that is, a stream or river with a sufficient fall height. Furthermore, an ideal location included proximity to the raw materials, be it ore, metal, flax or rags, and to transport possibilities such as waterways, and later railways and roads. For industry dealing with copper and iron another source of power, namely charcoal or coke to fuel the smelting processes was necessary for a long time. Charcoal, which was made of wood and was very brittle, could not be transported longer than a few kilometres. In order to supply a blast furnace a surrounding forest or available deposits of coal to make coke were hence needed. For the charcoal based production, this meant that the metal industry had to be spread out in order to share the resources of the timber.

In general, within the industrial area the different buildings and structures were organised with regard to the production process, to the raw material coming in, being treated, manufactured, finished, stored and transported to further manufacturing or selling. Each step in the production process often took place in its own building. Between the buildings were transportation systems, specifically designed for the material or product that was to be moved, for example, track based wagons moving ore from the ground, or aerial ropeways moving charcoal from storage barns, two systems that ended at the top of a furnace.

A system which supplied the industry with raw materials, power, transportation and a workforce was formed around the industrial area. The housing for owners, management and employees was an easily recognisable feature around most industrial places, often designed in integration with other important functions in society like schools, shops and religious buildings. Places with a certain homogenous economic and spatial organisation that put the factory in the very centre are sometimes called company towns.

In Avesta the refining of copper successively diminished in importance, and in 1869 it was replaced by iron making. In 1883, the company Avesta Jernverks AB was founded. An ironworks, modern for its time, was established comprising all the parts of the process from ore to plate. Here were the blast furnace plant, an open-hearth plant, rolling mills, foundry and
3. Koppardalen in Avesta: CHANGING MEANINGS, CHANGING MATERIALITY

The old industrial community of Avesta in 2002. To the left is the old workers’ housing area with the church in the middle, and one can also glimpse the manor house. Further to the right is the northern works industrial area, Norra verken or Koppardalen. The whole area borders on the river, Dalälven, to the north, and on the present town centre to the south, from which it is separated by a road and the railway. The picture is taken from the west looking east. Photo: Jonas Palm, 2002.

The ironworks of Avesta in 1912. To the far left is a row of coal barns, and the three gables in the middle are different rolling mills. The blast furnace plant is located behind the rolling mills. To the right is a plate rolling mill. The whole area is criss-crossed by rails and other transportation systems. To the right flows the river, Dalälven, while the waterway in the middle is called Flaten, a creek of the river. The picture is taken from the east looking west. Photo in ENC.
Map of the town of Avesta. From the mid-20th century, the old industrial area located along the river, Dalälven, was called the “northern works,” or in Swedish, “Norra verken,” to distinguish it from the new industrial area located south of the town centre, the “southern works.” To the left of the northern works is the old industrial community, with workers’ housing, a church and a manor house. The border between the built environment along the river and the new town centre is marked by a road, the railway and a difference in altitude of fourteen metres at the most.

1. The initial site of the bison sculpture (1976–2001), located on a hill outside the main industrial area and along the through road of that time.

2. The present location of the bison sculpture, after its 2001 move to the main town square in front of the town hall.

3. One of the famous Finnish architect Alvar Aalto’s few buildings in Sweden is to be found in Avesta, the “Sundh centre.”

mechanical workshop. The first blast furnace was ready to use in 1874 and stainless steel began to be manufactured in 1924. At the end of the Second World War the ironworks employed approximately 2,300 people and in the 1960s the number had risen to 3,600.

The copper works had been established on a long narrow piece of land along the south shore of the river, and the ironworks later took over and expanded within the same area. At the end of the 1930s, almost all the land within the industrial area had been used and to ensure continued expansion the company planned to tear down a nearby workers housing area. However, through the use of electricity transmission it instead became possible to establish a completely new industrial area, south of the town centre and separated from the river. The new area was called “the southern works” and the old area consequently started to be called “the northern works,” or in Swedish “Norra verken.” In the 1950s – delayed because of the Second World War – Avesta Jernverks AB started to move its production units from the northern to the southern works. At least for Swedish conditions this seemed to follow a general pattern. Up to the 1950s, factories as a rule were located close to the city centres while the industrial areas thereafter normally became located in the urban outskirts, often leaving the old premises empty.

The Norra verken industrial area in Avesta, stretching almost one and a half kilometres from east to west along the river and about 300 metres from north to south, was also gradually abandoned. The area remained fenced and the two gates, one at each end, stayed closed and guarded. The strong boundaries of the industrial area, which made it accessible only to those authorised, is a scenario likely to be found elsewhere, and because of the usual river front location this often implied that the waterfront was inaccessible to the public as well.

Generally, a factory that was left empty due to a closedown was regarded radically different by the surrounding community, than a factory left empty because the company moved to another part of the city, keeping or increasing the number of its employees. The expected employment situation thus decided the community’s evaluation of the empty factory, at least during the immediate stages after the abandonment. A positive employment prospect meant a positive or indifferent attitude towards the old factory. A scene of unemployment and economic decline often implied a negative view on the material remains of the lost workplace.

An abandoned factory or industrial area could furthermore be characterised as an urban place that is somewhat in-between. The concept of a “liminal phase” was coined by Arnold van Gennep in the early 20th century and has been developed by later researchers, among them Victor Turner. Turner defined the characteristics of a subject in a period of liminality as ambiguous and suggested that the subject “passes through a cultural realm that has few or none of the attributes of the past or coming state.” Sharon Zukin used the word
A picture showing the previous fenced and guarded entrance to the northern works, Norra verken. Photo: Anna Storm, 2003.
3. Koppardalen in Avesta: CHANGING MEANINGS, CHANGING MATERIALITY

liminality to describe, not a human subject but a kind of no-man’s-land where public and private, culture and economy, market and place are combined in unpredictable ways. Other concepts like “in a waiting stage,” a “permanent-provisional state” and “space of possibilities” have, in a similar manner, been used to focus potential futures as an approach to define and understand urban places in transition. For this study I regard this state of undecided meanings as the opening in which a reinterpretative and reuse process can take place, for example, an industrial area which the company has left.

A redundant industrial area

During the first decades of the 20th century Avesta started to take shape as a modern town south of the industrial area. The two parts, the old industrial community and the new town centre, were separated by a road, a railway and a considerable difference in altitude, at the most fourteen metres. When Avesta expanded substantially in the 1920s, the industrial area and the adjoining workers housing area were reduced to a district on the town fringe. The expansion first occurred comparatively unplanned, but quite soon initiatives were taken to create a more city like built environment. A new town plan was formulated in 1935 and during the Second World War the famous Finnish architect Alvar Aalto designed a new town centre for Avesta, called “Acropolis.” The proposal included municipal and commercial localities assembled around the main square. It constituted Aalto’s first worked-out design of a town centre and was probably his most important Swedish work. The design was, however, regarded too spectacular and too expensive by the local politicians and the issue was tabled. Aalto had a close connection to the owners of the iron and steel works – the Johnson family – and probably the rejected proposal also had its explanation in the complex relation between the powerful local industrialist and the social democratic political leadership of the town. Nevertheless, two decades later another less ambitious proposal signed by Aalto was ordered and built by an Avesta building contractor, Ernst Sundh, who was also Aalto’s companion. The “Sundh Centre” was finished in 1961 and covered a block, combining shops, offices and dwellings. The main building is still the highest residential structure in the town and has become a landmark with its blue colour and sharp angle of the roof.

During the 1970s the town centre of Avesta changed radically. Buildings around the town square were torn down and the old main street became a pedestrian mall partly under the roof of an arcade with a large connected parking space. The intention was to promote Avesta as a shopping town. The 1970s also brought about severe challenges for the branch of iron and steel, similar to many other industrial branches before and after. However, the crisis initially hit the production of ordinary steel and in Avesta, where the
main production was special steel, the great realignments and downsizings
did not strike the town until the beginning of the 1980s.

While the Swedish producers of ordinary steel were unified in Svenskt
Stål AB (SSAB), the companies that produced special steel were in a similar
manner unified step by step, including fusions with foreign companies.
Avesta Jernverks AB merged in 1984 with Nyby Uddeholm AB and Fagersta
Stainless to form Avesta AB. Next, what had then become Avesta AB merged
with British Steel to become Avesta Sheffield. During this period, the
number of employees within Swedish industry as a whole diminished from
942,000 in 1975 to 750,000 fifteen years later.32 Within the then borders of
the European community the period between 1974 and 1984 meant a loss
of 350,000 work opportunities only in the iron and steel industry, which was
45 percent of the total. In Sweden the number of lost jobs in the iron and
steel branch was 21,000.33 In 2001 Avesta Sheffield together with the Finnish
group Outokumpu Steel formed Avesta Polarit. Since 2003 all the parts in
the group of companies are named Outokumpu.

How did this development affect the old industrial area? The iron and
steel company that for more than three decades had carried out production
in both the southern and the northern industrial areas of Avesta decided in
1984 to concentrate all units to the southern works. In 1987 the company
sold the northern works to the municipality of Avesta and the company then
stepped back and left its original location without any vital claims for its
future use.34 In the contract between the company and the municipality, the
company’s right to remain in the area during a transitional period including
some activities was regulated for a rent that corresponded to the purchase-
sum.35 The contract further stipulated that under ground contamination to
be dealt with according to environmental legislation was even henceforth the
responsibility of the company, while the municipality undertook the task
of clearing the pollution above ground.36 The company had investigated
and cleaned some of the buildings from asbestos in the year before the
takeover.37

What was going to happen to the redundant industrial area? The general
significance of certain places being crucial for industrial production, with
regard to its material environment as well as assets in the form of local skills,
was a topic of interest during the 1990s.38 Manuel Castells and David Harvey
among others found the concept of place severely challenged.39 The forms of
production, consumption and information exchange during the last decades
of the 20th century, described by Castells as a “network of flows,” had led to a
development where the meaning of places for people tended to disappear or
change radically. Castells pointed to a spatial and cultural separation between
the people and their history. However, both Castells and Harvey identified
counter movements that strived to reclaim the place and its meanings.
Harvey, for example, suggested that “while the collapse of spatial barriers has
undermined older material and territorial definitions of place, the very fact
of that collapse [...] has put renewed emphasis upon the interrogation of
metaphorical and psychological meanings which, in turn, give new material
definitions of place by way of exclusionary territorial behaviour.40 The Norra
verken industrial area had become an abandoned place but its meaning could
be negotiated or even created anew.41
The municipality of Avesta became the new owner of Norra verken with
the intention of putting the partly derelict industrial area in order and trying
to attract another big company, hence supporting new valuable workplaces
for the town. One peculiar, but perhaps typical, state of affairs that Helena
Kåks points out, is that the downsizings of the iron and steel industry in
Avesta during the 1980s were mainly perceived in terms of a threatening
unemployment situation. While this caused protest marches, the actual
number of work opportunities did not in fact diminish due to a growing
public sector. Those employed in public work places such as childcare,
schools and hospitals were, however, to a large extent women, and women
were not traditionally regarded breadwinners in the company town. Kåks
strengthens her argument by revealing that in the 1990s the Avesta hospital
had to dismiss as many employees as had the iron and steel company, about
four hundred respectively. The public debates about the two work places
were, however, completely disparate. The anxiety for the future of the
hospital concerned local access to qualified care, while the male industrial
work place again was solely connected to work opportunities.42
At the municipal take over of the Norra verken industrial area, every
possibility of increasing or stabilising the number of workplaces was
nevertheless significant for the municipality. The industrial area, however,
soon showed a mixture of empty buildings and localities on lease to smaller
engineering industries and associations. There were among others the hot
rod club, Steel Town Cruisers Avesta, and the Avesta Kennel Club, there
were companies working with energy insulation and metal cutting, and
some locations housed publicly financed activities, such as the recycling of
old furniture and household goods, a youth club and government subsidised
work places. Furthermore, private persons and companies rented storage
space in the former industrial buildings.43 Some of the buildings were
comparatively well kept while others were falling into decay. Many windows
were broken or covered, and buildings that had no tenants provided tempting
refuges for youngsters. The long road through the area was illicitly used for
street racing.
The initial idea of finding a new big company that was willing to
establish its production in the industrial area was unsuccessful, and the
municipality had to redirect its goals. During the first half of the 1990s, a
number of investigations were undertaken, about what the future of Avesta
and the old industrial area could be.44 Although buildings and areas in many
cities and towns have always been reused, the adaptive reuse of industrial buildings had now become a more conscious policy in many countries. Michael Stratton considers it amazing that the “long-established process of adaptive reuse, as common as individuals renovating their houses, had to be re-discovered.” Zygmunt Bauman even asserts that if “the catchword of modernity was creation, the catchword of postmodernity is recycling.” This meant, among other things, that the existing understanding of the location of a factory was re-evaluated. If an empty factory was to be used for other purposes, what then were its strong and weak features? What were the crucial structures and details, and who were the new potential users?

Stratton suggests that one way to examine the reuse potential of an abandoned industrial place is to analyse its location, the building form and the physical conditions. The location and the building form, whether multi-storey mills and warehouses, daylight factories, great halls, single storey sheds or process-specific industrial structures must be matched with an approach towards preservation issues and future use. Was the new use sought after to be characterised by commercial adaptive reuse, housing, offices or mixed use, perhaps with cultural elements? Cultural centres in abandoned industrial places emerged as a concept in the 1960s, although offices constituted the prime category of reuse for industrial buildings from the mid-1970s to the late 1990s, and housing has increased in quantity probably since the turn of the century. For some abandoned factories, for example, textile mills and warehouses, a city centre location close to water, together with a building construction that showed material stability and endurance, large windows and open interior spaces, reuse was regarded relatively easy, since these features were welcome in many needs for space. For other empty factories, however, a less favourable location in relation to service and nature, together with a weak building construction, contaminated land, remaining industrial surroundings, small windows and low ceilings made reuse more unlikely or difficult. Decontamination could, for example, be expensive and would thus require especially high development pressure to be profitable.

The result of the first investigations by the municipality of Avesta pointed to a more diversified use and included smaller companies, preferably within the service sector, combined with public cultural and educational activities. The municipality’s actions in the matter can easily be understood as part of something typical of those times, identified among others by Margit Mayer. Mayer observes that “[w]hile traditionally the economic development measures of local authorities would focus on attracting mobile capital with conventional location inducements such as financial and tax incentives, infrastructure improvement or assistance with site selection, a shift in the approach of local economic development offices is now obvious.”

In the Swedish town of Eskilstuna the town representatives in a similar manner stated that the old factories in the town centre could only be preserved
if it was possible to find new use for them, preferably cultural use. If that was possible to achieve, then they considered the “problem with the 19th century factory buildings would have had a very successful solution.”53 Also in the Swedish town of Norrköping the centrally located industrial area became recognised as a built environment possible to reuse for cultural purposes.54 In Eskilstuna and Norrköping the public reuse plans preceded those in Avesta with about two decades.55 An influential and likewise pioneering public reuse effort outside Sweden is Lowell, Massachusetts, a textile city on the east coast of the United States. In the mid-1980s it was described as a city that had turned from depressed mill town to a “vibrant revitalized healthy” community by turning the vast amount of vacant mill buildings into premises for “high-technology companies […] attracted by the available labor pool, favorable state and local tax structures and aggressive promotion by community leaders.”56

Not only did these industrial cities and towns change their approach towards reuse of industrial buildings, they also tried to turn the reused industry into a positive image of the place. Mayer states that in “declining old industrial areas, anti-unemployment programmes and local labour market policies were put into place: diverse strategies were explored to foster a more favourable business climate: many cities increased spending on culture and leisure facilities or implemented strategies to upgrade the ‘image’ or the ambiance of a town.”57 Gert-Jan Hospers agrees with Mayer that local characteristics could make the difference in a global economy. He claims that for “older industrial regions in decline this ‘localization’ may contribute to economic renewal” giving examples from rustbelt regions like the Ruhr district, Wales and Sheffield.58

A slightly different perspective is presented by Mattias Legnér based on his investigation of Woodberry in Baltimore, Maryland in the United States. Here the industrial area of textile manufacturing was looked upon with nostalgia, described by a journalist as “picturesque views of rolling hills and glimpses of the industrial past.”59 Although I believe the nostalgic gaze is the exception, its existence highlights the duality of the factory, both the bright and dark meanings it carries.

Finding a new image

In Avesta at the beginning of the 1990s the search for an appropriate reuse concept started with more pragmatic issues when the municipal real estate company Avesta Industristad decided to investigate the physical condition of the old blast furnace plant. It was soon verified that in several places the roofs were leaking and in need of considerable repair. Furthermore, the building had many broken windows and the floors were covered with thick
layers of dove droppings. In 1991, Avesta Industristad received governmental employment subsidies for an initial restoration of the blast furnace plant, but even after the roofs and windows had been repaired and the interior somewhat cleaned, the impression of a dirty, ruined place remained. “When you were there, you could not stay for long because you got totally black from dust” was a common comment. However, a few years later the industrial milieu began to be transformed, through material changes, as well as through new associations and meanings attached to the built environment.

Map of the northern works (Norra verken/Kopparalen). The dashed line marks the borders of the industrial area. The dotted lines mark the division of the area into the western, the central and the eastern sections. The western section contains the oldest and most spectacular buildings, built in slag stone brick (1, 2, 3, 4). This section has also been prioritised in the integration with the present town centre, among other things by the new bicycle and pedestrian bridge (6).

1. blast furnace plant
2. open-hearth plant
3. different rolling mills, including the sheet rolling mill
4. building including, among other things, a briquette plant, a mechanical workshop and a plate rolling mill
5. cold rolling mill
6. bicycle and pedestrian bridge
7. location of underground remains of the copper works
8. laboratory building, housing research and development
9. sulphate mill


In 1993, the old blast furnace plant had been cleaned enough in order for a theatre group to be able to use it. Their play, “Krylbosmällen,” which involved a large number of actors, was based on a real event during the Second World War, when a railway coach exploded in Krylbo, a village near Avesta. The blast furnace plant was used actively during the play with real fire
in the furnaces, light, smoke and sound effects. The producer maintained the industrial environment was definitely an asset and that the blast furnace plant had a “fantastic, magic atmosphere,” so articulating what she perceived was an aesthetic value of the blast furnace plant.61

Two years later three local people realised an idea about an exhibition of contemporary art in the blast furnace plant.62 The exhibition was named “Avesta Art” and inaugurated with a program called “The blazing hearth of our ancestors” which was said to connect Avesta Art to the history of the region.63 In one part of the inauguration program, an actor dressed as an old ironworker described the work in the blast furnace plant. When one of the initiators, the writer and later chairman of the municipal council, Karin Perers, in an article described the event, she suggested that a new team of workmen had thus taken charge in the old blast furnace plant – a team of cultural workmen.64

In connection to Avesta Art, the aesthetic value identified earlier by the theatre producer was more strongly attributed to the blast furnace plant. The built environment was regarded as one explanation for the success of the exhibition; “contemporary art in interplay with shimmering slag stone and powerful furnaces give birth to unexpected encounters as well as magic adventures.”65 The very blast furnace plant was called a “cathedral of work,” an “Inca temple” and a “medieval castle.”66 Adjectives such as shimmering, powerful and magic all appealed to an aesthetic experience, while metaphors such as cathedral, temple and castle triggered fantasy and associations to other places loaded with meaning. Within a few years, the blast furnace plant in this way became a stage for theatre and an art exhibition. In retrospect, one of the other initiators, Lars Åke Everbrand, to whom we return in more detail further on in this study, clearly remembers the feeling during the planning of the art exhibition. “It was like when you say you are good […] ashamed to say so […] how are we to do anything international with contemporary art […] down there in that rubbish […] what will people think about this?”67

This statement can partly be understood in the light of what is called the “spirit of a company town,” according to which it is always wrong to laud oneself, a topic that is expanded upon in the following chapter. Nevertheless, Everbrand was assured the exhibition was going to work and describes the idea of showing contemporary art in the old blast furnace plant as only “natural.”68

Were there any similar initiatives at this time? In the old factory town of North Adams, Massachusetts, in the United States there was at least a planning process beginning in the mid-1980s concerning a museum of contemporary art to be housed in a complex of twenty-eight derelict 19th and early 20th century industrial buildings.69 Sharon Zukin has analysed the process and suggests that the preservation of old redundant buildings for historical or cultural purposes was a strategy that satisfied both the elite who protested against demolition and “populist demands for slowing change.”70
Visitors to the exhibition, Avesta Art, on their way into the blast furnace plant. Photo: Jan af Geijerstam, 2003.
She shows how the new activity could be approved by different groups of actors for different reasons. Using the potential of history and culture to create service-sector jobs could be regarded an excellent solution to several problems and needs like urban renewal, revival of civic pride and community identity, as well as new work opportunities. And, as Karin Perers in Avesta put it, the change could just be regarded as a new team of workmen coming in, not as a problematic and uncertain break with the past.

What is the relation between a local or regional image, on one hand, and identity on the other? David Harvey suggests that in the late 20th century both image and identity have become increasingly important. The search for historical roots constitutes, in his view, a sign of a “search for more secure moorings and longer-lasting values in a shifting world” that does not seem to contradict the image creating efforts. A possibility of simultaneously being visible in a market and part of a community identity could thus be regarded ideal. Henrik Widmark provided one example of this possible double function in his description of how the old fortress in Helsingborg in Sweden was to give the inhabitants of the city a common space of experience at the
same time as the building was used to market the city and different company products. Also in Eskilstuna, visionary goals were articulated to strengthen the local identity and uniqueness by advertising the history of industrial development. Creating an image of the town of Eskilstuna included using its industrial heritage as a possible development tool. Harvey, however, finds that the effort to sell a place by emphasising what makes it special often leads to “a kind of serial replication of homogeneity.” Is it so? The question of being unique by comparison is further developed in the next chapter.

A municipal project

Due to a series of mergers in the late 1960s and early 1970s and thus a decrease in the number of municipalities in Sweden, together with decentralising several governmental tasks to the county councils, the local and regional levels at this time obtained more control in questions concerning regional development and cultural heritage. In addition, the planning system in Sweden gives the municipalities the main responsibility for spatial planning. The trend of increasing financial control at the local and regional level was further strengthened in the mid-1990s when Sweden joined the European Union, and the flow of redistributed economic subsidies largely went through the regional county administration. This was valid especially for the means distributed within the so-called structural funds, by which the European Union intended to support certain branches and regions. As a consequence, the national level was, in some respects, comparatively weakened.

Between 1995 and 1999, 583 million Swedish crowns were put into 526 different projects in the Bergslagen region via the European Union structural funds. In general, this money represented forty percent of the projects’ financing. The co-financing came from county administrations, municipalities or the Swedish government. The two main goals of the Bergslagen programme were to keep or create work opportunities and attract new companies to the declining industrial and countryside regions. However, the goals were only partly achieved and the character of the financing made the activities unstable in a long-term perspective. The strive to renew the old industrial area of Avesta benefitted from governmental economic subsidies directed towards industrial regions in decline in order to promote a restructuring of their trade and industry. Later it became one of the Swedish projects that largely depended on European Union funding in the late 1990s and early 21st century.

The first municipal investigations in Avesta had among other things led to the formation of a municipal project team given the task of working with the development of Norra verken, now renamed Koppardalen. In a report at the beginning of 1997, the project team proposed dividing the industrial
area into three sections, depending on existing characteristics and as an expression of future plans. The western section contained the oldest and most spectacular buildings, such as the old blast furnace plant, built in slag stone brick, and the open-hearth plant, both from the late 19th century. The central section contained a mixture of buildings from different periods, but its major part was empty ground that had earlier been used for storage, including land created by a filled creek of the river. The eastern section contained modern industrial plants that different companies used for production, but it also contained an abandoned sulphate mill.

Avesta municipality directed its ambitions through this division into three sections. The overall aim of adapting the industrial area for more diversified use was articulated in different ways in each section. The western section was mainly to become a place for cultural and educational activities,
while preparations in the central section were designed to accommodate smaller companies within the service sector. In the eastern section, continuous industrial production was to be retained, at least for the time being. In early 1998, the project team presented a proposal for the renewal of Koppardalen. The suggestion implied a five-year development plan divided into two phases. The first phase ranged from 1998 to 2000, and the second from 2001 to 2003. The overall idea was to integrate Koppardalen with the existing town centre and by doing so create a more attractive centre that “could give a strong local identity to Avesta and the Avesta inhabitants, to contribute to make Avesta known within a larger region and to attract both visitors and entrepreneurs.”

In the mid-1990s the municipal real estate company, Avesta Industristad, in agreement with the County Antiquarian, Ulf Löfwall, decided to carry out some demolitions within Koppardalen. The aim was to increase accessibility to the buildings and locations that were regarded most suitable for reuse. When Avesta Industristad contacted Ulf Löfwall about the plan to demolish a sheet rolling mill, he replied that a demolition was acceptable since the building had a “universal design that is not significant for the distinctive character of the area.” He expressed his concern about the dimensions of the demolition, however, and some adjustments to the plan were made. The politicians and the different professional groups in the municipality’s administration agreed to the sheet rolling mill being torn down in order to enhance the usability of the place. However, the demolishing process was comparatively slow, due to the choice of letting unemployed workers do the job with governmental subsidies and on an irregular basis. During the six years between 1994 and 2000, the rolling mill disappeared piece by piece.

In the programme for the development of Norra verken/Koppardalen, the municipal project team commented on the need to tear down some parts of the built environment. They wrote that equally important to converting some of the buildings was getting rid of “ugly, dilapidated milieus and so increase access to more valuable buildings and to enhance the contact with the river.” This would be achieved through a “selective demolition of the old sheet rolling mill to open up the area towards river Dalälven and at the same time make the architecturally more valuable buildings along the river more visible and accessible.” The project team saw that their task was to identify which buildings were more or less valuable in order to be able to prioritise between them. In the quotation above it becomes clear that the oldest buildings, and especially those built in slag stone brick, were regarded the most beautiful, as well as the most valuable, while the others by not being mentioned, were placed lower on the scale.

Most of the municipal representatives, politicians and civil servants, agreed on singling out the slag stone brick buildings as a key feature of the area. A few opposing voices were instead raised from actors outside Avesta.
The sheet rolling mill was considered negligible and priority was given to other structures. To the left one can glimpse the blast furnace plant. View from the south east. Photo: Kent Lindström, 1999.

The sheet rolling mill during the demolition process, carried out between 1994 and 2000. One can glimpse the river, Dalälven, to the right. View from the south. Photo: Kent Lindström, 1999.
The architect, Caroline Tholander, for example wrote an undergraduate paper about the Koppardalen project in which she criticised the transformation process for being too fast, and for lacking sufficient documentation procedures. She pursued the case to both the county administration and the National Board of Antiquities. Her request to prevent the demolition of the sheet rolling mill was, however, rejected, with reference to the far advanced stage of the project. Tholander appealed against the verdict to the county administrative court, but also this authority rejected her appeal.

Nevertheless, the preconception of the slag stone brick being the most valuable building material has not been severely threatened. Reasons for the high appraisal of the slag stone brick can be found in relation to its age. The slag stone brick buildings were the oldest ones within the area and age is, as mentioned in the previous chapter, a common criteria of value. Although there are other circumstances that could have made the younger buildings competitive – such as being designed by famous architects – the slag stone brick triumphed with good margins over clay brick and plate. The two buildings that were totally or partly demolished during the reuse process in Koppardalen, investigated in this study, were built of clay brick, and taken down in order to make the slag stone brick buildings more visible.

Traces of the sheet rolling mill

In the visualisation of the renewal of Koppardalen, the above mentioned sheet rolling mill had been standing on a kind of borderline within the industrial area. Before the mill was demolished, this part of the area was densely built. There were only a few metres between some of the buildings, generating narrow corridors for people and vehicles. The sheet rolling mill was physically linked to the building complex of the western section of the three established by the municipal project team, but belonged in the reuse plans to the central section. Its existence could thus be seen as a question of negotiation between the endeavour to create cultural and educational activities and the efforts to provide commercial locations for smaller companies.

During the demolition, the town architect, Dan Ola Norberg, the head of the department for cultural and educational matters, Lars Åke Everbrand, and the County Antiquarian, Ulf Löfwall, discussed different ways of letting the sheet rolling mill leave some traces on the place. In a municipal programme text, their ideas about traces and references in the environment were developed:

To understand the historic cultural heritage from the copper works period up to today it is as important to protect the traces as to preserve certain buildings. It is by being able to read the history in the material environment that we can tell and explain the daily life at the works and the development of industry.
The industrial area was densely built. Some of this density has been kept while demolitions have opened up other parts of the area. View from south west. In the background, the river, Dalälven, is visible. Photo: Kent Lindström, 1999.

When the sheet rolling mill had been demolished, some traces were left, among them a coloured gable (left) and a row of iron girders (centre). Low walls of net cages filled with brick from the demolished mill were constructed to mark the place of the former building. Photo: Kent Lindström, 1999.
3. Kopparadal in Avesta: CHANGING MEANINGS, CHANGING MATERIALITY

The discussion ended in a decision to leave a row of iron girders from one of the long sides of the sheet rolling mill. Another trace the group prioritised was to leave an exposed gable – a former interior wall – untouched. The gable was seen as a piece of art when it showed a multiplicity of colours and patterns originating from earlier floor levels, a staircase and partition in rooms. As an addition to the retained traces, they also decided to create a new material reference to the sheet rolling mill. This was done by framing a number of new parking lots with low net cages filled with bricks from the demolition.

When the demolition was finished, a row of iron girders, an exposed interior wall and a series of net cages around the parking space could thus be seen. In general, Paul Ricoeur articulated the character of traces by asserting that in their quality of being something left remaining and interpreted, the traces represent the past in the sense that they replace the past. This understanding is relevant to the sheet rolling mill demolition process where, for example, the iron girders and the gable were traces from the past in the respect that they constituted parts of no longer existing buildings, and at the same time neither of them had been visible in this way before.

