



Accessibility to Cultural Heritage

Nordic Perspectives

Oddbjørn Sørmoen (ed)

Accessibility to Cultural Heritage

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TemaNord 2009:572

© Nordic Council of Ministers, Copenhagen 2009

ISBN 978-92-893-1

Print: Scanprint as

Cover photo: Oiva Isola/Riksantikvarieämbetet

Copies: 2500

Translations by Oddbjørn Sørmoen, with invaluable linguistic assistance from Whimster Associates

Printed on environmentally friendly paper

This publication can be ordered on www.norden.org/order. Other Nordic publications are available at www.norden.org/publications

Printed in Denmark



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Summary

Access to cultural heritage is about consciousness, knowledge, creativity and balance. It is human beings who define sites and buildings as cultural heritage. The heritage therefore has meaning only through its encounter with people. This report explores and discusses different ways of making the cultural heritage accessible to everyone – not only the obvious priorities of physical accessibility, but also accessibility in the form of understanding and experience.

In some cases physical accessibility can shadow for understanding and experience, as for example when we encounter large archaeological landscapes. In other situations most people do not even think about the heritage values of a place because their main interest is in the services carried out in the building or at the site that constitutes the heritage. The variations of the challenges linked to accessibility are great and therefore it is difficult to generalise about the solutions.

The report shows how accessibility questions are currently being addressed through some practical examples drawn from across the Nordic countries. There are considerable variations in scale, ranging from the challenge of providing physical accessibility to a small, vulnerable and remote church on an island in Iceland to doing the same in a baroque palace in the centre of Stockholm where thousands of people have business to carry out every day. The purpose has not been to compare the different countries' legislations, politics or ideology in this field.

Most of the cases presented in the report have found their solutions, some permanent and others temporary, while others represent challenges that are still being worked on. In some cases it is impossible to avoid solutions with negative consequences for the heritage. It is then important to make people aware of the various choices that have to be taken. The purpose of this report is therefore to develop that awareness and to be of help to others who are working with the same kind of challenges.

This aspect of heritage management is developing fast, both in terms of ideology and technical solutions. Conservation ideology will always be evolving in response to the changing needs and values of society. At the same time, new technical solutions will come to light as architects and designers respond to the demands of a growing market.

Good and lasting solutions often need time to mature. Access to cultural heritage is too important for brutal and ill-timed solutions; we need to work tirelessly and with determination to find the best and most lasting answers.

1. The project Accessibility to Cultural Heritage

Accessibility to Cultural Heritage is a project in which experts from the central heritage authorities in the Nordic countries, supported by the Nordic Council of Ministers, have together examined the consequences of the proposition that everybody should have access to cultural heritage.

Internationally there is a strong, positive movement in the direction for equal accessibility. Conferences are arranged, projects carried out and many positive initiatives are undertaken, and also the cultural heritage sector has made much progress in this field. But the speed and dynamics of change, as well as the political pressure for it, demand that we pause occasionally to think about the consequences.

Conflicts will sometimes appear between competing rights and considerations. The fact that everybody has an entitlement to history and knowledge means that in some cases choices will have to be made between the right to accessibility, and the right to history and knowledge. Beyond a certain point, accessibility could damage the heritage, and knowledge open or hidden in the monuments can get lost and therefore could be inaccessible for ever – for everybody.

The initial aim of this project was to contribute to open thinking about this paradox: how far can we take the accessibility before what we want to make accessible is permanently damaged. The purpose has been to increase the consciousness of the value choices, sharpen the arguments and reflections and find alternatives so that in the future the richness of heritage can be accessible for most people regardless of their circumstances and qualifications.

Heritage sites and monuments can be visited to reflect on the past. But much of the heritage has a function and a use which is primarily utilitarian. People need to go there to function in society; the bank, the town hall, the place of worship or the school. The demand for accessibility will naturally be stronger in these cases. The consideration, however, has to be made: Is this the right way to access, are there reasonable alternatives, or in the extreme cases should the function be moved somewhere else?

Access to heritage can mean many kinds of access: physical, mental, cultural, visual and so on. There has been very much focus on accessibility meaning physical access for people with mobility impairments. This is important, but still this focus has to some extent discriminated against other kinds of impairments. Our intention has been to focus on the wider accessibility questions but since cultural heritage after all is much about

tangible; physical buildings and sites, *our* cases also are biased in the direction of physical accessibility.

Since the project started in 2007 the working group has met in Oslo, Stockholm, Copenhagen and London. In all gatherings the time has been divided in site visits where external scholars and colleagues have participated, and internal group sessions. The main purpose has been to learn and bring our knowledge to our own organisations. This report presents to a wider public some of the topics and cases discussed.

There are many common denominators in this field among the Nordic countries, and naturally some differences, due to the difference in culture, the character of the heritage, politics, and priorities, but in all countries there is a strong will to open up and share the knowledge, the enrichment and the reflection and inspiration given by our cultural heritage, to make it accessible and useful to everybody.

The Swedish concept of “Värdig entré”, dignified entrance, has opened up for many interesting discussion, as well as the concept “universal design”. What does “dignified” mean in this context, and what does “universal” mean? We hope that through reading this report the concepts will become clearer, if not easier.

The aim of the report is to present some of our ideas and cases for others, not because they are infallible or because they are in any way absolute; some of the challenges presented have not even been solved, but to contribute to the ongoing discussion, be more transparent, open some eyes, also our own, and hopefully to help to widen the interface between heritage and the questions of accessibility.

It is necessary to mention that none of the members in the working group have any disablements, but that persons with disabilities have taken part in many of the cases presented.

The report has been written by individual group members and is based on the experience from their daily work in the various institutions. The institutions themselves are necessarily not responsible for neither the choices of examples nor the arguments put forward here. The idea has been to use cases as a basis for the reflections.

Each author is credited for their contributions.

Without the contributions from the Nordic Council of Ministers, and our employers English Heritage, Fornleifavernd ríkisins, Húsafríðunarnefnd ríkisins, Kulturarvsstyrelsen, Riksantikvaren, Riksantikvarieämbetet, this project could not have been realised.

The working group

The group behind this report consists of the following representatives from the national heritage authorities of Denmark, Sweden, Iceland and Norway:

- Ebbe Keld Pedersen (Architect) from Kulturarvsstyrelsen, The Heritage Agency of Denmark
- Oiva Isola (Architect), Gert Magnusson (Archaeologist) and Ingrid Schwanborg (Senior Adviser) from Riksantikvarieämbetet, The Swedish National Heritage Board
- Magnús Skúlason (Architect) from Húsafriðunarnefnd ríkisins, The National Architectural Board, and Þór Hjaltalín (Archaeologist) from Fornleifavernd ríkisins, Archaeological Heritage Agency of Iceland, Iceland
- Inger Karlberg (Archaeologist), Anne Midtrød (Architect) and Oddbjørn Sørmoen (Art Historian) from Riksantikvaren, Directorate for Cultural Heritage, Norway. Sørmoen is currently seconded to English Heritage, England. He was the head of the project and is the editor of this publication.



FIG 1–1. Magnus Skúlason ©

2. Cultural Heritage – a vehicle to understand ourselves

Oddbjørn Sørmoen

2.1 Created by human beings

Cultural heritage is created by human beings. Often people have fashioned it with their own hands, but what we might term “mythical landscapes”, i.e. landscapes that have received a meaning through belief and conceptions, can also be classified as cultural heritage. Heritage monuments and sites become so because they have been defined as such by humans. At the centre there is always the thinking, reflecting human being. Cultural heritage is important as a vehicle through which people can understand themselves, their value as human beings and their ability to explore themselves and their own history.

Ideally the objects, landscapes and environments that comprise our heritage should remain untouched, each telling its own story in its own way. But heritage is influenced by the weather and the wind, by decay, by war and age, and in our time in no small part by consumerism, pollution, tourism, regular use and the demands of our contemporary society for economic returns. These circumstances force us to intervene, regulate, limit and prepare so that the heritage can be more widely understood and experienced, can continue to please and can be of use for future generations.

All human beings, regardless of educational background, economic circumstances, ethnical background and degree of physical and psychological ability, need heritage both for their own self-understanding and in order to participate in an optimal way in modern society. It may be impossible to reach the final goal – equal access to knowledge and experience for everybody – but we all have a duty to do our utmost to achieve this end.

Accessibility is necessary to allow us to be able to explore and experience our cultural heritage. Accessibility can mean *physical accessibility*: that we can enter or come near the monument. Accessibility, however, can also mean *accessibility to knowledge and experience*. In some cases this can mean that one should *not* enter or come close to or touch the monument, because physical closeness makes understanding and appreciation more difficult. In other cases providing for physical accessibility means a kind of intervention that makes heritage less valuable.

It is human beings who define heritage. We protect in order that heritage can be both used by and enrich us. Accessibility is therefore a common concern, and not specifically linked to any policy of disability. Each person becomes a resource when they come into contact with heritage, so everyone can contribute with reflections and experiences to increase our common perception of heritage in its widest sense – to increase the understanding of what it means to be a human being.

2.2 Reasons for heritage protection

There are many reasons to protect heritage, but central are those that can be described by the words *knowledge* and *experience*.

Knowledge may be partially obvious and partially hidden. An architectural monument or a landscape conveys knowledge by its very appearance. The degree of knowledge depends on the viewer's professional and cultural background. For an archaeological site the hidden knowledge may be in the ground, and for a built monument in the structures, walls and symbols.

Knowledge lies not only in the original condition of the monument, but also in the layers of history that have been added or subtracted through the ages. Some monuments represent a particular period, while others reflect a continuous development.

We have a responsibility to protect hidden knowledge as much as the visible. We know that new ways of seeing things will give rise to new interpretations and that new technology opens up opportunities for knowledge that we previously could not have imagined. Therefore any changes to a monument will interfere with the future development of knowledge about it.

Our experience of heritage can be immediate, in an emotional meeting with the monument, but it can also come with knowledge. The experience of a building, a room, or at site, is enhanced by the knowledge of how it came to be and what took place there. A change to or a partial covering of the monument or the vicinity will naturally also alter the experience. Sometimes the consequence of such a change is that the monument is misinterpreted, or the experience of it is spoiled or even destroyed.

There is often a clear connection between knowledge and experience. Even without knowledge it is possible to experience greatness and surprise in an encounter with the monument, but usually knowledge will be a condition for the experience.

2.3 Reasons for accessibility

Accessibility is a condition for cultural heritage. Since it is people who define what heritage is, then people also need accessibility to heritage if it is to make sense to them.

Accessibility means accessibility to knowledge and experience. One can have both when in direct contact with the heritage. In the direct encounter the experience is genuine, as the acquiring of the facts is reinforced in the direct meeting.

Accessibility is also about understanding, however. To begin with, knowledge depends on the ability to take possession of the visual or what one is faced with. Understanding presupposes a mediation which the receiver is able to comprehend.

Accessibility is a general problem in a pluralistic society in which people have very different cultural, linguistic and functional qualifications. A characteristic of the cultural heritage sector is mobility: people often travel long distances to experience a monument or site. Another characteristic is the variation in the visitors' abilities to understand what they see.

Increased life expectancy, improved economic circumstances for the individual and modern tourism are some of the factors that contribute to this variety in the ability to understand. Today, ever larger numbers of people seek out heritage as a way of increasing their self-understanding and exploring other human beings' background and history.

Accessibility in the wider sense may also be understood as a foundation for a democracy. A well-functioning democracy is built upon engaged and enlightened citizens. Since cultural heritage is a source of knowledge and experience, and knowledge and experience are conditions for involvement, access to and participation in cultural heritage are also important requirements for a democratic society. Adjustments to allow for equal participation are therefore a step in the natural development of democracy.

People from diverse backgrounds and circumstances define cultural heritage. There are many objective facts, but the interpretation of them depends upon the interpreter. The potential for alternative interpretations of a monument cannot be exhausted until everybody has had the opportunity to encounter it at first hand. The experience is as a rule subjective, but can be equally strong for everybody.

Too often accessibility becomes limited to the issue of physical accessibility for the physically impaired. While this is of course important, too strong an emphasis on physical disability will cast shadows on other kinds of disadvantages and on models for their solution.

3. Accessible heritage sites – a theoretical model from experience to insight

Tor Hjaltalin, Inger Karlberg and Gert Magnusson

3.1 The cognitive landscape

Our physical surroundings are a mixture of natural and cultural components that have meshed over time. Almost the entire environment is marked by human history. Stories, beliefs and tradition can be attached to mountains, valleys, rivers and water sources. In some places the heritage created by human beings can be so visually dominant or has existed for such a long time that it is impossible to think about the landscape without it. In a compressed cultural environment that has a long history of use or in a compacted urban landscape, the number of stories and layers of knowledge can be considerable. In other places, cultural heritage may be conserved beneath the surface, requiring special knowledge and insight to “see” it.

All landscapes have at least one story to tell. In the cultural landscape and the cultural environment it is human history which is pivotal. We talk about a “cognitive landscape”, by which we mean our interpretation of the traces of culture in the natural world. People who lived before us left traces, used the available natural resources and told stories. We continue this fellowship and these traditions, but at the same time we also take care of the past and try to understand it. The material traces as well as the immaterial values deserve to be protected.

The historical events, the saga sites and the landscape of the storyteller all have meaning not only through the stories themselves but in terms of the landscape in which they are set. The saga gives us a landscape and a story seen from the perspective of the author. It is like a landscape of memories in which we can attach the thoughts of the past to physical places. The mythical or literary landscape fixes the stories, and creates credibility. These landscapes are vulnerable and their contemplative character should be protected. New features may be added, but only when the core values have been fully understood. This is the only way that supplementary contributions of any value can be made.

The landscape surrounding a monument or site, passed on and protected, triggers a desire for knowledge and wonder. The cultural land-

scape has an inbuilt force of renewable knowledge, protected through the non-renewable cultural heritage. Places can produce new experiences through facilitated visits, poems, plays and other forms of mediation. We form and re-form the heritage sites in our collective mind. Who knows what the right stories are?

3.2 How to make the different landscapes and monuments accessible

The sensitive contemplative literary/mythical landscapes should have information centres situated away from the central areas, explaining the context. In positioning these it is important to find the good *viewpoints* from which visitors can consider the many different stories and interpretations. Historical sources, like saga literature, can be seen as indirect “monuments” around which the old and new interpretations revolve. The viewpoints can be chosen on the basis of focus, understanding and as background for new use and experiences. At the most vulnerable monuments, the viewpoints can be positioned carefully on their outskirts. The design, architecture and choice of material should be carefully selected to make the information centres fit in with their surroundings.