On one rare occasion, a representative for the iron and steel company expressed an opinion concerning the renewal of Kopparadal, in connection to another way of understanding the concept of leaving and creating traces. The company had offered the municipality material support with the new roofs needed for many of the buildings. Referring to historic correctness the municipality refused the offer because it was not regarded authentic to put stainless steel on the old mills. The surprised company representative asked why it was not appropriate to use stainless steel on the roofs of the very cradle of stainless steel, that is, Kopparadal. Leaving traces on a place could hence be interpreted differently by different actors.

In a reuse project in Baltimore, Maryland in the United States, several rows of steel columns were preserved in a similar way as the iron girders in Kopparadal. There the columns were reused as torches in order to enhance the romantic senses of a ruin, when what had been a tractor building was converted into an exclusive pool area. Another example can be found in Leith, Edinburgh, in Scotland, where columns from an upper floor of a warehouse was spared in order to be moved and used as decoration, forming rows around a car parking area. In Avesta, the iron girders did not, however, evoke romantic associations, but instead some actors said they reminded the viewer of a concentration camp.

The managing director of Avesta Industristad, Jan Thamsten, was one of those actors who regarded the remaining traces from the sheet rolling mill as strange and ugly features in the environment. During meetings with potential tenants for the area, the row of iron girders and the coloured interior wall became, in his eyes, obstacles, something that needed an explanation and
did not benefit the advertising of the place. When the oil company OKQ8, after several years of discussion, decided to move its customer support for the Nordic countries from Stockholm, to Avesta, and into a new office space in an old plate rolling mill in Kopparadal, it was regarded as a great success from the municipality’s point of view. The oil company also brought about forty new work places and – probably most importantly – it legitimised the public money spent on adapting the building to new use.

Why did OKQ8 move to Kopparadal? Was the company’s choice influenced by the place’s image or identity? Was the management searching for what Gregory Ashworth and Peter Howard describe as an “atmosphere of historicity [that] confers an aura of continuity and even of artistic patronage upon activities located in it – an inference of reliability, integrity and probity, conferred by association.” According to the local manager of OKQ8, Benny Hedlund, while there were several concurrent grounds for the company moving its customer support to Avesta, the conclusive one was the economic benefits. The rental expenses in Kopparadal were considerably lower compared to Stockholm. Another economic aspect concerned the work force. In Avesta, OKQ8 expected to find comparatively older and more loyal workers than in Stockholm, where customer support had the character of a transit occupation. The company also appreciated that the Avesta municipality and the local employment agency contributed to the recruitment and education of employees.

However, when the local manager and the chief executive presented the new locations in the company magazine, they used more poetic terms. The new work place was described as a “modern office in an old slag stone building – with a fantastic view of the river” and the combination of old and new was especially mentioned as contributing to the restful milieu. Thus, there was no explicit relation between the choice of location and the specific character of the built environment of the place, although the character was pointed out as something positive. Nevertheless, the local hearsay is that the decisive factor for the new localisation was that the chief executive of OKQ8 had his roots in Avesta.

Industrial apartments in a company town?

The imagined future of Kopparadal also included one of today’s more common kinds of reuse, seen from a national as well as an international perspective: for residential purposes. The general conception of an earlier closed industrial area on the waterfront being transformed into attractive housing has been characterised by Gene Desfor and John Jørgensen as “a rediscovery, a return and re-integration of the waterfront” and the examples are manifold. In Avesta, while the old meaning of the water’s proximity in
relation to the copper and the ironworks location was energy and a means of transportation, the new meaning became associated with beauty as well as good working and living standard. In the OKQ8 magazine, the new location in Koppardalen was described this way:

If this building had been a private house in a big city, the rateable value would be astronomic. You cannot get closer to the water. One of the exterior walls hits the very river. It is told that once someone caught a really big salmon with a casting rod by leaning out of a window in the adjoining building.98

The economic value of the water thus remained, but the focus shifted from making production possible to the trading of attractive office spaces and apartments.99

At one stage, local politicians envisaged that the sulphate mill, located in the eastern section of the Norra verken/Koppardalen industrial area, could be reused as apartments. Photo: Anna Storm, 2003.

In Avesta in the beginning of the 21st century, there were ideas to adapt a former sulphate mill into modern apartments. The sulphate mill was located in the far east part of the industrial area, with no real connection, physically or visually, to the cultural-educational western section and the commercial central section. The distance between the sulphate mill and the other industrial buildings in the process of reuse was dominated by the open flat land that had been a creek of the river Dalälven, and which had been filled and used for storage purposes. The location of the sulphate mill was described as “empty” and “dreary,” although the mill itself was regarded “old
and beautiful.” The local conservative councillor, Ulf Berg, expressed that he would very much like to see the mill converted into housing. In his vision, the sulphate mill would become a perfect place to live, with the immediate proximity to the river, and a planned pedestrian bridge to the other shore where a golf course is located. “You can take your golf bag and walk across the new bridge [...] you can just slip into the golf course and start at hole number nine, and then you can go back home again.”

The ideas to convert the sulphate mill into apartments have not been a matter of priority in the municipality of Avesta. The need for new housing areas in the town has not been pressing, because the number of inhabitants has been constantly decreasing. In the village of Krylbo, close to the town of Avesta, the municipality has instead discussed tearing down unused blocks of flats. The weak demand for new apartments is, however, not the whole picture. Even the most enthusiastic advocates for adapting the sulphate mill into housing, doubt if anyone would like to live in the mill. In the words of the former local councillor, Åke Johansson, when questioned if he thought that anyone would like to live there, and if he would like to live there himself: “I do not know. [...] I do not think I would like to live there, no.” Therefore, it can be seen that the reinterpretation of the industrial place, in this respect, differs between larger cities and smaller company towns like Avesta.

**Contradicting ideals of cleaning and greenery**

Both the department for cultural and educational matters as well as the department for commercial issues were actively involved in the process of reinterpreting and reusing the Koppardalen area. Margit Mayer and Jan Turtonen have, from separate perspectives, observed that marketing interests, on one hand, and preservation interests, on the other, have increasingly begun cooperating and benefiting from each other. Mayer furthermore asserts that these partnerships often focus on “the physical upgrading of a large area near the central business district” thus even more placing the series of events in Avesta within a broader Western world pattern.

In both the cultural and commercial visions, Koppardalen was imagined becoming a lively and appreciated place. The question was how best to achieve this vision. How was the old industrial area to become a place where, as in the old days, thousands of people had their workplace and where, for the first time, the present town centre could find itself extended into the waterfront lowland that had previously been closed to public access? The changes followed two lines; sometimes contradictory, sometimes in parallel. One strove towards the idea of cleaning up and adding greenery in order to soften the area, while the other attempted to reinterpret and raise the value of the existing rusty industrial look.
By analysing an inventory completed in 2001, aimed at identifying “carriers of value” in the built environment of Kopparstaden, it becomes clear that the two lines were not represented by two distinctive groups of advocates. One curator, one architect and two engineers carried out the inventory, and the report was commissioned by the municipal real estate company, Avesta Industristad. The four authors documented and analysed the buildings and the remaining technical equipment in Kopparstaden. In the investigation, the contradictory ambitions became clear. On one page the authors noted how the old blast furnace plant had been “cleaned and adapted for exhibitions and social events. The building is tight and heated, it has a moulded floor and the environment is neat and tidy at the same time as parts of the industrial environment create a suggestive atmosphere.”

On another page they discuss the concept of authenticity in relation to a building’s future use as an “experience milieu:”

In the blast furnace plant and around the furnaces the environment was very dirty. [...] The working environment at the different stages in the processes is very important in order to achieve a total experience. All cleaning should be related to the authentic working environment.

The message from the expert group to the municipality about how to handle the built environment with regard to practical reuse and the preservation of authenticity was hence ambiguous. In retrospect, Lars Åke Everbrand regrets the decision to put a moulded floor in such a large part of the old blast furnace plant and thinks they should have preserved a corner as a point of reference to show how it looked in the late 1980s. Furthermore, this perspective gradually became the prime attitude among certain groups of heritage advocates in many countries. As formulated by a Finnish architect in the late 1990s when describing the planning of the Soumenlinna Galley Dock in Helsinki: “Tidiness should be kept out of the dockyard! [...] The patina is the outmost layer and cleaning is a severe threat to it.”

The approach towards greenery had another character. In this question, public opinion was clearly in favour of adding greenery to Kopparstaden. In the late 1990s the standard of the external appearance of Kopparstaden was regarded to be low. In a questionnaire about the ongoing renewal project, the municipality asked the inhabitants of Avesta about their opinions of the project, and if they had any ideas for the future use of Kopparstaden. Some of the answers recommended that the municipality should “plan the area so it becomes nice [with] green areas” and “take away all the ugly, grey and brown houses [and instead make] oases and other walking areas.” Others suggested that one should “tear down the slag stone buildings and build dwellings with a view of the river, take away the asphalt and establish green areas.”

A group of architect students from Stockholm who made a case study in Avesta in 1999 also found the abandoned industrial area to be an “ugly wound in
nature,” something they argued could be solved with new planting. If the area could also become more accessible, the students foresaw that Koppardalen could be the “most beautiful place in Avesta.”

However, the four authors of the inventory of “carriers of value” raised objections to this opinion. They asserted that the lack of greenery in itself was a carrier of value and that flowerbeds, lawns and trees must be laid out sparsely. They also found the natural elements that grew in Koppardalen, due to neglected maintenance, a problem. Describing one of the canals in the area, they commented that the water

in a beautiful way mirrors the yellow autumn leaves, but in the long run the roots of the trees jeopardize the wall edges and do furthermore give the area a woody quality that is unfamiliar to its character.

This message seems to have influenced the municipal decisions only partially. The town architect, the town landscape architect and representatives for the municipal real estate company mainly adhered to the opinion that Koppardalen should be developed through planting. However, vegetation in direct connection to industrial buildings and structures was removed. Thus, vegetation and greenery could be seen as a threat or a possibility in
relation to the future use. Together with the discussions about leaving traces in the area, the approach towards greenery shows how the industrial place was reinterpreted in a variety of ways.

In a mining village called Norberg, near Avesta, an even more explicit conflict of parallel character arose. Just outside the central village three groups of actors shared a comparatively small area. There were historians eager to protect remnants from the opencast mining era, botanists who wanted to protect rare orchid habitats that had come into existence because of the mining, and finally a cross-country skiing club that had their best prepared ski tracks in the mountains. Therefore, all the actors in Norberg as well as in Avesta could agree that the place was valuable and suitable to use, but the details of the future vision were, to some extent, contradictory.

This chapter examines the changing materiality and the changing meanings of a post-industrial situation, that is, the Norra verken industrial area being turned into the publicly owned Koppardalen. During the reinterpretative and reuse process the closed, dilapidated and abandoned industrial area was successively opened up and used for cultural events such as a theatre play and a recurrent art exhibition. The earlier unrecognised industrial aesthetics were articulated and given positive and suggestive meanings by comparisons to established understandings of palaces and temples. Material hierarchies were established where the oldest buildings built in slag stone brick were regarded the most valuable, and the location between the present town centre and the river was likewise identified as an asset.

The overall imagined future of Koppardalen as a lively and useful place was shared by most people in Avesta. The details of how to reach this future have, however, revealed different ideals, for example, with regard to cleaning up, the role of greenery and the ambition of leaving and creating traces from buildings that were torn down. In the next chapter, we take a closer look at the actors in the reinterpretative and reuse process. Who were they and what were their arguments? What is the “spirit of the company town,” and how has it affected the attitude towards the future of the industrial area?
The iron girders

A Sunday afternoon in early spring 2003, the chairman of the municipal council in the town of Avesta in Sweden was about to show some council members and a couple of guests a development project she was very proud of. The project in question concerned the reuse of the Koppardalen industrial area in the immediate proximity of the town centre. The chairman, Karin Perers, requested the group to gather at a row of high vertical iron girders in the middle of the industrial area. When they arrived at the designated place there were no iron girders to be seen. Astonished and dismayed, the chairman realized that the iron girders had been hastily taken away without her knowledge.

Why was there a row of high vertical iron girders standing in the middle of the industrial area to begin with, and why were they secretly taken away? The iron girders constituted some of the material remains after a sheet rolling mill had been demolished during the second half of the 1990s, described in the previous chapter. The iron girders, marking one of the former outer walls of the mill, visually dominated the place where the building had been standing. The decision to tear down the mill was motivated by the assumed higher value of the surrounding built environment. By demolishing it, the adjacent buildings would become more visible and accessible, and thus more suitable for the new kind of use sought after.

In connection with the oil company OKQ8 moving into its new localities in Koppardalen in 2003, the managing director of the municipal real estate company, Avesta Industristad, decided to remove the iron girders and an adjoining coloured interior wall that had been preserved as traces of the sheet rolling mill. After conferring with the County Antiquarian he promptly executed the decision. The iron girders were cut down and the gable was plastered into one homogeneous grey surface.

The presence and subsequent disappearance of the iron girders could be regarded as expressions of different reinterpretations of this particular industrial place in Avesta. According to some of the actors involved in the reuse process, the iron girders represented a historical trace from the demolished factory. At the same time, these actors believed that the iron girders made the transformed...
industrial place aesthetically interesting. According to other actors however, the iron girders were seen instead as ugly obstacles that made the place unattractive and unsuitable for reuse. In this chapter, the actors and their arguments in the reinterpretative and reuse process are in focus, and the first actor in this story of an industrial place is not surprisingly, the company.

The company as heritage producer

The iron and steel company, Avesta Jernverks AB, not only built and used the industrial place for the company’s production in a physical sense, but was also the first to interpret it from a historical perspective. Marie Nisser has shown how certain industrial branches in Sweden, most notably the mining and iron and steel industry, worked consciously during the whole of the 20th century to establish archives and to preserve their older built environment. The owner of Avesta Jernverks AB – the Johnson family – was one of these industrialists, who invested a lot of effort into establishing archives and in preserving several of the various premises within their group of companies. Avesta Jernverks AB and the Johnson family also commissioned one of their employees, the engineer Bo Hermelin, to be in charge of “cultural matters” at the company. Hermelin collected old, no longer used artefacts from different industrial places owned by the company, and in the 1940s the ambition was to establish a metal and mining museum in Avesta. The idea was to show the development of the company and iron making in general “from oldest times to the present day” from an international perspective.
Almost in parallel to the town centre proposal, described in the previous chapter, the architect Alvar Aalto was asked to design a research institute for the Johnson group of companies, including laboratories, offices and a museum. The institute was to be built just outside Avesta and the museum was to occupy a considerable centrally located space in the institute complex. Situating a museum alongside research laboratories and representative localities could be seen as one way of using history and old artefacts to make the present and the future of the company look more modern and promising. A visible history was a contemporary asset. The Johnson family’s actions during the first half of the 20th century thus fitted well into the general depiction of how the industrial past was used as a response to the second industrial revolution by offering a contrast to the modern production. The research institute was, however, not realised, like so many of Aalto’s proposals in Sweden.

In the 1960s, the management of Avesta Jernverks AB was still planning to establish a museum, but instead of a new building the intention was to adapt the old and at the time two decades abandoned blast furnace plant to house the museum. Bo Hermelin wrote to the executive director about how he imagined the realisation of the museum:

In general, all that conceals the architecture, the powerful walls and the beautiful arches, will be taken away, if it not has or has had a function that is obvious or if it in other respects is interesting or perhaps has a picturesque appearance.

Hermelin furthermore suggested that the selection and display of suitable objects should be done in consultation with the director of the Swedish National Museum of Science and Technology in Stockholm. Avesta Jernverks AB thus worked actively and ambitiously to create a museum. This also meant that the old blast furnace plant would be preserved, even though it would no longer fill any vital function for the company.

During the so called European Architectural Heritage Year in 1975, representatives for the Swedish National Board of Antiquities journeyed the country in order to visit industrial milieus, and one of the places they visited was Avesta and its old blast furnace plant. Avesta Jernverks AB acted as host during the daylong visit, and the national heritage representatives were very impressed with the company’s committed work for their older redundant industrial buildings.

In relation to Kopparadal the active role of the company ceased in 1992 when the Johnson family sold their part of the shares, and Avesta AB merged with British Steel Stainless to form Avesta Sheffield. The Johnson group at that time chose to leave Avesta and the company’s interest in the local history was decisively reduced. In general, Maths Isacson has described Sweden’s old mining and iron and steel district – Bergslagen, where Avesta is also located – in terms of companies closing down or merging during this
period, implying a disappearing company responsibility for the towns that had grown and changed together with it. The company stepping back and a public body taking over the ownership and caring for the local industrial history and heritage is furthermore a picture that is to be found in many places around the Western world during the last decades of the 20th century. The iron and steel company in Avesta was still in the first years of the 21st century after several mergers, the biggest private employer of the town, but after the Johnson family left in 1992 it did not, to any appreciable extent, take part in the reinterpretation and reuse of Koppardalen.

Professional heritage recognition

The company could thus be characterised as an active heritage producer in Avesta, at least until the 1970s. Professional heritage recognition, seen from the Swedish national level, nevertheless developed in parallel. During the first half of the 20th century a number of museums, focused upon the history of technology and industry, were inaugurated. A company museum in the mining town of Falun opened in 1922, and what is said to be the first industrial open-air museum in the world was established in the town of Ludvika in 1938. In 1923 a great exhibition was held in Sweden’s second city, Gothenburg, a main section of which was devoted to industrial history. The ambitious work of collecting artefacts from all over the country for the exhibition later led to the creation of the National museum of Science and Technology, founded in 1924. Apart from drawing attention to venerable origins and progenitors, the societal way of responding to the second industrial revolution during the first half of the 20th century, in terms of how to relate to the recent past, these more public activities can also be understood as acts of contrast, making the modern society seem even more modern. The early interest was principally directed towards one single branch, the iron industry, and originated in the history of certain companies. Furthermore, many larger companies engaged professional historians to write comprehensive company histories, which reached a peak in the 1940s and 50s. There are certainly other types of activities to be found as well. The Swedish National Museum of Cultural History, the Nordiska Museet, for example, conducted documentations of industrial sites from the 1920s and from the 1940s it collected workers’ memories by means of questionnaires and interviews.

In the 1960s a more general interest among professional historians for industrial history and its material remains emerged. An often mentioned event is a meeting at the National Museum of Science and Technology in 1968 when Gunnar Sillén and Marie Nisser formulated an appeal with the aim of bringing about “volunteer inventory work of buildings and milieus connected to work.” The British pioneer in industrial archaeology, Kenneth
Hudson, spoke at the meeting about inventory work done in Britain in order to inspire similar work in Sweden. The appeal did not result in any immediate and concrete measures, but was nevertheless one expression of an emerging dialogue at the time. Among historians, architects and building conservationists, an interest in older industrial buildings had slowly grown and the topic was discussed at professional conferences and in the papers.

By that time industry had begun to be understood as something about to disappear, something that had to be saved before it was too late. The activities of the late 1960s and 1970s are hence to be seen as the beginning of a response to the third industrial revolution. The appeal at the National Museum of Science and Technology in 1968 demonstrated that a new group of actors had entered the arena, but also that the industrial companies were still important players. The appeal was directed to the industrial leaders in order to encourage them to better care for their own history, for their own benefit and also for the whole society. A few years later special attention was paid to the built environment because of the Council of Europe’s designation of the earlier mentioned European Architectural Heritage Year in 1975. This year became important with regard to industrial buildings in Sweden, both in a sense of highlighting industrial monuments among other types of heritage and from a perspective of reuse opportunities. Each country was supposed to appoint a number of pilot projects and among other sites Sweden chose the Engelsberg Ironworks, which belonged to the Johnson family that also owned Avesta ironworks. Engelsberg Ironworks had been declared a historic building complex the year before and the appointment in the European Architectural Heritage Year became symbolic to those engaged in preserving industrial buildings.

In the mid-1980s, in parallel with the municipal take over of Norra verken/Koppardalen in Avesta, two local conservative politicians submitted a motion that the old blast furnace plant should be declared a historic building. At the same time, Axel Norberg, the Avesta Jernverks AB archives manager, requested Marie Nisser – then representing the historical committee of the Swedish Steel Producers’ Association and president of the International Committee on the Conservation of Industrial Monuments – to express her opinion on the old blast furnace plant and the open-hearth plant, in view of the industrial area’s passing into new ownership. Nisser wrote a memo in which she emphasised the importance of the old premises in Avesta and stated that they had few equivalences within Europe and the United States. Consequently, she strongly recommended that they should be preserved. In 1987 the old blast furnace plant was declared of national interest to heritage conservation and Nisser’s memo has been referred to since then, as an authoritative document that clearly shows the value of the old industrial remnants in Avesta. External professional heritage recognition thus played an important role in Avesta during the 1970s and 80s.
A new name

As the new owner of the old industrial area in the late 1980s, Avesta municipality strived to attract companies as tenants or purchasers in the industrial area of Norra verken. As one part in these efforts, Avesta Industristad, the municipal real estate company that had been formed especially to manage the area, initiated a competition. The inhabitants of Avesta were invited to propose a new name for the area, and from the almost 600 proposals a jury chose the name “Koppardalen” (“the Copper Valley”). Other proposals that were ranked highly were “Koppardalen,” “Myntforsen,” “Bruksstaden,” “Industridalen” and “Industristranden” (approximately “the copper coin,” “the coin falls,” “the company town,” “the valley of industry” and “the industrial shore”) the two first bearing a clear reference to the earlier copper works of the place.

Naming and renaming are powerful acts of interpretation. With an example from the London Docklands, Doreen Massey has examined how different names, like Docklands, Millwall, the Isle of Dogs or the Venice of the North, allude to different stories about the area, directed at different groups of people. Massey suggests that when industrial buildings are converted, the renaming is “an attempt to evoke a connection with a past, equally romanticised but this time in a different version.” With reference to Walter Benjamin she asserts that a whole world could be maintained in the names of, for example, old streets, but not only maintained – a historical world could, in fact, be created by the names. Massey concludes that naming is one part of telling the story of a place, and that the identity of places is bound up with these stories. The story that turns out to be the dominant one, sometimes expressed in a new name, is therefore of significance in an attempt to understand the reinterpretation of a place. In addition, Anssi Paasi argues that territorial symbols strengthen the inhabitants feeling of belonging and that the most important symbol is the name of the place.

The new name of the industrial area of Norra verken, “Koppardalen,” alluded to the copper works and the coin manufacturing which were part of a proud history that, beside the prestigious task of the national coin production, encompassed spectacular orders of copper plate for the roof of the Versailles palace outside Paris in France. Perhaps the naming was also influenced by a then recently inaugurated copper coin museum. In 1983, the Johnson family had celebrated the 100 years anniversary of Avesta Jernverks AB, and the museum was opened in the presence of the Swedish king as one part of the festivities. Four years later the Norra verken was renamed “Koppardalen” in a public ceremony in the presence of the Swedish Minister of Industry. Paradoxically, both the company and the municipality chose to focus the timely distant copper manufacturing by the opening of a museum and a renaming of the ironworks. The choice of the name Koppardalen may have
referred to the past, the aim was, however, to point towards a better future, and the name may perhaps be regarded as nothing but logical since it is often easier to unite around a distant event or early symbol than around a more recent history with not yet forgotten controversies and interpretations.37

In Avesta the search for a new image not only implied the renaming of the old industrial area but also brought to light expressions of regret. In a compendium put together by the Avesta municipality in 1993, the role of Alvar Aalto and his proposals for the town were commented: “If these three projects had become reality, they would not only have unanimously changed the townscape but would also have made the town richer in tourist attractions. They would probably, in a decisive way, have influenced the life of the inhabitants in Avesta.”38 A reader can imagine the opinion that their municipal predecessors had been penny-wise and pound-foolish concerning Aalto’s suggestions. A strong image of the town as it could have been was lamented.

**Spirit of the company town**

As described in the previous chapter, the municipality’s initial idea of finding a new big company to inhabit the Koppardalen industrial area was unsuccessful. After a couple of years the local politicians and civil servants instead worked towards an idea of a more diversified use that included many different activities, both public and commercial. However, the strategy of the local politicians also revealed other problematic aspects of a company town. Gert-Jan Hospers has asserted that industrial communities in general have a “poor ability […] to react to the rising demand for services: firms and their workers are so accustomed to the industrial structure that they find it hard or are even unwilling to shift to new circumstances.”39 The Swedish concept of “bruksanda” approximately translated into “spirit of the company town” can be perceived both negatively and positively, but it connects in several aspects to Hospers’ formulation.40 The basic characteristics of the “bruksanda” are, according to Maths Isacson, a division of responsibility and function, loyalty and positive connotations to hard physical work, class divisions visible in the built environment, the individual as subordinate to the collective, discipline and control, a strict division between male and female, and an ideal of being conscientious.41 The negative connotations comprise much of what Hospers points out about a stubbornness against change and a strong confidence in the responsibility of the leaders, be it in the company, the union or the state. Due to the “bruksanda” it has been difficult, in many company towns, to change the expectation that the company, the municipality or the government should solve the problems.42 Although the class society is certainly present, the contemporary company town can also be understood in relation to its origins in a pre-industrial period where the work...
was more marked by guilds than by social classes, and where the leadership was more paternalistic than administrative.43

According to Isacson, the “bruksanda” furthermore contains a consciousness of the place. The inhabitants do identify themselves with the place, the big company, the collective norms, the organisations, the built environment and the common history. The place grounds the people in time. And, says Isacson, when the companies have disappeared or become more anonymous, the municipality and the politicians have taken over the role as community leaders.44 One of the leading persons in Avesta municipality in the 1980s, a newcomer, was described in strong words such as “a saviour” who was going to take care of everything. Although this man later left Avesta because of economic irregularities, the leading politicians and civil servants were, in general, expected to do what has to be done, and this is also a possible explanation of why – in spite of the comprehensive changes – an all-encompassing mobilisation of study groups and amateur plays that was present in nearby towns and villages during the 1970s and 80s, did not happen in Avesta.45

In addition, not at any point does there seem to have been a collective experience in Avesta of being in the midst of a severe crisis.46 With regard to the town of Eskilstuna and the Swedish Social Democratic Party respectively, Johan Samuelsson and Åsa Linderborg have shown that a presumed conflict between company or party leaders and workers in relation to history and heritage was not always present. Instead, a spirit of cooperation, a vital part of the so-called Swedish model, or just indifference also influenced the attitude towards the recent past.47 One could, for example, compare how former workers vividly protested against the new development of London’s Docklands, or how the transformation and reuse of a gas factory in Amsterdam in the Netherlands was said to have a problem with too much community involvement.48

Yet another image to strengthen this picture of Avesta as a place with strong leaders is the two groups of retired iron and steel workers that have met regularly every week since the mid-1980s to talk about their working life memories and about contemporary society. They do not at all represent a radical force with an ambition to influence the creation of history and heritage based on their own work experience. Neither have they taken part as a group in the reuse process in Koppardalen. In 1995 the trade unions and the then newly opened Swedish Museum of Work investigated, at the national level, how the trade union organisations worked with their history and heritage. The result showed that the metal union members were among the most active, which was explained by a strong collective and clear identity with proud workers.49 Ten years later Kjersti Bosdotter, responsible for culture matters at the metal union in Sweden, gave another picture, however. Bosdotter asserted that the workers in an unprivileged position did not feel they could take part in work concerning the industrial heritage. According to Bosdotter, it was difficult to get former
workers tell their stories, and all in all it seemed there was no room for the stories of conflict and difficulties anyway.\(^{50}\) In the case of Norrköping, Annika Alzén tried to find sources that would talk about retired textile workers’ view of their former workplace. However, Alzén concludes that in the life narratives of the old workers, the stories in main concern the work itself and not the factories as part of a larger building complex. Nevertheless, many people in the 1970s expressed in general a categorical and negative attitude towards the abandoned industrial landscape in the town centre.\(^{51}\) Whether it depends on the spirit of the company town or not, the workers and the public, in general, have not, to any significant extent, taken part in the reinterpretation and reuse process in Koppardalen in Avesta.

In the late 1990s and early 2000, a local guide association as well as a local history society were formed in Avesta. Apart from being established comparatively late, these organisations were, however, not radical either in the way of asserting a workers history. While Maths Isacson points to an increasing interest in local history at the turn of the 21st century due to the vanishing industrial society, and also links, on one hand, voluntary activities by local history associations, and on the other, industrial buildings that have been reused as museums and art galleries, this connection cannot be confirmed by the present study of Avesta.\(^{52}\) The former workers and the general public did not take part in the struggle to preserve and adapt the old ironworks, and they were not prominent participators in the reinterpretation process.

The first phase of the municipal development project in Koppardalen was finished in the year 2000 at a cost of about 40 million Swedish crowns, of which the municipality had contributed 25 million. This meant it was the largest separate project of the municipality in terms of money. During these years the municipality had torn down the sheet rolling mill, parts of a cold rolling mill, decontaminated land from mercury, repaired and put new roofs on a number of buildings, built a pedestrian and bicycle bridge between Koppardalen and the town centre and, finally, almost finished the construction of a sports arena. Towards the end of the first phase, the earlier mentioned questionnaire indicated that a clear majority of the local inhabitants were positive to the renewal of Koppardalen.\(^{53}\) Nevertheless, there were also voices raised against the changes, sometimes in anger suggesting that the buildings in the area should be forgotten, torn down or burnt. One inhabitant of Avesta wrote in the local newspaper:

The municipality’s buying of the Norra verken industrial area and the conglomeration of unprofitable littered buildings at a cost of 36 million crowns plus interest plus undertaking of demolition and clearance plus maintenance of the heritage listed buildings for ever and ever […] could something worse fall upon a small town like Avesta? This is crazy […] The inhabitants of Avesta have had enough of the old ironworks, you do not go there in order to feel happy. It is a narrow dirty blind alley in history.\(^{54}\)
Although the municipality, on the whole, found public support for their activities through the questionnaire, one can conclude that the public objections of the reuse process in Koppardalen concerned the municipal economy rather than the priority of interpretation of the past. The public economic undertaking to preserve and adapt the old industrial area was expected to affect municipal responsibilities like childcare and lead to increased taxes.\textsuperscript{55} Because the project was public and largely financed by taxes, the activities naturally had to compete politically in the same arena as, for example, the school and the hospital. What new meanings became attached to the local materiality of the past was obviously not a big issue.

During the remarkably long period between 1919 and 2002, the Social Democratic Party was in political majority in Avesta. After the election in 2002, a coalition consisting of the Conservative Party, the Centre Party, the Green Party, the Liberal Party, the Christian Democrats and the local party Axel Ingmars Lista – Avestapartiet, came into power. The direction of the municipal project in Koppardalen was, however, not changed, which indicated that the project was supported by an overall majority of the political representatives.\textsuperscript{56} The political agreement is notable, and could also probably be understood in the light of the spirit of the company town.

**Visions of the enthusiasts**

When the meanings of the old industrial place were not really a topic of public debate, those who really cared about a new understanding were instead people with a personal agenda, many with a professional platform. The second phase of the municipal project concerning Koppardalen began with two people, the head of the department for cultural and educational matters, Lars Åke Everbrand, and the town architect, Dan Ola Norberg, being commissioned to formulate ideas for a possible continuation of the project.\textsuperscript{57} Their proposal was presented in the spring of 2001 and described two alternatives for continuing the project. One alternative showed a high level of ambition and the other contained a lower level of ambition. The less ambitious alternative, which had the character of a nightmare scenario with broken windows, a decreasing population and increasing unemployment, was presented first.

The more ambitious alternative showed a vision of the future that was in all essentials different. This alternative envisioned international conferences taking place in Koppardalen, where big service companies were already established and students enthusiastically gathered around exciting technical models in a visitors centre. The higher ambition was compared to the ill-fated Acropolis, Alvar Aalto’s plan for a new town centre in the 1940s. In the text, the future of Koppardalen was called “the new Acropolis,” and the authors
raised a warning not to repeat the mistake made in the 1940s when the town centre design came to nothing.\textsuperscript{58}

Everbrand and Norberg asserted that the future use of Koppardalen concerned nothing less than the future of the town of Avesta and they rhetorically stated: “The question is not if we can afford to invest, but if we could afford \textit{not} to invest.”\textsuperscript{59} The municipal council also decided first to increase the budget in order to finish the sub-projects begun during first phase, and second – with two thirds of the votes – to continue the project into a second phase.\textsuperscript{60} The decision to launch a second phase of the project did not, however, imply an unconditional acceptance of the analysis and proposal formulated by Everbrand and Norberg. Instead, elements were both added and removed, and the biggest investment plans during the second phase became the conversion of a plate rolling mill and a sheet rolling mill into mainly office space, and the development of “historic milieus” in the old blast furnace plant respectively. The plans also included pilot studies for a swimming hall, an educational centre and a science centre.

The existence of one or a few truly dedicated persons have been crucial to the success of many reuse projects, especially during the formative stages.\textsuperscript{61}
For Lars Åke Everbrand, ambitions were high from the very beginning, or in his own words, he personally carried “a rather great dose of aspirations,” describing himself as a competitive kind of person, always aiming at creating something innovative. In retrospect he does not regret anything and if he had to repeat it, he would not change his decisions: “I wanted rather to do something that is noticed and worth something,” comparing the work of renewal in Koppardalen with the daily work of municipal administration.

He describes how he and a few other people have their hearts in Koppardalen and that this has made them very immune to working overtime. However, he expresses concern should the project become more institutionalised and the personal devotion probably colliding with an administrative form. Then he believes it would feel “meaningless, I will not take part in that.”

Everbrand describes the possibility of realising new and innovative ideas in Avesta in terms of freedom. He thinks he has been able to do almost everything he wanted, as long as he only used the money within his own administration, characterised as “a kind of economic dictatorship.” Informal groups have been able to work unobstructed, initiate ideas and carry them through, without any formal political direction. According to Everbrand, it was, however, important to get external recognition, for example, when one of Sweden’s biggest television news programmes, Aktuell, reported about the art exhibition Avesta Art during peak viewing hours. He asserts that as soon as they received this nation-wide exposure the local politicians also regarded the exhibition as terrific.

At the offices of the municipality and the municipal real estate company, Avesta Industristad, the story of Koppardalen was put within the narrative of a bright future for the town and the inhabitants of Avesta. The reuse process in Koppardalen was regarded as the road to success, to new work places, to an increasing number of inhabitants and to an image of the town in which Avesta was considered a magnet for external commercial investment and cultural interest. David E. Nye suggests that landscapes, like the Koppardalen area, are created by an act of imagination and expropriation, hence socially constructed by the activity of landscaping, a process of “changing the appearance of the world.” The actors in Avesta took part in a dialogue about their differing perceptions, often expressed in narrative form in order to make sense of the new meanings. Connecting the never realised town centre, Acropolis, and the industrial area of Koppardalen is one example of this kind of pervasive imagination. Creating a narrative is, however, not the same thing as inventing a story. There has to be a balance between pre-figuration and what others can possibly be convinced about. The imaginative act that can create a narrative of a landscape – or the meaning of a place – can thus also be seen as a way of establishing a legitimate interpretation, something Everbrand and Norberg – although not in every detail – managed to do.
4. Kopparadal in Avesta: NEGOTIATING THE LOCAL FUTURE

A bridge or an excavation?

Another actor with a personal agenda, Axel Ingmar, was instead engaged in the older history of Avesta. Ingmar was a local party leader, as well as an amateur geologist and former history teacher. In the early 1990s, he wrote an article in *Avesta Tidning* in which he asserted to have localised the remains of the old copper works from the 17th century, situated mainly underneath the through road in Kopparadalen. He showed how it was possible to observe the remains by going into a culvert partly filled with water. His statement was received with interest by the municipal project team and mentioned in the programme for the first phase of the project. However, an excavation was indefinitely postponed.

Ingmar struggled for an excavation. Among other things he advocated that younger buildings from the ironworks period should be torn down in order to make it possible to excavate a larger area of the copper works. He later abandoned this opinion and the question of the excavation instead became connected to the plans of the municipal project team to build a pedestrian and bicycle bridge between Kopparadal and Avesta town centre. The lack of easy connections between the two areas had for long been a prioritised issue. Earlier schemes had included a car tunnel but later, in connection to the new plans for Kopparadal, a pedestrian and bicycle bridge was regarded more appropriate. Emphasising or breaking up boundaries is – like the act of naming – a powerful activity. In general terms, boundaries structure many narratives and influence the perception and meanings of spatial relations, like the division between the Avesta town centre and the Kopparadal industrial area into two separate worlds.

The municipal project team initially suggested that the bridge should cross the roof of a cold rolling mill or a laboratory building and then descend to the ground. Axel Ingmar reacted strongly because this suggestion implied that the area where he had located the copper works would in that case be built over, making an excavation impossible. After a period of animated argumentation the municipality finally decided to tear down thirty metres of the cold rolling mill building in order to make place for a stairwell and an elevator closer to the railway. A gravel road that could easily be removed if or when an excavation was to be undertaken was constructed from the stairwell. The remains of the copper works were hence prioritised at the expense of the cold rolling mill, in line with the naming of the whole area. The older – the more valuable, could be a valid heading for the choices made. As Doreen Massey has claimed, the competing stories of a place’s past are simultaneously arguments about what its future should be. In the visions of the future of Kopparadal, the materiality of the post-industrial situation was arranged in a hierarchy, not only consisting of certain entities like slag stone or a waterfront location; the old copper works was not important enough to be excavated immediately, but still more important than the overall impression of the cold rolling mill.
In June 2000 the pedestrian and bicycle bridge was inaugurated. The structure bridged the difference in altitude between Koppardalen and Avesta town centre but also infrastructure in the form of the railway and a road. From the town centre the bridge connection was a prolonging of the ground level...
and at the lower level Koppardalen there was an elevator and a stairwell. The opening ceremony featured, among other things, an amateur actor dressed as a worker, carrying a thick rope and walking from the Koppardalen area. On the newly built bridge he met two young people holding a band that represented broadband for computer communication, walking from the town centre. In a symbolic gesture they knitted together the rope and the broadband, the old and the new, which the bridge was to unite. Therefore the audience of about 1,500 people crossed the bridge for the first time and went down to Koppardalen. The two bands that were knitted together and their carriers mediated a clear message: the old worker from the history of Avesta and the young people, the future of the community, belonged together and the industrial work was replaced by an activity with a strong post-industrial marker. The physical and the mental barriers between Koppardalen and the town centre were in that way challenged.

Elitist and popular approaches

Apart from those people with a personal agenda described above, who took part in the reinterpretation process? What were their arguments and from which platforms did they act? A comparatively small group of actors led the reinterpretation and reuse of the Koppardalen industrial area. They were found in the municipal project team, as well as in other positions outside the municipal administration. The group consisted of approximately ten men forming a tight network. They were all middle-aged and had known each other in different constellations their entire professional life, that is, for twenty or thirty years. While some of them regard Avesta their hometown, others moved into the town or the surrounding area in the 1970s or early 80s. Most of them did not work at the iron and steel company themselves, and furthermore had not been into the old industrial area at all before the late 1980s or early 1990s. Hence, the Koppardalen area was mainly interpreted and reshaped by individuals whose first experience of the place was in its abandoned and derelict state. This group includes no full time politicians, although some of them have served, from time to time, as part time politicians. Their professional bases instead included positions as municipal civil servants or employees at the municipal real estate company, the county museum, the county administration or the university.

The ease by which the adaptation work in Koppardalen mostly proceeded could largely be explained by the reliable communication that was established within the group. When something had to be decided or executed in a hurry, a simple phone call could solve the problem. The group of men were not only long time acquaintances, they also held the same professional positions in their organisations during this whole period. In the publicly
Since 2000, a bicycle and pedestrian bridge that spans the road, the railway and the difference in altitude connects the town centre and the Koppardalen area. To the right is the cold rolling mill with its new gable, after thirty metres of the building had been torn down. In the background one can glimpse the blast furnace plant. Photo: Anna Storm, 2003.

A view from the new bridge over the eastern part of the Koppardalen area. To the far left is a power station, designed by Torben Grut, and in the middle the blast furnace plant. In front of the blast furnace plant is a new, gravelled road – a compromise to enable any future excavation of the remains of the old copper works, located beneath. Photo: Anna Storm, 2003.
owned old industrial area of Koppardalen, the political representatives should have directed the actions taken. It was, however, almost without exceptions, the professional civil servants who took the initiatives and formulated the visions. The fact that there were very few occasions when different opinions explicitly collided can probably be understood in the light of the confident network in charge of the reuse process, probably together with a general acceptance in the town for the municipality’s ambitions. Lars Åke Everbrand is of the opinion that even though he could see the need for more people to do the huge amount of work, he preferred working with the small number of persons involved. He argues that this is the reason “we can make decisions rather fast” and if there had been a large staff they would have had to ask for support in everything and in this case that was not needed. Nevertheless, the relative consensus characterising the negotiating process concerning the changing role of Koppardalen in Avesta is noteworthy.

What more characterised the group of leading actors? Several of them consciously worked to educate others: the politicians, the company representatives renting office space in Koppardalen and the inhabitants of Avesta. The issues of education were, for example, connected to what should be regarded historically correct in terms of architecture, the characteristics of the international arena in which Avesta wanted to play and the appropriate way of viewing contemporary art. The attitude of knowing more was exemplified by the politicians towards the inhabitants of Avesta, for instance, in the words of the local councillor, Ulf Berg, when commenting on difficult decisions:

> You have to be brave and push things when you have knowledge and perhaps another kind of input, which influence the decisions you make, compared to those who just read the local newspaper.

Similarly, Lotten Gustafsson has shown how civil servants in a heritage creating process on the Swedish island of Gotland viewed resistance towards the plans as mainly a pedagogical problem. The solution to differing opinions was thus simply enlightenment.

For several of the leading actors, the attitude of knowing more also includes an ambition to create something that will become a public good. The architect who has been extensively engaged in the reuse process, Jan Burell, emphasises that the effort of making Koppardalen a place of public access has been very important to him. As an example he made a first draft of a swimming hall located in one of the former ironworks buildings, but it was subsequently decided not to build the swimming hall within the old industrial area. Beside the disappointment of a rejected proposal, Burell expressed his concerns about other future plans for the industrial building. One idea was to convert the building into housing and this idea he found “exciting, but then in the worst case it could become private property. It should rather be something public.”
At the time when the iron girders suddenly disappeared, the chairman of the municipal council, Karin Perers, had held this position for only a couple of months. The visit to the old industrial area of Koppardalen – introducing this chapter – was a first step in an ambition to bring new knowledge and ideas to the members of the council. The guided walk through the industrial area when the iron girders were discovered taken away, was labelled a “study visit” and followed by an extended council meeting a few days later. Perers had invited special guest speakers who were to give their views on the future of the area, together with representatives from all the political parties in the council to this meeting. In this way, the chairman mobilised different non-political professionals to direct the discussion, several of whom I regard to belong to the ten men network.

At the meeting, none of the speakers made the removed iron girders an explicit issue in their speech – in spite of the fact that most of them had taken part in the Sunday study visit. Several of them did however mention the episode incidentally or indirectly. Professor Maths Isacson, for example, concluded his speech by giving some advice to the municipal council. Among other things, he emphasised that even though economic and practical reasons made it impossible to preserve all the built environment within the industrial area, it was nevertheless of great importance to also make less attractive structures visible, and if they were torn down, to leave some traces in the ground or elsewhere.

In the following speech, the County Antiquarian, Ulf Löfwall, praised the municipality for the previously carried out inventory, the purpose of which had been to identify material “carriers of value” in Koppardalen. He continued to discuss the relationship between seemingly insignificant material details and the total impression of a place. In a subordinate clause he rhetorically refused to probe into the question of the iron girders, but nevertheless connected it to a statement where he asserted that a certain detail may not be essential in itself, but together with other details it constituted the base for the identity and character of the area. He warned that if the details were not respected the area would soon become trivial and reduced to the commonplace.

Of the political representatives, the leader of the Conservative Party and then also local councillor, Ulf Berg, meant that there was no evident answer to what was right and wrong, whether the iron girders should or should not have been removed, but the important thing was to continue an open discussion about the reuse process. Others were less diplomatic and declared their opinion that cutting down the iron girders and plastering the coloured gable, was a self-willed decision and that “these two details had a really important history to tell, which is now gone.”

The study visit to the industrial area was presented in the local newspaper, Avesta Tidning, and the municipal council’s meeting was broadcasted live on the local radio channel. The main impression is yet that all actors were eager...
to smooth over the incident of the removed iron girders and the plastered gable. The superior goal of adaptive reuse of the old industrial area could not afford too many explicit internal conflicts. The incident was furthermore not regarded absolutely crucial, although several of the actors still commented on it with frustration some years later.90

The first decision to spare the iron girders and the coloured interior wall in connection with the demolition of the sheet rolling mill, and the second decision a couple of years later to take them away when the oil company was about to move in, indicate two conscious but different ways of reinterpreting the industrial place. The division of the industrial area into three sections, indicating the municipality’s intentions, was challenged by the existence of the iron girders that were saved by the actors representing cultural and educational activities, and then taken away by the actors representing the commercial and real estate issues. The two directions of adaptation to new use collided on the borderline between the two sections, not only as an expression of two geographical areas of responsibility, but also as an expression of two somewhat different visions of the desired future of the place. According to Everbrand, it could be compared to a game where different departments within the municipality rivalled each other.91

Unique by comparison

What then were the qualities of the Koppardalen industrial area that the different actors could agree upon? And how were these qualities articulated and asserted? Gregory Ashworth and Peter Howard have pointed to how history is used to “stress continuity and distinctiveness sometimes as a condition deemed in some way relevant to economic production and sometimes as no more than a formal assertion of the unique existence and thus identity of a place.”92 Convincing images have, however, been created in Avesta also in other ways than by making references to the past and to visions of the future. Comparing Avesta and Koppardalen to other places within the country and abroad has been one important aspect in the local process of adapting the industrial area of Koppardalen to new use. Many of the actors travelled to other countries in order to find inspiration and also to discover unsuitable examples, that is, what kind of changes should be avoided.93 These international experiences have also been used to spread and anchor visions upheld by some of the municipal civil servants to the local politicians, who in the end were supposed to approve the direction of the reuse process.94

Ann-Kristin Ekman suggests that identities based in territoriality are difficult to define, and that the everyday experiences are most often connected to a rather limited geographical area. The village, the housing area or the municipality is to most people the relevant territory that is loaded with
meaning. Anssi Paasi similarly observes that compared to “the individually experienced and produced ‘place,’ the ‘region’ has an explicit institutionalised and thus collective nature. Place refers to the process by which everyday practices of individuals relate to the structures of institutional power, whereas region is a symbolic entity beyond direct experience produced by individuals only by collective means.” By focusing the more local and geographically limited place of Koppardalen in Avesta, this study indicates that the main frame of reference for a certain municipality or individual was not the Bergslagen region, but other places within the country or abroad. Other local places, interpreted and loaded with meaning, constituted the main comparison when the uniqueness of Koppardalen was articulated.

The four authors of the inventory of “carriers of value” was one group that formulated value by comparison. Among other things they emphasised how the old blast furnace plant was “magnificent with its elevated stairs and its expressive chimneys” and that the slag stone façade in its “solemn severity bring your thoughts to a Florentine renaissance palace.” Different actors describing the area, among them the Avesta guide association which showed visitors around, later rephrased these comparisons. According to Doreen Massey, the local uniqueness is always “a product of wider contacts; the local is always already a product in part of ‘global’ forces.” The conception of the uniqueness of the place, Koppardalen, in Avesta was thus created by a presupposed relationship between the assumed identity of a place and its past, but also and more distinctively by comparison with other places.

To articulate meaning and value by making references to other well-known places is a common strategy. Norrköping has, for example, sometimes been called the Manchester of Sweden because of its once dominant textile industry. In addition, Annika Alzén suggests that perhaps the comparison with the famous textile city could have given extra incentive to the efforts of preserving the industrial built environment in Norrköping, because of the powerful preservation forces that were active in Britain. Another example is to be found in Baltimore, Maryland in the United States where the redevelopment of a former industrial site included new custom-made railings designed by a famous metals artisan using objects retrieved from a former factory as models. This way of making the place unique, trying to make it look different from similar development projects, was described by the project manager as ”a little bit of Las Vegas in Baltimore;” Las Vegas itself of course building much of its value upon references to other places.

The articulation of value in Avesta by comparison was, however, not only made through written texts or spoken words, but by travelling to other places in order to discern differences and similarities. The number and range of journeys made by politicians and municipal civil servants to other countries, motivated by the reuse process in Koppardalen, were extensive. In smaller and larger groups, they travelled primarily to Finland, Britain and Germany,
to visit former industrial places that had been reused in different ways. Any possible Swedish references, like Norrköping and Eskilstuna, were almost totally neglected by the politicians and municipal civil servants, because they thought there was little to be seen within the national borders, if the process in Koppardalen was to be at the forefront conceptually. The inspiration and the less successful examples the travellers brought back concerned, among other things, possible activities in the former industrial buildings, ways to work with aesthetic and pedagogical issues and practical solutions for heating in non insulated constructions, for example. Two features have been commonly mentioned in Avesta within this context: the remaining building complex of the old ironworks in its entirety as a pedagogical resource, and the two remaining furnaces from the open-hearth plant as exclusive objects. There are, however, also more reflecting comments to be found:

The journey to England [...] was incredibly important, because then they saw, then they accepted. They had not visited any place like that before and we were able to see a development that they could compare to Koppardalen, how Koppardalen could develop in the same way. That was important, we are part of an international trend.

In this manner, Lars Åke Everbrand described his impressions and the functions of the trips, connected to the reuse process of Koppardalen. The quotation concerned a visit to the industrial districts of the Midlands in northern England in 2001. Local politicians and civil servants from the municipality took part in the journey, a total of fifteen people, and the comment illustrates how the travelling could be part of a local discussion, in this case strengthening the political will to implement some of the ideas that had been put forward in the process to change Koppardalen. “They” in the quotation thus refers to the local politicians, those who had to be convinced for the project to become successful in the long run. Everbrand describes the principal aim was getting support for their ideas, although there was always a risk that the politicians could start interfering with the details of the process, which was “none of their business.”

Another reflection was made by Kenneth Linder, civil servant in the department of cultural matters in the municipality, based on his several journeys to the Ruhr district in Germany:

...they have preserved some fragments, skeletons and framework. In the landscape you could somehow imagine, that here has been a building, there it has been a wall. And it is also done through greenery, important to conquer the area with greenery. They have such an abundance of industrial areas so probably they think they have to take away the dirt and make it green, but still you could get a feeling of a structure, that this place has been different...
Linder’s reflection illustrates what the transformation process in the Ruhr district looked like at the beginning of the 21st century, against the backdrop of related processes in Avesta. “They” in this quotation refers to the unnamed people who had been working to change the redundant industrial landscape of the Ruhr district into something more adapted to contemporary needs. The major characteristics pinpointed by Linder are the vast number of former industrial structures, the lack of natural greenery and finally the vague but still readable landscape of the industrial past. At least the two first mentioned features definitely differed from the physical environment in which Koppardalen is located and his reflection somehow mirrors this difference.

Another group of actors in Avesta, mostly pensioners interested in local history, travelled mainly within the country. Their frame of reference was based more on networks and organisations connected to the so-called “work life museums” mentioned in the second chapter, local history associations and trade unions, than to large scale reuse projects. The ideas brought back by these actors concerned, for example, the possibility of showing ongoing handicraft activities or the inferior example of exaggerated use of text information in an exhibition. These travels have nonetheless also worked as a way of asserting the unique value of Avesta and furthermore to strengthen a feeling of pride. The former chairman of the local industrial history society in Avesta, Ingrid Bengts, described a meeting with amateur historians from other places in this way:

Oh, do you come from Avesta, they say, [...] where you have had the sense to preserve the industry [...] and I cannot help feeling such an enormous pride to be from Avesta.

According to Maths Isacson, the way to assert one’s hometown as very special is an expression of how the place is connected to the concept of “bruksanda” or spirit of the company town. The local inhabitants of a company town identify themselves with the place and if the place is regarded valuable and unique, this, to some extent, counts for its inhabitants as well. Isacson explains the function of travelling – using Avesta and the municipal project in Koppardalen as an example – as neutralising blindness to defects in one’s home and thus avoiding standardisation. In contradiction I argue that the understanding and the appreciation of one’s local place are generally formed and expressed in a far more complex way, and that travelling can be a way of asserting local uniqueness which in many cases though has led to replication and homogeneity.

This chapter shows how various actors were involved in the negotiations about the local future in Avesta, as it was expressed in connection to the reuse
process in Koppardalen. The company was the first to interpret the industrial area from a heritage perspective, and the company’s preservation and museum activities was paralleled and strengthened by growing professional heritage recognition at the national level. In the late 1980s, Koppardalen was taken over by the municipality, which then became the most prominent actor in defining what the desired future and hence accurate understanding of the area was. Many different actors articulated the value and meaning attributed to Koppardalen by a comparison with a wide range of other places and initiatives, like the Acropolis proposal by Alvar Aalto, Florentine renaissance palaces and activities in the Ruhr district.

Within the municipality there were a few people with a strong personal agenda, primarily civil servants, who together with a small number of professional actors outside the municipality formed a network that influenced the actions taken very much. This group was able to develop their ideas about, for example, contemporary art in the old blast furnace plant, relatively undisturbed. The local public opinion was generally in favour of the renewal project and the objections raised concerned financial issues rather than interpretative ones. One exception was the large number of proposals in the competition to rename the industrial area.

On some occasions, different municipal ambitions collided, as in the case with the pedestrian and bicycle bridge versus an excavation of the old copper works, and the case with the hastily cut down iron girders. The level of general agreement is however remarkable and could perhaps be explained by a combination of different factors: the spirit of the company town that implies great trust in the community leaders, a cooperative attitude based on the Swedish model, the lack of an experience of crisis, and the mutual confidence within the tight and stable network of devoted individuals driving the reuse process.

In the following two chapters, some of the findings from Koppardalen and Avesta will be put in contrast to two other reinterpretation and reuse processes. First, we visit Ironbridge in the Midlands of Britain and examine issues of the articulation of industry as heritage, and of a museum project in relation to its local context.
4. Koppardalen in Avesta: NEGOTIATING THE LOCAL FUTURE
5. Ironbridge Gorge Museum: 
HERITAGE STATUS AND LOCAL ANCHORAGE

... a living museum is being formed around the relics of one man’s momentous achievement [...] The project is being undertaken by men who believe that an industrial civilisation, whose prosperity is still based largely on the metal extracted from iron ore, cannot allow these most precious monuments to fall into dereliction.¹

At the time of its inauguration, industrial archaeologist, Arthur Raistrick, in this manner described the Ironbridge Gorge Museum as based on the inventive genius and still an activity of decisive importance in contemporary society; iron and steel making. The formulation focuses the material remnants and also provides a hint that these “precious monuments” had been neglected until recently. Through the efforts of preservation, the museum would be able to pay the remnants the attention they deserved, and in addition it was to become a “living” museum and not anything commonplace.

This chapter describes the formation of an industrial museum in Britain in the late 1960s and 70s and addresses questions about the articulation of industry in the heritage arena, as well as the establishment of a museum project in its local context. The actors in this process were, apart from the local population, primarily newcomers to the area and, in addition, heritage and museum professionals. The activities of industrial archaeology and the ideas concerning ecomuseums furthermore made up an outer frame for the establishment of the museum. Who articulated the value of the old abandoned industrial places in the Ironbridge gorge, and what was the outcome of their argumentation? What characterised the relation between the local inhabitants and the newcomers, and how did this affect the museum?

The gorge with the river Severn at Ironbridge in the West Midlands of Britain is by many looked upon as the cradle of the industrial revolution.² At the beginning of the 18th century, successful experiments to make iron using coke instead of charcoal were carried out here, and during the second half of the century, the region was a leader with regard to a number of important products.³ Among these could be mentioned iron cylinders for steam engines, rails, iron boats, and iron for construction purposes. The 18th century was a
5. Ironbridge Gorge Museum: HERITAGE STATUS AND LOCAL ANCHORAGE

During the period during which fires were commonplace occurrences, a fact which strengthened the importance of iron as construction material.\(^4\)

In 1779, the gorge became the place for the first bridge in the world made of iron, manufactured in the surrounding area. Since the slopes of the gorge were unstable, the existing techniques for bridge construction, with stone or wood as building material, were difficult to use here. Almost
immediately after its erection, the bridge became a symbol for engineering knowledge and attracted tourists as well as artists. The industrial image as a genre, in general, came into existence in the second half of the eighteenth century in the wake of rapid industrialisation in England. The idyllic pastoral setting along the river Severn, combined with the industrial built environment is still appreciated two hundred years later and regarded “something of a masterpiece and [...] one of the most picturesque industrial settlements in existence.”

The bridge affected the communication patterns and the nearby settlements, which resulted in its surrounding area becoming a centre for trade. At the northern hold a town called Ironbridge was established. In 1862 the railway reached the region and a station was built close to the southern hold of the bridge, which thus continued to be a junction between the railway, the waterway and the road. The gorge prospered during the second half of the 18\textsuperscript{th} century when almost one third of all the iron produced in Britain was smelted in the area. However, the 19\textsuperscript{th} century implied a stagnating economy and from the 1870s the area declined rapidly. Instead production grew in areas such as South Wales and the Black Country. The remaining iron foundries of the gorge subsequently mainly concentrated on architectural and decorative casting. The 1850s also brought new industrial activity to the valley such as decorative tile manufacturing and a china factory. About seventy years later, in 1926, the china factory stopped production. The iron bridge was closed to vehicular traffic in the 1930s, and in the 1950s the tile manufacturing ceased.

A museum takes shape

In the 1950s the local ironworks, the Coalbrookdale Company, traced its roots back to the successful experiments at the beginning of the 18\textsuperscript{th} century of smelting iron ore using coke instead of charcoal. The company was to celebrate its 250\textsuperscript{th} anniversary in 1959 and the preparations included, among other things, an excavation of the old blast furnace that was located on the company’s premises. The furnace was known about, but hidden beneath many decades of waste material. At the anniversary festivities, the excavated furnace and a small museum, dedicated to telling the story of the innovative iron master Abraham Darby and his two later namesakes, were inaugurated. The museum was mostly directed towards visiting customers and school children from the region.

In the 1970s, the Coalbrookdale Company was bought and the local enterprise became a division within a much larger organisation with blast furnace plants and employees in several countries. The people leading the work locally lost most of their power over the interaction with the local
society. In parallel to the Johnson family and the iron and steel company in Avesta, the connection between the company and the local society of Ironbridge was mostly lost.¹⁴

The Ironbridge Gorge Museum Trust was formed in 1967, its first director appointed in 1971 and the museum fully opened to the public
in 1973.\textsuperscript{15} It was planned that the museum should consist of the remains of the early industrial activity preserved in situ along five kilometres of the river Severn between the villages of Coalbrookdale and Coalport, covering 40 hectares along the wooded river valley of rural character. A network of museums was to include the old blast furnace in Coalbrookdale, the homes of the Darby family, the china factory, the tile factory and an open-air museum where buildings and machinery that could not be preserved in situ were to be moved or reconstructed.\textsuperscript{16} The museum did, naturally, also comprise the very iron bridge that had given a village and the museum their names.

The Ironbridge Gorge Museum was said to become a new kind of museum since it had the ambition of recreating a whole workers’ society with remains from an earlier industry “of national importance for a time of world-wide fame.”\textsuperscript{17} The relation between the establishment of the company museum of the Darby furnace in the 1950s and the opening of the Ironbridge Gorge Museum twelve years later has been a matter of some debate among the actors. While some indicate a clear link between the two, others reject this connection.\textsuperscript{18}

The establishment of the Ironbridge Gorge Museum had, however, one unquestioned prerequisite in the designation of a new town.\textsuperscript{19} During the Second World War, many housing areas and much industrial infrastructure in Britain were destroyed. After the war, the government set up a committee to organise a grand scale improvement of the built urban environment, including not only damaged areas but also completely new settlements. One important aim was to limit the growth of the bigger cities. The “new towns” were inspired by the garden city movement with an emphasis on green areas and a balance between living and working estates.