There is an important link between the monument and the landscape that was made at the moment when the monument was created. Archaeologists here talk about “context”, meaning the relationship between an object and the layer of soil or even the ruin in which it was found. We have a historical responsibility to take care of the monument, interpret connections and also to allow the monument to reflect our own time. For example, a house is pulled down and a new one built, or a house burns down but the site is left – in both cases the traces of thousands of years remain in the ground.

An old archaeological cultural landscape is like a ball wound round with many such ribbons of connection. When we analyse the monument, there will be many memories, stories and values that are not always obvious to us. The balancing of the surroundings with the ribbons of history is the basis for our work. The problems arise when we make it impossible to reinterpret the site in the future.

Archaeological heritage is often fragmentary. In the course of history this heritage has lost much of its original diversity and is therefore particularly vulnerable to changes and interventions. Additionally, very ancient archaeological heritage may originally have belonged to foreign and now defunct cultures, which make it even more vulnerable to our additions, however well-meaning, and interpreted “truth”. Our responsibility is therefore to try to maintain cultural landscapes in such a way that they can preserve all their stories, including the ones we hardly know, the ones

not yet told and those that are difficult to tell. Diversity and the typical have been, and are still, important criteria for conservation.

3.3 A model for analyses

To untangle the complex problems linked to access for all at cultural heritage sites, to be able to discuss them and find solutions, we have made the following model:

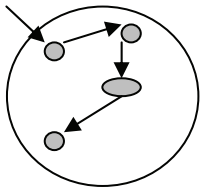
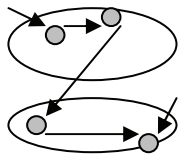
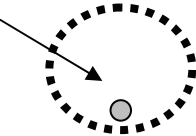

Landscape	Cityscape/ city environment	Sites	Objects/ individual monuments
			
<p><i>Character:</i> Big landscape with rather 'modest' monuments.</p> <p><i>Ways of making accessible:</i> General information and accessibility through maps and brochures. Need for a central and sensibly positioned information centre. Not all the objects need to be made accessible, particularly the most vulnerable monuments and sites. The totality and the story are important for the choice and degree of accessibility.</p>	<p><i>Character:</i> Complex environment with different types and layers of monuments.</p> <p><i>Ways of making accessible:</i> The monuments may be the bases for several stories. Broad spectrum of possibilities from information centres and museums to specially designed brochures, lighting, models, signage etc on site. Possible differentiation between the time layers.</p>	<p><i>Character:</i> Cultic, mystical and saga sites where the landscape is a condition for the positioning of the monuments.</p> <p><i>Ways of making accessible:</i> The information centre with the highest degree of accessibility. The centre should contain specially selected viewpoints and information points to give insight into the selected stories.</p>	<p><i>Character:</i> The single monuments are of very high heritage value. The surrounding landscape may have different characteristics, contain modern buildings or simply be an open space.</p> <p><i>Ways of making accessible:</i> The monument made accessible for all, but in a way that does not reduce the value of the individual parts or the stories the monument contains. The solutions are detailed and adapted to every unique monument. The ideas may be general but the adaptations should be made special for every particular site.</p>

FIG 3–1. All the fixed monuments are in a landscape. The difference of size between the monuments and the landscape are measures for where to put them into the model. In the model the arrows signify access and movements, the small grey circles are monuments and the bigger encircling rings their surroundings.

Heritage sites that are indistinct and difficult to understand, sometimes in surroundings that have themselves undergone alteration, need special consideration when being made accessible. Presentational material should be concentrated in information centres, while access to the more vulnerable monuments should be limited. When several monuments together make a context, the movements of the visitor between them are impor-

tant. The ways of moving should give the visitor an understanding of the connections between the monuments in time and space. Where monuments are on sites of cultural historical and mythical significance, the landscape should be drawn into the interpretations of the site. These are the theatre of stories. Sites with many stories may be damaged by changes inside or close to the monuments. Physical presentations should usually be made away from the central area. In complex city environments it is better to select and enforce some stories, and leave others out. To conclude; when considering accessibility to historic sites, we search for the best combination of several solutions which together will improve the quality of each particular site. We can take inspiration from the many examples of good practice already in existence, and learn valuable lessons from less successful attempts.

4. The archaeological environment – the landscapes of the sagas

Tor Hjaltalin

4.1 Vatnsdalur, Northern Iceland

The Icelandic Vatnsdæla Saga, written in about 1270, tells the story of the first generations of the Hofverja family. The time span of the saga covers the Viking age, approximately 870–1030. The historical landscape stretches from Norway and Sweden in the east, to the Orkney Islands and Scotland in the west and up to the Vatnsdalur in the northern part of Iceland, where most of the saga's events take place. Public interest in landscape and medieval literature has increased during the last few years. "Saga-travels" exploiting the cultural landscapes of the Icelandic sagas have become increasingly popular and considerable efforts have been invested in their development. Many projects are in progress, such as the one concerning the cultural landscape of the Vatnsdæla Saga, principally set in Vatnsdalur and Ting in northern Iceland. The aim of this project is to make the archaeological remains linked to the saga both accessible and comprehensible to the general public.

4.2 Cultural historic background

Central in the Hunating county in northern Iceland is the farm Tingeyrar, which was the administrative and cultural centre in the district in the Middle Ages. There during the commonwealth period (approximately 930 to 1264) the regional public assembly was situated, and from 1133 to 1550 a Benedictine monastery as well. The monks at Tingeyrar soon became known for their literary works. In the late 12th century, King Sverrir Sigurdarson asked Abbot Karl Jónsson to come to Norway to compose a saga about the king. The abbot lived at the royal court during the 1190s and wrote Sverri's saga. Other well-known authors in the period around 1200 were Oddur Snorrason, who wrote Olaf Tryggvason's saga, and Gunnlaugur Leifsson, famous for the saga of Bishop Jón Ög-

mundarson at Holar. Many of the Icelandic sagas are set in the area surrounding Tingeyrar.

The Vatnsdœla Saga narrates the story of the forefather of the Hofverja family, the settler Ingimundur the Old, who sailed from Norway to Iceland with his people, free men and thralls, in about 900. He settled in Vatnsdalur and named the farm Hof. The family became one of the foremost chieftain families in the northern part of Iceland and the saga tells the story of their conduct as chieftains, how they kept law and order in the area and struggled to defend the peace against raids by outsiders.

In the Vatnsdæla Saga 114 place-names are mentioned, both topographical names for natural phenomena such as mountains, rivers and valleys, and names for cultural places such as farms, harbours and burial mounds. Of the 114, 48 are situated in Vatnsdalur and Ting; of these in turn, 27 are the names of cultural sites, mostly farms. In the area where the events recounted in the saga take place, an unusually high percentage of historical sites with archaeological remains can be directly linked to the saga. There are ruins of ancient farms and other archaeological remains that the saga's author must have known and used as the setting for his story. Thus the saga binds together the archaeological remains and sites in a totality: the archaeological environment of the saga landscape.



FIG 4-1 The mountain Jörundarfell in Vatnsdalur, named after the settler Jörundur háls. Jón Gíslason from Hof ©

4.3 The challenges

The landscape of Vatnsdalur and Ting covers an area of about 1500 square kilometres. People have lived in the area since the settlement period. So traces and archaeological remains from left generations spans a

time period of about 1,100 years. Here we use the bureaucratic term “cultural environment” to describe and identify the saga-landscape. But it must be remembered that in a given area it is possible to define several different cultural environments. Different ensembles of ancient monuments, as we define them as a unity, give new concepts of the landscape: these could be, for example, the saga landscape, or roads and travelling routes in the 19th century, or something else entirely – there are many stories to be told. The interest in ancient monuments is not new. They have been exploited in different ways throughout the centuries. The authors of the Icelandic sagas in the 13th century use the monuments not only as a source of information, but also to add significance to the landscape to serve their political interests.¹

The growing interest in heritage during the 19th century in Iceland arose out of ideas about the “nation state” and the struggle for independence from the Danes. The pioneers in Icelandic archaeology travelled around the country mapping the heritage sites connected to the sagas and added new meaning and significance to support new ideas. Now we interpret anew to meet the demands from cultural tourism for information and for exploiting the heritage as resource for adding value to the countryside. This is not just about the economic value connected to cultural tourism, however, because cultural heritage is important for regional development as it builds up an area’s identity and a feeling for its history in a constantly changing world, thereby transforming history and heritage into a “living part” of people’s lives to increase their welfare and wellbeing.

How do we make such large-scale saga landscapes accessible? The landscape of the Vatnsdæla Saga has many phases. It is possible to experience it as a unity, as mountains and valleys, farms and yards, where nature frames the stories of the saga. The landscape can also be divided into many separate historical places, some of which also have archaeological remains. In this last phase we have moved from landscapes to individual objects, each of which demands an individual solution to make it accessible.

¹ Hjaltalin, T (2009) “The Historic Landscape of the Saga of the People of Vatnasdalur: Exploring the Saga Writer’s Use of the Landscape and Archaeological Remains to Serve Political Interests”. *Medieval Archaeology. Journal of the Society for Medieval Archaeology* Vol. 53 (2009), pp 243–270. Maney Publishing, Leeds.



FIG 4-2. Information board at Faxabrandsstaðir with explanations in text and illustrations. Fornleifavernd ríkisins and Landnám Ingimundar gamla ©

4.4 Accessibility

Demands for accessibility to heritage environments increased throughout the 1990s alongside the idea that heritage should be used to support the development of cultural tourism. These demands can be discerned in the Icelandic Cultural Heritage Act of 2001, which set out the following objectives:

... contribute to protect the cultural historical remains and secure that the Icelandic heritage is preserved for the generations to come. The act should assure that as many as possible of the historical remains are preserved in their own surroundings, facilitate people's access and knowledge of the country's cultural historical remains and give support to examinations of them.²

Previous acts had contained nothing similar about “accessibility and knowledge”. The 2001 act imposes an increased obligation to “take into use” heritage environments for the general public, and to do this in a sustainable way. The combined demands of “use and protect” requires new methods and a new approach to the way we take care of the heritage. To make heritage sites accessible for the general public involves finding solutions for the physically and psychologically impaired.

² Law nr. 107/2001, 1. paragr. <http://www.althingi.is/under/Lagasafn>.



FIG 4–3. Vatnsdalshólar in Vatnsdalur. Jón Gíslason from Hof ©

1. Information centres

Making a landscape accessible essentially means presenting information to the visitor. In this project, the farm of Tingeyrar was chosen as the key to the whole area. Here there is an information centre with an exhibition about the landscape, a cafeteria and toilets. Wheelchair access to and around the building is easy. Tingeyrar has a good view over the surrounding landscape – both out to the sea as well as into the valley and the whole area is visible.

2. Travelling by car

From Tingeyrar visitors can continue the “Saga circle” route by car. A historical map of the landscape gives information about the historical sites and archaeological remains. Along the road there are signs with information about individual places and descriptions of the remains.

3. Viewpoints

The planning of good viewpoints is important for the appreciation of the landscape.

4. Boat

The Vatnsdalsá River flows through the whole of the valley down into the sea. In Vatnsdalur, on both sides of the river, are working farms and the ruins of former farms with direct connections to the saga. To sail

down the Vatnsdalsá in an open boat would be an excellent way to experience the cultural landscape.

5. Horses

The most serious problems connected to accessibility are those of getting close to the individual ruins and remains. Signs along the highway show the way to the ruins, but getting to them involves walks of between 500 and 1000 metres over uneven ground. This means that in most cases the ruins are inaccessible to people with walking difficulties. To make gravel roads for wheelchair users would often necessitate an unacceptable intrusion into the natural landscape. One possible solution is to use horses to carry people to the ruins. Recently a new type of saddle, called “Seifur”, has been developed that makes it possible for many disabled people to ride a horse. In Vatnsdalur horses are available for hire and rides with guides are offered. One of the aims of the Vatnsdalur project is to develop suitable riding routes and train tour guides with horses to assist the disabled on riding tours.



FIG 4-4 The saddle “Seifur” in use. Sambýlið á Blönduósi ©

5. Made accessible and understood – or misunderstood?

Inger Karlberg

5.1 The Memorial Park, Gamlebyen, Oslo, Norway

The Memorial Park is a complex site that contains the ruins of some of Oslo's most important medieval buildings. It is one of the oldest city-like areas in Norway, and there have been buildings of one sort or another there ever since the 11th century. Today the site is still very close to the centre of the modern capital, surrounded by huge areas of modern development.

Accessibility to the ruins requires both good physical access and clarity in the choices between the many narratives that the site contains. Cultivation of the multitude of stories may create confusion in such a complex cultural historical environment. The aim should be to present the medieval history in a living city park.



FIG 5–1. The Memorial Park in the 1930s. Riksantikvaren ©

5.2 The monument's background

The medieval sacred stone buildings of Korskirken, the Church of the Holy Cross, Olavsklosteret, St Olav's Monastery, and St Hallvardskatedralen, St Hallvard's Cathedral, constitute the most important parts of the urban Memory Park, which was set up in 1932–3. The site is listed as a part of a larger area of antiquity, the medieval city of Oslo. The park's boundaries are from the south towards east: Bispegata, St Halvards gate, Oslo gate, Arupsgate and Egedes gate. Along these streets lie 19th century apartment buildings that are protected by royal decree.

Korskirken, the Church of the Holy Cross, was built at the end of the 12th century as a parish church for the northern part of the medieval city. To the south of this is Olavsklosteret, the Dominican monastery of St Olav, built in about 1240 on the land belonging to the then-existing Olavskirken, St Olav Church. St Hallvard's Cathedral was built in about 1100 with later additions to the basilica, colonnaded aisles on both sides, a transept and apsidal choir. The present park also incorporates the medieval churchyards belonging to the churches.

Some of the medieval buildings were torn down during the Reformation, and others were damaged in city fires. The citizens of Oslo were allowed to quarry the buildings for stone when constructing cellars, building foundations or roads, with the exception of the north and east wings of the monastery, which were first used as a cathedral school and then from 1554 onwards by the Lutheran bishop. St Hallvard's Cathedral was also used after the Reformation, but went into decline at the end of 17th century. A map dated 1745 shows wooden buildings over a partly hidden ruin.