In the New Towns Act of 1946 it was stated that the new towns were to be built with government funds, and, at the local level, carried out by a development corporation, which had the possibility to acquire land and property within the designated area. While the first stage was built just after the war and comprised mainly satellite towns comparatively close to London, the second and third stage in the 1960s focused on the declining industrial areas of northern and western England, emphasising ways of attracting new employment.

Among the new towns designated during this period was Dawley new town in 1963, comprising a number of existing towns and villages in Shropshire in the West Midlands. The designated area was extended in 1969 and the new town was renamed Telford, after the famous civil engineer Thomas Telford. Other suggested names at the time were Dawelloak and Wrekin Forest City. The extension meant that the area of Ironbridge gorge a few kilometres south of Telford, comprising the villages of Coalbrookdale, Ironbridge, Madeley, Broseley, Jackfield and Coalport, was included. The gorge was, from the new town perspective, regarded a cultural component
Map of the steep and wooded Severn valley indicating the spread out villages of Coalbrookdale, Ironbridge, Broseley, Jackfield, Madeley and Coalport, as well as the ten main museum sites within the Ironbridge Gorge Museum. The position of the Bedlam furnaces is also marked (11). The “new town” Telford is located about ten kilometres north of Ironbridge.

1. Darby Houses
2. Coalbrookdale Museum of Iron
3. Enginuity (interactive design and technology centre)
4. Museum of the Gorge
5. Iron Bridge and Tollhouse
6. Broseley Pipeworks
7. Jackfield Tile Museum
8. Blists Hill open-air museum
9. Tar Tunnel
10. Coalport China Museum
11. Bedlam furnaces

and a beautiful recreation area for the expected increasing population of Telford, and described as a vicinity “most valuable for amenity purposes.” On behalf of the development corporation, a project team was given the task of investigating possibilities for a museum in the gorge. The enthusiastic members of the team strongly argued for the establishment of the museum and for the preservation of a number of different sites in the valley. 

In terms of money the museum was a small part of the new town’s activities, but nevertheless, in terms of visions of the future it was the more important. The focus of the enthusiasts in the project team was, however, not only to create a natural and cultural environment for the new town population but rather to promote and reward what they considered the outstanding industrial history of the valley. In the minutes from the project team’s meetings the superlatives are almost endless, and the members of the group especially emphasised the significance of the valley as the birthplace of industry from a worldwide perspective. Accordingly, the project team wanted to create a museum that attracted national and global interest rather than just local or even regional attention. The invention of smelting iron using coke, in the early 18th century, and the list of “firsts” of the region, such as the first iron bridge, were a foundation for the justification of the existence of the museum. The project team found they had a responsibility to take care of these valuable remnants.

Articulating the industrial past

Their endeavour coincided in time, and somewhat in place, with the then growth in industrial archaeology activities, examined in the second chapter, and the project team cooperated with and could, to some extent, be said to be part of this phenomenon. According to Peter Davis, a general interest in local history occurred in Britain in the 1970s, which coincided with the recognition of old industrial remnants. As a consequence increasing numbers of industrial and rural life museums were opened. Although this explanation is probably valid for Ironbridge as well, I believe the ambitions of the new town development corporation cannot be overlooked and that these represented a somewhat different set of ideas.

However, when the project team was about to present their ongoing investigation to the development corporation, they had a small exhibition on the theme of industrial archaeology in the town hall in order to convince the corporation of the importance and possibilities of a museum in the Severn valley. The response was “warm, enthusiastic, wholehearted and committed.” At different occasions during an intensive planning year from 1966 to 1967 the project team also invited guests to give speeches during the corporation’s meetings. Among the speakers could be mentioned Michael
Rix, lecturer at the University of Manchester and the person who launched the concept of industrial archaeology.24

In his speech to the development corporation, Rix argued that it should be possible to visit the place of the birth of the industrial revolution as a “living display” and that the project was not just for the local area “nor just for the country, but for the world.”25 His words seem to have made a great impression on the listeners. Barrie Trinder, who was also engaged in industrial archaeology at the time, asserted that the museum plans along with similar initiatives elsewhere mirrored a “real and widespread popular concern for the preservation of the monuments of the Industrial Revolution.”26 Trinder compared the importance of the early industrial remnants for Britain to “those of classical antiquity to Greece, or the Renaissance to the cities of Northern Italy.”27 Value was hence attached to the place by its comparison with sites and phenomena in other parts of the world in a manner similar to the arguments articulated in Avesta, described earlier.

The general attention paid to former industrial buildings and structures had, however, not diffused so far at that time. The later curator and director at the Ironbridge Gorge Museum, Stuart Smith, gave one illustrating example. In the mid-1960s, he had completed his masters degree on the history of technology in Manchester when he for the first time heard someone mention...
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a place in Shropshire with an iron bridge. Although he had specialised his study in textile industry and the introduction of cast iron, he had not known there was a cast iron bridge from the late 18th century not far away from his university. When he heard about the bridge, he did not go there anyway “because it was, you know, forgotten.”

Instead Smith took part in industrial archaeology activities of preservation and recording at other places. He recalls the massive public protest when the Euston Arch in London, mentioned in the second chapter, was torn down in the early 1960s and believes that the widespread interest in old industrial buildings could be dated from about that time. Neil Cossons, the first director of the Ironbridge Gorge Museum, asserted in 1975 that even though the destruction of the arch was a major loss, he foresaw that in the future one may regard the loss “as the first great sacrificial price that had to be paid before other monuments of Britain’s industrial heritage could be spared.” The demolition of railway stations seems to have been decisive also in the United States with regard to a wakening interest and appreciation of older buildings with industrial character. Sharon Zukin suggests that the demolition of Pennsylvania Station in New York City “threatened people with a sense of irreparable loss.” While these events formed a background, they were not, however, directly involved in the definition and creation of the Ironbridge Gorge Museum.

Positioning within the branch of museums

The suggestion the project team made to the new town development corporation was to form a trust as the organisational platform for the museum. According to the minutes from the meetings and later the final suggestion, the project team was mainly occupied with ideas concerning the open-air museum. The group did undertake a couple of studies of existing open-air museums from a national and international perspective. The open-air museum of Skansen in Sweden was one of the role models given special attention. The activities being undertaken in Sweden at the turn of the 20th century – when Skansen and a great number of local history societies were formed in an endeavour to preserve knowledge and artefacts from the vanishing agricultural society – were put in parallel to the new interest in industrial history in Britain. In 1976 Barrie Trinder asserted that just as “local open-air museums sprang up all over Sweden between 1870 and 1914, so we are witnessing a similar phenomenon in Britain as steam, coal, iron and cotton are ousted from everyday life by electricity, oil, plastics and synthetic fibres.”

Apart from the open-air museum that was to be built in an area called Blists Hill, the Ironbridge Gorge Museum initially included a number of former industrial sites in their original location. Among them was the Coalbrookdale blast furnace museum inaugurated in the 1950s, which was
handed over to the museum trust in 1970 by the then owners, Glynwed Foundries, on a ninety-nine-year lease. Neil Cossons and Stuart Smith, employed at the museum from 1971 and 1972 respectively, both regarded the in situ preservation concept as an important new and innovative feature of the museum. Museums were, at this time, mostly understood as indoor displays behind glass with small labels of provenance and dates. A few open-air museums existed in Britain, but in situ preservation of industrial milieus or vernacular buildings at all, systematised and presented in a museum context, was, on the whole, an unexplored field.

Cossons, Smith and David de Haan, later the deputy director of the museum, all remember these first years as a period of great enthusiasm and self-confidence. Everything seemed possible and within reach. Ironbridge was seen as the birthplace of the industrial revolution and as an important node in the new interest for industrial archaeology and industrial history. Consequently, Neil Cossons notes how it was regarded as nothing but logic that the initiative to organise the first international meeting on the topic of industrial history, mentioned in chapter two, was taken in Ironbridge. About seventy people were invited to the meeting in 1973, and approximately forty came to Ironbridge. Rather than calling the meeting a conference it was termed a congress in order to add significance and weight to the event. The congress became important not the least because most of the people attending had never met before. Cossons describes how proud he was that the congress was held in Ironbridge, that it was an idea no one had had before and that the mission they were carrying out in the valley was expanded to include the rest of the world as well.

Between 1973 and 1990, the Ironbridge Gorge Museum grew with the opening of one new museum or exhibition a year. In 1978 the museum received the very first Museum of the Year award created by the Council of Europe, and in 1986 the Ironbridge Gorge was designated world heritage by UNESCO.

That the museum represented something new became clear when work began on excavating and restoring the industrial sites remaining in situ. For example, when the museum was about to excavate the Bedlam furnaces, dating from 1758 and among the first built specifically for coke smelting, there were no one to ask for advice because a furnace from that period had never been excavated in Britain before. Stuart Smith recalls a discussion with inspectors from the Ancient Monuments Board about how to consolidate the brickwork but since the heritage professionals had experience only of castles they could not really provide any help. Smith reflects that today “we would never have been allowed to excavate a site like that any longer, I say excavate, what we really do was take away the rubbish, the archaeology followed later.”

The establishment of the Ironbridge Gorge Museum was parallel in time and yet sparsely connected to the development of ecomuseums in France and some other countries, described in the second chapter. Simultaneous to the
process of creating the museum in Ironbridge was the inauguration of the Museum of Man and Industry, situated in the French district of Le Creusot and Montceau-les Mines in the southern part of Bourgogne. This museum covered an area of 500 square kilometres including an urban centre, a mining town and rural parts. The area had been an important industrial region in France, producing armaments and locomotives, from the late 18th to the mid-20th century, when most of the production had ceased. The museum consisted of approximately twenty sites as well as an administration and information centre located in the castle of the former industrialists.

The ecomuseum in Le Creusot and Montceau-les Mines early on received a vast number of visits from museum professionals who were interested to see how the museum worked with enriching the lives of the local population, and putting the ideas of the “new museology” into practice. The Museum of Man and Industry in France thus became a role model or source of inspiration for similar initiatives on an international arena. One example is the Ecomuseum Bergslagen in Sweden. It was inaugurated in 1986, located in one of the industrial regions of the country, Bergslagen, and it comprised an area of 750 square kilometres. The formation of the Ecomuseum Bergslagen was decisively influenced by the ideas developed in France, among other things in its ambition to encourage volunteer participation and to strengthen local identity.

The ecomuseum experiment was, however, looked upon with disapproval by the French museum profession at large, and it was regarded almost an anti-museum. Similary while the ideas of new museology in general found a hold in Britain, the ecomuseum concept did not. In a book devoted to new museology published in Britain in the late 1980s, the national perspective totally dominated and the only two non-British examples were gathered from the United States and Australia. The ecomuseums was consequently not mentioned at all.

One of the key figures in the development of ecomuseums, Georges Henri Rivière, was a great admirer of the Ironbridge Gorge Museum and thought it fitted well into the ecomuseum model. This characterisation was, however, rejected by the museum representatives in Ironbridge. David de Haan, for example, declared that Ironbridge Gorge Museum could not be regarded an ecomuseum because the involvement of the local population was non-existent or of the right character due to the ecomuseum concept, a question we return to later in this chapter. The reasons for the British indifference to the ecomuseum ideas could probably be understood in terms of national competitiveness. However, it has also been asserted that there were organisations in Britain, which approximately met the same needs. Institutions like the Groundwork Foundation and the Common Ground dealt with local initiatives of restoring landscapes and promoting the importance of a common cultural heritage respectively. Hence, another concept was not deemed necessary.
An experience of thorough changes

The 1960s and 70s was a period of great changes in the industrial landscape of Britain. Initially, it was, however, not a period of great crises in terms of unemployment and a difficult economic situation. The rapid changes nonetheless brought feelings of uncertainty and a desire to save some traces from the past. A more severe crisis appeared later, which among other things also lead to government unemployment schemes that, in terms of a cheap work force, the museum could somehow benefit from. While the museum was thus not born from a crisis situation, it was subsequently strengthened by actions taken to soften the impact of those crises which occurred later.

Many researchers have interpreted the creation of heritage sites and museums as compensatory acts in periods of decline, some of them – like Robert Hewison – with negative connotations and others with a more positive or indifferent approach. Hewison asserted that the nostalgia of museums is incompatible with a proper future orientation. He argued that cultural vitality should instead be displayed by investing in the future. The open-air industrial museum of Beamish, located 300 kilometres north of Ironbridge, is one example of a museum created in a period of decline. This museum’s peak collection year was 1978, a height reached because of the demise of the coal industry in several towns of the area. Other industrial museums established in Britain during the same period were the Black Country Museum opened in 1975 and the Chalk Pits Museum at Amberley opened in 1979. Another way of articulating the relation between periods of decline and the formation of heritage sites and museums is that dying or no longer useful things can get a second life as heritage, and the creation of heritage could become a means of supporting a dying activity. Sharon Zukin asserts that by connecting oneself to what is designated heritage, one also chooses to “return to a more manageable past.” Or, in the words of Barrie Trinder in the mid-1970s: “There has been a great change in popular taste. In 1950 few would have thought a gas holder or a bottle oven beautiful, and the ruins of a blast furnace, a working corn mill or a row of weavers’ cottages would not have been regarded as appropriate venues for family outings.”

Another voice critical to the increasing interest in creating heritage sites and museums was Pierre Nora’s, who asserted that these places became very artificial in character. A true and integrated treatment of memory and heritage was, however, according to Nora, unfortunately something lost in modern society. Raphael Samuel, on the contrary, argued that the interest far from being regressive was instead progressive, because the expansion of heritage had meant that democratic and domestic parts of the collective memory had been included, among other things through the creation of industrial museums.

According to its directors, the Ironbridge Gorge Museum did not cause much in-depth discussions or controversies about what story the museum
was to impart and how. Critical voices were, however, not totally lacking. Barrie Trinder had enthusiastically described the benefits of the museum in one of the first issues of the *History Workshop Journal*. In a following issue a reader replied with his impressions from a recent visit. The reader meant that the museum’s “most striking defect” was the complete absence of any information about the labour movement, the trade unions, local politics as well as working-class living and working conditions. According to this reader the museum emphasised great men and technical innovation. In spite of the radical agenda of the time, the new museum of industrial history had not chosen that perspective. This is not, however, very exceptional. In fact, according to Michael Stratton, many industrial museums have been criticised for their right-wing bias in terms of celebrations of technology, inventiveness and entrepreneurship at the expense of perspectives emphasising the common man and the often negative social aspects of industrialisation.

Similarly, the open-air museum of Beamish is described as displaying a continuation of middle class identity. Ryan Trimm suggests that Beamish “by failing to represent actively functioning industry, […] presents a past embodied almost exclusively in domesticity and the service industry.”

Furthermore, Annika Alzén asserts that the industrial archaeology activities were in general lacking a political ambition, and that the perspectives from below were instead carried by “oral history” and the “history workshop.” In the two last-mentioned, the focus was not so much on the built environment but on the people. Other researchers have, on the contrary, found the late 1950s and 1960s a time when many industrial archaeological projects were launched with an aim to explain, not the technology or how it developed, but rather “the social and economic reasons behind developments.”

One can conclude that the perspectives and ambitions of heritage and museum activities related to industry and work were not homogenous and, furthermore, a topic of debate at the time.

Commodifying iron in an idyllic setting

During the first twenty years of the existence of the Ironbridge Gorge Museum, Neil Cossons and Stuart Smith, then director and curator respectively, shared the work so that, in general terms, Cossons developed the ideas and Smith realised the actual building process. The museum displays were formed in close cooperation with a private design firm based in London, Robin Wade Design Associates, who were also friends of Cossons. Smith in fact states that without this company “the museum could not have been created.” The design company not only developed the museum displays but also the publications, the graphic profile and “everything.” Cossons argued that the choice of engaging an outside design firm was very carefully managed
in order to guarantee quality and that the firm fulfilled a “fundamental role in the development of interpretive policy […] of vital importance to the visitor’s enjoyment and understanding of the gorge.”67 Michael Stratton asserts in retrospect that the design firm established practically “a model in relating displays to industrial monuments through their work at the Ironbridge Gorge Museum in the late 1970s.”68

One example of the detailed level of this work was the paper bags in the museum shop. Initially, they resembled any paper bags, colourfully decorated with flowers. Smith explains how after a lot of discussion they “suddenly realised that Ironbridge was about iron and fire” – not about flowers – and subsequently designed a pattern with the word “Ironbridge” in red on a background depicting the iron bridge itself in black. According to Smith, besides the in situ preservation, the most innovative aspect of the museum was in fact its commercial focus, with an entrance fee, elaborate souvenirs and so on.69 This aspect had also been developed earlier by Kenneth Hudson and Neil Cossons who had discussed the relation between cultural heritage and tourism in different publications since the late 1960s. They meant that history and archaeology were not only interests for the professionals, but also the tourists had to be taken into account and valued in discussions concerning preservation.70 Several researchers have traced the roots of industrial heritage tourism to Britain as a consequence of the early decline in manufacturing.71 The initiatives of the leading actors of the Ironbridge Gorge Museum are certainly to be regarded as additional reasons for this development.

During the first years of the 1970s, a director, a curator, a marketing professional, a secretary and a few other people made up the entire museum organisation. The creation and development of the museum was in many respects led by this core, together with a couple of external consultants like the London design firm. When the museum organisation expanded, a number of committees and expert groups became involved in different subprojects, often related to one of the sites, like the Coalbrookdale iron works, the Coalport China factory or the Jackfield Tile factory. Within the open-air museum at Blists Hill, there were committees dedicated to almost every particular building that was to be built, moved or restored.

The idyllic character of the gorge with the river Severn was at no point regarded a problem. Instead, the natural beauty constituted one of the factors which caused the new town development corporation to regard the valley a potential recreational area, including walking paths, canoeing possibilities and camping, along with the museum sites. One of the individual museums also featured topics of ecosystems and environment friendly behaviour, next to the historical exhibition. One could compare this to the attitudes that were present in Avesta, described in the third chapter. When most people suggested to the municipality that the Koppardalen industrial area would be more welcoming with the addition of greenery, some of the heritage professionals
and municipal civil servants asserted that the industrial character of the area would be lost by such an alteration. Instead, they gave prominence to the existing rusty look, believing it was significant in the ambition to make the place special and interesting. These kinds of arguments never occurred in Ironbridge.

A local museum?

Apart from its national and international ambitions, in what respect was the Ironbridge Gorge Museum a local museum? When the new town was designated in 1963, the built environment of the valley was in a very derelict state. That same year, the Severn Valley Railway closed and shortly thereafter, the station building was demolished. The vast amount of government money that the new town generated made it possible for the development corporation to buy almost one third of the private property within the village of Ironbridge. The corporation restored the houses and then sold them back to private owners. The sellers of the derelict houses were, however, not the same individuals as the buyers of the restored houses. Those who had lived there before made some money selling their dilapidated houses and then moving away. The newcomers who bought the restored and more expensive houses were in general people with a higher education and also better incomes. During a short period, the buildings in Ironbridge were thus not
only restored, but the local population, to a large extent, replaced in a rather fierce version of a gentrification process. In 1987, Stuart Smith ambiguously lamented the rapid changes: “When I came here [...] you could buy a house for £100. Now, you would pay £20,000, even for a derelict one.” Of the original inhabitants, only old sick people remained, since they did not have the strength or possibility to move away. When many of these elderly people died in the 1980s and 90s, there was actually no one left of the valley’s original population. According to Sharon Zukin, the replacement of the local population is one of deindustrialization’s characteristics, repeated in cities all over the Western world.

During the first years of the museum’s existence in Ironbridge there were some expressions of disapproval to the museum staff, for example, “why are you keeping this site, my father suffered here, he spent his miserable life working at this furnace, it should be destroyed.” Nevertheless, this kind of protest disappeared rather quickly due in part to the gentrifying replacement of the local population, and partly because of a changed attitude toward the museum. Furthermore, a fact to take into consideration is that many of the industrial remains that were included in the museum had been abandoned for several decades, in some cases for centuries, which means that even if the original population had remained, not many of them had had their own memories of working in these places.

The contrast between the working class experience of the industrial place on one hand, and the preservation and tourism ambitions on the other, was, however, a possible area of conflict in the museum project. A problematic past, in the introductory chapter discussed in terms of the duality of the factory, is generally shaped in a balancing act between memory and oblivion. One insight is how the difficult easily becomes harmless with the passing of time, that is, when it is no longer a part of many people’s individual experiences. Another insight is that the difficult can become harmless when contrasted to contemporary progress, for example a more humanistic treatment of offenders or better working conditions in the factories. The establishment of the Ironbridge Gorge Museum might be considered an expression of such contemporary progress, turning the partly problematic industrial past into a tourism commodity.

A second wave of local objections against the museum had its origin in the group of newcomers, the more affluent new inhabitants of the valley. When the museum expanded and groups of tourists occupied more and more of the every day scene in the area, the permanent inhabitants found this state of things disturbing. This wave of protest, however, also rapidly disappeared. According to Neil Cossons, the local population was, in general, quite strongly supportive because the people realised that Ironbridge and the surrounding area was near extinction and the museum was one part of a possible brighter future. However, when the original population had moved away and
the scope of the museum was not primarily local, a communal feeling of ownership – “this is our museum” – was unsurprisingly not really present.

In spite of the extensive number of people working for the museum – at some point the museum employed approximately 700 people of whom 200 were full time staff – the interaction between the core group and the other people including the trustees and the development corporation were not particularly significant with regard to how the museum’s ideas developed. As Stuart Smith says in retrospect: “Neil Cossons and I didn’t listen to a great many people, we just did our own thing.” A description by Barrie Trinder is illustrative. In an article from the mid-1970s he emphasised how the general public was involved in the museum by issuing tickets, acting as guides or operating a steam engine at Blists Hill. The reason behind this largely voluntary participation was, according to Trinder, that these people “feel that the project is sufficiently worthwhile to devote some of their time to.” He noted that an association of museum friends in 1976 had over 700 members, of which about 150 were actively involved in some way. The local and volunteer involvement did not, however, question the museum leadership but was instead regarded a valuable complement to the “highly professional” standards of conservation and presentation.

David de Haan later argued that it was important to try to engage the local people more, even though it was difficult. In his opinion it had been “thirty years of us and them here” and that this state of things was difficult to undo. This was also why de Haan so vividly rejected the label “ecomuseum” for the Ironbridge Gorge Museum. Neil Cossons, on the other hand, described the relation between the museum and the local population as passionate, that people liked the museum or had strong antipathies towards it. Nevertheless, when the museum had been running for more than thirty years, almost everyone living in the valley had, at some point, been working for it, or had a close friend or relative that had been doing so. Thus, a new kind of memory connected to the area’s industrial history – as it existed within the frames of the museum – was created.

The formation of the Ironbridge Gorge Museum became part of the articulation of the industrial past as valuable heritage, from a national and international perspective. The financial prerequisites were based in the establishment of Telford New Town, but for the individual actors taking part in the museum project, the importance of the place was mainly understood in terms of heritage. The birthplace of the industrial revolution was regarded a forgotten national treasure and a possible tourist attraction. The museum succeeded in the double ambition of firmly establishing old industrial remnants as proper heritage, confirmed among other things by
the world heritage designation, and also of positioning itself as a new kind of museum. Many labels have been put on the Ironbridge Gorge Museum such as a “network museum,” an “ecomuseum” and a “theme park.” The museum management has, however, asserted the uniqueness of the activities, partly in terms of pioneering commodification ambitions. The industrial past thus became a common heritage that needed special interpretation forms. Similar to Koppardalen in Avesta the external heritage professionals and newcomers were important in giving the site heritage status. However, unlike Koppardalen, the idyllic natural setting of the gorge did probably contribute to the heritage designation. In comparison to the established heritage sites of the 1970s, such as manors or farmhouses, the designation of the Ironbridge gorge as heritage was not an insuperable step to make.

For the Ironbridge Gorge Museum, the local context was about changing the future prospects of a declining area in economical terms, not primarily in relation to memory or identity. Because of the age of many of the museum sites, few people had a personal relation to them as former workplaces. Eventually however, local inhabitants experienced them again as workplaces, but this time as places where one worked with the promotion of the industrial heritage.

In the next chapter we leave Britain for Germany to visit the heavily industrialised Ruhr district focusing on how nature has begun to re-conquer the landscape and how artists express the meanings of the past and present.
In the 80’s, the Ruhrgebiet was seen as a giant dying from physical space and social issues diseases, besides the negative region image due to the soil contamination, huge unemployment and little creativity on the labour market.¹

This was a picture and a reality that leading politicians and business executives in the Ruhr district in Germany were eager to change, and several initiatives were also taken during the decade, encouraging local ideas and enterprises. A new image had to be established and the material legacies from the past had to be transformed by new understandings that could bring hope in the future. As in Avesta, both the materiality and its meanings were thus subject to change in processes of negotiation. Among many possible aspects, this chapter focuses on the role of nature and art in the endeavour to transform a former ironworks, known as the Meidericher Hütte, into the Landschaftspark Duisburg-Nord, within the larger context of an encompassing restructuring programme.

In 1989, the ten-year long programme, Internationale Bauausstellung (IBA) Emscher Park, was launched, inspired by the German tradition of building exhibitions. The aim was to promote urban development from a social, cultural and ecological perspective.² In changing the industrial landscape towards ecological sustainability, through the reuse of old industrial facilities and the building of new housing areas, the initiators hoped the district would also obtain a new image.³ In an early memorandum for the IBA Emscher Park programme, the potential of unused industrial buildings was labelled “industrial monuments as carriers of culture” and constituted one of altogether seven areas of investment.⁴

The industrial landscape was to be reshaped with a special focus on access to rivers and lakes, on walking paths and bicycle ways.⁵ The reuse of old industrial buildings was formulated as a task to “better than hitherto make conscious the importance of these industrial and technical historical monuments for the historical and cultural identity of the region” and to develop organisational and financial trade and find forms for use and
preservation. The managing director of the IBA Emscher Park, Karl Ganser, stated: “Even the best planned new buildings are no match against the preservation, modernization, conversion and re-use of existing buildings when it comes down to the consumption of resources.” In the large scale building exhibition programme the materiality of the post-industrial situation was hence treated as a resource. But how was the built environments to become “carriers of culture” in the sense that they could contribute to brighter visions of the future? And how could the duality of the factory – the bright and dark aspects of the industrial past – be managed in a district where the complicated issues included not only the factory, pollution, heavy work and unemployment, but also politics and the realities of war, Nazism and an extensive immigration situation that had brought about social tension?

Meidericher Hütte as a test arena

Within the IBA Emscher Park programme more than one hundred individual projects were carried out. One of them was the transformation of the former Meidericher Hütte in Duisburg, into the leisure area Landschaftspark Duisburg-Nord. When the Meidericher Hütte closed down in 1985, after more than eighty years of activity, no one lost their job, the workplace just simply moved to a more modern plant nearby. This meant there was no feeling of crisis – as in Avesta and Ironbridge described in the previous chapters – and no
one really seemed interested in the old site. The owner, Thyssen AG, kept and maintained the Meidericher Hütte for about a year to have in reserve, until the production had become successfully transferred to the new plant. After this period in limbo, it was generally expected that the company would demolish the old ironworks.8

However, a number of enthusiasts started instead to argue that the ironworks should be preserved, and the local press supported the idea.9 Meanwhile, the planning process leading to the IBA Emscher Park had started on a small scale, partly influenced by the activities in Duisburg. From this moment the restoration and re-opening of the former ironworks as a landscape park, in many respects, went hand in hand with the more large-scale thinking connected to the idea of a building exhibition. According to Wolfgang Ebert, president of the German Society for Industrial History and involved in the transformation of the Meidericher Hütte, the landscape park constituted a core and “a small galaxy of the overall ideas” that later characterised the IBA Emscher Park.10 Everything that was developed within the grand programme was first established in the landscape park at Duisburg. The ironworks thus functioned as a test arena from its announced closedown in 1984 until the IBA Emscher Park programme started in 1989, and to the conclusion of the programme ten years later. When the IBA Emscher Park programme was completed in 1999, the Landschaftspark Duisburg-Nord played a central role in the festivities. Among other things, the final exhibition presenting the whole programme with its many individual projects, was held in the landscape park.11

The ideas to reuse the Meidericher Hütte were inspired by, at the time, recent examples of efforts to preserve iron and steel works elsewhere. In Birmingham, Alabama, in the United States, the Sloss Furnaces, originating from the 1880s, had been closed down in 1970. The private company subsequently donated the property to the Alabama State Fair Authority with the hope that it could be developed into a museum of industry. However, after several years, the State Fair Authority found preservation not feasible and announced their plans to demolish the plant. Public response, among other things, involved the organisation of a lobby group that intended to work for the preservation of the furnace. Their arguments were based on Sloss’s “historic and cultural importance to the City and its role as a symbol of the technology that once made Birmingham the foremost industrial center of the South.”12 Their struggle drew national attention, among other things the Historic American Engineering Record, and the City of Birmingham funded a documentary survey of the site. In 1977 the State Fair Authority transferred control of Sloss to the city, the site was designated National Historic Landmark in 1981, and two years later it opened as a museum of the City of Birmingham. It was later a venue for concerts, festivals, conferences, as well as workshops and exhibitions of metal art. The major emphasis was put on the history and identity of the local people and workers.
The Völklinger Hütte, also in Germany, was another iron and steel works that had been preserved and reused prior to, or simultaneous with, the Meidericher Hütte. This plant also originated from the 1880s, employed 17,000 people in the 1960s and closed down in 1986. The ironworks was owned by the Röchling family until 1978 when they sold their shares and withdrew from the steel business. The Saarland Council of Ministers agreed to preserve the parts of the closed works that were regarded significant as historic monuments. Later, in 1994 the Völklingen Hütte was designated world heritage by UNESCO. There were thus possible role models of preserving and reusing iron and steel works, although the concept cannot be characterised as commonplace at the time.

A private place made public

Emscher, as in IBA Emscher Park, is one of the rivers flowing through the Ruhr district from east to west, and the river as well as the surrounding area have been heavily exploited and contaminated. From the beginning of the 20th century and until the 1990s, the river was an open sewer because, due to land sinking, it was impossible to build underground sewerage and to many the stinking trench epitomised the depressing image of the Ruhr district.

In general, the landscape of the district is flat marshland, and the coal – the basis for the regional industry since the 1830s and consequently the dense settlement – is typically found in tilting layers in the ground. The coal layers come to the surface in the southern part of the district and go deeper and deeper northwards. Hence the oldest remains of coal mining and early industrial activities are to be found in the south, close to the river Ruhr. As mining techniques developed, the industry could follow the coal layers further north, and at the beginning of the 21st century the industry was concentrated just north of the river Emscher. The salaries paid in the area were high and somewhat compensated for the polluted environment. The land in the immediate proximity of the Emscher had, by the late 1980s, largely served its use and was said to be the area with the largest problem density in the country. The fact that the building exhibition focused on this highly problematical part of the Ruhr district is therefore not surprising.

In the 1980s, the city of Duisburg, along with the other cities in the urban conglomeration of the Ruhr district, evidently faced tough environmental and societal challenges. However, the local politicians were not convinced that a transformation of the Meidericher Hütte would solve any of these problems. Decisive initiatives with regard to the redundant ironworks were taken instead from the federal government of Nordrhein-Westphalia. The 65 million D-mark of public money that was spent on restoring the old ironworks did not in the first place come from the local government but
from federal and national subsidising schemes. However, a public company, Landesentwicklungsgesellshaft NRW GmbH, acted as trustee for the city and became the new owner, buying the 230 hectare old ironworks area on the outskirts of the city from Thyssen, for a symbolic sum.

Gradually, the earlier “forbidden city” of the ironworks was opened up to the public. There were a few special guided tours from 1987, and from 1989, concurrently with the launching of the IBA Emscher Park programme, the Landschaftspark Duisburg-Nord was made accessible to everyone. In retrospect, Wolfgang Ebert asserts it was important that the first events taking

Map of the Ruhr district. Three rivers flow through the area from east to west: the Ruhr, the Emscher and the Lippe. In a north bound direction flows the Rhine. The coal – the basis of the region’s industry – is found in tilting layers under the ground, coming to the surface in the southern parts of the area, and going deeper further north. Industrial production and settlements have gradually moved north, following the coal layers as mining techniques developed. Along the river Emscher, the flat landscape is currently heavily exploited, and criss-crossed by transportation systems. The area included in the Internationale Bauausstellung Emscher Park, 1989–1999, is marked by the dashed line. The unbroken line marks the industrial heritage trail “Route Industriekultur,” launched in the mid-1990s. The arrow locates the place of the former Meidericher Hütte, now transformed into Landschaftspark Duisburg-Nord. Map: Stig Söderlind, 2007.

6. Landschaftspark Duisburg-Nord: NATURE AND ART ON STAGE
View from the top of a blast furnace at the former ironworks, Meidericher Hütte, now Landschaftspark Duisburg-Nord. In the foreground part of the cowper stowe battery, used for preheating the air blown into the blast furnace. To the left the cylindrical gasometer, and in the background the extensive view over the flat landscape. Photo: Anna Storm, 2007.

Scrawl on a girder at the top of the blast furnace in Landschaftspark Duisburg-Nord,signifying the place as a refuge for young lovers. Photo: Anna Storm, 2007.
place in the park were visible and clearly directed towards the public, the major attraction being just to walk around and experience the place.\footnote{19} This statement emphasises the importance of public approval giving authority to the group of people that strived to transform the former ironworks.

Relatively early in the transformation it was possible to climb up a remaining blast furnace via a prepared stairway, and from there to experience an extensive view over the landscape. For most of the visitors it was a surprising sensation to go in there, for they had never been able to see something like that, despite the fact they are surrounded by this landscape, they do not know what is in there.\footnote{20}

This story of discovery can also be found elsewhere.\footnote{21} At this stage, there were almost no former workers involved in the transformation process. Later, there was a group of retired workers and engineers voluntarily engaged in maintenance work. The first visitors to the landscape park were, however, as in Avesta, mostly people with no previous personal experience of the place behind the fence. It has been argued that the entire region was “reconstructed for a not-yet-existent middle class,” explaining the low involvement of the local population in the process.\footnote{22}

The previously hidden industrial place had, in its post-industrial situation, become accessible and visible to everyone. The possibility of walking around, climbing and touching the redundant industrial structures brought about new experiences of both the details and the totality. The texture of an ore bunker and the literally new perspectives of the district one could get from the top of the blast furnace became parts in the formation of new meanings for the abandoned materiality.

**Industrial nature**

What is the relation between industry and nature?\footnote{23} Is it a connection primarily marked by contradiction where industry brings about the destruction of nature in terms of polluted ground, exploitation of natural resources and visually devastated landscapes? The interplay between industry and nature has certainly had varying outcomes in different regions. While the human built environment dominates in Duisburg, the wooded valley and the agricultural surroundings mark Ironbridge, and around Avesta the forests could seem almost endless. Furthermore, are industry and nature two sharply distinct concepts, or are there examples of blurred boundaries? Could nature be comprehended as something culturally produced, like industry? With the term “Industrienatur” in German, or “industrial nature,” the two words have been put together to describe a new understanding of a phenomenon which will also turn out to signify one kind of reinterpretation of the industrial place.
In the long perspective and according to Yi-Fu Tuan, the word nature has lost its meanings of connecting heaven and hell, and instead become associated with qualities of charm and picturesqueness. In addition, the word landscape, which is sometimes used as a synonym to nature, has gone through another transformation, from referring to the real world to signifying a view or a scene, thus connecting to the world of art and imagination. Consequently one can understand landscape as a “material and territorial entity and, at the same time, a way of seeing, a culturally defined way of using and perceiving the physical environment.”

At the end of the 1980s, before the fall of the Berlin wall and the German reunion, the Ruhr district was regarded one of the weakest part of West Germany, which influenced the political will to invest in the district, both at a federal and a regional level. Another important factor for the realisation of the IBA Emscher Park was that the green party, “Die Grünen,” had many voters at all levels in the country, and the environmental issues played a significant role in the political debate. However, the ecological approach of the IBA Emscher Park programme not only included efforts to clean the river and the polluted ground. There was also an articulated appreciation of what was called industrial nature, exemplified in the landscape park in Duisburg in the following, but at hand in many of the projects carried out within the programme. The very symbol of IBA Emscher Park was an abstract figure with three coloured fields, relating to each other as jigsaw pieces not yet fitted together. One field was blue, another was green and a third was red, referring to water, greenery and buildings respectively. Two thirds of the symbol was therefore directly focused on the improvement of the natural environment within the heavily industrialised landscape.

At the Landschaftspark Duisburg-Nord, nature – in terms of overgrowing – is a prominent part of the visual impression of the site. In addition, at one place in the area, there are straight rows of planted broad-leaf trees forming a small well-organised army in the midst of the former industrial area. The view of the blast furnace and the strict rows of tender greenery is one example of how a post-industrial landscape was visualised at the beginning of the 21st century, scattered and comprising unexpected combinations. In connection to the development of cultural parks within the IBA Emscher Park programme, the industrial monuments were even described as “germs,” the core from which the new life would sprout.

From the first opening of the Landschaftspark Duisburg-Nord there were guided tours dedicated to showing the nature, that is, the large number of species growing in the former industrial area because of the earlier industrial activities. There is a special term, ruderal species, which describes the plants that have the nitrogenous ground often found at former industrial land as their locality. The ruderal species could therefore be regarded as the special greenery of industrial ruins, and the word, “Industrienatur,” mentioned earlier
symptomatically exists in the German language.\textsuperscript{32} The “Industrienatur” has been portrayed in photographs in the genre of delightful scenic nature, and a specific tourist route in the Ruhr district is dedicated to visiting certain industrial nature places.\textsuperscript{33} This might appear as a way of concealing industry with nature. On the contrary, I would argue that the actions taken and the

Vegetation has been allowed to grow almost everywhere within the former ironworks area. Photo: Anna Storm, 2007.

At some places, vegetation has been consciously planted, such as these strict rows of tender greenery just beneath the blast furnace. Photo: Anna Storm, 2007.
A huge traverse now stands silent over the system of bunkers that once contained ore, coke or lime stone. Photo: Anna Storm, 2007.

At the far end of the system, climbers use the walls, hence further strengthening the new understanding of the place in terms of a landscape park. Photo: Hans-Jürgen Wiese, 2006.
new meanings attached to the changing materiality are ways of making the place visible anew, although in a somewhat altered shape.

The new name of the former ironworks is also intriguing – landscape park – describing an area dominated by a rather modern blast furnace plant, casting machines, railway lines, overhead cranes, ore bunkers, storage facilities and administration buildings. The reinterpretation of the place is thus, by the name, directing the pre-conception away from the industrial towards the natural allusion. To rename the Meidericher Hütte, Landschaftspark Duisburg-Nord, was not a big issue, and certainly not the subject of a controversy, although there were other suggestions like “Feuerland” (“Land of fire”) that, if chosen, would have sent radically different signals to the visitor.34 One can notice the similar interpretation of iron and fire in Ironbridge, which became visible in the chosen graphic profile, described in chapter five.

Moreover, the landscape park has been used in a way that is somehow a translation of activities that are usually carried out in a natural environment, such as climbing, biking and diving. The climbing routes at Landschaftspark Duisburg-Nord are built on the walls of the former ore bunkers, the biking paths meander throughout the whole former industrial area of the ironworks and the diving takes place in a former gasometer, complete with a wrecked car at the bottom. All these activities have become very popular. The climbing walls comprise a large number of different routes open to the public and a local division of the German Mountaineering Association has, since 1990, had its own climbing garden within the landscape park. The diving in the former gasometer is, in a similar manner, open to the public, and hosted by the Park Diving Club.35

A similar translation of activities in Bottrop, not far from Duisburg, shows the far-reaching reinterpretation of the industrial area as landscape and nature. Since 2001 an indoor ski slope, built as a pipe, winds over six hundred metres down a slag heap. In the comparatively flat Ruhr district the possibility to go downhill skiing in Bottrop has been very much appreciated. All year round you can here ride the escalator to the top of the waste heap, enter the minus four degrees atmosphere and go skiing, or you can stay in the alp cottage bar at the top and have a beer while listening to tyroler music from the loudspeakers.36

A substitution story?

How could one understand the overwhelming focus on nature and landscaping in the restructuring of the Ruhr district, remembering the notion made by Kenneth Linder from Avesta, rephrased in the fourth chapter: “They have such an abundance of industrial areas so probably they think they have to take away the dirt and make it green, but still you could get a feeling of a structure, that this place has been different…”37 One possible track to follow
starts in the many difficult events of the past connected to the Ruhr district; the First World War, the French occupation of the Ruhr district in the early 1920s and the Second World War, the latter perhaps of a particular dignity due to the question of guilt.\textsuperscript{38}

Coal mining and steel production in the Ruhr district were of decisive importance for the German forces during the Second World War, and thus also an obvious target for the allied bombing. When the war was over, 75 percent of the Ruhr industry and built environment were partly or entirely destroyed, and the rebuilding was a priority during the 1950s.\textsuperscript{39} The rebuilding effort was
partly financed through the Marshall Plan and could also be connected to the creation of the European Coal and Steel Community in 1952. The district that had been crucial for the war was to become crucial for the peace.

Towards the end of the 1950s, the coal mining was hit by a crisis, partly due to overproduction and rising international competition, and partly to competition from new energy sources such as gasoline and oil. A wave of closedowns followed. Just over a decade later, at the beginning of the 1970s, the oil crises occurred, severely affecting the Ruhr district. Between 1960 and 1980 the number of workers in the mines diminished by 50 percent and even if the service sector increased in importance it was not enough to replace the vanishing industrial work opportunities. Out of the 150 mines that were active in 1950, only 13 were still in use fifty years later. The first university in the Ruhr district was not inaugurated until 1962, with classes opened in 1965. In 1982, the unemployment figure was 14 percent and still at the beginning of the 21st century, unemployment was 12 percent for the entire Ruhr district. Some parts of the district struggled with numbers close to 20 percent. The earlier problems with contamination, a low level of education and a one-sided trade structure, remained.

How would it be possible to deal with the overwhelming material legacy of this painful past? In an interview with German photographer Hilla Becher, she reflects upon the fact that in the 1980s it was impossible to talk about her and her husband Bernd Becher’s joint photographic work of industrial structures. Hilla Becher describes how it was indeed regarded old-fashioned, but the main point was that people wanted to look towards the future, not the past. In Germany, she claims,

nobody wanted anything to do with the past. But even if you left out the Nazi time you still had the First World War, and going back further to even the last century it was all left out and you wouldn’t find anything in the history books about it. So we both thought that the last century was historically the most interesting period of time.

The creation of history and heritage involves a lot of choices about which aspects to stress and which to suppress. Newly independent nations, for example, often chose to sweep away a hated past and replaced it with an older heritage. David Lowenthal has suggested that while individual forgetting is largely involuntary, collective oblivion is mainly regulated and has an aim. But are the stories of war and Nazism really suppressed? And if so, is there a collective purpose to be disclosed? There are certainly museums and heritage sites in the Ruhr district dealing with the region’s 20th century history. Nevertheless, perhaps the determined focus on the natural environment, the “Industrienatur,” presents a possibility, if not to replace, then to balance these more difficult elements of the past. If the polluted nature could be seen as the
main representative of the difficult past that contemporary society has to deal with, the focus of the IBA Emscher Park programme for a sustainable natural recovery could become more than a way of making the district a physically healthy place to live in. The work to overcome the environmental disasters from the past could then also be seen as a choice to deal with, speaking with Sharon Zukin, “a more manageable past.”

A similar choice, although at a smaller scale, could be said to be present in the Swedish province of Ångermanland. In the village of Lunde, four workers on strike and a female spectator were shot to death by the Swedish military in 1931. Although the number may seem insignificant, this incident became a national trauma and, for a long time a complicated event for the national labour movement to relate to. Today, almost nothing of this history, or about the industrial history on the whole is told to visitors of the region. Jan af Geijjerstam and Sverker Sörlin assert that it is “as if the very interpretation of the place defused the memory of the shots.” Instead, the natural environment has been put in focus since the 1970s. The regional identity has been connected to the extraordinary elevation of the land that is marking the area. The concept and naming of “the High Coast” has become the uniting theme and advertising tool, replacing the history of industry and the complicated political events.

The focus on the natural environment did express yet another characteristic of the reuse process in the Ruhr district, namely, the main orientation of the work towards the future. While the past was evidently part of the process, the direction, the emphasis and primary value was in relation to visions of the future. The history could be visible as a source of inspiration and used to show the progressive quality of the district and its people. One historical event often referred to is the early regional cooperation in the Ruhr district which began in the 1920s. At the time, the association, Siedlungsverband Ruhrkohlenbezirk, worked to solve severe common environmental problems, such as water and sanitation, as well as to facilitate transport and infrastructure. Within the framework of the Siedlungsverband Ruhrkohlenbezirk, extensive planning for green corridors was carried out, the result of which still marks the district’s geography. The work of environmental planning in the IBA Emscher Park programme is both rhetorically and practically connected to these pioneering efforts. In 1979 the Siedlungsverband Ruhrkohlenbezirk was transformed into Kommunalverband Ruhrgebiet with the task of promoting green areas and landscaping, developing possibilities for leisure activities and working with waste and sewage problems. The Siedlungsverband Ruhrkohlenbezirk/Kommunalverband Ruhrgebiet has thus, for a long time, worked to counteract the negative effects of industry on humans and the natural environment. Consequently, the severe problems that nevertheless had to be addressed within the IBA Emscher Park could also find brighter aspects to relate to.

Landschaftspark Duisburg-Nord has been looked upon as an incarnation of a post-industrial landscape, but what is generally included in this concept?
According to Niall Kirkwood’s introduction to an anthology on the theme, there are two main issues on the agenda: first the decontamination of the soil, groundwater and the fabric of buildings and structures, and second, “the motivation to return these manufactured sites to productive use and the physical means by which this can be carried out.” That is, issues about memories of the past are not prominent, although they are mentioned in terms of “acknowledgement” and “celebration.” According to Rebecca Krinke, the remembrance at Landschaftspark Duisburg-Nord is not done via the preservation of the blast furnace plant as a museum, but through giving the buildings an “active new life.”

At the beginning of the 21st century, Peter Latz, the landscape architect responsible for the transformation process of Meidericher Hütte into a landscape park reflected on the past and future of the site:

In time, the greenery will dominate the technical constructions of the gateways. So bit by bit another history, another understanding of the contaminated site and of the idea of the ‘garden’ is developing.

In this way nature is taking the landscape back, sometimes directed by human intervention, sometimes without human interference. Culture and nature thus combine in new ways. The redundant industrial place becomes an overgrown ruin, not through abandonment, but by controlled changes including spare time adventure activities in the industrial nature.

Industrial art
— orientation, inspiration, reconciliation

If nature is a controlled force of continuous change, and perhaps also a possible substitution story, art has been given the function of constituting reference points in the Ruhr district. Parallel to the ecological focus, the aesthetic approach to the Landschaftspark Duisburg-Nord and within the IBA Emscher Park programme was important. According to the driving forces of the programme, the green vision was not regarded enough to change the image of the Ruhr district – something more was needed. Consequently, the reshaping of the landscape was carried out in combination with artists’ installations emphasising and commenting the environment, its past and its future, some of them quickly becoming new landmarks.

While the landscape before industrialisation was mostly flat, the silhouette did change through the above ground storage of waste materials from the mining activity. Today, the slag heaps constitute a number of hills or small mountains of the Ruhr, and they are also most commonly used for the new artistic installations. Some artists and landscape architects have
even chosen to reshape these slag heaps into artistic creations. For example, there is a fourteen metres high, vertical oriented and slightly tilted, steel slab at the top of the Schurenbach heap, a thirty metres high artificial cliff with a compilation of concrete blocks on the top of the Rheinelbe heap and a tetrahedron on the Bechstrasse heap, illuminated during the dark hours and possible to climb in the daytime. These pieces of art, which are visible from afar, form landmarks, but also constitute outlook places from which you can get a view of the surrounding landscape. These places thus work in dual directions.

The landmark art, in most cases, consists of huge abstract sculptures made from materials relating to industry, such as steel and concrete, as the above mentioned, and could be regarded as lenses through which to visually comprehend the area. According to a case study carried out in the 1990s by the United States Environmental Protection Agency within their programme for brownfields and land revitalisation, local residents described the industrial landscape viewed from the metal tetrahedron on Bechstrasse heap as the “Seven Hills of Rome;” perhaps an act of imagination as intriguing as the new Acropolis in Avesta described earlier.57
The bridge at Ironbridge in Britain already became an artistic motif in the late 18th century. Furthermore, industry and technology increasingly became a theme of fine art. The wars of the 20th century, especially the two world wars complicated the previously comparatively homogeneous positive interpretations. Although the power of the machines now became understood as a possible destructive force, industry was continuously also described as a major source of inspiration: “Any important art coming out of the industrial age will draw inspiration from industry, because industry is alive and vital. The beauty of industry lies in its truth and simplicity: every line is essential and therefore beautiful.”

Was the industrial landscape of the Ruhr district regarded beautiful? Or perhaps a more adequate question would be: What could it impart and what associations did it evoke?

In general, the relation between art and place has been considered positive and powerful in terms of how people are able to associate themselves with a place. Yi-Fu Tuan, for example, claims that art “induce[s] an awareness of place by holding up mirrors to our own experience; what had been felt can now be seen, what was formless and vacillating is now framed and still. […] A work of sculptural art or architecture […] creates place materially as well as in the imagination.” Furthermore, in Tuan’s analysis, the function of landmark art could become crucially important to changing the experience of the region. Tuan asserts that art “trains attention and educates sensibility: it prepares one to respond to the character of alien places and situations” thus pinpointing art as a possible tool of navigation in a changing world, a tool of reinterpretation.

For the leading actors in the organisation of the IBA Emscher Park, the aesthetic approach became important in the effort of attracting people and applying for support, in short a marketing tool. According to Zygmunt Bauman, the “the tourist’s world is fully and exclusively structured by aesthetic criteria,” thus describing art and the aesthetic component as a rather prosaic commodity for visitors. The interest from different kinds of artists in taking part in the reinterpretation process of the Ruhr district was nevertheless substantial, and not only in the form of sculptural installations on the landscape. A specially designed light show, for example, illuminates the former ironworks of the Landschaftspark Duisburg-Nord in late evenings. The landscape park has also become the place for nearly sixty movie productions during the ten-year period of the IBA Emscher Park programme. At a more general level, it has been argued that the performance of artworks plays a crucial role in the process of de-industrialisation. Sharon Zukin talks of art present in the industrial as a kind of material and symbolical infrastructure “in the transition from an industrial to a de-industrialised urban economy.”

In the early process of de-industrialisation, Bernd and Hilla Becher began photographing industrial structures such as blast furnaces, water
towers and limekilns, and one of the main areas for their work was the Ruhr district. From the 1960s and during the following decades they returned to take new series of pictures, and also travelled to other countries like Britain and the United States. For example, during the 1980s they photographed the Sloss furnaces and the Völklingen Hütte mentioned earlier. They called their work “anonymous sculptures” in a pictorial language somewhat between document and art.65

Beside the motives of the individual artists, are there other connections between industry and art? In 1926, Henry Winram Dickinson, then Honorary Secretary of the Newcomen Society and Keeper of the Mechanical Engineering Department at the Science Museum in London, made a reflection about one noteworthy connection. He wrote: “One would conclude that it was almost indecent to engage in industry, but having done so, and been successful, only a peace offering to the Muses would suffice as reparation.”66 His comment concerned the matter of successful industrialists often making donations to establish an art gallery in order to gain immortality. The industrial achievements could not stand free from the human and environmental suffering that came with it, and therefore it had to be somewhat justified by a tribute to the arts. The connection between industry and art could hence, among other things, take shape as orientation, inspiration and reconciliation.
Another way to approach the relation between industry and art is through a discussion about the concept of authenticity, referring to a quality of being true, genuine and original. Wolfgang Ebert believes there has been a lack of authenticity in the Landschaftspark Duisburg-Nord, despite all the ambitions. According to Ebert, authenticity implies that interpretations and activities should evolve from their own environment. While it is indeed exciting to perform operas or rock concerts with the Meidericher blast furnace number five in the background, from his perspective it is not an authentic event, but only a translocation of a rather ordinary event. He believes the present fashion of using industrial sites as stages is dangerous, because it could soon be out of fashion and then suddenly nothing is left. Instead, according to Ebert, one should think of the site’s own potential and what a sustainable activity could be grown out of it. His prime suggestion for the Meidericher Hütte is live role playing which could bring the plant back to life.

Is this a representative attitude? Lars Åke Everbrand, involved in the reuse process of Koppardalen in Avesta, has had very clear ideas of what the appropriate interpretation and activities in the old blast furnace plant could be. He has expressed his opinion in decisions concerning the overall direction of the reuse process, including details about wine being preferable to beer when the plant hosts cultural events, in order to create the right atmosphere. The existence of strong visions among the actors in a transformation project is thus not a rare phenomenon, but the explicit reference to authenticity as the basis for one’s argumentation, as made by Ebert, is, however, more unusual.

Authenticity and integrity are two of many factors examined in the process of nominating sites for the World Heritage List. While authenticity is a concept mainly valid for cultural heritage sites, integrity is the counterpart regarding natural heritage sites. Authenticity refers to the places being original in form, material, design and location, and integrity refers to places being typical and with interdependent components. In general, authenticity is a Western cultural product connected to modernity in its search for the untouched, genuine and traditional. For the World Heritage List this way of thinking is also transferred to a bureaucratic ranking where the most genuine cultural or natural heritage sites are the most valuable. Jan Turtinen argues that together with other sought after characteristics, this ranking gives the sites aesthetic qualities – the most genuine place is also regarded the most beautiful.

Furthermore, the concept of authenticity applies to the strong feelings awakened by abandoned and derelict industrial places. In a memorandum from 1988, it was imagined that achieving the new use of abandoned industrial sites within the IBA Emscher Park programme would go via
a partial preservation forming “marks of truth of the past in the form of ruins.” In a detailed survey in a British context, Tim Edensor has shown how industrial ruins, at the beginning of the 21st century, are appreciated and valued by many people, and not always by those with a strong official voice. Instead the industrial ruins are hiding-places and sites for fantasy and adventure, used by children and youngsters, criminals and addicts, lovers and scrap dealers. His basic assumption is that society has become so overwhelmingly organised that people are trapped in the predictable. The ruins thus offer a rare place of disorder and openness of interpretation. The same argument, for peripheries in general, are made by Terttu Pakarinen, who asserts that peripheries could make place for appropriation of the urban space and hence for emancipation and freedom.

To the planners and heritage professionals, the official voices, on the other hand the ruins often represent a problem. The unused, uncontrolled and dangerous places are seen as scars in the urban fabric that have to be healed and incorporated into the planned space. Nevertheless, to the heritage professionals, this organising and interpretative ambition is ambiguous. If a place is organised into a heritage site, with the application of labels and of a logical story, then it has, in addition, often lost some of its spirit, the
immediate feeling of time passing by. When it is cleaned up and explained, it is consequently no longer open to interpretation. In other words, here is an example of the contradicting ideals of preservation described in chapter two – of restoring into original shape or of striving towards a minimum of intervention. The actors within the IBA Emscher Park programme and the transformation of Meidericher Hütte into Landschaftspark Duisburg-Nord thus express a fairly unusual ambition of minimal intervention concerning both nature and the built environment in order to retain the “secrets” and the “mystery” of the place.

The materiality in a post-industrial situation in the Ruhr district has been made visible in new ways by means of nature and art. The previously closed and forbidden world behind the fence has become accessible to everyone, and the tactile and visual experience has been understood as a discovery.

The new use of the redundant industrial place is also partially marked by adventure activities that represent a translation of pastimes traditionally associated with nature. Skiing, climbing, diving, walking and biking are examples of spare time hobbies that now take place in the “Industrienatur.” It is also possible to understand dealing with the contaminated built structures, ground and water and reshaping it into landscape parks, like the Landschaftspark Duisburg-Nord, in terms of a substitution story. The material legacy of occupation and wars during the 20th century could, through the lens of industrial nature, turn into a more “manageable past.”

The redundant industrial structures have furthermore become stages and backgrounds for, among other things, concerts, movies and artistic installations. The industrial materiality makes up a source of inspiration, while the new landmark art is regarded as important nodes for geographical orientation in the district. A new appreciation of industrial aesthetics contains a search for authenticity through ruination, as well as a tourist commodification of the industrial place. The conscious aesthetic view, together with the appreciation of industrial nature in the Landschaftspark Duisburg-Nord, hence show a rather atypical way of combining clarity with ambiguity and control with decay.
Landschaftspark Duisburg-Nord: NATURE AND ART ON STAGE
During 2005 and 2006 at a festival in Austria, the stage design for Giuseppe Verdi’s opera “Il trovatore” shows an oil refinery replica, built with effects of light, smoke and fire. The designer commented that his work embodied a “fortress of today’s industrial society” connected to the opera performance because power, affluence and revenge were all key factors of the plot. While at many places old industrial structures have been used as backgrounds to art, concerts and shows, this was a completely new built replica of an industrial plant.

Has the landscape of the industrial past become a place of spectacle, a place to consume? And how should one understand a newly built industrial place like the oil refinery replica which was never a place for production of goods? The meaning of a former industrial building, whether production has just ceased, or it is being reused for other purposes or it is just a newly built fake, is certainly beyond the scope of what is traditionally regarded heritage. And, as shown by the reinterpretation processes in Avesta, Ironbridge and Duisburg, the professional heritage perspective along with the challenging popular appeal are not sufficient, when trying to understand the complex issue of how places in a post-industrial situation have been given new meanings in the late 20th century.

In this chapter we therefore start from a different perspective by turning to how former industrial buildings became interesting to planning and design professions, a motif for artists and an arena for hobbies like “urban exploration.” Among other things, the industrial place has been reused as offices, dwellings and restaurants, and the industrial ruin appreciated as a beautiful environment and provocative necessity in society. By using the lens of planners, architects and photographers perhaps some of the missing pieces in the jigsaw will be found, contributing to a new understanding of the arena where the industrial past has been negotiated.
Industry as stage scenery: At the Bregenzer Festspiele in Austria, a replica of an oil refinery served as an opera stage design. Photos: Karl Forster, 2005. Courtesy of the Bregenzer Festspiele.
A planning perspective

The existing built environment, its material conditions and geographical location, became a subject of discussion for the planning sector in the 1970s and 80s.\(^2\) The post-war decades, dominated by new construction, had been followed by an interest in adaptive reuse. The reasons for this were manifold; the relative economic decline, the high density in numerous urban environments that did not allow new buildings without demolishing existing ones, and a wide-spread critique of the extensive building programmes of the 1960s and early 70s.\(^3\) The new approach put the reuse of abandoned factories and other building categories on an agenda of economical and sustainable behaviour. This was true for many Western countries, among them the United States and Sweden.\(^4\)

In the United States a handbook directed towards preservationists, businessmen and potential investors was published in 1976. The target groups were assumed to recently have discovered the industrial buildings as architecture, as important evidence of the past and as high quality space for offices, housing et cetera.\(^5\) The book included descriptions of numerous cases of profit and non-profit reuse of industrial buildings in the country – some of them probably recommended by members of the “The Society for Industrial Archeology” as described in chapter two – with detailed information about budgets, ownership, technical considerations and architectural solutions. A prime example was Lowell, Massachusetts, one of the textile cities of New England mentioned earlier, where federal tax incentives had contributed to a considerable growth in building renovation, especially concerning older industrial properties.\(^6\) Lowell was already in the late 1970s regarded a reuse success that was expected to be repeated in other urban places. The reuse in Lowell included retail and service, culture and entertainment, housing and recreation, and it was argued that one vital element was the combination of public and private funding.\(^7\)

In Sweden the topic of the adaptive reuse of industrial buildings was dealt with in a dissertation, **Återanvändning av industri- och specialbyggnader** (“Reuse of industrial and special buildings”), by Bo Hedskog, defended in 1982 at the Royal Institute of Technology in Stockholm and in an official governmental investigation, **Sanering efter industrinedläggningar** (“Conversion after industrial closedowns”), published the same year.\(^8\) In both publications the focus was set on real estate economy, technical and functional aspects and the decontamination of land. The industrial buildings were seen as overlooked resources that had to be brought into a conscious discussion about building economy, urban planning, and environmental sustainability. Both Bo Hedskog’s dissertation and the investigation were based on inventories carried out through nationwide questionnaires and several case studies.
Among the authors’ conclusions could be mentioned their slightly surprised notion of what a broad spectrum of possible ways to reuse industrial buildings they had found. Beside the expected reuse by another industrial branch or smaller handicraft enterprises, they found industrial buildings reused as offices, schools and housing. Seemingly more in line with the questions raised to justify the investigations, they concluded that it was generally cheaper and faster to adapt a building for reuse than to tear it down and replace it with a new construction. Important aspects in this process leading to what was considered a successful reuse, were the technical standard of the building, its functional and architectural features and not the least its location.