At the end of the 1850s archaeologists used the Old Norse king's sagas to locate the remains of the medieval city. At this time the area was mainly covered by a garden amounting to some 7000 square metres, which belonged to the bishop's palace, and a number of wooden buildings facing on to the main streets. These buildings were demolished in 1878 to make room for St Hallvard Square. Later, during the 1880s and 1890s, the Arupsgate and Egedes gate blocks of flats were constructed as compact city tenements. This part of the Memorial Park, belonging to St. Hallvard's Cathedral, was set up as a reconstruction and restoration of the ruins after Norwegian Railways had dug railway tunnels underneath the whole area.

5.3 The challenge

The underlying medieval structure with its numerous interventions combined with the 19th century modifications and developments in the area make the Memorial Park a site where complex values need to be identified and made accessible. To do this it is important to create an under-

standing of the many narratives of the place, even if the individual fragments are difficult to present.

As a result of the historical development of the city the ruins are often at different levels, which creates challenges for moving about the site and reading the history. Some ruins are exposed while others are hidden beneath present-day streets. Some are clearly rebuilt or incorporated in constructions built after the Reformation. Which stories should be told needs thorough consideration, but will influence the choice of tools for making the site accessible.

The specific challenge: to facilitate understanding and movement in the park by emphasising the most important medieval stories without damaging the values of the lower-priority fragments.

There are four objectives:

- to extract the most effective stories out of the ruins
- to make physical adjustments
- to improve the presentation of information about the ruins
- to develop the park as a recreational area.

A combination of these four objectives will give the best result for the visitors, but it should be borne in mind that there is a danger that some of the aims may also create divergence and possible misunderstanding. The aim should be to make the visitors understand what they are looking at and to lead them through the site so that they see the totality of the ruins.



FIG 5–2. The ruins before accessibility interventions. Riksantikvaren ©



FIG 5–3. *The ruins before accessibility interventions. Riksantikvaren ©*

5.4 Extracting the most effective stories out of the ruins

The physical condition of the ruins and their degree of conservation are challenges for the presentation of the site and the issue of accessibility. The importance of the different historical layers must be assessed, and user demands must be set against the need to protect the medieval traces. Accessibility measures constitute not only visual intervention but also a possible direct threat to the archaeological remains below ground level. New landownership, repositioning areas of activity to allow for silent zones close to the ruins, regular maintenance of the vegetation and solutions for signage, lighting and movement among the ruins are all factors to be considered.

In general the ruins are less than a metre high, which makes the layout relatively clear. One idea is to differentiate the once-internal and external parts of the ruined buildings. This can be achieved by using grass “outside” and a gravel cover “inside”. Historically, different floor materials were used for the rooms of the monastery and those of the church. These elements can be made visible in the parts of the ruins that are under cover and where it is not so important to simplify the story. The foundations for the buildings, which were meant to be hidden, should be re-covered as much as is practicable both to increase the readability and to protect them.

5.5 Physical adjustments

The challenges in the ruins are more or less the same as for complete buildings. Access should be through the original entrances. However, some of the door openings are too narrow for wheelchair access, but cannot be widened because to do so would falsify the monument. A narrow passage, on the other hand, will not hinder visual insight because the ruins are so low. The solution is to alter the movements so that instead of access being mainly through walls, visitors pass along the sides of the ruins or go via the original passages and rooms.

Added accessibility measures can make effective, discrete ways of communication through the site. The right choice of gravel, altering the gradients, new ways of access, ramps, and bridges all contribute to improved accessibility. Wooden bridges and steel railings should be used to solve the problem of accessibility across areas at differing heights. Good design and robust quality are essential. Any new additions should take account of the implications of making new interventions in the ruins and the cultural layers. The value of the experience should not be reduced by the new elements, but the latter should add to the aesthetic dimension and the overall presentation as a positive contribution from our own time.

The municipality should consider purchasing new plots to the south of the cathedral to enable the complete ruins to be seen. This would open up a new entrance to the park, in addition to the existing one. The new access route will enhance the medieval streets. The park should not be sheltered by a high, closed wall and gate, as was the case in the 1930s, but the erection of new cast-iron fences would discourage graffiti and fly-posting and at the same time keep the character of the site open and separated, day and night.

5.6 Improving the presentation of information

At present there is a lack of good signage at the park. The main information panels should be by the normal entrances to the park. The use of models would aid understanding of the site and the history of the ruins. The signs

at the entrances ought to be high and vertical, and the ones closer to the ruins lower and almost horizontal. It is important to make the signs tactile and to explain names, dates and the different functions of the buildings.

The lighting should be applied strategically to emphasise the development phases, and to shade out the areas that are not important or distract from the main story.

5.7 Developing the park for recreation

The Memorial Park is part of a larger area of green belt left around the blocks of flats that were put up at the end of the 19th century, when the capital was industrialised. These flats are worth protecting and the park itself is an important recreational area for the residents. The provision of leisure amenities within the park for residents has inevitably resulted in a loss of readability in the story of the site. It is important that the park continues to function as a place where locals can play, barbecue and relax, but litter-bins and other facilities should be positioned so as not to detract from the experience of the medieval ruins.

The current bishop's garden also covered the ruins in the 19th century. The circular plantations of lime trees and walking paths are reminders of this park. The carp pond and the herb garden are illustrative elements which describe the medieval story; these were incorporated into the Memorial Park in 1950 as part of the jubilee for the city. Even though not all these parts belong to the medieval story, they are kept to convey the site's recent history and to add to the visitor experience. They should be adapted so that they enhance the presentation plan and are wheelchair friendly; the vegetation should be regularly maintained so that the plants do not harm the ruins. The intention behind designing the site in this way is to keep The Memorial Park invitingly open and to prevent graffiti and vandalism.

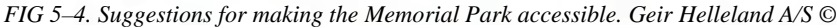


FIG 5-4. Suggestions for making the Memorial Park accessible. Geir Helleland A/S ©

6. Accessibility to unique buildings and the limit of tolerance of change

Ebbe Keld Pedersen

6.1 A Danish perspective

Many of the buildings we regard as heritage are listed. This means that the heritage authorities have to approve any changes made to them. How do the listing authorities think and how does their practice reflect current ideas?

Listed buildings are the tangible witnesses of the technical and economical capabilities, living conditions and ideals of previous generations.

The aim of the Listed Buildings Act, *Bygningsfredningsloven*, is to secure the buildings against demolition or other forms of damage. The administration of this law is carried out by the listing authorities, which comprise the *Kulturarvsstyrelsen*, The Heritage Agency of Denmark.

6.2 Legal protection – a controlled development

According to the Listed Buildings Act buildings with considerable architectural or cultural historical value are worthy of listing. As a general rule the buildings should be more than 50 years old, but younger buildings might also be listed due to their outstanding value or other special circumstances.

Even though the Listed Buildings Act is a heritage act, listed buildings are not considered to be fixed “monuments”. They are instead “living buildings”. In the light of this, a particular listed building is the concrete result of an ongoing process that will continue for as long as the building exists.

As a result of the act of listing a new participant comes into the process – the heritage authority. Once listing has taken place, a process that was solely in the hands of the owner changes to one that has become controlled. In this context, listing means “controlled development”.

6.3 The legal consequences of listing

A listed building should be kept in a sound state. It is not sufficient that the building is simply waterproof. The entire building should be maintained in a state that safeguards all parts of the building from deterioration.

Once a building has been listed all works on it, other than ordinary maintenance, need permission from the heritage authorities, be it changes of building parts, alterations to construction, moving of walls, doors or windows, changes to surfaces and colours, pulling down of brick constructions, removal of fixtures, and so on.

Permission is not needed for ordinary maintenance, however, as long as it does not change the building's appearance.

6.4 The use of buildings – and accessibility

Buildings are constructed for a particular purpose. Over time, the use of the building will inevitably change its character. Its function is constantly developing and new needs and wishes lead to new demands for the building. The building's function may also change.

It is obvious that a building's accessibility is an important parameter for its use. Accessibility is in many ways independent of the function. A building's specific function is the decisive factor in determining what demands for accessibility the building is facing. The use of the building is its *raison d'être*.

6.5 The Listed Buildings Act

While the Listed Buildings Act § 1 part 1 describes the purpose of the law, to protect valuable buildings, it is §1 part 2 that gives guidelines on how the authorities should carry out the law.

“The management of the law should put emphasis on that the buildings that are protected get an appropriate function, which under consideration of the special character of the building serves their maintenance in the long run.”

Legal protection in itself is no obstacle for continuing the existing use of the building. On the other hand the heritage authorities cannot demand a continuation of the function, because it is the building and not its function that is protected. In these circumstances only the owner can decide the function.

The law presents the heritage authorities with two basic challenges. First, when the character of the function changes or the building acquires a new function, the authorities should decide if the necessary changes may be carried out, respecting both its architectural as well as its heritage

values. Quite often the owner wants a use that pushes the boundaries of the existing building and leads to interventions in its heritage values.

Secondly, there is the issue of whether the function is “appropriate” in the sense that it will contribute to the “upkeep of the building” in the long term. For the owner it is very much the immediate functional demands that are in question, as the heritage authorities in their management are instructed to see the case from a long-term perspective. The protected building should in principle be sustainable “in eternity”.

It is heritage policy that the demands from the user should be met to as fully as possible, because the basic assumption is that buildings are best protected when they are in use.

6.7 The limit of tolerance

The shape of a building is legally protected in the moment of its listing. Thereafter it is the heritage authorities that decide the limit of tolerance for any changes to it.

As the reasons why a monument is protected change over time, the limits of tolerance likewise will also change. The authorities may therefore in the past have refused permission for building activities that they now, or in the future, might accept.

- The limit of tolerance is always defined in the concrete – in the tangible. It is the scale and the character of the changes that will be accepted or rejected that mark the limit of tolerance.
- The limit of tolerance will always be marked in relation to a specific building project. The limit will appear in an evaluation of the project’s consistency with the purpose of the protection.
- The limit of tolerance can lead to new conditions being set for the project. These conditions may relate to the architecture, design of details, use of materials, construction work or building techniques.
- The limit of tolerance will always be defined in relation to what currently exists, i.e. the appearance the building has during the preparation of the project.
- The limit of tolerance cannot be decided in advance. In the assessment for protection certain values that need to be sustained may be specified. In such cases the scope of any changes will be limited.
- The limit of tolerance may be defined in relation to what once was. This applies when an owner wants to rehabilitate the building. Usually it involves removing any technically or aesthetically “unfortunate” additions that have been added to the building over the years.
- The limit of tolerance is primarily connected to the general impression of the building. This follows the general formulation of the reason behind the protection, about the maintenance of the “cultural historical

and architectural values”. The more specific protection values will often be emphasised in connection with building projects, where the various elements of the building are scrutinised.

6.8 Limits of tolerance and accessibility

As the limit of tolerance is defined in the material, the use of the building or its change of use is important only where it leads to alterations in the building structure. Many cases sent to the listing authorities are about the moving of a partition wall, fitting in a new door or installing new facilities in a bathroom or kitchen. The questions concerning accessibility do not differ from these: they are all tasks to be solved in the most appropriate way.

Creating good and functional accessibility in old buildings often leads to changes. Accessibility for wheelchair users will normally lead to alterations in the building’s construction or in its visual appearance. It is up to the listing authorities to decide if the necessary changes are compatible with the listing values of the building.

A building case often develops into a dialogue between the owner and the listing authorities where the owner presents the demand of use and the heritage authorities defend the listing values. Constructive dialogue will normally move an unacceptable project over to the right side of the limit of tolerance. In reality it is a question of finding pragmatic solutions that allow the listing values to be secured as far as possible.

If the interventions are considerable they will inevitably lead to loss of listing values. When these values are gone, they cannot be recreated. This does not, however, exclude the possibility of new and contemporary solutions but simply means that their character and design add new qualities to the building. In this way any loss in the listing values is compensated for by other values that the listing authorities believe will redress the balance and will interact with the lasting values. These kinds of views are part of a so-called “dynamic listing concept” that is currently under debate.

It is heritage policy to work for qualitative and lasting solutions for accessibility in a listed building.

7. A new entrance to a 16th century building

Ingrid Schwanborg

7.1 Lundagårdshuset, The Lundagård building, Lund, Skåne, Sweden

How is it possible to create accessibility for all to a 16th century building where the only entrance is through the tower on the main façade, where you have to walk ten steps up? Is it acceptable to make a new entrance from the rear side? Is it acceptable to remove parts of an information-packed stone wall and disfigure a characteristically designed façade from the 20th century? Hardly, without a level of interference that will reduce the building's cultural historical value. The demands for accessibility, however, are important and with the help of an assessment of the consequences of different alternatives you may try to find the optimal solution.

7.2 The cultural historical background

The Lundagård building, also called “Kungahuset”, The King's House, is situated in the centre of the city of Lund, surrounded by a park, between the cathedral and the main university building. The Lundagård building and its predecessor on the site, the archbishop's castle, have played an important role in Danish and Swedish history since the beginning of the Middle Ages.

Lund was founded in about 990 and was already an important city by the 11th century. In 1060 Lund became a bishop's seat and in 1103–4 the archbishop's seat, initially for all the Nordic countries. This seat was removed in 1536 due to the Reformation. In the foundations of the building, below ground level on the northern side, there are still remains of the wall that once surrounded the archbishop's castle; under the building are also the foundations of other medieval buildings.

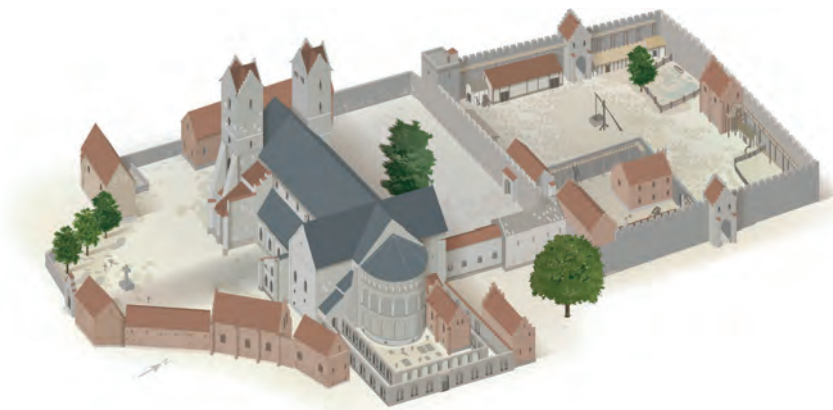


FIG 7-1. Lundagård and the cathedral as it could have looked like at the end of the Middle Ages. The building to the extreme right is at the site of the current Lundagårdshuset (Kungshuset). Reconstruction by Petter Lönegård 2008 ©

The Lundagård building was erected in 1578–84 as a residence for the county lord of the Danish king Fredrik II. Skåne became Swedish after the Treaty of Roskilde in 1658. The University of Lund was established in 1666–8 as part of the process of integrating the people of Skåne as Swedes. The Lundagård building was given to the university in 1688. It was the main headquarters of the university until another building was constructed for the purpose in 1872–82. The building has also been an observatory, museum and library. Today it is used by the Faculty of Philosophy for educational purposes. The exterior is now characterised by changes made in 1840s and the last part of the 19th century.