While Hedskog dealt mostly with solitary buildings in city centres, the governmental investigation was directed towards larger industrial areas in company towns where the reuse was closely connected to questions of local and regional employment. From this perspective the investigation examined the issue of ownership and financing in relation to reuse of industrial buildings. The results showed that the privately owned industrial area was often sold to the municipality in which it was located, in connection with a closedown or when the private company moved to other localities within the city or the region. The municipality then typically tried to adapt the industrial area to attract new companies, of similar kind or smaller size. The company that closed down or moved was often involved in and supported this process. This is a pattern we can recall from Avesta, where the northern works industrial area was bought by the municipality and adapted to new use.

The investigation also drew attention to the changing role of Swedish municipalities in the trade and industry sector. The geographical borders of the municipalities were re-drawn in the 1960s and 70s, and the basic principle was to group areas that shared trade and industry characteristics. During this period the attitude towards governmental intervention in trade and industry shifted from negative to cautiously positive. However, the investigation, and Hedskog as well, emphasised that the examples of successful reuse they had identified, would probably not have been achieved without a few devoted individuals. It was asserted that because of the novel nature of these kinds of reuse processes, there were no regular procedures which could be launched automatically. Instead, a couple of individual driving forces had to be present, whether as civil servants in the municipality, company representatives or local politicians, to enable the necessary cooperation in a reuse process. This is a crucial pattern we can recall from all the three places visited earlier in this study. In Avesta, Ironbridge and Duisburg, people with a personal agenda played an important role in changing both the meanings and the materiality of the redundant industrial place.

In both the dissertation and the governmental investigation, heritage aspects were mentioned and taken into consideration. The latter nevertheless meant that the preservation of the industrial buildings, and perhaps also
the machinery, from a heritage perspective was something very specific and unusual. According to the answers in the questionnaire, only about ten percent of the unused industrial buildings had been evaluated and documented with regard to their possible heritage qualities. The heritage institutions had accordingly been sparsely represented in the closing down processes. In a formal statement on the investigation from the Swedish National Board of Antiquities, a discontentment with the treatment of the heritage questions was also expressed, together with an emphasis on the fact that proper knowledge was lacking. The conclusion from the main national heritage authority was therefore that these aspects needed further investigation.

At the earlier mentioned third international conference on industrial heritage, held in Stockholm and Grangärde in Sweden in 1978, several of the participants expressed their concern about what adaptive reuse could destroy. Stuart Smith, known from Ironbridge, stated that “If in fact adaptive re-use is the only economic solution to a problem then one must ensure that the archaeology which is carried out prior to the renovation programme must be of the highest standard.” Also Neil Cossons declared that the question now to be asked is: can those industrial archaeological sites and monuments that survived the years of neglect now survive the period of rampant rehabilitation?

The industrial place was in this way recognised by architects and planners as a potential resource. However, their interest was met with ambiguous feelings from the heritage professionals.

Loft living and waterfront development

Since the end of the Second World War, in the city of New York, artists had reused rundown industrial buildings and warehouses as cheap spaces where they could combine working and living. At the beginning of the 1970s larger groups of people started to regard the open floor spaces of multi-storey industrial buildings – the lofts – as fashionable living space. According to Sharon Zukin, the lofts changed from being industrial production places to “items of cultural consumption” because of new social and cultural values of the time, among them a rising status of art and artists, a rising ecological awareness and a broadened idea of historic preservation. Zukin furthermore suggested an aesthetic component as part of the popularity of loft living. Old factories became an expression of contemporary society through a “heightened sense of art and history, space and time” and a modern search for authenticity. She states that living in a loft was an “attempt to replace modernism’s mass production of the individual with an
individualization of mass production” and that the industrial aesthetic was hence “domesticated.”

Harbour areas also became subject to reinterpretation and reuse in the United States in the late 1960s and early 1970s. What was labelled “waterfront development” became a widely spread strategy against dereliction of urban areas close to water. The case of Baltimore is often mentioned as an example that inspired other places, both in the United States and in Western Europe, with regard to the organisation of investment as well as the character of the new activities established in the old harbour. In Baltimore, new use included residential areas for upper middle-class inhabitants, heritage and leisure activities connected to water, retail trade, offices and hotels. Jussi S. Jauhiainen has described the heritage aspect of the waterfront development in the cities of Barcelona, Cardiff and Genoa as being represented by a sole chimney or gas tower left as a reminder of the industrial past, or a restoration of a few warehouses or an old ship. The transformation of a harbour in Amsterdam into a residential area could constitute yet another example of the concept where a preserved crane was said to establish “a link with the past.”

When waterfront development became prominent in Western Europe during the 1980s and 1990s, the concept from Baltimore was copied in many cities. However, Jauhiainen observes that while Baltimore was a success in economic terms, the social aspects were not as positive, among them increased
local costs and massive gentrification. Other researchers have found that the gentrification process could be based, not on the housing needs at the time, but on a conscious strategy to attract “quality people” by offering what was regarded quality housing on the waterfront.

The flour mill “Juvelkvarnen” in Gothenburg, Sweden, is being rebuilt for housing purposes. One page in the advertising brochure shows the old façade with a rooftop water cistern, which is said to give the building “a special identity.” The sketch below illustrates a possible interior of the new apartments when the conversion process is finished. Courtesy of JM.
By the harbour of Sweden’s second largest city Gothenburg, at the beginning of the 21st century, a flourmill, Juvelkvarnen, was rebuilt for residential purposes. The advertising brochure is full of references to the industrial past of the place. The main connection made between then and now is between nostalgia and character on one hand and fresh creativity and technology on the other. The industrial past is not something that is mentioned in a subordinate clause but included in the main characterisation of the residential area, which is said to be “marked by warehouse living, a concept where qualities from the past meet the present and so create a unique living environment.”

The qualities from the past referred to are exemplified in the brochure with preserved visible steel girders and plastered interior walls, original deep windowsills and open floor spaces. On the roof, an old water cistern is said to give the building a “special identity.” Next to the rebuilt flourmill, the construction company is about to erect a completely new high-rise building, which will borrow characteristic features from the old environment of the area. The potential buyers of apartments in the newly built house are being offered rough concrete walls as an optional choice. The young urban couple dressed in proper but comfortable clothes, smile in front of their car outside the old mill in the pictures of the brochure. The industrial past, as expressed in material features, in detail as well as in the urban landscape of the 21st century, has become an advertising tool directed towards a young urban middle or upper middle class. Speaking with Sharon Zukin, the industrial aesthetics has, undoubtedly, been domesticated.

Furthermore, in the Swedish capital of Stockholm and its immediate proximity, reused industrial buildings as residential areas on the waterfront have become prominent features. The advertising concept of these partly rebuilt, partly newly built areas is very similar to the example of the flourmill in Gothenburg. The materiality of the industrial past is emphasised and connected to positive descriptions of uniqueness, beauty and quality. Architectural qualities are also often highlighted as part of the reinterpretation of the industrial place. The architectural language validated by a famous, or at least a named architect, has become an important component in the new appreciation of the place.

In addition to these different strategies of attaching a new image to the industrial place, certain buildings or whole areas have been renamed mainly along two lines; water and nature on one hand, and the former industrial production or individual industrialists on the other. One can discern a division in which larger areas have been renamed with reference to a lake, a shore or a harbour, while the names of the streets and individual buildings connect to the former industry with reference to personal names of leading industrialists or words picked from the production process. The pattern is confirmed by the three reinterpretation processes described earlier. In Avesta the old industrial area was renamed “the Copper Valley,” in Ironbridge the
In Gustavsberg, Sweden, some of the porcelain factory buildings have been converted into studios, housing, shops and restaurants under the joint name “Gustavsberg’s harbour.” The picture depicts a café located in the former administration building, and in the background one can glimpse the water. Photo: Anna Storm, 2005.

At some places the industrial past has been emphasised, not only by referring to a certain production process, but also by using connotations of the factory concept in general. In Nacka strand, Sweden, a former factory has been rebuilt to house conferences, fairs and exhibitions, as indicated on the sign in the middle. Photo: Anna Storm, 2002.
A gentrified place for memory and oblivion

If artists were one of the first groups of people to make use of abandoned industrial places, they did not disappear when wealthier middle-class inhabitants found their way to the reinterpreted industrial environment, but the activities somewhat changed. The galleries became more frequent than the ateliers, and prestigious projects like the Bankside Power Station in London, opened as Tate Modern in 2000, and the Montemartini Power Station in Rome, which houses collections from the Capitoline Museums, proved that the industrial place is appreciated in the arts world three decades after the concept of loft living emerged, although in another scale and setting. Sharon Zukin has shown how the lofts in New York were transformed from being mere work places to scenes on which artists exhibited their artistic creations, and the industrial aesthetics hence not only became middle-class
fashion but also, in some places, a stage for artistic expressions. The former blast furnace plants in Avesta and Duisburg that were used as an art gallery and a background for concerts respectively, together with the huge power stations of London and Rome that were transformed into art museums, hence signify a trend in which industrial milieus have been chosen as stages for, or backgrounds to, pieces of art.

As previously mentioned, gentrification was one of the negative social consequences of loft living and waterfront development. I argue, however, that gentrification could be understood as a complex concept that possibly also includes positive social change in terms of making previously closed areas accessible and visible to everyone. In Norrköping for instance, the industrial area along the river had always belonged to the textile companies and although it had been a working place for many, to most people the area was unknown. By means of reinterpretation and reuse – with consequences of gentrification – the industrial area was transformed into the “Industrilandskaper” (“the Industrial Landscape”) and became a public space, in a pattern often repeated elsewhere.

Gentrification could thus, in some respect, mean opening up, making the redundant industrial place accessible. How has this affected the former workers? Have they established a new relation to their previous workplace? In other words, how is this new public access related to issues of personal and collective memories? Michael Stratton suggests it was young professionals who were to adopt the loft living life style, noticing the importance of generation and educational level as decisive for the new users. Thus Stratton identifies not only gentrification but also a break with the possibility of having personal memories and earlier experience of the place. Similarly, Sharon Zukin asserts that only people who do not know “the steam and sweat of a real factory can find industrial space romantic or interesting,” thus further stressing the importance of a break between the old and new users of a place in a reinterpretation process. She argues that the succession of uses and users is to be seen as a reflection of larger social changes where working-class neighbourhoods are gentrified in parallel with a replacement of industrial production by “higher-level post-industrial activity.” The young urban couple in the advertising brochure for apartments in the flour mill in Gothenburg, and the replacement of the local population in Ironbridge, of course, support this analysis.

Memory, history and gentrification of a place have been dealt with from different research perspectives. Dolores Hayden has shown how bitter or ambiguous memories, like those that could be connected to the abandoned industrial place, are often difficult to embrace in an urban landscape. Pierre Nora also claims that it is a complex matter to embody memory in a certain site at the same time as a feeling of historical continuation persists. Not only could the memories themselves be complicated, but also the very feeling of time passing could give the site, building or artefact, the role of an obstacle.
The duality of the factory has undoubtedly become a factor in the material changes of the industrial built environment.

What about the newcomers, those who do not know the “steam and sweat” of a real factory? According to Zukin, the middle-class users and inhabitants that have often taken over the industrial place and established new meanings, are able to do so because of their appropriation of a certain history. Instead of relating to an existing lower-class population, they identify themselves with an earlier group of, perhaps, wealthier inhabitants which allows them to make the place their “own.” In this case, memory as a factor in the reinterpretative process takes on a radically different role compared to Hayden’s study. Instead of revealing and evaluating difficult memories of one’s own life, the new middle-class inhabitants attach themselves to a certain period and a chosen lifestyle of the place where they intend to live. A proper heritage has consequently been created to suit the new meaning of the place.

Something has been remembered or created, and something has been forgotten or actively not chosen to be remembered. As the contrasting perspectives show, there is no easy parallel between memory and oblivion on the one hand, and good and bad on the other. Oblivion, forgetting or not choosing to remember could be labelled political oppression, rootless gentrification, or a necessity in the contemporary society depending on the specific place and its past.
The beauty of decay, the adventure of abandonment

The opposite of preservation and reuse might be leaving the redundant industrial place to fall into decay, gradually turning it into a ruin. The industrial ruins do not, however, simply represent a reverse perspective but, in many ways, even further strengthen both the heritage and the planning perspectives, which, for example, was shown in the previous chapter about Landschaftspark Duisburg-Nord.

During the late 18th century, the ruin became an object of appreciation, in paintings, poetry and as newly built entities in private gardens. The ruin was seen as emblematic of the cycle of life and death and the inevitability of time passing, in short a prime ingredient of the Romantic scenery. A patina of age sent signals of authenticity and was considered aesthetic.46 Two hundred years later, in the late 20th century, there is what Tim Edensor calls “the golden age of industrial ruination,” valid at least for the Western world.47 In relation to the praised ruins of the 18th and 19th century, the industrial ruin did not immediately evoke similar connotations of melancholic beauty, but instead represented a wasteland of dark urban nightscapes and abandoned parking lots that were loaded with meanings of ugliness and danger.

Nevertheless, industrial ruins have also been used as objects for the arts, but perhaps more in popular media forms than in painting and poetry. Edensor analyses a range of movies made from the mid-1980s to the late 1990s in which the industrial ruin constituted a main stage for the plot. He found four main categories: the industrial ruin as a backdrop for spectacular action, as a dystopic scene for science fiction, as a nostalgic landscape that is lamented as something passing, and finally as a marginal place where dissident identities are positively reclaimed.48

Another genre of artistic interpretation of industrial ruins is photography. Bernd and Hilla Becher, mentioned in the previous chapter about Landschaftspark Duisburg-Nord, have been working since the 1960s with black and white photographs of blast furnaces and steel works, lime kilns, water towers, gasometers, winding and cooling towers, most of them redundant, in Europe and the United States. The industrial structures are depicted frontally and in isolation, in order to reveal basic forms of a certain type of construction. By bringing together groups of images into tableaux they have tried to reveal similarities and dissimilarities. Most of the industrial structures they portrayed have since been demolished, and their award-winning work has been exhibited in art museums and books.49

The Bechers commented in an interview that the main objective of their work was to prove that today’s shapes are technological forms even if they did not arise for form’s sake. Just as the medieval thought is manifest in a Gothic cathedral, our age reveals itself in technological buildings and devices.50
This statement was made in 1971, before the oil crises and the formulation does not give a hint of what was to come. Instead, it again confirms the power of giving and explaining value by comparison, of which we have seen several examples in this study. The utterance also emphasises the industrial structures as emblematic, and as representatives of something present. During the following decades, however, many of their motifs were reinterpreted as structures belonging to the past.

Later photographers have followed in their steps. One is Gustaf Karlsson, who at the beginning of the 21st century took colour photos of abandoned industrial places in the Bergslagen region and Stockholm in Sweden, as well as the Ruhr district and Berlin in Germany. In a book titled “That no longer are” he introduces the pictures with a short poem: “There are places that no longer are./I’ve seen some of them./Silent factories and breweries./Quiet mining areas./Once well guarded./Now unlocked doors./Traces of men, but not a single man./The past yet the present./The feeling of another world.”

His pictures emphasise graphic patterns with a focus on details or perspectives. The sky is often dark and cloudy. Like the Bechers’ photos, Karlsson’s pictures represent a way of seeing the industrial structures as beautiful surfaces and forms, the texture of a place that once housed production but which is now empty, silent and immovable. The documentary and repetitive character of the Bechers’ projects is however not prominent in Karlsson’s pictures, which have instead an atmosphere of sudden redundancy.

Not only photographers have gone to see the redundant industrial place. A phenomenon called “urban exploration” traces its roots to the late 18th century, but the activities show a notable increase from the late 1980s and the term was coined in 1996. One urban explorer, with the alias Ninjalicious, asserts that one has a moral duty to explore abandoned sites, because if “you don’t go and appreciate these beautiful palaces of decay, it’s possible no one will, and that would be a terrible shame.”

What is past, what is present? What is continuation, what is change? When today’s urban explorers refer to the term industrial archaeology as just an everyday expression, what does it imply? Has industrial archaeology been transformed or prolonged in the activities labelled urban exploration? Or has the concept of industrial archaeology begun to signify a multiplicity of ways to take an interest in old industrial environments? Both industrial archaeologists and urban explorers investigate and appreciate abandoned industrial buildings and structures, but while the first-mentioned focus on recording and sometimes preservation, the latter’s centre of attention is on adventure. Both groups, however, encompass an attitude of opposition towards authorities, and the activities are carried out within a community that shares values and experiences.

As previously mentioned, Tim Edensor suggests that the industrial ruin works as a place of refuge for those not fitting into society, and furthermore
The redundant and sometimes abandoned industrial place can be appreciated in terms of beauty and adventure. Picture from shipyard in Karosta, Latvia. Photo: Anna Storm, 2001.
as a place representing disorder in a too well-organised and thus sometimes stifling society. He argues that the industrial ruin forms a critique of the highly regulated urban space and so questions normative materiality. Through being a sort of counter area the industrial ruin becomes inconsistent with the myth of progress. For the urban explorers, the kind of non-arranged surroundings seem to constitute an important aspect of the temptation. Ninjalicious describes how people who

live in towns made of sloppy junk buildings constructed with a few silly architectural gimmicks to disguise their overall banality can’t help but notice the amount of authentic beauty and character that these old abandoned buildings exude, even beneath all the dirt and decay.

The ruins hence offer a contrast that is experienced as more genuine than the neat and tidy façades behind which urban life usually takes place.

The urban explorers do not, however, seem to solely represent individual misfits in society. Many of them, for example, use an alias when communicating with others about their activities, because they want to keep their hobby a secret from their employer and colleagues at work. Instead, the risk seems to consist of being accused of devoting oneself to a childish game for grown ups. Economic historian, Jan Jörnmark, for example, has stated that also tough and smart guys are interested in ruin tourism which thus makes it possible for him to indulge in this activity too. In 2005 Jörnmark launched a website where he published photos of abandoned places that had lost the “roulette of transformation” in the process of globalisation. Two years later he wrote a personal and popular account of the Swedish high industrial period which together with a large number of his photos became a coffee-table book, gaining a lot of publicity.

The text tells one story, full of people. The pictures tells another one, a story of empty blocks and holiday camps, offices and canteens, sugar factories and mine shafts, rust and greenery, often in tilting perspectives. In one picture, a few paint ball enthusiasts and traces of role-playing come into sight. Jörnmark introduces his book with a description of how he and his wife “discovered” and “found” some of these places in 2004. He characterises them as bizarre and strange, and expresses his surprise that no one else had tried to document the phenomenon. Obviously, the fascination of abandonment, of places where people have left their binders on the writing-desk and never come back, is something he shares with many others, although it seems as if the interest has become especially intense after the turn of the millennium.

The above described approaches are all quite passionate, some of them emphasising an exotic otherness as the basis of their interest. This distinction between the familiar and the adventure, or theatre, or romanticised past, is identified by several researchers as what makes these places something to consume. Robert Willim, for example, uses the concept of “industrial cool”
to claim that the allurement of industrial ruins is established because, for many people, industry was located at a distance or as something absent, while others talk about a “theatrical image of the urban past” or a “construction of a landscape of display and spectacle.”

The redundant industrial place has, however, also caught the interest of other academics with a slightly different approach. In the United States, Julie Bargmann is head of the design research project D.I.R.T. studio which engages architects, engineers, artists and historians in the practical urban regeneration of derelict areas. Bargmann and her team describe their project as a way to “give voice to the landscape” and they “aspire to the extraordinary to create grounded authentic places.” The interaction with the local community is emphasised and the goal is vital cities and landscapes with “ecological and cultural production.” One could hear echoes of the community involvement in the ecomuseums, and of the nature and art on stage in the Landschaftspark Duisburg-Nord. Like Jörnmark, Bargmann and her studio have received a lot of publicity and have thus contributed to a public discussion on the topic of new use for redundant industrial places.

Authenticity in heritage and planning?

Authenticity is a word that is frequently repeated in the above quotes. The urban explorer, Ninjalicious, living in Toronto, Canada, elaborates his thoughts about what qualities it carries:

Whereas in most parts of the city it’s easy to forget that the past ever happened, in abandoned buildings you’re surrounded by the past and can’t help but feel connected to it and a part of it. Along with their decay, their emptiness and their history, abandoned buildings offer city and suburb dwellers an all-too-rare taste of authenticity.

The materiality is understood here, not as a link to his own personal memory but as a reminder of the past as such. The connection is the rare flavour of something genuine.

The experience of authenticity by means of ruination is well-known, as with the 19th century decorative garden ruins, and as one strong argument for the preservation ideal of minimum intervention, described in chapter two. How has this immediate experience taken shape in the professional planning context? Is it the feeling of authenticity that makes us look upon industrial buildings as aesthetic and fashionable? And is it actually details of ruination that are preserved in order to give the new apartments in the reused mill their special identity sought after? When the layers of dirt are taken away, visible rusty iron bars and rough concrete walls certainly bear some kind of patina and witness of decay. The difference would thus only be to what extent one is interested in the industrial
ruin – untouched and in its totality as the urban explorers and industrial photographers, or as a detail giving the living room or office a certain character.

And what about the heritage professionals? The experience of authenticity and adventure at least constitutes one important aspect in industrial heritage tourism. This is exemplified from the Ironbridge Gorge Museum, via Landschaftspark Duisburg-Nord to extensive schemes like the “Route Industriekultur” in the Ruhr district launched in the 1990s as one part of the IBA Emscher Park programme and today comprising more than fifty different sites. Also the “European Route of Industrial Heritage,” launched as a European Union project in 2002 and today involving five Western European countries, among them Britain and Germany, exemplifies industrial heritage tourism. Advertising characterisations like “full of surprises” and labelling a combination ticket a “discovery pass” indicate an industrial heritage visit as being an exploration into something exciting and unknown.\(^6\) While industrial heritage tourism sites are managed and financed by a variety of private and public means, the phenomenon can certainly be regarded one part of a new heritage arena, one that along with the increasing attention paid to redundant industrial places has come to involve numerous actors outside the core of professional heritage institutions and organisations.

Many heritage institutions as legislative and expert authorities can, however, be regarded a part of the general regulation of space in society, as suggested by Tim Edensor. The idea of designated heritage has, in his view, become too dominant in how we apprehend the past, and the industrial ruin hence represents a kind of anti-heritage by being unorganised and ambiguous. The heritage perspectives are said to represent a “monumental banishment” of ambiguity as well as of the dark and mysterious.\(^6\) Heritage is instead increasingly taking shape in terms of commodification and mediation, and simultaneously an erosion of negative aspects of the past. The duality of the factory is evidently still present.

What then are the consequences of commodification? One example is to be found in Britain where a symbolic stone at a commemoration place was moved and “placed in a glass case in the heritage centre.” Edensor suggests that, as a result, the stone was denied its authenticity and could no longer serve as a place of remembrance. He concludes that the knowledge that possibly emerges out of ruins is not intellectual but sensual and intuitive.\(^6\)

And it seems that the changing industrial society and many of its material remains have somehow evoked more questions than triggered pleasant feelings of authenticity among heritage professionals. At least in Sweden one can note that an investigation commissioned to suggest directions for a three-year governmental scheme for industrial heritage in the late 1990s resulted in a report named *Frågor till det industriella samhället* (“Questions to the industrial society”).\(^6\) Another Swedish example includes the National Board of Antiquities which in its 2001 programme for industrial heritage
put the strongest focus on the development of methods and approaches.69
A governmental investigation of 2002 which was to report on the three-year scheme and come up with ideas for future work did furthermore not lead to any real change.70 The questions raised in the various official reports to a large extent concerned issues of representation of many voices and perspectives – for example of marginalised groups like women and ethnic minorities – within the narratives of the industrial society. In contrast to the photographers, urban explorers and construction companies, the heritage professionals appeared to avoid the nostalgic, aesthetic and emotional devotion, as well as direct normative proclamations of how the industrial society and its physical and immaterial legacy were to be understood.

The emphasis on representation and narratives also implies an underlying critique of the close connection often made between heritage and built environment. According to the above referred investigations and programmes, the immaterial heritage should be regarded as important as the material and, in my interpretation, this immaterial heritage should be based on a distanced and intellectual questioning approach. The museum that Ninjalicious describes is thus not likely to become a part of an official heritage definition:

Half castle and half playground, the abandoned factory or hospital or theatre or train station that looms darkly on the edge of the skyline is virtually irresistible to those with a passion for seeking out and discovering the unknown and forgotten. Abandoned buildings can be incredibly moving and beautiful places; the whole tragic process of decay and entropy is both sad and breathtaking to behold. […] In addition, abandoned sites provide the best and most interactive museums of industrial archaeology and local history you’ll ever find. Those buildings that haven’t been stripped bare often house incredible old machines or technology we’ve all but forgotten today.71

The experience of the industrial place could thus be intellectual, visual and tactile, understood in some respects and a complete mystery in others. A poem by the writer and journalist Göran Greider published in 1995 expresses something similar: “The factories though remained forbidden cities./Childhoods passed by in the sign of a mystery./The adults hold an averted, inaccessible component./When the factories become silent they turn visible again./Not until now they are unfamiliar to us.”72

The factory has turned visible by becoming redundant and then being rediscovered.

Beginning from the planning perspective has provided some missing pieces to the understanding of the changing meanings and changing materiality of
the industrial place. It is also possible to discern a point when the planning and the heritage perspectives met or began to converge, approximately in the mid-1980s. This period saw both an awakening broader interest in the reuse of the industrial built environment and a diminishing radicalism in the formation of an industrial heritage. A decade later, heritage rhetoric was used to advertise offices and apartments, while planning, and local and regional development ambitions, were used to justify the existence of heritage activities in society.

The challenging claims and the popular appeal of the 1960s and 70s had, in the 1990s, been replaced with a complex gentrification process where closed private industrial areas were opened up, and where difficult stories of the past were turned into industrial aesthetics that constituted an essential part of a commodification of the industrial place. Another popular approach, expressed in hobbies like urban exploration and photographic expeditions based on a fascination of abandonment, has also been visible in the late 1990s and early 21st century. Consuming the materiality of the industrial place has been chiefly visual, and one key word seems to be authenticity, meaning a thrilling but pleasant experience of something real and genuine. This longing for authenticity also constitutes, I suggest, the main reason for the appreciation of visible rusty iron girders in newly-produced apartments in former industrial buildings.
This study examines the redundant industrial place as it was reinterpreted and reused in the late 20th century Western world, with the overall aim of contributing to a richer understanding of this transformation. What actors were involved in the process, what were the issues of negotiation, and what was the outcome? The empirical focus includes three former industrial areas which are investigated from a critical hermeneutic perspective: Koppardalen in Avesta, Sweden, the Ironbridge Gorge Museum in Britain, and Landschaftspark Duisburg-Nord in the Ruhr district of Germany.

A traveller’s view from a train, a bison sculpture that was moved from the industrial area to the town square, a row of iron girders that suddenly disappeared, the industrial place as a tourist attraction and leisure area, industrial aesthetics as spectacle and appreciated ruin all exemplify how the reinterpretation of the materiality in a post-industrial situation can take many different shapes and involve a wide range of actors.

During the period investigated, a logic was established concerning what kinds of industrial structures that were preserved or demolished, and which meanings and material features that were hidden or emphasised. The duality of the factory – the bright and dark aspects associated with the industrial place – was a rich source for individual actors to use for reinterpretative purposes. However, the main structuring principle of the transformation was focused on the future orientation and the expected benefit, be it a commodified industrial past or a confident local identity. In general, the new understanding of the redundant industrial place is that it offers a projection of visions of the future in a local context.

While some of the study’s findings contradict or modify previous research, others are observations contributing to an understanding of the character and significance of the changing industrial place. The main results, which can be grouped into four themes and are examined in the following, concern gentrification and commodification, the role of former workers and white-collar newcomers, a search for similarities as well as uniqueness, and, finally, the reinterpretation process turning the industrial past comparatively harmless.
Gentrification into a commodity

The redundant industrial place was turned into a commodity through a process of gentrification, expressed in new activities, users and meanings. The relation between industry and art was one arena in which this process became visible. During the late 20th century, many industrial places were used as stages or backdrops for high culture, such as photography and opera, as well as for popular culture, such as movies and rock concerts. One kind of stage gained value mainly by virtue of its patina, for example, the Bankside Power Station that became the Tate Modern in London. Another, more uncommon, category did not play on any kind of decaying ruin atmosphere, but was instead newly built and sent a message of full production, for example, the oil refinery replica used for the opera stage design at the Bregenzer festival (chapter seven).

Furthermore, the industrial built environment became appreciated, as such, from an aesthetical point of view. This was expressed in its adaptive reuse as apartments, offices and public localities. Somewhat paradoxically, the same esteem of industrial aesthetics also made the abandoned and decaying industrial place, on its way to becoming an industrial ruin, praised as a materiality offering an experience of the passage of time – a classical vanitas motif. While this study suggests that the artistic interpretations of the former industrial place could be regarded as a kind of reconciliation with the past, this understanding, however, also had the purpose of creating the place anew in order to meet present needs.