The Lundagård building falls within legislation under “Regulation (1988:1229) on public constructions memories etc” and has protective directions decided by the government. This means that the building cannot be demolished, rebuilt externally or in any other way changed. Alterations to its structure, original floor plan or to older fixtures and fittings are also forbidden. The unique 18th century stairs in the tower, the Jacob Erlandsen gate and the colonnade on the ground floor cannot be changed.

7.3 The challenge

The Lundagård building is used for educational purposes, which means that the demand for accessibility for people with mobility impairments is strong. All floors in the building should be made accessible. The solutions should also meet the demands of “dignified entrance”.

There is only one entrance to the building, apart from an access to the basement on the eastern side. It is through the spiral stairs housed in a tower constructed on the southern side of the building. The floor of the tower is at ground level, which makes it easy to enter the tower itself, sitting in a wheelchair. The problem starts just inside, since it is impossi-

ble to continue upwards without assistance. The entrance on the first floor is up 10 steps in the unique 18th century winding staircase that fills the breadth of the tower.

From this flight of stairs there are also entrances to the 2nd, 3rd and 4th levels. To protect the historic stairs it is desirable to reduce their current use. In the north-eastern corner of the building there is another spiral stair between the 1st and the 3rd floors. Between the 3rd and 4th floors there is also a staircase in the middle of the building.

7.4 The cultural historical values

The building in its entirety is an expression of the great ambitions of the rulers – for example, the Christianisation at the beginning of the Middle Ages, the Reformation and the king's appropriation of the church's properties in the 16th century and the efforts to make the people of Scania Swedish. The building has been the residence of the county lord, the main university building, an observatory, a university library and museum, and is now again used for teaching purposes. If we include the medieval remains, it has also been part of the bishop's residence.

In the cityscape it is a symbol of the region and the city of learning. Its position in the centre of the university and the cathedral environment illustrates the central role the building has played for centuries in these institutions.

The position with the entrance to the south is important for understanding its historical context in the surroundings. Since the Middle Ages the building has faced south and faced the cathedral. There was a functional connection between the building and the cathedral, at the time of the archbishop as well as the first period of the university, when theology was the university's most important subject. The Lundagård Park to the south was established according to drawings by the architect Carl Hårleman in the 1740s. The embellishments on the southern façade are richer than those on the northern, which even had a privy. During the restoration in 1836–9 Carl Georg Brunius made a stone portal in the main entrance to match the Roman north portal of the cathedral.

The original plan of the building, rectangular with the round stair tower, characteristic of the Danish Renaissance palaces of the time, is intact.

The walls, especially the older pre-19th century ones, have a high value as a document and source of information about the complex history of the archbishop's castle and the Lundagård building as well as the building traditions of preceding periods.

The exterior expresses the ideals of the 16th century as well as the ideals of the 19th century restoration. The exterior design represents the contribution of important architects such as Carl Hårleman, Axel Nyström, Helgo Zettervall and Professor Carl Georg Brunius.

The ground plan from 1840s at the first floor as well as the Carolina Hall and the historicising style of the vestibule all bear witness to perceptions in that time of the history and the building of institutions. The same applies to the door frames and skirting from 19th and 20th century.

The 18th century flights of stairs, built in massive oak, and the Jakob Erlandsen gate from the 13th century, moved to the vestibule from the cathedral, are indispensable.

7.5 Consequences of the various solutions for accessibility

It is difficult if not impossible to solve the accessibility needs in a building with such high heritage values without reducing or losing some of them. The practical needs of our own century and their influence on the heritage values have to be considered thoroughly. By studying the consequences of various alternatives one must try to find the best possible solution between accessibility and heritage.

Solving the communication challenges between floors 1 to 4 is less complicated than finding a solution for accessibility between the ground and the 1st floor. The installation of a lift and stairs between the 1st and the other floors means intrusions in the floor constructions and thus some reduction of their heritage value. However, the floors are from 1840 and have not the same high value of documentation as the older floor constructions and walls. The interior was rebuilt in the 20th century and will put up with some modern additions.

A lift and new stairs will reduce the use of the 18th century stairs, which as a result will be better preserved. The accessibility between the first and the upper floors will be satisfying for everybody.

It is much harder to find an acceptable solution to the accessibility from the ground to the 1st floor. There are, however, several alternatives.

7.6 The alternatives



FIG 7–2. Lundagårdshuset seen from west. Ingrid Schwanborg ©

7.6.1 Alternative 1: A stair lift for wheelchairs is fitted in the tower stairs between the ground floor and the 1st floor

The door of the vestibule has to be rebuilt.

How the heritage values are affected

A stair lift in the unique 18th century spiral staircase will have a negative visual impact on lower parts of the stairs. However, the stairs are very wide (3 metres) and a stair lift when folded out would take up less than half the available space of the stairs. The stair lift is also reversible and its installation would involve only minor interventions. The doors to the 1st floor would have to be altered, which means a reduction in their heritage value.

The functional side

The stair lift would make it possible for wheelchair users to reach the 1st floor without assistance, as long as the connection between the stairs and the vestibule is made technically sound and fire-safety regulations are satisfied. The demand for a “dignified entrance” is fulfilled, even though it would be less satisfying than a “proper” entrance. The wear and tear on the 18th century stairs is not reduced below the 1st floor, but would be on the floors above.

7.6.2 Alternative 2: Conversion of the fifth window in the northern façade into an entrance

The wall under the window, 160 cm high, is removed and a ramp and a handrail added.

How the heritage values are affected

Nobody knows what archaeological and architectural questions will be asked in the future. The intervention in the 16th century wall means that valuable information may be lost. Below ground level, at the point of intervention, the stone wall belongs to an original wall that surrounded the archbishop's castle. The part of the wall that has to be removed, the dado, is a mixture of brick and natural stone; its reuse of stones shows the building's complex constructional history.

This proposal will mean a change of entrance from the traditional south side to the north side, which will distort the historical connection between the buildings in the environment and people's ability to understand of their use in the past.

This option would also compromise the building's 16th and 19th century architectural design and symmetry because of the way the new door will interrupt the row of windows. The modern additions needed to make this alternative functional, such as a ramp with handrail, lighting, signs and possibly a shelter roof, will further distort the historical environment.

On the positive side, this option would automatically create a new escape route and therefore makes it possible to remove a flight of modern iron steps. It would also reduce the use of the 18th century stairs. Both these consequences are would be of benefit to the building's heritage values.

The functional side

This alternative satisfies both the accessibility requirements and the demand for a "dignified entrance". It will be possible to enter the building close to where the planned internal lift and stair will be.



FIG 7–3. Lundagårdshuset seen from north. According to alternative 2 the new entrance should be through the window no 5 from the left side. The alternative 3 suggests an entrance through the window at the extreme right. Oiva Isola ©

7.6.3 Alternative 3: Entrance in the northern façade, through a door put in at the extreme western window

No ramp is needed since the floor is at the ground level.

How the heritage values are affected

The intervention in the 16th century wall as a result of removing the part under the window means the loss of valuable evidence. Compared to alternative 2, however, this intervention is perhaps less serious since the wall fabric here is more homogenous and consists only of bricks. There are no signs of medieval walls. The use of the northern side as an entrance is contrary to the history of the building and the context. On the other hand, an entrance here would require fewer additions than previous alternative, since there is no need for a ramp. Under this option, the visual intrusion in the row of windows is less apparent and disturbing to the impression of symmetry than the proposed door of alternative 2, although some distortion of the historical façade would occur. One escape stair can be removed. The wear and tear on the 18th century stair is reduced.

The functional side

This alternative satisfies both the accessibility requirements and the demand for a “dignified entrance”. It will necessitate a passage through the Carolina Hall, where the library is today.



FIG 7-4. The main entrance is in the tower. According to alternative 4 a new entrance should be made under the window to the right of the tower. Ingrid Schwanborg ©

7.6.4 Alternative 4: Entrance in the southern façade, through a new door east of the tower

No ramp is needed. The new entrance will lead to a level lower than the first floor. Once inside the building there are two ways of getting further: either by an internally installed wheelchair lift that goes up to first floor and down to the basement, or an entrance leading further into the building and eventually to a lift and flight of stairs at basement level. The floor construction between basement and first floor will in both cases be removed, since the ground level on this side of the building is between two floors. The basement level might have to be lifted.

How the heritage values are affected

The intervention has to be made in the external 16th century wall, which is thicker than the one under the windows on the northern side. This means loss of substance and important historical evidence. There are, however, no indications that this construction is medieval. The intervention leads to some distortion of the historical exterior, but is not as intrusive as that of alternatives 2 and 3. The entrance will be on the “right” south side of the building.

External lighting and a possible shelter roof might be needed, but there is no need for a ramp, and the signs can be added to those already at the tower entrance. Part of the construction of the 1840s' flooring between the basement and first floor would have to be removed to accommodate the lift. This change will also mean alteration of the room which

is a passage between the vestibule and a lecturing room and of an old floor plan. Both alternatives will reduce the use of the 18th century stairs.

The functional side

From the accessibility point of view the second alternative with the lift and flight stairs from the basement satisfies the demand for a “dignified entrance” in better ways than alternatives 2 and 3, since this entrance will be much closer to the main entrance. The alternative with the platform lift gives access to wheelchair users but hardly to anybody else. None of the alternatives will prevent other people from passing through the room between the vestibule and the lecturing room, but they both make it less easy.

7.7 How should the accessibility challenge be solved?

The case presented here is a difficult one. The alterations needed to comply with the requirement for accessibility demand considerable interventions into the fabric of the building, with a high cost to its heritage value. More consideration is needed to find the optimal solution. Alternatives 3 and 4 should be scrutinised further. What is technically possible? What are the consequences for the heritage values? The building’s wall structures should also be examined more closely.

Other alternatives could be discussed – for example, the possibility of constructing a separate additional lift tower. The alternatives presented here are chosen because they do not involve major additions in this sensitive environment. A new use for the building that would not entail the full demands for accessibility should also be considered.

8. Court of Justice in a baroque palace

Oiva Isola

8.1 Bondeska palatset, The Bonde Palace, Stockholm, Sweden

Is it possible to make a baroque palace accessible to the various needs of general public while maintaining its heritage values? How can the benefit of accessibility as presented in different suggested changes and their influence on heritage values be compared and evaluated?



FIG 8–1. Bondeska palatset, southern façade after the interventions in 2004. The courtyard surface consists of cobblestones with paths of sandstone and markings with setts. Oiva Isola ©

8.2 The cultural historical background

Bondeska palatset, The Bonde Palace, is situated in Gamla stan, the Old Town, in Stockholm. It was built as the private residence for Sweden's Lord High Treasurer, Count Gustav Bonde, in 1673, and designed by the architects Nicodemus Tessin the elder and Jean de la Vallée. At the turn

of the eighteenth century it was used by the Svea Court of Appeal and the Royal Library. From the 1730s to 1917 it housed Stockholm's Court-house. After a fire in 1753 the building was extended to include an additional floor as well as wings on the southern side, resulting in its present exterior. In 1948 the Swedish State took over the building and commissioned the architect Ivar Tengbom to plan alterations to its interior to suit the needs of the Swedish Supreme Court. In 2004, modifications were made to adapt the building to conform to modern requirements for accessibility by the AIX Arkitekter AB.

The Bonde Palace is a state-owned listed historic building. According to the legislation protecting it today, the building may not be torn down or rebuilt, and its exterior may not be altered. Interventions in the building's interior structure, original floor plan and permanent fixtures are prohibited. The courtyards and wrought-iron fences must be properly maintained. And further construction in this city block also is prohibited. In the case of particular reasons, this building may be altered in contravention of legislation, after planning permission granted by Riksantikvarieämbetet, the Swedish National Heritage Board.

The municipality also must approve any changes in line with the Building and Planning Act. As the Old Town is listed as a protected and historically important site any interventions affecting the ground must be approved by the County Administration in line with the Cultural Monuments Act.

The Bonde Palace is an important feature of the cityscape because it is situated at the waterfront to the north, widely visible from its surroundings. It is one of Sweden's most important architectural monuments from the 1630s to 1718, the period when Sweden was a great power. The building's exterior is influenced by the seventeenth and eighteenth centuries, and its interior successfully combines the changes made in the 1940s with its eighteenth century architecture. The building may be characterised as expressing a symmetrical, classical style with a homogeneous exterior. The external stairways impress visitors with their obvious message of power. The interior consists of well-proportioned rooms whose floor plan shows how houses of the high nobility were organised 300 years ago. And its courtrooms reflect the building's long tradition as a court of law.

This building is a good example of how European models, such as the French Renaissance and baroque, influenced and developed Swedish architecture. It also is a source of information about early building techniques and craftsmanship. Both visible and hidden information is carried in its structure, the walls and the fixed fittings.

The monumentality of the palace, its location next to Riddarhuset, The House of Nobility, its proximity to the Royal Palace along with the use of the foremost architects of the time all emphasise Count Gustav Bonde's high social status as Sweden's Lord High Treasurer.

The building's change of function from a nobleman's palace to government office reflects the shift in power made from the nobility to the civil

servants. The building has housed the legal bureaucracy for the courts for nearly 280 years. As a town hall the building witnessed several dramatic historic incidents such as the public flogging of Captain Jacob Johan Anckarström for the murder of the Swedish king Gustav III and the lynching of Field Marshal General Axel von Fersen by an angry mob in 1810.

8.3 The challenge

Prior to its rebuilding in 2004, the court rooms of the Swedish Supreme Court in the Bonde Palace were not accessible to people with disabilities. In preparation for such changes, different alternatives for improved and equal accessibility for all visitors as well as for employees were explored. In this case study the four alternative solutions that were suggested are presented and discussed.

The palace's main entrance is situated at the southern courtyard on the first floor, and it is reached by an exterior double flight of stairs. Prior to the adaptations, people with impaired mobility were carried up to the main entrance, which is connected to a centrally situated staircase by a lift. Another two entrances lead to the central staircase: a staff entrance at the southern court, under the exterior flight of stairs, and an entrance from the northern courtyard at the rear of the palace. In addition to these three entrances there also are a number of secondary entrances away from the central staircase, which have not been interesting to evaluate from the perspective of accessibility adjustments.

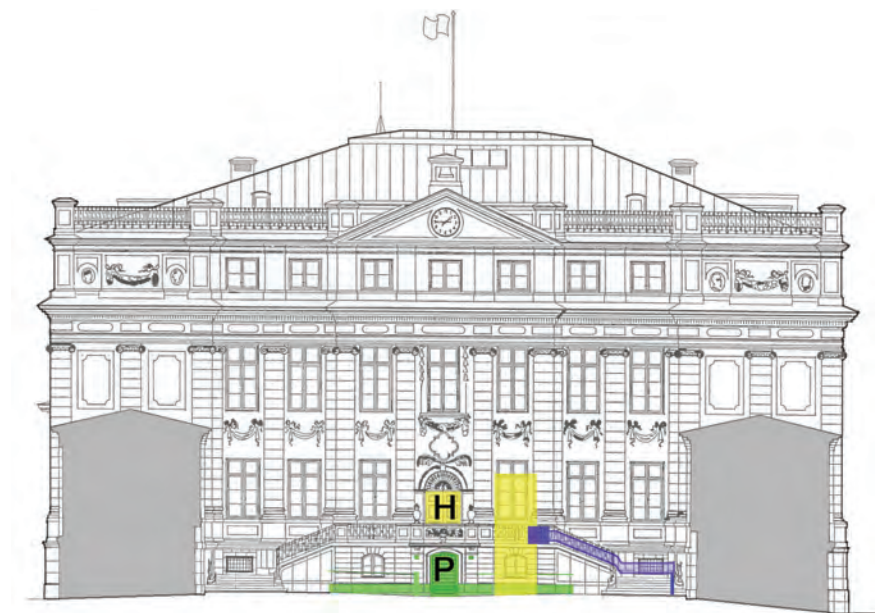


FIG 8-2. Southern façade, facing the courtyard. H is the main entrance, P is the personnel entrance, green shows alternative 1, external ramp, yellow shows alternative 2, lift/lifting board and blue shows alternative 3, stair lif. Drawing by Statens Fastighetsverk, adapted by Oiva Isola.

8.4 Accessibility solutions

The impact of the four alternatives on the heritage values and in relation to their benefits for accessibility, are described in the following. All four alternatives contravene the protection legislation because they involve construction work in the block (ramp, lift/lift platform, poles), changes to the building's exterior (external door, lift in the stairways), and intervention in the building's structure (wall fastenings, bored holes for electrical cables) and traditional permanent fittings. The following consequences for the palace's cultural history and functions are common to all four alternatives:

- The entrance doors are converted into one automatic door and fitted with a control panel. The panel is positioned on a flat, freestanding post, firstly to avoid making additions to the building that might detract from the palace's architecturally important façades, secondly to avoid physical interference to the walls by the installations and, thirdly, to retain the reversibility of such changes. The automation of these doors negatively influences their appearance and physical influence to the doors. And, furthermore, in practice the automation of double doors does not function satisfactorily.
- To a certain extent, the ground's cultural layers are affected since the post and the lift platform/lift must be secured in the earth. A lift must be secured deeply in the ground; however this is not of decisive importance for the evaluation.

The alternatives are described in summary for the southern and northern façades after which they are presented separately in detail.

8.5 The alternatives

8.5.1 Alternative 1: Roll-in entry via the staff entrance, using interior stair lifts to progress down to the lift for transport up into the building

Description of the measures

At the staff entrance a level discrepancy of two steps is built-over by two externally symmetrical sandstone-clad ramps (length 4.6 metre, gradient 1:12). The side of the ramp facing the courtyard is bounded by a low granite wall. Towards the façade the ramp is equipped with a handrail set into the ground. Two internal steps inside the entrance door are removed. An exterior double door is replaced by a new, higher and broader single automatic door. Two light armatures are mounted onto the façade, above the entrance. Two short interior stairways are equipped with step lifts to bridge the 1.5 metre level discrepancy between the staff entrance and the interior lift that serves all the floors.



FIG 8-3. The personnel entrance before the intervention in 2004. Eva Göransson, AIX arkitekter ©

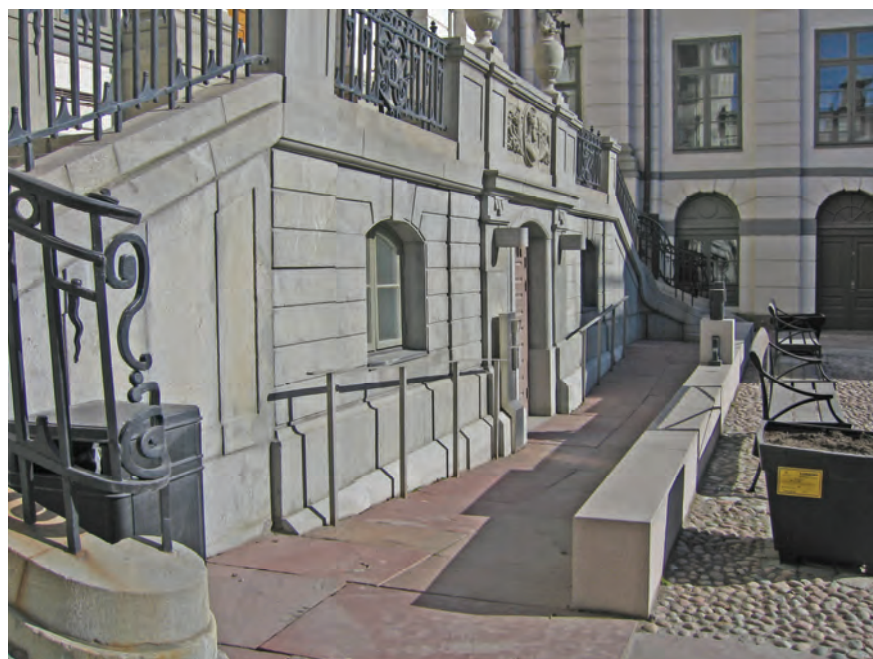


FIG 8-4. The personnel entrance after the intervention in 2004. Oiva Isola ©

Influence on the cultural historical values

Replacing the double entrance doors from the 1940s with a single door somewhat reduces the palace's heritage value in that the dignity of the minor entrance is increased which can confuse understanding of how the ground floor earlier was used. Changing the direction in which the door opens breaks the tradition of doors opening inward due to factors of climate, for example, snow. The new door agrees with the original door with respect to material, colour and details, and which is removed and

stored in the building in order to make remounting at a future time possible. It also had been possible to return to an earlier phase, a panel door, as the door prior to the changes from the 1940s.

The two interior stone steps that are removed are probably an original part of the building, but that does not minimise any of its essential values.

The low stone wall successfully hides the ramp seen from the street which means that the visual influence to the building's exterior and entrance court is minimal. Also with respect to material and surface appearance the wall is adapted to the building's granite base, which means that it appears to be integrated with the building. Reusing the existing sandstone slabs in the ramp contributes to retaining homogeneity in choice of material and degree of wear. The holes in the sandstone slabs for fastening the poles can be accepted since the slabs are relatively modern, originating from the rebuilding of the courtyard in the 1940s. Although the handrails, poles and armatures are made in modern material – dull steel – and are of modern design, they match the colour of the grey stone façade behind very well. The form and thin dimensions of the handrail contribute further to the harmony. On the other hand, a handrail of more traditional design in black wrought iron would have been more clearly noticeable. The width of the flat post with elbow opener/control panel is overdimensioned. Two armatures are mounted symmetrically onto the façade. The installation of a handrail on the ramp nearest to the façade minimises the visual impact compared to a handrail on both sides of the ramp.



FIG 8-5. The new adjusted entrance is equipped with a new outward going door with automatic opening door opener, handrail, armatures and a post for entry control. O. Isola ©



FIG 8–6. The post with elbow switch, buttons for entry code and entryphone have been installed at a distance from the wall and attached only to the ground. O. Isola ©

This exterior solution homogenises well with the building's monumental architecture and symmetrical expression, subordinating and partly adapting to the already existing elements with regard to material and colour. The additions respect the building's original architecture which is assigned high cultural historical values. The internal stair lifts differ from the earlier interior with regard to design and materials, and because of this they are experienced as foreign and tangible elements which, however, are reversible. The spots for attachments in the floors and walls cause a minor loss of original material, but this should not be important for future interpretation of the building's history.



FIG 8-7. The new door to the personnel entrance is fitted with an automatic door opener. The stair lift is in an uplifted position. Oiva Isola ©

Functional goals

The aim of creating a common, dignified entrance for all is not fully achieved by this alternative. Moving downwards from the ground level is not experienced as a natural entrance to a building's main floor one flight up. However, one advantage is that the staff uses this entrance and that it is situated near to the main entrance. It is also possible for a person to enter the building independently. The ramp's breadth and gradient fulfil the norms for a ramp although it had been preferable to have a ramp with a lower gradient (1:20). However, the majority of people can use the ramp successfully since it is short. Although the handrail is placed on one side of the ramp only, those who need to use it can use either hand as the ramp is double-sided. The worn and rough sandstone offers a sufficiently non-slippery surface. However, the well adapted and partly hidden ramp may be difficult to find.



FIG 8–8. The main façade after the installation of the ramp. Oiva Isola ©

The way through the lower floor to the lift leads via beautifully designed rooms with cross-vaulted ceilings, although still simpler in character than the comparative way on the first floor. The lower floor lies slightly below the courtyard level. The internal lift is reached first after using two slow and noisy stair lifts, which can be experienced as a less dignified way of entering the building.

Conclusion

This alternative respects the building's cultural historical values and creates new values by adapting to the exterior design. This solution is a compromise between the demands of heritage values and accessibility. (This alternative was selected for the 2004 modifications.)

8.5.2 Alternative 2: Vertical lift to the main entrance

Description of the measures

A vertical lifting device – a lift or a lifting board – is constructed in the entrance courtyard to overcome the level discrepancy between the courtyard and the main entrance. The lifting device is positioned in front of alternatively to the side of the staff entrance. A new sandstone path leads to the lifting device, which means that parts of the existing cobblestone paving are replaced by new sandstone slabs. Part of an original stone balustrade or wrought-iron railing has to be removed.

Influence on the cultural historical values

A vertical lifting device is a prominent object and tangible volume which is rather smaller for a lifting platform than for a lift. However, this marginal advantage does not outweigh choosing the lifting platform instead of a lift, because of the lifting platform's functional shortcomings. A lifting device, in glass and steel, contrasts with the palace's materials, design and appearance. This addition is obvious and experienced as a foreign element.

A symmetrically-placed lifting device means that an artistically well-made stone balustrade must be removed, minimising the heritage value. The lifting device hides both the main entrance and the staff entrance. An asymmetrically positioned lifting device means the removal of an original

wrought iron railing, again minimising the heritage value. This solution distracts from the symmetry of the courtyard's entrance and the façade as well as hiding a window.

The removal of cobblestones and the installation of a walkway detracts from the appearance of the courtyard's entrance and surface appearance, the asymmetrical more than the symmetrical option. Since ground surface is secondary and relatively recent, this question is not of decisive importance.

Functional goals

The lifting device makes it possible for a disabled person to enter the palace independently through the same main entrance as everyone else. The solution therefore satisfies the aim of a dignified entrance. An external lift functions well technically all year round, whereas a lifting board has lower functionality unless it has heating devices. From a user's point of view, the lift is preferable to a lifting board.

Conclusion

This alternative satisfies the demands for a common, dignified entrance and the functional demands for accessibility but has the greatest negative influence on the cultural historical values. This alternative is both visually and physically intrusive, since important original details have to be removed.

8.5.3 Alternative 3: stair lift to the main entrance

Descriptions of the measures

A stair lift is mounted in the main flight of steps. The lift is fixed to the façade and the flight of steps. The double door is provided with an automatic door opener. The signal button, sound connection or sound/picture contact is made between the user of the lift and the person in Reception. The control panel is installed on a pole in front of the stairs and in the reception.

Influence on the cultural historical values

The stair lift is an asymmetrical solution that reduces the symmetry of the palace's façade and affects the visitor's appreciation of the magnificent and monumental flight of steps, especially seen close up. The stair lift's modern material and design contrast with the design and materials of the palace, and are very obviously a foreign element in the whole. Installing a stair lift means that holes will have to be drilled in the wall, in the stone balustrade and the steps. This means a minor loss of original substance.

Functional goals

A stair lift makes it possible for disabled persons to use the same entrance as everybody else at the first floor, but it is not satisfactory since they have to call for assistance before getting into the lift. The solution therefore does not satisfy the demands for a dignified entrance. A stair lift is noisy and slow when in use and furthermore is subject to technical problems when installed outside.

Conclusion

This alternative satisfies neither the cultural historical nor the functional demands.

*8.5.4 Alternative 4: Detour to the rear door**Descriptions of the measures*

The double door on the northern court is provided with an automatic door opener. Signage for the entrance is fixed to the wrought-iron fences on both sides of the building, by the main entrance and on six places on the façade.

Influence on the cultural historical values

The installation of an automatic door opener in the secondary double external door and the erection of signage influence have a minor impact on the heritage values.

Functional goals

This alternative does not satisfy the aim for a common, dignified main entrance since people with disabilities will have to make a 130-metre detour to a separate entrance on the rear side of the building. It is, however, possible for people with impaired mobility to enter the building by this route without help from others.

Conclusion

The use of a separate entrance at the rear side satisfies best the demand for the preservation of the heritage values and the demands for accessibility, but is the worst alternative from the point of view of a common and dignified entrance. To make the northern entrance into the main entrance would alter the entrance and the use of the building and therefore reduces the heritage values.

8.6 Principal comments

The most important cultural historical value of the Bonde Palace is architecture which is least affected by additions adapted to monumentality, symmetry, materials and colour of the building.

The best solution from an accessibility viewpoint, the external lift, is not acceptable because it distorts the heritage values. The solution which affects these values least, the entrance from the rear, does not result in a dignified entrance.