Another aspect elucidating the gentrifying commodification concerned nature. From being a comparatively indifferent feature, nature gradually became significant in the transformation process. The relation between the redundant industrial place and nature was expressed in two principal ways. On the one hand, some actors looked upon nature as a threat, something that challenged the bare industrial character. It was perceived as distorting the true character of industry, most apparent in Avesta (chapter three). On the other hand, nature was regarded as a resource which contributed to an idyllic setting, or as a way to re-conquer the place with vegetation and hence change its appearance in a supposedly positive way. The former ironworks area in Duisburg is characterised by the controlled overgrowth of vegetation that makes it visible and used in new ways – many of them, like climbing, diving and biking, in a kind of translocation from a natural environment into the “Industrienatur” (chapter six).

Nature was also a sought-after connotation in the reinterpretation process through the renaming of places that included elements such as valley, landscape, park and shore. In Avesta, the industrial area was renamed Koppardalen, “the Copper Valley,” and in Ironbridge the beautiful gorge was emphasised in the museum’s advertisements. The use of such terminology connects different spatial scales and merges nature and the built environment
into a common materiality. This study suggests that the focus on nature’s recovery constitutes a possible substitution story that defuses more difficult and potentially dangerous elements of the past, the latter perhaps being particularly manifest in the built structures. A new and more sympathetic understanding of the industrial landscape contributed to changing the meanings of the materiality in connection to future prospects.

Furthermore, material hierarchies were also established at the detail level. In Avesta, negotiations about retaining and creating traces from demolished buildings revealed different ideals. While some actors saw the traces as facilitating the readability of the place and making it aesthetically interesting, others considered them ugly and obstacles to future development. Related to this issue were the place’s rusty appearance and its atmosphere of abandonment. Whether the place should be kept rusty or, rather, softened by cleaning it up and planting greenery (chapter three), became a question of quite intense local debate as part of the gentrification process.

While gentrification is usually perceived as a process of distinction and exclusion, the present study suggests a more complex situation. The sophisticated cultural activities that have come to inhabit many of the places in a post-industrial situation indeed signify gentrification in the traditional sense. Yet, compared to the previously closed industrial area, the new ownership and activities impart a sense of accessibility, that material and mental barriers have disappeared and the place has become public, open to larger groups of people. Thus, the gentrification process can have contrasting effects, on the one hand creating distinction and exclusiveness, and on the other, openness and accessibility.

### Not former workers, but newcomers

Who was involved in the reinterpretation and reuse processes? A short answer is that it was not, primarily, the former workers or the company, but instead white-collar professionals who were usually also newcomers to the place.

Previous research has often supposed a clear connection between, on the one hand, activities asserting a workers’ history from below and, on the other, the reinterpretation and reuse of the industrial built environment (chapter four). However, according to the present study, this connection is not evident. Instead, the key figures of the industrial past – the workers and the company management – have been strikingly absent in the process of reinterpretation and reuse. In their place, the main actors were public bodies such as municipalities and trusts, or private construction companies.

The main actors, the newcomers, often had a strong personal agenda. In addition, their geographical relocation as well as their lack of personal memories of the industry, when it was still in operation, appears to have contributed to
how they identified and acknowledged the industrial place. The newcomers in this respect discovered the former industrial place for the first time at a stage when it was marked by liminality (chapter three), a state of undecided meanings with openness towards reinterpretation. While the company that had earlier carried out its production in the industrial place withdrew its interest, the meanings attached to the place were gradually taken over by the new actors. This pattern is valid for all three former industrial areas investigated. Prior to the municipal take-over in Avesta, the company had been an active heritage producer for several decades, establishing archives and planning for a museum. In Ironbridge, the public museum had a forerunner in a smaller company museum. At these two places, the company not only chose to relinquish its material legacy as a production site, but also its role as a heritage creator.

While the new meanings were not articulated by the factory workers or those in management when production was still running, the radical spirit of the 1960s and 70s nevertheless influenced the recognition of the redundant industrial built environment. The arguments presented, among others, by industrial archaeologists, ecomuseums and dig-where-you-stand study groups, which asserted a new and different relation to the recent past (chapter two), affected the established heritage, as well as planning professionals and the general interest in the industrial place. These arguments did not, however, constitute the direct cause of the initiation of the reinterpretation process. In Ironbridge, the creation of the museum occurred simultaneously as intense industrial archaeological activities and the formation of ecomuseums, but it was not an immediate result of these ideas. Instead, the museum was criticised for not being radical, while, at the same time, it was awarded for its innovative museum approach, emphasising, among other things, costumed guides and elaborated souvenirs.

Is it possible to understand why the former workers and the companies were not major participants in the reinterpretation process? I suggest the answer consists of three separate parts, possibly linked together: an experience of crisis, an increased interest in the past, and the reinterpretation and reuse of the built environment, respectively. The results of the present study provide reasons to further investigate these links empirically.

The connection between a crisis experience and a search for stability through structures of the past is a link examined and acknowledged in previous research (chapter five). Translated into the place in a post-industrial situation this could be formulated as a presumption that when industrial production ceases, people lose their workplace and in a feeling of crisis seek new confidence by engaging in activities that deal with the past. The amateur research of the dig-where-you-stand study groups (chapter two) is one example. However, the transformation from an industrial to a post-industrial situation does not necessarily imply a crisis experience that leads to an increased interest in the past. In none of the three places investigated
was there a complete closedown at one specific moment in time, nor was there any widespread mobilisation of activities that made the past visible and manifest. Although the wider surrounding regions faced severe challenges of restructuring and unemployment, in Avesta, Ironbridge and Duisburg a feeling of crisis and despair does not seem to have been dominant at the time when the respective reinterpretation processes began. Instead, there was an experience of general rapid changes in society, which not only included negative connotations but also hope and belief in the future. As already mentioned, in order to elucidate if these aspects were exceptional or something that commonly occurs, further research is needed.

The possible connection between an increased interest in the past and the reinterpretation and reuse of the built environment has, so far, been sparsely investigated empirically, but nevertheless often assumed as a matter of course by researchers dealing with industrial heritage. Applied to the place in a post-industrial situation it could be understood as a presumption that former workers would choose to engage in transforming their former workplace into something useful for the future. This conception is probably accountable, for example, for the Swedish volunteer run “work life museums.” However, as noted above, in the investigated large-scale reuse schemes, former workers did not, to any considerable extent, take part in the conversion process. This can be explained not only by the first link described above (that is, no crisis experience and no special interest in the past), but also by the existence of the “spirit of the company town,” which implied a strong reliance on community leaders to take care of everything that had to be done. This was most obvious in Avesta (chapter four) but probably also present in Duisburg.

A state of affairs which further indicates that the main incentives for commencing the restructuring processes were not locally initiated but a result of external ambitions concerned the financial prerequisites. In contrast to comparable projects in cities with high exploitation pressure, the three investigated reuse processes were based on national or international funding, directed towards places and regions in decline. The transformation in Avesta was dependent on European Union structural funds. In Ironbridge, the museum was created as part of a recreation area, which contributed to the upgrading of a quite derelict neighbourhood and was based on the government resources for the British “new towns.” The former ironworks in Duisburg was transformed mainly with regional funding through the ten-year restructuring programme, IBA Emscher Park.

Similar, but also unique and authentic

Previously, I claim that the reinterpretation of the industrial place in the late 20th century was a phenomenon with relatively similar characteristics
all over the Western world. I also repeatedly observe how the redundant industrial places were appreciated for being unique and authentic (chapters three, four, five, six and seven). Taken together, how can these two statements be understood? Do they contradict each other, or is there a conceivable combination?

One frame for the entire investigation was the third industrial revolution and the corresponding contemporary consumption society, in which the production process in itself is not the centre of interest but what is possible to sell. This is not just a matter of money, since the symbolic value of a certain product becomes equal to, or even more important than the actual price (chapter one). When the redundant industrial place was transformed into a consumer experience within the realm of a commercial logic (chapter seven), this experience was based on general characteristics, such as a new appreciation of industrial aesthetics and an appraisal of waterfront and city centre locations, as well as conceptions of authenticity. This was most obvious in reuse processes for offices and housing (chapters two, three and seven).

Similarly, the industrial place became valuable at the local level, because of its comparisons with other places, which not only emphasised the local as being part of something bigger, but also as a unique entity. In Avesta, the actors created compelling images of the industrial area by claiming references to, for example, an Inca temple, and in Duisburg the associations with landscape parks stressed another kind of similarity. Ironbridge, on the other hand, was incessantly labelled “the cradle of the industrial revolution” and thus a place of national and international importance. In this way it declared its uniqueness in relation to the rest of the world. Both perspectives – of similarity and uniqueness respectively – were present in each of the three places investigated. The museum in Ironbridge, for example, both adapted and distinguished itself against prevailing norms and practices. While the idyllic setting in the Severn valley made it similar to other kinds of heritage, the concept of a “living” museum with its in situ preserved built environments made it special and authentic.

In general, the larger picture became an argument in the local community, asserting similarity as well as uniqueness. Thus, I claim that the homogeneity of the phenomenon and the aspect of authenticity and uniqueness of individual places have mutually reinforced each other. An international frame of reference was used to strengthen the conception of the local industrial place both as truly unique, and as a prominent part of a larger context. The chosen framework elucidated the locally articulated value, and constituted a ground for local recognition and economic support. Thus, it is possible to understand the reinterpreted industrial place both as a “point in a spatial system” and as a “unique artefact” that can be experienced by the senses, as it was suggested in the introduction (chapter one).
The industrial past becomes harmless

The dark and difficult aspects of the duality of the factory have in the reinterpretation and reuse process been selectively emphasised or suppressed. The literal overgrowth of vegetation of industrial material structures, or the comparatively wealthy recreational activities carried out in former industrial places indicate that the political dynamite attached to the place has been defused to a certain extent. The parts of the difficult past that some actors, nevertheless, have chosen to stress are somehow manageable, and fit into the general endeavour to change the former industrial place into an asset in a local future project. In addition, the creation of new understandings in all three investigated places was most often marked by agreement or compromise. Hence, in its entirety, the reinterpreted industrial place has to many people become fairly inoffensive and without risk. A commodity can be created on the basis of a fascination for danger and misery, but it cannot afford to be unpleasant.

At the same time, this study suggests that the reinterpretation of the industrial place can be regarded as an expression of reconciliation with the industrial past. Harmlessness and reconciliation certainly connote a different kind of dignity, and many people would probably endorse neither of them. The negotiations concerned with memory and meaning and the creation of history and heritage have different outcomes in different communities and periods of time. The individual and collective memory can be in accordance or not. The necessity of forgetting is a reality, not only because the past in its totality is naturally too encompassing and chaotic to be remembered or given shape, but rather because meaning and intelligibility are also created through oblivion, through what we choose not to remember. However, these choices are never self-evident or natural, but expressions of power relations and contemporary needs.

Hope and rust

The reinterpretation of the industrial place has been a way to formulate and project visions of hope in local contexts. The industrial past, as heritage as well as in other forms, mirrors contemporary calls for new identities and new economic activities in society. Implicitly, a crucial part of the search for new identities refers to a traditional male identity. The muscular and heroic steel worker had to be replaced by another ideal, connected to values of entrepreneurship and creativity, and expressed in more symbolic currencies. Similarly, the understanding of what constitutes a “real” workplace and “real” products is subject to change.
Rust represents industry becoming something that belongs to the past, something that in many respects is being lost in the third industrial revolution and the consumption society. An ambiguous lamenting over what has turned rusty includes both relief and sorrow over what was left behind. The rust implies that industry is no longer what it once was, but nevertheless forms an important part of the new hope. Rust has become fashionable, signifying the aesthetics of middle or upper middle class people, their apartments and offices, art galleries and coffee table books. Rust signifies a valuable patina that has become part of the commodification, demanded by urban intellectuals, but also, although not fully and with some scepticism, by inhabitants of old industrial communities.

When those who knew the “real sweat” of working in factories are no longer around, some heritage professionals have suggested that the industrial past will be encompassed by the same sentimentality as the agricultural society. However, perhaps sentimentality is not the word I would choose, but instead adventure, beauty, uniqueness and spectacle. Nevertheless, in the global, third industrial revolution, the real sweat of workers in factories still exists, but more in the non-Western places of the world, such as East Asia, or, for example, Chusovoi in the Ural mountains (chapter two).

And while the northern works, later Kopparalen, in Avesta was being reinterpreted and reused, the steel production in the southern works industrial
area of the town continued, because the company managed to retain a strong position in specialised niches of the global steel market. And although it is still terribly hot in the rolling mills of the southern works, the workers nowadays usually manage the process using a computer behind the glass walls of a tempered room. The hard labour in front of the hot blast furnace when the worker’s back was freezing cold because of the non-insulated plant is now only a memory and a tale told in Avesta.

What will be the redundant industrial places of the future? This study has not dealt with anonymous single-storied industrial buildings from the post Second World War period, which are without windows, marked by the fork-lift truck, located on the outskirts of the cities far from the waterfront. How will these industrial landscapes be understood and used when they no longer fill their present purpose? That is a question for further investigation.

I conclude that the view of former production sites, from the window of a train, which opens this study, will most often signify an interpretation of a college or business park, the mass production sites of our time. In parallel, but as a less dominant reinterpretation, the redundant industrial place will be understood as heritage or a museum. In sum, the industrial place has been domesticated aesthetically, made democratic with regard to perspectives and become accessible to a large audience by being transformed into a spectacle. In the late 20th century, the factory as a material reality and an imaginative tool has, undoubtedly, obtained new possible functions and users, new possible pasts and futures.
8. CONCLUDING DISCUSSION
1. INTRODUCTION

2 Andersen et al., Fabrikken, p. 111ff.
9 The word “revolution” could be misleading. Although it is often used to describe fast, and sometimes violent change, it is also possible to understand in terms of profound – rather than rapid – transformation. The latter meaning is here the most relevant. ”Revolution” could also mean cycle, and thus a return to the point of departure. For a semantic analysis of the word, see Reinhart Koselleck, Futures past: On the semantics of historical time, New York: Columbia University Press, 2004, pp. 43–57. Original publication Vergangene Zukunft: Zur Sematik geschichtlicher Zeiten, Frankfurt am Main, 2000 (1989). Other researchers have suggested slightly different chronologies. See for example Alzén, Fabriken som kulturvarv, p. 23ff; Eva Silvén, Bekänna färg: Modernitet, maskulinitet, professionalitet, Stockholm: Nordiska museets förlag, 2004, p. 17ff.
10 Andersen et al., Fabrikken, p. 96ff.
11 Ibid., pp. 126, 137.
12 Ibid., p. 119. Andersen does not, however, use the concept of a second industrial revolution.
13 Alzén, Fabriken som kulturvarv, p. 23, with reference to Marie Nisser.
15 Ola Wetterberg describes the same phenomenon within Swedish building conservation, but stresses the contrast more as a critique of modern society. Ola Wetterberg, Monument och


21 Andersen et al., Fabriken, p. 143.

22 Ibid., p. 122.

23 In Sweden the concept of a third industrial revolution has been suggested primarily by economic historians Lars Magnusson, Lennart Schön, Mats Larsson and Maths Isacson. The concept has however been used internationally since the mid-1960s in contexts like space engineering et cetera. For a historiographic survey, see Maths Isacson, "Tre industriella revolutioner?" in Industrialismens tid: Ekonomisk-historiska perspektiv på svensk industriell omvandling under 200 år, eds. Maths Isacson and Mats Morell, 11–28, Stockholm: SNS förlag, 2002.


26 According to a survey of research about the use of history, an experience of thorough changes or crises can generally be related to an increased interest in the past. Peter Aronsson, Historiebruk: Att använda det förflutna, Lund: Studentlitteratur, 2004, p. 286.


28 Ibid. According to Peter Aronsson, historical arguments are more often used explicitly in order to slow down a threatening development, than to legitimise change. Aronsson, Historiebruk, p. 278.


32 Aronsson, Historiebruk, p. 275f.


34 Ibid., p. 151.


36 Ricoeur, Memory, history, forgetting, pp. 41, 150.


39 Ibid., p. 40.

40 Koselleck, Futures past, p. 257ff.
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41 Bauman, "From pilgrim to tourist" p. 19.
42 Ibid., p. 23, with reference to Christopher Lasch.
45 Andersen et al., Fabrikken, p. 464.
46 Ibid., p. 467.
49 Ibid., p. 37f.
50 One way the two professional perspectives previously have been investigated together is when cultural heritage is regarded as infrastructure in a planning process. See for example Krister Olsson, Från bevarande till skapande av värde: Kulturmiljövården i kulturmiljöer, Stockholm: Royal Institute of Technology, 2003; Catrin Jonsson, Postindustriella parker: Industriella platser som offentliga parker, Sveriges lantbruksuniversitet, Ultuna, 2007.
51 One of the key texts for the dig-where-you-stand activities, Gräv där du står: Hur man utforskar ett jobb by Sven Lindqvist, has according to the publisher, the Bonnier group, however, been translated into German, Norwegian, and Danish.
53 Dolores Hayden, The power of place: Urban landscapes as public history, Cambridge: The MIT Press, 1995; Lynch, What time is this place?
55 Ibid., p. 122.
56 Marie Nisser has worked actively to establish networks where scholars and heritage professionals from different countries can increase their knowledge by exchanging experience. This ambition has taken shape among other things in training courses in industrial heritage concerning the Nordic and Baltic countries, and furthermore through Nisser’s work – during 1984–90 as president – in the International Committee for the Conservation of the Industrial Heritage, TICCIH. See also Andis Cinis et al., eds. Industrial heritage around the Baltic Sea, forthcoming. A national comparative perspective has furthermore been emphasised in the Swedish industrial heritage research. See for example Jan af Geijerstam, ed. Industriarmiljöer i förändring: Rapport från en konferens i Ramnäs, Västmanland 6–8 oktober 1999, Smedjebacken: Ekomuseum Bergslagen, 2000; Jan af Geijerstam, ed. Industriarv i förändring: Rapport från en konferens, Koppardalen, Avesta, 7–9 mars 2006, Avesta, 2007.
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59 Alzén, Fäbriken som kulturarve.
60 Ibid., p. 77.
63 In an overview of research connected to use of history, a field to which this study is related, Peter Aronsson emphasises the need for local and international investigations, for comparative perspectives and an interest in emotional and aesthetic components. Aronsson, Historiebruk, pp. 277–285.
64 A second important interviewee unfortunately decided, after more than one year of continuous contact, not to answer my questions, and I was not able to trace a third sought-after interviewee.
65 Regarding the interviews, it has been my impression that most of the actors have given interviews about their work before, within different contexts, but not to a great extent about their own incentives and experiences. This made the interview situations in general relaxed and concentrated but still the interviewees had to reflect upon these issues in a fresh manner and not answer by habit. With a few exceptions, the interviews were recorded and partly or entirely transcribed. The Swedish actors were interviewed in Swedish, the British actors were interviewed in English, which is not my mother tongue but theirs, and the German actor was interviewed in English as well, thus creating a situation where none of us were talking in our mother tongue. All quotes from the interviews in Swedish – as well as the quotes from Swedish, Danish, Norwegian and German texts – were translated by the author.
66 See for example Nisser, “Industriminnen på den internationella arenan.”

2. HERITAGE, MEMORY AND POPULAR APPEAL

3 Ibid., pp. 35–59.
8 Saint, ”How listing happened” p. 117; Hunter, ”Introduction” p. 7f.
9 Saint, ”How listing happened” p. 124.
10 Revision and perhaps exclusion of what has already been appointed heritage was, and still is, extremely rare. One obvious exception is the former Soviet states where new selections of heritage have been part of the formation of a new national identity. Ashworth and Howard, European heritage planning and management, p. 49.
12 The ”restoration à la mode” is associated with Eugene Etienne Viollet-le-Duc in France.


17 Gavin Stamp, "The art of keeping one jump ahead: Conservation societies in the twentieth century" p. 86ff.

18 Ibid., p. 94f.


21 The organisation was later renamed the International Committee for the Conservation of the Industrial Heritage (TICCIH).

22 Marie Nisser, "Industriminnen under hundra år" Nordisk Museologi 1 (1996), 73–82.


24 The Council of Europe and the European Union, for example, both influence the agenda. The Council of Europe has among other things drawn attention to the urban built environment through the naming of years, for example the European Architectural Heritage Year in 1975. Hitherto, the European Union has not been a major actor in this field, partly depending on its internal organisation that split the heritage questions between several different areas of responsibility. The United Nations Educational, Scientific and Cultural Organisation (UNESCO) founded in 1945, the International Council of Monuments and Sites (ICOMOS) founded in 1946 and the International Council of Museums (ICOM) founded in 1964 are other actors that have contributed to the international discussions.

25 Ashworth and Howard, European heritage planning and management, p. 73; Jan Turtinen, Världshavets vilkor: Intressen, förhandlingar och bruk i internationell politik, Stockholm: Stockholm University, 2006, p. 172f. The World Heritage List is one way in which UNESCO seeks to "encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity." The ambition is embodied in an international treaty called the "Convention concerning the Protection of the World Cultural and Natural Heritage" that was adopted by UNESCO in 1972. World Heritage List website, http://whc.unesco.org/, accessed September 12, 2006.

26 Beside the four sites mentioned, world heritage designations of industrial sites include Maritime Greenwich in Britain in 1997, the Naval Port of Karlskrona in Sweden in 1998, Mountain Railways of India in 1999, the Blaenavon Industrial Landscape in


29 Wetterberg, Monument och miljö, p. 9f.


31 One can assert that the activity that was later to be labelled industrial archaeology had in fact been going on within the Newcomen Society since its formation in 1919, although the Newcomen Society was a learned society and its members consequently considered the industrial archaeology movement in the 1960s not to be scientific enough. Henrik Harnow, "Industriel arkæologi – modefænomen eller tiltrængt nybrud?” Fortid og Nutid 4 (1992), 253–271, p. 263. See also Alzén, “Kulturarv i rörelse” p. 211.


33 The word “ecomuseum” was coined at the ICOM general conference held in 1971 in Grenoble named “The museum in the service of man today and tomorrow.” John Aage Gjestrum, "En bibliografi om økomuseer” Nordisk Museologi 2 (1996), 57–70, with reference to Hugues de Varine. See also Ashworth and Howard, European heritage planning and management, p. 81.

34 However, there has been a struggle about how to define the concept, including some advocates for a bias towards ecology. The concept was also coined during the rise of environmentalism and can as such be regarded to meet political needs of the time. Peter Davis, Ecomuseums: A sense of place, London: Leicester University Press, 1999, p. 3.

35 Ibid., pp. 67ff, 228.

36 There are, however, some European countries where no ecomuseums exist in name, notably in Germany, Austria, the Netherlands, Greece and Spain. Ibid., p. 114.

The increasing activity of local amateur research in the form of study groups did start before the books of Sillén and Lindqvist, but flourished most intensely in connection to these publications in the last years of the 1970s. Activities preceding the dig-where-you-stand study groups were, for example, the travelling exhibition "Land du välsignade" made by Riksutställningar and touring from 1973 and onwards, the radio- and TV-series "Bygd i förvandling" sent in 1974, that were inspired by about five hundred study groups in northern Sweden. Ibid., p. 79ff. See also Maths Isacson, *Industriamhället Sverige: Arbete, ideal och kulturarv*, Lund: Studentlitteratur, 2007, p. 249ff.


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58 Ibid., p. 93.
59 Furthermore, the Society for Industrial Archeology was said to be international, thus not only comprising the United States. Ibid., p. 93f.
62 Hudson, "Ecomuseums become more realistic." According to Hudson, the actual work was carried out by the professionals providing guidelines, while the amateurs collected material, and the professionals finally presented the result in a meaningful way. This was the case for the ecomuseum at Le Creusot and Montceau-les Mines, but also for many ecomuseums in France and other countries later on.
63 Davis, Ecomuseums, p. 223ff. Davis does not explicitly assert that it was the museum professionals that carried out the principal discussions, but he formulates the volunteer participation in terms of "use of volunteers" which I understand as they were neither leaders nor opponents.
64 Alzén, Fabriken som kulturarv, p. 91.
67 There were, however, people that asserted that the archaeological approach was appropriate, although the time period had to be expanded to include industrial or industry related activities from pre-historic periods. See for example Arthur Raistrick, Industrial archaeology: An historical survey, London, 1972.
68 Linsley, "The industrial heritage" p. 21.
69 According to Alzén however, neither in the United States nor in Britain did industrial archaeology comprise an ambition of social and political character. Alzén, "Kulturarv i rörelse" p. 224.
70 Nisser, "Industriminnen under hundra år."
73 Sven Lindqvist, "Arbetets historia" Dagens Nyheter November 6 (1977). Lindqvist was also influenced by oral history and when the key text of oral history (Paul Thompson, The voice of the past: Oral history, Oxford: Oxford University Press, 1978) was translated into Swedish, Lindqvist wrote the preface. Alzén, "Kulturarv i rörelse" p. 218.
75 Alzén, "Kulturarv i rörelse" p. 220.
76 Annika Alzén, "Rörelser i det förflutna" in Idier om bemhygden: Utmaningar för en folkrörelse
3. Koppardalen in Avesta: CHANGING MEANINGS, CHANGING MATERIALITY

1 For a thorough cultural history of the European bison, see Simon Schama, *Landscape and memory*, London: Fontana Press, 1996, pp. 37–74. Slag is a rest product from smelting of ore, for example, copper and iron ore. The copper slag is almost black while the iron slag has shots of green, blue or grey. Beginning in the 18th century, and because of the scarce resources of wood, slag was used as a building material, as moulded bricks or chips. Ann Marie Gunnarsson, "Hus av slagg" *Dagsverket*, 4 (2003), 8–9.


7 At this place, the company expected it to be noticeable both for the local population and for visitors. Hopefully it would so also avoid being damaged. The local manager emphasised that it was still the company that owned the sculpture and what it represented also henceforth was of concern for the iron and steel company. He even warned that the company would take the sculpture back as the "darling" it was, if it was subject to damage. Ibid.

8 Einar Lövgren, *Folkare din hembygd*, Avesta, 1977, p. 120.

9 Kåks, *Avesta*, pp. 27, 37. At the most about 100 people worked at the copper works, in 1675.


11 Thisse mentions two polar cases of separation, one that is associated with segments of the market, and one that corresponds to the production process. Obviously I am here referring to the latter. Thisse, "Location theory" pp. xviii–xix.

12 Vikström, *Industrimiljöer på landsbygden*, pp. 42–73; Eva Vikström, *Platsen, bruket och samhället: Tätortsbildning och arkitektur 1860–1970*, Stockholm: Statens råd för byggnadsforskning, 1991, p. 23ff. Beside the company towns there are of course more diverse cities where different kinds of industry make up just one part together with, for example, trade and governmental institutions as the basis of the urban conglomeration.

13 The coin manufacturing came to an end already in 1832 when the Swedish government

14 Blast furnace number one was built in 1874 and taken out of use in 1938. Blast furnace number two was built in 1876 and taken out of use in 1920. Blast furnace number three was built 1915 and taken out of use in 1918. All three blast furnaces were temporarily put out of operation. The open-hearth plant in Avesta was in operation between 1887 and 1954. Verket website, http://www.verket.se, accessed March 21, 2005.

15 *Svenska Dagbladet*, November 3, 1976, Bo Hermelins samling, F1:10, ENC. Note that the number of employees indicates those employed at the company, which is not equivalent to those working in the industrial area of Norra verken. In this area about 2000 people have been working at the most. *Anteckningar rörande Avesta Jernverk under disponent Walfrid Erikssons tid* (1927–49), Meddelande 18.2, 1971, Avesta Jernverks AB, F2B:119, ENC.


18 *Avtal mellan Avesta AB och Avesta Industristad AB. Bilaga 2, Hyreskontrakt 1*, 1986, Avesta municipality, p. 3.


20 For example, one can compare the attitude towards the abandoned industrial areas in Avesta with those in Norrköping. Ibid., p. 58.


30 Rudberg, *Alvar Aalto i Sverige*, p. 118ff. Sundh Centre is one of two out of Aalto’s many proposals in Sweden that were actually built. The other one was Västmanland-Dala student clubhouse in Uppsala, finished in 1965. Rudberg, *Alvar Aalto i Sverige*, p. 128ff.


32 Ibid., p. 22. The numbers include mining but exclude the building sector.

33 Ibid., p. 207.

34 The municipality at the same time also bought the old workers housing area "Gamla byn." *Avtal mellan Avesta AB och Gamla Byn AB. Köpekontrakt*, 1986, Avesta municipality.


37 *Avtal mellan Avesta AB och Avesta Industristad AB. Bilaga 1:14, Asbestförekomst i ventilations-
anläggningar – Avesta AB i Avesta, 1985, Avesta municipality; Avtal mellan Avesta AB och Avesta Industristad AB. Bilaga 1:15, Angående asbest i Norra Verken, 1986, Avesta municipality.


40 Harvey, "From space to place and back again" p. 4.

41 Sverker Sörlin has suggested that the process of giving value and meaning to natural or cultural landscapes or objects could be viewed as a "trading zone" where different actors present their arguments in order to define the status of the landscape or object. The concept is borrowed from Peter Galison. Sverker Sörlin, "The trading zone between articulation and preservation: Production of meaning in landscape history and the problems of heritage decision-making” in Rational decision-making in the preservation of cultural property: Report of the 86th Dahlem workshop, Berlin, March 26–31, 2000, eds. Norbert S. Baer and Folke Snickars, 47–59, Berlin: Dahlem University Press, 2001.

42 Kåks, Avesta, p. 137ff.


44 For an overview, see Caroline Tholander, Koppardalsprojektet ur ett uthållighetsperspektiv: Begreppss- och verktygslära. Teorier och erfarenheter från Chalmers, m. ff., Göteborg: Chalmers, 1999. Part 3.4.2.