The Swedish cultural heritage sector's work with accessibility questions is characterised by efforts which as far as possible make the cultural heritage accessible to everybody. In their examinations of the cases the authorities regard accessibility as well as fire protection, evacuation, personnel safety and working environment as important reasons for changes. The particular reasons for changes are weighed against the loss of heritage values. The ways the changes are carried out are of decisive importance. The question is therefore how the heritage should be adjusted, not if it should be adjusted. In special cases where exceptionally high heritage values are at risk, the suitability of the activity in the particular building should be questioned and the possibility of making the values accessible in alternative ways be considered.

The changes should start from an analysis of the conditions of the actual object and the restrictions caused by the legal protection. The heritage values should be defined and widely known, and form the basis together with the desired functions. Faced with any kind of changes it is necessary that the participants have access to knowledge about and understanding of the history of the building, site or environment in question. Sustainable solutions are preferable but in some cases it may be better to opt for temporary reversible solutions. The additions may be matched or contrasted to the existing building, site or environment, or subordinate to or dominate them.

To work with accessibility in cultural heritage environments the competence of cultural history, architecture and design as well as accessibility are needed.

The higher the cultural historical values are, the more important it is that they are made accessible for as many as possible. Whatever we do to improve accessibility in the heritage environment should be of the highest quality, so that future generations will consider them as additions that reflect our views on equal human dignity.

9. The small and vulnerable monument

Oddbjørn Sørmoen

9.1 Nannestad kirke, the Church of Nannestad, Norway

A community church is a public building that is often in use throughout the whole week and year. Good accessibility is therefore vital. However, simplicity and a relatively small size is a common denominator for many Scandinavian churches. New additions will easily interfere with the cultural historical values and architecture at the sites.



FIG 9–1. Nannestad kirke, seen from the main road. Inger Karlberg ©

9.2 The cultural historical background

The church of Nannestad is situated on a hilltop in a fertile rural landscape in the county of Akershus, north-east of Oslo. The municipality of Nannestad has a rich heritage and the history of the church and the grave-

yard goes back to the Middle Ages. The church is mentioned in a story from 1240 in the Saga of Håkon Håkonsson.

Because of its relatively small size and poor condition, the church was rebuilt in 1692–3 with stones from the medieval building that stood on exactly the same site. The long-closed doorway in the southern nave wall is a reuse of a doorway from the medieval church. The exterior of the church is very much as it was in the late 17th century, with a simplicity in plan and form that many will rightly mistake for medieval: chancel, nave and porch.

The position on the hilltop is typical for rural churches in Norway in the Middle Ages. The church was the only public building in the community and was the cultic centre at a time when religion played an important part in everyday life. The church was visible to everybody, and is in our time pivotal for the *genius loci* (spirit of place). The topography reinforces the visual importance of the church, as it is fully exposed from the main road when approaching the village from south.

Both the site and the church are automatically listed under the Norwegian Heritage Act. Any intervention in the building and the medieval ground surrounding the church will need consent from the Directorate for Cultural Heritage.

9.3 The challenge

The church's position on the hilltop and the relatively high steps up to the main entrance on the western side cause problems when people with mobility impairments want to enter the building. The fact that the present parking area is on the other side of the road on the eastern side of the church does not make the approach any easier. The topography, which is central to the character and beauty of the medieval site, complicates further the situation for the wheelchair user.

The challenge is to make a good entrance for people with mobility impairments and prevent the entrance from reducing the heritage values of the church and the site.

This case is typical of many places in Norway:

- The small scale of the church, its simplicity and the topography make even the most minor interventions or additions stand out.
- The climate, with frequent adverse weather and temperatures far below 0° C for months every winter, and sudden changes in conditions, causes problems with snow and ice.
- Funding: under the Church Act the municipality has to pay for any maintenance and building projects connected to the local church, but there are limited resources to do anything more than is strictly necessary.

9.4 Accessibility solutions

1. A ramp on the southern side of the church
2. A lift or floor lift next to the entrance stairs

9.4.1 Alternative 1: A ramp on the southern side of the church

Descriptions of the work

The most obvious solution is to build a ramp with a gradient that makes it possible for a person in a wheelchair to get up to the entrance unassisted. In a rural community where people often have appropriate experience and a practical approach to work, making a ramp might seem to be the easiest and least expensive solution.

Since the parking area is east of the church, the ramp will slope up from east to the west on the southern side of the church.



FIG 9-2. The current main path to the entrance. Inger Karlberg ©

Influence on the cultural historical values

The ramp has several implications for the cultural historical values of the site.

Visual influence: Because of the topography a ramp would have to be as long as, or even longer than, the length of the church. The southern façade is the most exposed and characteristic side of this monument: since everyone driving past the church or going to services on foot approaches the church from the south, a ramp would easily distort the impression of the site because it will be highly visible to all. A ramp on the southern side will be a visual intrusion to the architecture of the church.

Since the church is so “clean” and simple the ramp should also be simple. A ramp may in some cases be partially hidden behind tree or shrub planting, or the lines softened in other ways, but in this case this will bring other distracting and untraditional elements to the site. The ramp’s profile is very likely to become a sharp line along the side of the church, seen from afar. Close up, a ramp of sufficient width will occupy much of the space between the church wall and the present gravel path. The natural simplicity will be spoilt.

The historic fabric: Above the ground this will not mean any intrusion into the historic fabric. However, the part of the building below ground level is also a part of the fabric. In this case the ramp might have an impact on the medieval foundations. It is not certain if this will be the case here, but it is probable.

Archaeology: Any construction on the ground will have to take into consideration the frost and the ground movements caused by freezing. This means that the ramp will need proper foundations. Since this is a graveyard from the middle ages, and parts of the foundation of the church are very likely to be medieval, this work will need scrutiny and permission from the archaeological experts. Consent would entail carrying out archaeological excavations or surveillance of the work. The depth of possible building foundations is not known. An archaeological excavation is likely. A graveyard is the most obvious place to find important human remains, and all human remains from the middle ages are listed.

A theoretical alternative would be to build a ramp of the same length on the northern side of the church. This would involve as much archaeological research but be more sensitive to the visual appearance of the site.

The functional consequences

A ramp will make physical access easy for everybody, and can be used without any assistance all the year round.

Taking the site and climate into consideration, there will always be a danger of snow and ice falling off the roof in the winter season. In the winter the slope will also have to be cleaned and kept ice free. To prevent this, stoppers may have to be installed on the roof against the snow.

A ramp on the northern side would not be so exposed, but the distance for the wheelchairs, will be unacceptably long.



FIG 9-3. The main entrance, Inger Karlberg. Riksantikvaren ©

9.4.2 Alternative 2: A lift or floor lift at the entrance

A lift or floor lift built at the porch in connection with the stairs at the west end of the church.

Influence on the cultural historical values

Visual influence: A lift will be an intrusive element to the old church. The right choice of material, colours and design would make an acceptable solution more likely.

The historic fabric: The porch was added at an unknown date, but certainly later than the time of the building of the church. It has, however, been altered several times, and is further away from the medieval foundations. The stairs are of 20th century date and can be altered or adjusted to accommodate the lift.

Archaeology: This solution is as likely to come into conflict with the archaeology here as on the southern side of the church, but the distance from the building as well as the much smaller surface area affected reduces the scale of the problem.

The functional consequences

A lift may be very easy to operate for the wheelchair users; however, other people with mobility impairment might be reluctant to use such technical devices.

The crucial functional point seems to be the climatic conditions. Lifts of the appropriate kind are regularly used outdoors in Nordic countries, but there is sometimes a reluctance to invest money in expensive technical devices that are believed to malfunction in severe winter weather.

Conclusion

A church in regular use is a place of worship, a venue for services, concerts, funerals and weddings; all of which require good and easy access for the congregation. A considerable number of people of all ages visit the church every year. For the local population the actual use of the building is just as important as its history. However, that history is nevertheless indispensable to the way people perceive the church and most of the things going on there.

Relative to the nave the porch is a modest structure, and adding a small lift to it seems less intrusive than a long ramp to the nave.

Technological developments for helping people with impairments are developing fast, not only in terms of the equipment itself but also in the supporting facilities, such as heating, which can help make the devices viable. For the owner of the church, the cost of the project is naturally a vital question, but equally important are the reliability and durability of the technical equipment.

A ramp would at first sight seem the simplest and economically “safest” solution. However, detailed costing of the two alternative options, including archaeological surveys and running costs have not been made. It is always difficult to put a cost on the loss of heritage value, which is very much in the eyes of the beholder.

9.4.3 Principal comments

At Nannestad the access challenge has not yet been solved, even though this is a very common kind of case: a small and vulnerable monument set against an obvious, but very intrusive solution. To overcome such problems here and elsewhere, new solutions need to be tried out. But is it too much to ask local congregations to carry out the experiments on their own?

Since the ramp and lift options were first considered, the circumstances at Nannestad have changed again. The construction of a new car park means that visitors will in future approach the church from the north, with the result that a ramp along the length of the nave is no longer a practical option. However, the underlying principles of the case remain valid and reflect the dilemmas faced at many other historic places in Norway.

10. Accessibility to Icelandic churches for people with mobility impairment

Magnus Skulason

In Iceland there are about 106 listed churches, spread all over the country, some in densely populated areas and towns, but most in the countryside and on islands. Many of the churches are built of wood, but some are of natural stone or concrete. The majority were built in the period 1840–1918.

According to the Cultural Heritage Act all churches built before 1918 are listed. In addition to these some churches are listed by special decision by the Minister of Education. No changes can be carried out without dispensation by the Husfredningsnevnden.

Accessibility to these churches varies greatly as a result of different natural conditions. At some sites it is not just difficult but actually impossible to carry out the changes that would make these places accessible for wheelchair users. In addition, there are the problems caused by heavy snowfalls in the winter.

On the other hand, many village churches are hardly ever used – in some cases perhaps only once a year. This lack of use makes it hard to defend expensive alterations to the buildings, which bring with them disfiguring changes thereby reducing the heritage value of the churches and the appreciation of their architecture and sites.

Churches in daily use in towns and densely populated areas should have priority when it comes to demands for accessibility. In many cases a temporary solution has been found: a removable and extendable aluminium ramp with a length of 1 to 3 metres, produced in Sweden. Installing these ramps has brought about a considerable improvement in many places, making it possible for many wheelchair users to enter the churches, albeit with some assistance.

Many wheelchair users are reluctant to be carried or lifted because they regard this as degrading. The lightweight aluminium ramp is simple to use by the sextons who are on hand to help the visitors.

Listed below are some examples of accessibility to Icelandic churches.

10.1 Laufaskirken, the Laufas church (built 1865 – 7)

10.1.1 Background

The church is situated in the countryside at Eyjafjord in northern Iceland. The location of the church is of great importance as it is next to one of the best-protected turf farms in Iceland.

10.1.2 Challenge

The situation here was complicated because the church is on sloping terrain and its only entrance is at the front via three steps. This made it difficult to envisage a scheme for improved permanent accessibility that did not detract visually from the site. The present incumbent is a wheelchair user, making it even more important to find a solution.



FIG 10–1. Laufaskirken. Magnus Skulason. Húsafriðunarnefnd ríkisins ©



FIG 10–2. Laufaskirken. Magnus Skulason, Húsafríðunarnefnd ríkisins ©

10.1.3 The alternatives for improved accessibility

1. A permanent ramp at the front
2. Installing a lift by the steps
3. Temporary solutions.

10.1.4 The consequences of the alternatives

1. In this case a permanent ramp at the front would disfigure the church façade and was therefore an unacceptable solution.
2. Putting in a lift would mean transforming the steps. The steps are a relatively new feature of the church so a change is therefore acceptable. However, in this area there is heavy snow and thick ice in the winter and there is therefore some uncertainty about how reliable a lift would be. Heating the stairs and the lift would not be feasible here, since there is no geothermal heating at the site.
3. A temporary reversible solution would be the acceptable option as it will not lead to any damaging interventions in the building.

10.1.5 Principal comments

The solution was to make a temporary ramp which could be attached to the steps of the church. The steps have not been altered. A connecting walkway was made between the landing at the top of the steps and the doorway to the church, which made it possible for the incumbent to enter the church.

In this way accessibility for wheelchair users and the physically impaired has been improved. The solution is reversible and does not lead to

interventions in the construction of the listed building. The next step will be to find a permanent solution based on the same idea.

10.2 Husavik kirke, Husavik church (built 1906 – 8)

10.2.1 Background

The church was built and designed by the architect Rognvaldur Olafsson, Iceland's first qualified architect. The church, built of wood and in Carpenter Gothic style, is one of his major works and it has an important position in the streetscape at Husavik, the second-largest town in north-east Iceland. It is relatively large and can seat 300 people. Both the interior and exterior of the church are listed.

10.2.2 Challenge

At the main entrance, facing the main street, there is a concrete flight of six steps. At the side entrance on the southern side of the church the ground rises slightly and consequently the flight of steps there is not as high. There is no lift or ramp at either of the entrances. Inside the church there are stairs up to the organ and the choir's gallery.



FIG 10-3. Husavik kirke. Magnus Skulason, Húsafriðunarnefnd ríkisins ©



FIG 10–4. Husavik kirke. Magnus Skulason, Húsafríðunarnefnd ríkisins ©

10.2.3 The alternatives for improved accessibility

1. The local disability organisation wished to have a permanent ramp installed at the main entrance. The application has been turned down because the ramp would detract from the architecture of the façade. As an alternative, a removable aluminium ramp has been put in place and a handrail has been fixed to the wall next to the main flight of steps to assist the elderly and the slightly disabled.
2. Installing a ramp or lift at the side entrance on the southern side has also been considered. There is a garden here, so there would be sufficient room for such a solution. A ramp or lift would not be as visually intrusive on this side as by the main entrance.

10.2.4 Consequences for the heritage value

A ramp on the main façade of the church, which faces the main street of the town, is considered detrimental to the listed building, and is therefore unacceptable.

10.2.5 Principal comments

In this case it was considered that a ramp on the church's main façade, facing the main street of the town would have an adverse visual impact on the listed building. Sometimes it is better to let things lie for a time, instead of forcing something through. At Husavik there has been a discussion about establishing a community house in connection to the church, either in a new building or in an existing building close by. The

congregation has recently bought the neighbouring house, on the southern side of the church. The challenge now is to find an acceptable solution for access for all to both buildings and the connection between the two.

The provision of an aluminium ramp offers an acceptable temporary solution, allowing time for better and more satisfying permanent solutions to be considered.

10.3 Grenjadarstada kirke, Grenjadarstada church (built 1868)



FIG 10–5. Grenjadarstada kirke. Magnus Skulason, Húsafríðunarnefnd ríkisins ©



FIG 10–6. Grenjadarstada kirke. Magnus Skulason, Húsafríðunarnefnd ríkisins ©

This church is also on the north eastern side of Iceland, not far from Husavik. Like Laufaskirken, it stands next to one of the five largest and well-preserved turf farms on Iceland.

Visitors have to pass through a freestanding clock gate in front of the church and then walk up a 6-metre-long path of natural stone before reaching the church door. The path is 40 centimetres lower than the floor level of the church. The solution to the accessibility challenge in this case has been to raise the ground level of the stone path in front of the church. This works well and the raised area is heated geothermally.

10.4 Modruvalla kirke, Modruvalla church (built 1878)



FIG 10-7. Modruvalla kirke. Magnus Skulason, Húsafríðunarnefnd ríkisins ©



FIG 10-8. Modruvalla kirke. Magnus Skulason, Húsafríðunarnefnd ríkisins ©

Modruvalla church is situated on the western side of Eyjafjord, not far from Akureyri. Access to the church has been difficult for a long time because the path has never had a hard surface, only grass. In this area

there is heavy snow in winter. At the entrance to the church there is an original flight of cast-iron steps, which it is important to preserve. The area in front of the door is only 30 centimetres deep and the difference in height between this and the church floor is 20 centimetres.

Installing a ramp up to the church door could damage the nearby old graves and have an adverse impact on the architecture of the church. One suggestion is to make a geothermally heated and raised path that takes the graves into consideration. A copy of the cast-iron step, with a larger area in front of the door and a handrail on both sides, would improve the church's accessibility for disabled people.

10.5 Reykjavik katedral, Reykjavik Cathedral (built 1796 – 1846)



FIG 10–9. Reykjavik katedral. Magnus Skulason, Húsafriðunarnefnd ríkisins ©



FIG 10–10. Reykjavik katedral. Magnus Skulason, Húsafriðunarnefnd ríkisins ©

The original architect of this stone church was Anders Kirkerup, the Royal Master Carpenter. The church was extended and rebuilt in 1846 with Danish bricks. The architect in charge of the extension was the Royal Surveyor, Laurits Albert Winstrup. The church has two entrances: the main entrance and one through the sacristy.

By 1985 there was a growing demand for making the church accessible for disabled people and for wheelchair users through the main entrance. In front of the main entrance there is a flight of four steps, in cut natural stone. A thorough evaluation concluded that a ramp at the main entrance would mean significant visual alteration to the cathedral's façade, with serious negative consequences for the appreciation of its architecture.

The alternative of an entrance for wheelchair users through the sacristy was proposed, as the difference in height there was less significant and not so apparent. There was, however, a height difference between the different floor levels in the sacristy itself.



FIG 10–11. Reykjavík katedral. Magnus Skulason, Húsafríðunarnefnd ríkisins ©

The following solution was chosen:

The pavement was raised to the same level as the outer part of the sacristy. To allow access to the higher level of the inner sacristy, which is at the same level as the cathedral floor, a lift that could be concealed in the lower sacristy floor was installed.

Access to the upper floor of the cathedral, the choir loft and the church loft has not yet been solved. This last loft is used for choir practice, and until this challenge has been overcome it is not possible for physically impaired people to participate in the choir.

10.6 Conclusion

The conditions at Iceland's churches are all very different and the challenges have to be evaluated on an individual basis. Frequency of use is an important factor. If the church is rarely used the demands for accessibility are correspondingly lower. This might mean that some architectural masterpieces will remain inaccessible for disabled visitors.

11. The main entrance is not necessarily always the best

Oddbjørn Sørmoen

11.1 Andorsengården, the Andorsen building, Mandal, Norway

The principle that everyone should enter a building through the same main entrance is obviously a right and good one. However, it is sometimes impossible to apply the principle to a historic building without destroying many of the qualities that make it so attractive. One alternative could be to build a new entrance, for universal access, and to change the internal communication in the building.



FIG 11–1. Andorsengården, street façade, in the 19th century. Riksantikvaren ©

11.2 The cultural historical background

The Andorsen building lies in the centre of Mandal, a shipping town in Vest-Agder County at the southern end of Norway. The tall-ship trade was particularly important in the 18th and 19th centuries. Mathias Knutzen was one of many to profit from this trade, and in 1801–5 he built his distinguished new home here, now known as the Andorsen building.

The building received its present name when Knutzen was forced to sell it to Consul Gulow Andorsen in 1822, as a result of the economic depression following the Napoleonic wars. In 1909 the daughters of the ship-owner Christian Salvesen, who were also the grand-daughters of Andorsen, bought the building. In 1953 they donated it to the Municipality of Mandal.

The building is situated on one of Mandal's typically narrow streets and is flanked by white wooden buildings from the same period, built for business, shops and living. The building being described here is the main one of two at the property. They are linked to each other but still separated at ground level, with a covered carriageway leading from the street to the backyard and garden. The building is a half-timbered house, covered on the outside surface by wooden boards. Over the basement are a raised ground floor, a first floor and an attic. On the narrow pavement facing the street is a high flight of steps. On the rear side a garden goes down to a river. The building consists of 20 rooms, some of which were large reception rooms used for entertaining the upper echelons of society in this small shipping town.

Today the Andorsen building is a public museum, Vest-Agder Museum Mandal, as well as the local library, and the building is frequently used for exhibitions, talks and concerts.

The buildings are listed under the Cultural Heritage Act and no changes can be made without consent from the Vest-Agder County Heritage Authorities.

It should be mentioned that a very interesting and attractive room in the main building is the entrance hall, which is dominated by an authentic period grand staircase.



FIG 11–2. A period photo of the attractive entrance hall. It looks the same today. Riksantikvaren ©

11.3 The challenge

The Andorsen building has an important public function both as a museum and city library as well as a venue for various cultural events. Because of the basement and the raised first floor visitors have to enter the building via a tall flight of steps facing the narrow street. The building itself has a high degree of authenticity linked to the first part of the 19th century.

There is obviously a need to improve accessibility for people with various degrees of mobility impairments. Today it is not possible for people in wheelchairs to enter the building.

11.4 Accessibility solutions

11.4.1 Alternative 1: Entrance through the main entrance via a lift or ramp to get up the main flight of steps

Descriptions of the undertakings

A lift or lifting board built in connection with the flight of steps would mean that everyone would be able to enter the building through the same door.

The lift could be built in various ways. It could be put on the street side of the flight of steps or it could be fitted into the flight itself if half of the latter was removed, because the present symmetry of the flight of steps is not strictly necessary for the function.

Because the first floor is raised, a ramp with the appropriate gradient would need to be very long, and measurements indicate that it would extend beyond the corner of the building.

Influence on the cultural historical values

The historic fabric: The fabric of the flight of steps might not be of particularly high value if it has been modified over the centuries.

The visual influence: The character of the flight of steps, however, is important. These types of flights were characteristic of the bigger buildings in this kind of town environment in the 18th and 19th centuries. The symmetry shows the importance of the building and makes the entrance more impressive – after all, this building was originally the home of a wealthy family.

A lift linked to the flight of stairs would visually intrude on to the streetscape as well as the architecture of the building, but there have been developments in these kinds of lifts that make it impossible to exclude this option entirely.

A ramp of the size needed here would be an unacceptable solution for this building. The façade and the streetscape will be visually distorted even though the ramp itself does not damage the fabric of the building and could be made reversible.

The functional consequences

A lift might function well in this case, depending on how it is fitted in to the flight or to the building. Despite the fact that the winters can be harsh in southern Norway, ice and frost are unlikely to be a great problem.

The ramp solution is less satisfactory, since it would have to be very long and would be cumbersome to use. Having entered the building through the main entrance those with mobility impairments would still need a lift to access the upper floors. The presence of the grand period staircase precludes the possibility of installing such a lift in the main entrance hall.

Conclusion

Neither of these options would normally be acceptable in this case. The intrusion into the historic building and site would be unacceptable, but the possibility of the development of new technical solutions and good design in the future should not be overruled.

11.4.2 Alternative 2: Entrance via the carriageway



FIG 11-3. The carriageway. Oddbjørn Sørmoen, Riksantikvaren ©

Descriptions of the undertakings

The proposal here is for visitors to come off the street through the carriageway and enter the main building itself through one of the service access doors (which would have to be widened) in the basement on the gable side of the building. This option necessitates the installation of a lift inside the building leading up to the various floors.

Influence on the cultural historical values

Visual influence: Seen from the façade and the streetscape this option is very attractive, since it is virtually invisible from that side. It will have an impact on the appearance of the carriageway, which is an important part of the building as it explains its original use.

Historic fabric: This option involves considerable changes to one of the service access doors. There are, however, two such doors, so the function of the building can be still be evidenced through the one remaining. The big questions concerning this access are the alterations in the floors that installing a lift shaft would necessitate, and the changes of use and space in the rooms the lift goes through. This is a relatively big building, but a lift will still demand a great deal of space.

The functional consequences

As it would be inside the building, the lift would function well in technical terms. Visitors will have to pass through the carriageway, but that might be an advantage since they would be protected from rain and wind.

From the functional point of view, one has to consider the movements inside the building up to the other floors. The rooms on this side of the building are relatively small, and the lift would probably make it impossible for their present use to continue. The functional consequences for the way the museum and library are run are part of the whole picture and therefore a material consideration in any discussion of the options.

Conclusion

Alternative 2 is much more satisfactory than alternative 1, seen both from the visitor's and the cultural historian's point of view. There are losses connected to floor space and the original fabric and how important these aspects are will have to be fully considered. This option will, of course, cost more than alternative 1.

11.4.3 Alternative 3: Entrance via a new lift tower on the other gable side of the building



FIG 11-4. The gable seen from the garden. Thor Gunnar Hansen, Vest-Agder-museet Mandal ©

Descriptions of the undertakings

The building has one freestanding gable end, since there is no other building directly attached on this side. This space is currently occupied by part of the garden. This proposal is for a simple lift tower to be built on this side, linked to but not in the gable. A lift tower would be a modern addition to the original building, and it would be visible, although not to any great extent, from the street, but it would not impinge on the impression of the main façade. It would be preferable if the tower was made of wood, to match the materials and design used on the façade. Modern materials and design are theoretically feasible, but would be more prominent than the wooden boarding.



FIG 11–5. A period photo seen from the garden. Riksantikvaren ©

Influence on the cultural historical values

Alternative 3 means less intrusion into the original fabric because above ground only the passages into the building will be affected. A scrutiny of the gable and old photos shows that there once was a veranda with a balcony at the gable side stretching around the corner to the first two windows on the riverside. This means that the authenticity of the fabric of this corner is not as intact as it first looks like. Further adjustments and possibly larger openings in the building may be necessary in the course of construction, but the loss of original fabric would not be considerable.

Visually, however, this solution is not ideal, as it necessitates a new and unhistorical addition to the building. How intrusive it needs to become remains to be seen.

A new construction added to a building will be more intrusive the bigger it becomes. Despite this, alternative 3 ought also to explore the possibility of solving other issues of visitor reception, such as the provision of toilets, information stands, and ticket distribution for exhibitions, etc.

The functional consequences

Alternative 3 opens up not only new solutions but also problems. A well-functioning built-in lift would be an excellent way of entering the building and is also technically easy to construct. It could become the new principal entrance to the building, and thus serve as the entrance for all users.

Conclusion

A new entrance will change the internal configuration and use of the building. The success of alternative 3 will depend not only on the design and size of the lift tower but also on the question of how it influences the use of the rooms.

11.4.4 Principal comments

This case shows that there are several options for providing access to a building of this size with different consequences. The traditional entrance is not necessarily the best if it has to be accessible for everyone. If the building loses its historical character, however, it will also lose much of its attractiveness.

The case also emphasises that it is of pivotal importance to look at all the aspects of the building, including its current and future uses, in order to fully cover all the options. The different values have to be considered by all the partners in a project like this.

Inside the main entrance is an authentic period staircase leading to the first floor. Installing a lift in this room would destroy the building's most valuable room.

12. A prominent national building made accessible for all

Magnus Skulason

12.1 Thjodmenningarhusid: The Old State Library, “The Culture House – The National Centre for Cultural Heritage”, Reykjavik, Iceland



FIG 12–1. Thjodmenningarhusid: “The Culture House – The National Centre for Cultural Heritage”. Magnus Skulason, Húsafríðunarnefnd ríkisins ©

The Old State Library was designed by the architect Johannes Magdahl-Nielsen for the Icelandic Authorities, and built 1906–9.

The building of the Culture House at Hverfisgata marked a turning point in the history of the construction industry in Iceland because it was the last big building to be designed and built under Danish supervision. The building was constructed in the first year of home rule on the initiative of the Prime Minister, Hannes Hafstein, and the initial intention was that it should house the National Library and National Archives. The Danish architect Johannes Magdahl-Nielsen was put in charge of the

project. He often took his inspiration from medieval buildings, and this influence is visible in the Culture House, for example in the design of the windows and the special door framings. The house is also influenced by the Royal Danish Library in Copenhagen, another project in which Magdahl Nielsen was also involved.

The outer walls are double skin, with chiselled Icelandic basalt on the exterior surface, concrete on the inside and an open space in between. The basalt is firmly plastered and painted white, which was unusual in Iceland at the time. Other innovations in the Culture House were the moulded floors and concrete stairs. Concrete floors had only been moulded once before in Iceland. A great deal of consideration was given to the interiors, both the fittings and the furniture, which were designed by the Danish architect Frederik Kiørboe.

When the Culture House was completed in March 1909, in addition to the National Library and the National Archives it also housed the National Historical Collections and the Collection of Antiquities, which were moved there temporarily. In 1994 the National Library moved to a new building, Thjodarbokhladan, and in 1998 the National Archives relocated to new premises in Laugavegur.

The building now bears the name “The Culture House – The National Centre for Cultural Heritage” and is a venue for permanent and temporary exhibitions, meetings and lectures, theatre performances and other cultural events. The government uses the building for its weekly press conferences, and there are exhibitions of old Icelandic manuscripts, Snorra Edda from 1220, a presentation about Surtsey, the island which appeared out of the sea during the volcanic eruption, and photographs of the Nobel-Prize-winning author Halldor Laxness.