49 Stratton, "Understanding the potential.”

50 Ibid., p. 42ff.

51 Olshammar, Det permanentade provisoriet, p. 66f.


54 Alzén, Fabriken som kulturarv.

55 Samuelsson, Kommunen gör historia, p. 89ff; Alzén, Fabriken som kulturarv, p. 57f.


57 Mayer, "Post-Fordist city politics” p. 231.


60 Lars Åke Everbrand, interview, Avesta, May 18, 2006.

61 “I juni smäller det!” Dala-Demokraten April 16 (1993).


63 Ibid., p. 24.

64 Ibid., p. 15.


66 Perers, ”Avesta Art” p. 15f.

67 Everbrand, interview.

68 Ibid.


70 Ibid., p. 81f.

71 Ibid., p. 106.


74 Samuelsson, Kommunen gör historia, p. 126f.

75 Harvey, ”From space to place and back again” p. 8, with reference to M. Christine Boyer.


77 Isacson, Industrisamhället Sverige, p. 270f.

78 The Swedish governmental investment in the declining industrial region of Bergslagen was 475,5 million Swedish crowns during the 1980s and early 1990s, a larger part of which was reserved for roads and railways. Other parts were reserved for research and education, development of companies and employment subsidies. The main idea was to strengthen the existing industrial structure, although areas like tourism, culture and special programmes for women and young people were included during the latter part of the period. Ibid., p. 263ff.

79 The process of renaming will be further dealt with in the next chapter.


82 Beer från Ulf Löfwall till Hans Ångman, September 30, 1994, Dalarna CAB. The sheet rolling mill number three was built mainly in 1940 and enlarged in 1961. Sheet rolling mill number three was also built together with sheet rolling mill number two from 1934, the blooming mill from 1885 and the medium section rolling mill from 1924. The different rolling mills were in their turn built together with the earlier stages in the production process: crusher, roasting furnaces, blast furnaces, Bessemer steel plant and open-hearth plant. The plate rolling mill is the ordinary name on a building complex along the river. From west to east it has housed a briquette plant from 1909, a medium section rolling mill from 1924, polishing hall from 1937, plate rolling mill number one from 1875, plate rolling mill number two from 1920 and a mechanical workshop mainly from 1898. The mechanical workshop later became the ingot grinding unit in 1957.

83 Anhållan om rivningslov från Lars Markström och Hans Ångman, Avesta Industristad AB, till Miljö- och stadsbyggnadskontoret, Avesta kommun, September 26, 1994, Dalarna CAB.


85 Ibid.

86 Tholander, Koppardalsprojektet ur ett utbildningsperspektiv.
Well-known architects, such as Torben Grut and Ivar Tengbom, designed several buildings in the industrial area, among them a power station, finished in 1938, and a cold rolling mill, finished in 1940. Björn Björck et al., eds. *Koppardalens förnyelse, etapp 2. Projekt dokumentation: Identifiering av värdebärare. Koppardalen i förändring*, Avesta: Avesta kommun, 2001, p. 15.


Legné, "The cultural significance of industrial heritage and urban development" p. 127f.


Gene Desfor and John Jørgensen, "Flexible urban governance: The case of Copenhagen’s recent waterfront development" *European Planning Studies*, 4 (2004), 479–496, p. 480. In the seventh chapter, this phenomenon will be examined more thoroughly.

"Här ska OKQ8:s kundservice bo."

Lately, water has in addition got connotations of danger affecting not only certain tourism destinations but also waterfront development in general. See for example Sanna Casson, "Boverket varnar kommuner för att bygga i sjönära lägen" *Dagens Nyheter*, August 4 (2007).


Berg, interview; Johansson, interview; Perers, interview.

Johansson, interview.


Mayer, "Post-Fordist city politics" p. 234.

Björck et al., eds. *Identifiering av värdebärare*, p. 41, see also p. 62.

Ibid., p. 66.

Everbrand, interview.


A compilation of the answers to the questionnaire is to be found in *Anteckningar från projektgruppen Koppardalens förnyelse möte den 30 juni 1999*, September 2, 1999, Avesta municipality.
4. Koppardalen in Avesta: NEGOTIATING THE LOCAL FUTURE

1 Marie Nisser, "Industriminnen under hundra år" Nordisk Museologi, 1 (1996), 73–82.
2 Utredning beträffande erforderligt utrymme för museisamlingarna 1944: Förslag till allmän plan för bergstekniskt och brukshistoriskt museum i Avesta. Meddelande från Bo Hermelin, LAP 43/69, October 3, 1969, Bo Hermelins samling, Fl6, ENC. See also Några industrihistoriska minnesmärken, 1946, Bo Hermelins samling, F5b6, ENC.
4 Brita Lundström has analysed the Ericsson company's use of its own history and shown that a visible history became an asset several times in different contexts during the 20th century. Brita Lundström, Grundat 1876: Historia och företagsidentitet inom Ericsson, Stockholm, 2006.
5 Eva Rudberg, Alvar Aalto i Sverige, Stockholm: Arkitekturmuseet, 2005. As noted earlier, Sundh Centre is one of two out of Aalto's many proposals in Sweden that were actually built. The other one was Västmanland-Dala student club house in Uppsala, finished in 1965.
6 The blast furnace plant and the open-hearth plant had been continuously maintained by the company since their close down. PM angående äldre anläggningar inom norra verksamhetsområdet i Avesta, docent Marie Nisser, June 15, 1987, Karin Perers private archives.
7 Masugnsbyggnaden såsom museum. Meddelande från Bo Hermelin till VD m.fl., March 4, 1970, Avesta Jernverks AB, F2b98, ENC. See also Betr. museum i hyttan. Meddelande från Bo Hermelin till VD och EZ, May 20, 1970, Avesta Jernverks AB, F2b98, ENC.
8 At the same time, in Eskilstuna there was a cultural park established, mainly consisting of forges from the 17th century. The local companies did not contribute to the financing but the town itself financed most of the costs. Eskilstuna was, however, unlike Avesta, not a one-company town and the forges were since the beginning of the 20th century owned by the town. Johan Samuelsson, Kommunen gör historia: Museer, identitet och berättelser i Eskilstuna 1959–2000, Uppsala: Acta Universitatis Upsaliensis, 2005, pp. 41, 80f.
9 Preliminärt program för informationsresa till industrimiljöer i Sverige, April 9, 1975, Bo Hermelins samling, F5b3, ENC; Lunchgäster lista den 12 juni 1975, F5b3, Bo Hermelins samling, ENC; Brev från Riksantikvarieämbetet, avdelningsdirektör Åke Nisbeth, till direktör Gunnar Almström, AJA, July 21, 1975, Avesta Jernverks AB, F2b, ENC.
10 Per-Erik Pettersson, interview, Avesta, May 17, 2006; Kenneth Linder, interview, Avesta, May 18, 2006; Åke Johansson, interview, Avesta, May 18, 2006. In Eskilstuna where the companies had not been history producers to any large extent even earlier, the towns biggest company, Volvo BM, almost opposed the town's plan for a museum because they refused to contribute to the museum with historical items. Samuelsson, Kommunen gör historia, p. 99f.
11 Isacson, Industrisamhället Sverige, p. 262.
12 In Finland, for example, textile mills in many cities and towns closed in the 1980s. Soon they were purchased by the city and reused as centres for small businesses, theatres, offices, flats, housing and universities. Lauri Putkonen, "National reports: Finland" in Industrial heritage Austria 1987, transactions 1: The sixth international conference on the conservation of the industrial heritage, eds. Ute Georgeacopol-Winischhofer, Peter Swittalek, and Manfred Wehdorn, 57–63, Wien, 1987, p. 61f.
13 A fund for the museum in Ludvika was established and preparatory work started in 1924. The museum had a focus on mining and was inspired by the Swedish agricultural open-air museum of Skansen in Stockholm. Niisser, "Industriminnen under hundra år.” See also Marie Niisser and Fredric Bedoire, "Industrial monuments


15 The Swedish National Museum of Science and Technology was founded approximately at the same time as several other museums of science and technology in Europe and the United States. Alzén, Fabriken som kulturarv, p. 24.

16 Houltz, Teknikens tempel, p. 275f.

17 Alzén, Fabriken som kulturarv, p. 23f.

18 Nisser and Bedoire, "The industrial heritage" p. 77.

19 Ibid., p. 74.


21 Annika Alzén, "Kulturarv i rörelse: En jämförande studie" in Kulturarvens gränser: Komparativa perspektiv, Stockholm/Stehag: Symposion, 2003, p. 21; Nisser, "Industriminnen under hundra år" p. 79. Gunnar Sillén is also mentioned in chapter two as the author of the book Stiga vi mot ljuset, one of the important publications in the dig-where-you-stand activities in Sweden.


23 See for example "Skrota eller underhålla masugnspipor och ruiner?” Falu Kuriren, September 3 (1962); Isacson, "Industrisamhällets faser och industriminnesforskningens uppgifter” p. 21; Nisser, "Industriminnen under hundra år” p. 79.


25 Alzén, Fabriken som kulturarv, p. 29.

26 PM angående äldre anläggningar inom norra verksområdet i Avesta.

27 Jan Burell, interview, Avesta, April 26, 2006; Lars Åke Everbrand, interview, Avesta, May 18, 2006.

28 This was also the case in Norrköping, and Marie Nisser was here as well, one of the more prominent and influential advocates for the preservation of the redundant industrial built environment. Alzén, Fabriken som kulturarv, p. 46ff.


30 "Koppardalen blir namnet” Avesta Tidning, May 19 (1987). In Eskilstuna the proposed new name for the former industrial area was Carl Gustafs stad ("The town of Carl Gustaf") referring to the Swedish king that gave the privileges to the 17th century forges. Samuelsson, Kommunen gör historia, p. 95. In Avesta there have also been references to the "great men" of the town, represented among other things by the naming of streets and public places.


32 Ibid., p. 186f.

33 Ibid., p. 186.


35 In Woodberry in Baltimore, Maryland, in the United States, similar interpretations of a local industrial history that enhances the place’s contribution to a national or international past that one should be proud of, are to be found. Mattias Legnér, "The cultural significance of industrial heritage and urban development: Woodberry in Baltimore, Maryland” in Stockholms Lilja: Stadshistoriska studier tillägnade professorn i Stockholms historia Sven Lilja 23 juli 2007, ed. Lars Nilsson, 111–143, Stockholm: Stads- och kommunhistoriska institutet, 2007, p. 128. "The Copper Valley” can also give associations to the "Silicon Valley,” the southern part of the San Francisco Bay Area in Northern California in the United States. The name refers to the high-tech business in the area, and was coined in 1971. Wikipedia website, http://en.wikipedia.org/, accessed January 9, 2008.
"Koppardalen blir namnet."


38 Rundvandring i Avesta, kompendium sammanställt av Avesta kommun 1993, Avesta municipal archives, p. 27. The three projects referred to are the town centre, the research institute and furthermore a block of terraced houses, all proposed in the 1940s.


42 Isacson, Industriasambältet Sverige, p. 275.


44 Isacson, Industriasambältet Sverige, p. 267f. This conception is also confirmed by local actors. Everbrand, interview.

45 In Horndal near Avesta there were, for example, extensive reactions against the devastating shutdowns of an ironworks and a sawmill in the late 1970s. The inhabitants demonstrated, wrote books and articles, organised study groups and theatre plays that gave echo on the national level. Karin Perers, "Järnets väg genom Folkarebygden" in Förändring i Folkarebygd: Minnen, möten, möjligheter, eds. Karin Perers, Per-Erik Pettersson, and Lars Östlund, 37–79, Avesta: Avesta kommun, 2003, p. 72f.

46 Karin Perers, interview, Avesta, April 27, 2006.


51 Alzén, Fabriken som kulturarv, p. 73f, with reference to Eva Dahlström.

52 Isacson, Industriasambältet Sverige, pp. 240, 247. In addition, Isacson gives the dig-where-you-stand activities a broader role as influencing the whole agenda in Sweden at the time, including the governmental effort to preserve the industrial heritage and the preservation of certain valuable industrial places, the formation of the Museum of Work, and the formation of a society for work life museums. Isacson, Industriasambältet Sverige, p. 252f.


55 Isacson, Industriasambältet Sverige, p. 238.

56 Ulf Berg, interview, Avesta, May 17, 2006; Everbrand, interview; Johansson, interview; Linder, interview.
NOTES

58 Lars Åke Everbrand and Dan Ola Norberg, Koppardalsprojektet inför etapp 2, Avesta, 2000. One can note that other well-known architects had their proposals built in Avesta, for example Ralph Erskine, Torben Grut and Ivar Tengbom. Both Grut and Tengbom designed buildings within the industrial area of Koppardalen.
59 Everbrand and Norberg, Koppardalsprojektet inför etapp 2, p. 31.
60 Roland Bärrilsson, ”Lång debatt om Koppardalsprojekt” Avesta Tidning, October 27 (2000).
62 Everbrand, interview.
63 Ibid.
64 Ibid.
65 Ibid.
66 Ibid; Berg, interview; Johansson, interview.
68 Ibid., p. 8.
71 Everbrand and Norberg, Koppardalsprojektet inför etapp 2, p. 33.
72 Massey, ”Places and their pasts” p. 185.
73 A similar connection, although in verbal form, was to be found in Eskilstuna in 2001: ”Från järnband till bredband” (”From iron plate to broadband”). Similar to Avesta the industrial heritage here became part of a narrative where the past could serve as a role model. Samuelsson, Kommunen gör historia, p. 115.
75 With examples from Gothenburg, Olshammar asserts that a mental barrier is often stronger than a physical one. Gabriella Olshammar, Det permanentade provisoriet: Ett återanvänd industriområde i väntan på rivning eller erkännande, Göteborg: Chalmers, 2002, p. 24.
76 In Norrköping, the group of leading actors were primarily newcomers, while in Eskilstuna the leading actors instead were mainly local. Alzén, Fabriken som kulturarv, p. 45ff; Samuelsson, Kommunen gör historia, p. 96.
77 Burell, interview; Everbrand, interview.
78 Everbrand, interview.
79 See for example Burell, interview; Everbrand, interview.
80 Berg, interview; see also Everbrand, interview.
82 Burell, interview.
83 The guest speakers included the town architect, Dan Ola Norberg, the head of the department for cultural matters, Lars Åke Everbrand, the managing director of the municipal real estate company, Jan Thamsten, the professor in economic history at Uppsala University, Maths Isacsson and the County Antiquarian, Ulf Löfwall. Avesta municipal council, recording of meeting, March 20, 2003, Avesta kommun.
84 Bengt Silén, ”Fönster mot masugnarna en ny upplevelse i Hyttan” Avesta Tidning, March 17 (2003).
85 Maths Isacsson, Avesta municipal council, recording of meeting, March 20, 2003, Avesta kommun.
86 Björn Björck et al., eds. Koppardalens förnyelse, etapp 2. Projekt dokumentation: Identifiering av
87 Ulf Löfwall, Avesta municipal council, recording of meeting, March 20, 2003, Avesta kommun.
88 Ulf Berg, Avesta municipal council, recording of meeting, March 20, 2003, Avesta kommun.
89 Lars Levahn, Avesta municipal council, recording of meeting, March 20, 2003, Avesta kommun.
90 Everbrand, interview; Perers, interview.
91 Everbrand, interview.
92 Gregory Ashworth and Peter Howard, European heritage planning and management, Exeter: Intellect Ltd, 1999, p. 89.
93 Everbrand, interview; Linder, interview.
94 Everbrand, interview.
95 Ekman, "Kultur och utveckling i Bergslagen" p. 37.
97 Björck et al., eds. Identitiering av värdebärare, p. 15, see also p. 23.
98 In Eskilstuna, this kind of giving aesthetic value through metaphors was also present, for example by comparing the industrial built environment to courtyards and upper-class buildings. Samuelsson, Kommunen gör historia, p. 91.
100 Alzén, Fabriken som kulturarv, p. 58.
101 Legnér, "The cultural significance of industrial heritage and urban development” p. 127.
102 Everbrand, interview.
103 Ibid.
104 Ibid.
105 Linder, interview.
106 Ingrid Bengts, interview, Avesta, April 26, 2006; Hans Kristoffersson, interview; Avesta, April 26, 2006; Pettersson, interview.
107 Pettersson, interview; Bengts, interview.
108 Bengts, interview.

5. Ironbridge Gorge Museum: HERITAGE STATUS AND LOCAL ANCHORAGE

8 Cossons and Trinder, The iron bridge, p. 37.
9 Trinder, "Industrial conservation and industrial history” p. 172.
10 Cossons, "The museum in the valley, Ironbridge Gorge.”
11 Ibid.
13 Cossons, "The museum in the valley, Ironbridge Gorge.”
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18 Arguments repudiating a connection is to be found, for example, in Origins of the Ironbridge Gorge Museum Trust, IGM, p. 1; Thomas, Coalbrookdale and the Darby family, p. 201.
19 Cossons, "The museum in the valley, Ironbridge Gorge"; Thomas, Coalbrookdale and the Darby family, p. 201.
20 Rephrased in Thomas, Coalbrookdale and the Darby family, p. 200.
21 Origins of the Ironbridge Gorge Museum Trust, IGM. In a similar manner, New England in the United States has been considered the birthplace of the industrial revolution in this country. In this case, however, the textile industry was the branch in question. Maura Doherty, "Canaries in the coal mine: The deindustrialization of New England and the rise of the global economy, 1923–1975" Essays in Economic and Business History (1999), 149–162, p. 149.
25 Origins of the Ironbridge Gorge Museum Trust, appendix E, minutes of meetings of working party on industrial archaeology held on February 22, April 4, May 10 and June 14, 1967, IGM.
26 Trinder, "Industrial conservation and industrial history" p. 172f.
27 Ibid.
29 Ibid.
32 Trinder, "Industrial conservation and industrial history" p. 173.
33 Cossons, "The museum in the valley, Ironbridge Gorge."
34 However, in the 1980s, Cossons described Blists Hill as "an open-air museum of more traditional type" and that there were more of North American principles in its reconstruction work rather than the Scandinavian or mid-European folk-museum type of approach. Ibid.
36 Cossons, interview.
38 Smith, interview.
39 The district of Le Creusot and Montceau-les Mines encompasses sixteen municipalities. At the beginning of the 1970s the district had about 150,000 inhabitants. Hugues de Varine, "Eit museum i delar: Museet om mennesket og industrien, Le Creusot-Montceau-les-Mines" in Økomuseumsboka: Identitet, økologi, deltakelse, eds. John Aage Gjestrum and Marc Maure, 90–101, Tromsø: Norsk ICOM, 1988, p. 90. The ecomuseum of Le Creusot and Montceau-les Mines is often regarded the first ecomuseum. However, Kenneth Hudson argues that it was not in fact the first, but the one that got the professional sanctified label. Hudson gives an example of earlier efforts in Bagamoyo in Tanzania. Kenneth Hudson, "Ecomuseums become more realistic" Nordisk Museologi, 2 (1996), 11–19.
40 Davis, Ecomuseums, p. 66.
41 Hudson, "Ecomuseums become more realistic." Hugues de Varine, however, asserted that the "pilgrimage" for museum professionals to Le Creusot and Montceau-les Mines most often resulted in misunderstandings of the important features of the museum. Hugues de Varine, "Rethinking the museum concept" in Økomuseumsboka: Identitet, økologi, deltakelse, eds. John Aage Gjestrum and Marc Maure, 33–40, Tromsø: Norsk ICOM, 1988, p. 37.
42 Sweden, Denmark and Norway were all influential in the new museology movement, for example through the "folkhögskolor" literary translated into "peoples'

43 Trinder, “Industrial conservation and industrial history” p. 173; Davis, Ecomuseums, p. 61f.


45 Davis, Ecomuseums, p. 143.


47 Davis, Ecomuseums, p. 144f.


49 Cossons, “The museum in the valley, Ironbridge Gorge.”


52 Zukin, Loft living, p. 73.

53 Trinder, “Industrial conservation and industrial history” p. 173.


56 Smith, interview.

57 Ibid.

58 This becomes obvious not the least in how the difficult past takes shape through the cultural heritage designated by UNESCO to be of concern to the whole world. Georg
NOTES


1 Polise Moreira De Marchi, ”Ruhrgebiet: Redesigning an industrial region” in Exploring the Ruhr in Germany, Bochum, 2001, p. 29, with reference to Bernhard Butzin.


3 Moreira De Marchi, ”Ruhrgebiet: Redesigning an industrial region.”

4 Internationale Bauausstellung Emscher-Park, p. 35.

5 Ibid., p. 36.

6 Ibid., p. 44.


9 Ebert, interview.

10 Ibid. Besides, the German Society for Industrial History was founded in 1986.


13 The Völklinger Hütte website, http://www.voelklinger-huette.org, accessed October 15, 2007. In the beginning of the 21st century, the Völklinger Hütte had about two hundred thousand visitors per year. From 2004 there was a science centre described as an ”adventure world of iron.”

14 Gaëlle Covo, ”Spatial planning, structural change and regional development policies within the Ruhr area in Germany” in Exploring the Ruhr in Germany, Bochum, 2001.


16 Ebert, interview. The figure is specified in Marie Nisser, ”Nytt liv i Europas gamla industriområden” Kulturmiljövård, 6 (1994), p. 15.


6. Landschaftspark Duisburg-Nord: NATURE AND ART ON STAGE
NOTES

18 Quote from Ebert, interview.
19 Ibid.
20 Ibid.

23 Environmental debates in Germany have generally focused the best way to harmonise cultural and natural landscapes, rather than asserting a sharp dichotomy between the two. Thomas Lekan and Thomas Zeller, Germany’s nature: Cultural landscapes and environmental history, New Brunswick, N. J.: Rutgers University Press, 2005, p. 4.
28 The process of plants starting to colonize derelict land and buildings can be divided into stages depending on different predominating species. Tim Edensor, Industrial ruins: Spaces, aesthetics, and materiality, Oxford: Berg, 2005, p. 43, with reference to Oliver L. Gilbert.
30 Internationale Bauausstellung Emscher-Park, p. 44.
31 Ruderal, from Latin, "rudus" meaning rubbish.
32 In Britain many plants found in ruins are labelled "weeds" which according to Edensor is the "botanical equivalent of dirt." Edensor, Industrial ruins: Spaces, aesthetics, and materiality, p. 45, with reference to Tim Cresswell.
33 Jörg Dettmar, "Wilderness or park?” Topos: European Landscape Magazine, 26 (1999), 31–42.
34 Ebert, interview.

42 Covo, “Spatial planning, structural change and regional development policies within the Ruhr area in Germany.”


48 Jan af Geijerstam and Sverker Sörlin, "Det glömda Ådalen" Dagens Nyheter, November 29 (2000). From 2007, the official interpretation of the place has changed by means of new signs, which tell also about the death shots.


51 Morger, "IBA – Emscher Park: Ekologisk omdaning av en industriregion” p. 104.

52 Covo, “Spatial planning, structural change and regional development policies within the Ruhr area in Germany” p. 5.


56 Ebert, interview.


58 Lange, Bernd and Hilla Becher, p. 21.


61 Ibid.


64 Zukin, Loft living, p. 111f.

65 Lange, Bernd and Hilla Becher, pp. 35f, 64, 76ff.


67 Ebert, interview.


70 Ibid., p. 61, with reference to Regina Bendix and Richard Handler.
NOTES

1 ‘Cultural’ industrial plant engineer KRESTA: Stage setting for Bregenz Festival” GAW group imteam: News from the group, 1 (2005).


75 Edensor, Industrial ruins: Spaces, aesthetics, and materiality, p. 8ff.

76 Ibid.

77 Dettmar, ”Wilderness or park?” p. 35f.

7. PLANNING, COMMODIFICATION AND SPECTACLE

1 ”‘Cultural’ industrial plant engineer KRESTA: Stage setting for Bregenz Festival” GAW group imteam: News from the group, 1 (2005).


8 Bo Hedskog, Återanvändning av industri- och specialbyggnader: Fastighetsekonomiska, tekniska och funktionella aspekter på val av ny användning, Stockholm: Institutionen för fastighets-ekonomi, Royal Institute of Technology, 1982; Sanering efter industrinedläggningar:
The characteristics are familiar compared to the analysis made two decades later by Michel Stratton, referred to earlier in this study.

Sanering efter industrinsnedläggningar, pp. 69, 78.

One of the experts who took part in the investigation especially emphasised the importance of industrial heritage as a possible counterweight to problems caused by lack of history and local identity. Ibid., p. 160ff.

Sanering efter industrinsnedläggningar, Riksantikvarieämbetet och Statens historiska museer, Byrådirektör Staffan Nilsson, 2413/82, November 1, 1982, Marie Nisser private archives.


Zukin, Loft living, pp. 1f, 75.

Ibid., p. 3ff.

Ibid., pp. 14f, 67.

Ibid., pp. 68, 71.


Jauhiainen, "Waterfront redevelopment and urban policy" p. 7.

Ibid., p. 10ff.

Peter Nijhof, "The eastern docklands in Amsterdam: From harbour to residential area” in Maritime technologies: 10th international conference, transactions, ed. Christine Agriantoni, 113–116, Athens: TICCIH, 2000. This area was transformed in the early 1980s and it was the biggest post-war building project in central Amsterdam. Differing from many other places, dwellings were in the social rent sector and owned by a public social housing company.

Jauhiainen, "Waterfront redevelopment and urban policy" pp. 7, 20. Also Baltimore had sources of inspiration. According to Sharon Zukin the transformation of Ghirardelli Square in San Francisco was copied along the waterfronts of Boston, New York and Baltimore. Zukin, Loft living, p. 78.


Ibid., p. 16.

Ibid., p. 8.

Ibid., pp. 3, 6.

In the words of Sverker Sörlin, there has been "a packaging of space and a commodification of history" in order to raise real estate values. Sverker Sörlin, "The trading zone between articulation and preservation: Production of meaning in landscape history and the problems of heritage decision-making" in Rational decision-making in the preservation of cultural property: Report of the 86th Dahlem workshop, Berlin, March 26–31, 2000, eds. Norbert S. Baer and Folke Snickars, 47–59, Berlin: Dahlem University Press, 2001, p. 56.

See for example websites for Järla sjö ("The lake of Järla") http://www.jarlasjo.se/, Nacka strand ("Nacka shore") http://www.nackastrand.se/, Gustavbergs hamn ("Gustavberg's harbour") http://www.gustavbergshamn.se/, all accessed August 21,
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33 See also Maths Isacson, Industrisamhället Sverige: Arbete, ide och kulturarv; Lund: Studentlitteratur, 2007, p. 240.

34 See note 32. Naming of places in Baltimore described by Mattias Legnér is however different. Here the new overall names have not alluded to nature but to the former production of the place, such as "The Shoe Factory," and "Brewers Hill," explained by Legnér as an "interest in former production and branding [that] should be seen as an expression of a consumer society's view of heritage." Mattias Legnér, "The cultural significance of industrial heritage and urban development: Woodberry in Baltimore, Maryland" in Stockholms Lilja: Stadshistoriska studier tillägnade professorn i Stockholms historia Sven Lilja 23 juli 2007, ed. Lars Nilsson, 111–143, Stockholm: Stads- och kommunhistoriska institutet, 2007, p. 120.

35 Stratton, "Understanding the potential" p. 41f.

36 Ibid., p. 31.


38 Zukin, Loft living, p. 80.

39 Alzén, Fabriken som kulturarv, p. 73.

40 Stratton, "Understanding the potential" p. 33.

41 Zukin, Loft living, p. 59. See also Edward S. Casey who has used the concept "place memory" by which he means the place as a stable container of experiences. Edward S. Casey, Remembering: A phenomenological study, Bloomington, Ind.: Indiana University Press, 1987, p. 186f.

42 Zukin, Loft living, p. 173.


48 Ibid., p. 36ff.


50 Rephrased in Lange, Bernd and Hilla Becher, p. 10.

51 Gustaf Karlsson, Som inte längre är/That no longer are, Solna: Blyerts design, 2004. The poem is written in Swedish as well as in English.


53 Ninjalicious, Access all areas, p. 89.

54 Ibid., p. 88.

55 Edensor, Industrial ruins, pp. 14, 17.

56 Ninjalicious, Access all areas, p. 88f. See also Edensor, Industrial ruins, p. 172.

57 Ninjalicious, Access all areas, p. 215ff.


59 For example, the book was presented in several of Sweden's biggest newspapers, among them Svenska Dagbladet. Adam Svanell, "Platserna som Sverige glömde" Svenska Dagbladet May 21 (2007).

60 Jörnmark, Övergivna platser, p. 5.

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63 Ibid.
64 Ninjalicious, Access all areas, p. 88. See also W. Lipp, "Monuments as products" p. 208.
66 Edensor, Industrial ruins, pp. 18, 133–141. Quote from p. 135. See also Lipp, "Monuments as products" p. 207.
71 Ninjalicious, Access all areas, p. 88.
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Avesta municipal archives
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In the late 20th century, many Western cities and towns entered a process of de-industrialisation. What happened to the industrial places that were left behind in the course of this transformation? How were they understood and used? Who engaged in their future? What were the visions and what was achieved?

Hope and Rust: Reinterpreting the industrial place in the late 20th century examines the conversion of the redundant industrial built environment, into apartments, offices, heritage sites, stages for artistic installations, and destinations for cultural tourism. Through a wide-ranging analysis, comprising the former industrial areas of Koppardalen in Avesta, Sweden, the Ironbridge Gorge Museum in Britain, and Landschaftspark Duisburg-Nord in the Ruhr district of Germany, a new way of comprehending this significant phenomenon is unveiled.

The study shows how the industrial place was turned into a commodity in a complex gentrification process. Key actors, such as companies and former workers, heritage and planning professionals, as well as artists and urban explorers, were involved in articulating values of beauty, authenticity and adventure. By downplaying the dark and difficult aspects associated with industry, it became possible to showcase rust from the past fuelled with hope for a better future.

Anna Storm is affiliated with the Division of History of Science and Technology at the Royal Institute of Technology, KTH, in Stockholm, Sweden. In 2006, she received the Joan Cahalin Robinson Prize for best-presented paper from the Society for the History of Technology. Hope and Rust is her doctoral dissertation.