The Culture House’s position in the streetscape, next to the National Theatre, is of great importance as is its value as one of the most significant cultural heritage buildings in the country. The building was listed in 1973.



FIG 12–2. The main entrance. Magnus Skulason, Húsafriðunarnefnd ríkisins ©



FIG 12–3. The main stairs. Magnus Skulason, Húsafriðunarnefnd ríkisins ©

12.2 The challenge

The main entrance, which is from the Hverfisgata, is reached by a flight of nine steps made of Icelandic basalt. Access by car is restricted to guests of honour. There is no space for visitor parking by the entrance. There are, however, some parking spaces at the side and at the rear of the building. At the rear there is access down to the basement via five or six steps.

There is no ramp to allow wheelchair users access into the building. Inside there are stairs between the various floors, but no lifts. The challenge was therefore to alter the building so that people with mobility impairments could make use of it, while bearing in mind the important functions of the building.

12.3 Alternatives for improved accessibility

1. Providing wheelchair access at the rear of the building through the basement
2. Providing wheelchair access at the main entrance via a ramp
3. Installing lifts between the floors large enough to take wheelchairs
4. Providing facilities for disabled.

12.4 Consequences for the heritage value of the building

1. To lower the terrain without seriously changing the character of the architecture of the building would have been relatively easy. Installing a preheated ramp along the building from the car parking area would make it easy for wheelchair users to enter.

2. Putting in a wheelchair ramp at the main entrance would have a major visual impact on the building's heritage values.
3. Installing lifts between the floors could be done without adverse effects on the heritage values.
4. Likewise, facilities could be adapted to accommodate disabled users without adversely impacting on the heritage values.



FIG 12–4. The rear side, showing the alternative of an entrance in the basement. Magnus Skulason, Húsafríðunarnefnd ríkisins ©



FIG 12–5. The new lift to the main entrance. Magnus Skulason, Húsafríðunarnefnd ríkisins ©

12.5 Working with the alternatives

In the years 1996–8 the building underwent alterations and repairs, after a dispensation for putting in a lift from the basement to the second floor was granted. At the same time an application to put in a ramp at the main entrance was turned down on the grounds that it would visually intrude in the façade of the heritage building.

The solution was to make an entrance for wheelchair users through the basement, where it was also decided to house the cloakrooms and facilities for the whole building. Alternatives 1, 3 and 4 were thus realised.

Two years after these alterations had been made, a review of visitor access concluded that making the disabled access the Culture House at the rear of the building via the basement was inappropriate.

A proposal was put forward to rebuild the main steps at the front of the building so that there was space for a wheelchair lift next to the steps as well as space for wheelchairs to turn in front of the main door. This meant moving the platform at the top of the steps forward by 1 metre and lowering the threshold.

A dispensation from the statutory listing was given for this solution five years ago, and the new access has been in use for the last five years.

The lift can be operated both from within the lift itself and by the porter from above, using a control panel next to the main door. The lift is not heated and there have not been the anticipated problems with snow and ice during the winter months. Snow is simply removed by the porter. The wheelchair user has to ring a bell to alert the porter to open the double entrance door to the building.

12.6 Consequences for the building's heritage value

The wheelchair lift almost disappears into the ground and has very little visual impact on the building.

12.7 Principal comments

With hindsight, the initial decision to refuse dispensation for installing a ramp at the front on the grounds of adverse visual impact on the building was the right one. Waiting for the correct solution to emerge has paid off. Today the revised arrangement works well, with the caveat that some assistance is needed from the porter to open the heavy double door.

13. The heritage of modernism

Ebbe Keld Pedersen

13.1 The Town Hall, Århus, Denmark

The buildings of Modernism demand the same gentleness as buildings of earlier times when being altered. We know the ideas of modernist architects, and many of their buildings still stand in their original shape. The basic ideas of the buildings and their authenticity therefore become pivotal factors in the way we treat them.



FIG 13–1. Århus rådhus, designed by Arne Jacobsen and Erik Møller. Alice Rosenborg ©

13.2 Background

Århus Town Hall was built in 1938–42, designed by the architects Arne Jacobsen and Erik Møller.

The lay-out of the building consists of three connected wings which overlap each other. The principal wing facing the town-hall square contains the main hall, the city council's meeting room and the ceremonial rooms. The tall central wing contains offices, while the low wing below the tower is adapted to civil service.

The character of the town hall is related to the rebuilding and addition to Gothenburg Town Hall which was designed by Gunnar Asplund. Thus Århus Town Hall represents the special Scandinavian form of modernism which is characterised by a softening of the form and the use of natural materials. This is particularly expressed in the interior.

The vestibule plan is characterised by soft contours where the rounded wall of the city council hall is projected down into the limit of the entrance towards the vestibule floor. The straight staircase leading to the first floor is off centre in the room, while the spiral staircase leading to the basement is built freestanding on the floor.

In the small scale the soft contours are more manifest. The carrying iron constructions are rounded off with a smooth gesso plaster everywhere. This is most apparent in the vestibule where the cruciform pillars carry the slightly vaulted grating which supports the city council hall.

The pillars are softly rounded vertically and rounded at the top, except for the core itself which carries the overlying construction. The pillars are topped with a hood of brass, while their encounter with the floor is mediated with a brass moulding. The transforming joints are equivalent to the capital and base of classical columns.

The vestibule walls and the hall are covered with panels of beech lists. In the tall wing, the walls between the visible shell of iron reinforced concrete are filled with plates of beech plywood. The varnished surfaces let through the nature of the wood. Hand railings, door opener, wall lamps, and other accessories are made in brass. The materials come forward in a warm and golden colour scheme, and they are prepared with an exquisite finish.

The Town Hall is well endowed with artworks which have been planned and made in connection with the building process, thus being an integral part of the architecture.

In 1995, the Town Hall and its surroundings were listed. In the grounds for listing it says that the Town Hall is a principal example of the Nordic version of the functionalism which finds its ideals in the international architectural currents of its time.



FIG 13–2. *The vestibule.* Alice Rosenborg ©

13.3 The challenge

The Town Hall has to be accessible for citizens. Everybody should have an opportunity to participate in the democratic process and have access to municipal services. Therefore the protection of the building as cultural heritage has to be balanced with the use of the building.

In 2004, the ombudsman of Folketinget, The Danish Parliament, carried out an inspection of Århus Town Hall in order to examine the accessibility of the building and its surroundings for disabled employees and visitors. The ombudsman found that since the building had been completed, hardly any changes had been made to satisfy e.g. the needs of disabled people. Afterwards, the report following the inquiry has formed the basis for several initiatives.

13.4 Initiatives for improved accessibility



FIG 13-3. The ramp in the vestibule. Alice Rosenborg ©

13.4.1 Ramp in the vestibule

From the main entrance the visitor enters into the vestibule. The entrance of the vestibule is three steps lower than the rest of the vestibule. In one corner the difference in level is resolved by a fixed bench. The surface of the entrance floor is covered in mosaic stone; the floor of the remainder of the vestibule and hall is parquet made of bog oak.

In order to overcome the difference in levels, a short ramp is situated next to the security man's desk. The ramp which has low raised edges is made of bog oak staves.



FIG 13-4. The ramp to the city council hall. Alice Rosenberg ©



FIG 13-5 Detail showing how the new ramp meets the existing step. Alice Rosenberg ©

13.4.2 Ramp to the city council hall

The city council hall is on the first floor. Access is through the circulation hall. This takes the form of a 4-metre wide corridor, one wall of which is taken up by the shelves of a reference library. To muffle noise, the parquet floor is covered with a fixed carpet. The level of the city council hall is two steps higher than the circulation hall.

As the entrance to the circulation hall is close and at right angles to the entrance to the city council hall, the difference in levels has been overcome by a combination of ramp and steps. These are curved in shape. The floor is made of light beech parquet and a darker mahogany has been used to distinguish the extension of the ramp and steps.

The new ramp-and-steps are fitted to the wall so as to retain as much of the older wall material as possible. There are plans to take up the carpet in the circulation hall in order to make the parquet flooring re-appear, and overcome the problem of noise by fitting an acoustic ceiling cover instead.



FIG 13-6. The call button at the lift. Alice Rosenborg ©

13.4.3 Call button at the lift

The lift tower at the side entrance is a steel construction with glass sides. The service panel is fitted on the supporting construction. The surface of the panel is in polished brass. As it was not possible to integrate a new call button in the existing service panel, it has been housed in a separate panel of the same design and materials as the original one.

13.5 Authenticity

The examples above illustrate simple and gentle solutions with an effort to keep interventions in the building to a minimum. This is largely due to the fact that the exterior and, in all essentials, the interior of the Town Hall remain unaltered since the time of erection. Thus, the Town Hall can still be regarded as an authentic building.

The fact that the building is authentic does not automatically mean that it is valuable. One can, however, choose to use authenticity as a criterion of importance in the evaluation of the building. In the West, authenticity is usually linked to the age of the monument and the genuineness of materials. In the East, more emphasis is put on the ideas and processes that formed the basis of the work, regardless of the material age of the monument.

A hallmark of modernist buildings has been the architects wish to break with the usual concepts. Many buildings therefore represent a new way of thinking in terms of function, building technique, and visual expression. The buildings are often well documented with sketches, construction drawings, and descriptions. Thus we know a great deal about the basic ideas behind them. Authenticity in relation to the basic ideas of the buildings can therefore be a parameter in the work to preserve the modernist buildings.

Authenticity as a part of the basic ideas can be specified in relation to the functional, technological and architectural concept of the building. Århus Town Hall is still in use as a town hall. No interventions have been made in its construction, and the materials of the building are still original. And finally, the building has the same visual appearance as when it was built.

The interior changes which have been described above, relate to the technological and architectural concept. This primarily concerns the materials, the quality of the craftsmanship, and the soft rounded shapes. The new call button on the lift might have been designed in this way when the building was erected.

13.6 Basic ideas and accessibility

It would have been in tune with the basic ideas of modernism, if the difference in levels between the circulation hall and the city council hall had been compensated by a contemporary technological solution.

During the accessibility work in the town hall, the problem concerning the circulation hall and the city council hall became evident, as one of the candidates for the city council was a wheel-chair user. A solution was suggested whereby a ramp was built in between the steps which could be pulled out when needed.

In the opinion of the wheelchair user this solution would be too elaborate: It would take time to get the ramp into use and the arrangement would be inconvenient for other users of the steps. A permanent and more conventional solution was therefore chosen with due attention paid to the overall architectural concept.

It has been put forward that the solution might be risky for other users who could stumble where the ramp and steps are joined. This fear has proved to be groundless. Everybody has been happy with the solution chosen.

13.7 Final remarks

Originally, the town hall was the result of an architectural competition to “Design a contemporary building for the government and administration of the city”. The winning proposal showed the building with bright concrete-plastered facades and white-painted windows and gutters. The jury found that “The exterior of the building appears with a beautiful, monumental and festive quality that expresses the functions behind in a natural way”.

However, this was at odds with public opinion. Among other things, it was expressed that there was no desire for a “drawing room communist concrete box”, and in addition to this the building lacked a tower. Layman wanted a “house of the city” with a visible identity and symbolic values. The architects reluctantly compromised, and the building was fitted with a tower, marble-covered facades, and the city’s coat of arms above the main entrance.

The municipality of Århus takes good care of the building. An architect sees to it that proposals for change respect the architectural characteristics of the building. And the daily cleaning is done by the municipality’s own employees. Not by a cleaning company.

14. Accessibility to some public buildings in Denmark

Ebbe Keld Pedersen

Many listed buildings have maintained their original function, not least the public ones. In an assessment of the values of these buildings the cultural historical aspects – the original function – are conspicuous. Buildings that serve a public use should fulfil the demands of accessibility. The age, function, architecture and character of the building often exclude overarching solutions for accessibility. The questions of accessibility therefore have to be dealt with differently in each building.

The following examples show how the challenges for accessibility can be solved for people with mobility impairment or wheelchair users in protected buildings. The examples are a good illustration of the scope of possible solutions. They were carried out in different places in Denmark from the 1990s until 2003. Technological innovations have opened up new possibilities for solutions and have benefited heritage professionals, who have shown an increasing interest in design and the adjustment of design to fit the circumstances of a particular building.

The experience of a listed building is to a great extent a visual one. Efforts have been made to design the new access facilities in a discreet way, even occasionally hiding them, so as not to interfere with the general impression. From time to time this may have led to solutions that are less than ideal when seen from the viewpoint of the disabled – for example, entry via the rear of the building. In some of the examples one could wish for better signage to mark the location of control buttons to activate automatically opening doors. On the other hand, everybody, including wheelchair users, can experience the undisturbed character of the building.

14.1 Metropolitanskolen, The Metropolitan School

The Metropolitanskolen was built in 1811–15 and designed by C. F. Hansen. The façade faces the square surrounding Vor Frue Kirke, Our Lady's Church, and the two buildings together form a neo-classical ensemble. The school is still used for teaching purposes, but today it is part of the University of Copenhagen.

14.1.1 The challenge

The challenge was to make an access for people with mobility impairment to the lecture rooms on the ground floor and to a new disabled toilet.



FIG 14-1 Metropolitanskolen: Access via a door in the gable of the building. Ebbe Keld Pedersen, Kulturarvsstyrelsen ©

14.1.2 The solution

People with mobility impairments and wheelchair users have access to the building via a door in the gable of the building. A short ramp leading up to the door has been fitted in under the window, with the same width as the window.



FIG 14-2. Internal lift. Ebbe Keld Pedersen, Kulturarvsstyrelsen ©



FIG 14-3. The new door to the right. Ebbe Keld Pedersen, Kulturarvsstyrelsen ©

To give access to the ground floor and the basement level a lift has been installed in the double wall. The doors leading into the lift are automatic. The new door on the ground floor has been cut into the wall symmetrically with the old door; its design has references to the old door but at the same time clearly marks it as new.

The lift solution respects the basic concept of the building and its architectural character. The size of the lift is, however, limited and admits only relatively small wheelchairs.

14.2 Kunstforeningen, Gammel Strand, The Art Society

The building at Gammel Strand 48 was originally constructed in 1750–1 to a design by Philip de Lange. It was damaged by fire in 1795 and to a great extent rebuilt. The property consisting of the front building facing Gammel Strand, two side buildings as well as a rear building facing Læderstræde was bought by Kunstforeningen in 1941.



FIG 14-4. Kunstforeningen. Ebbe Keld Pedersen, Kulturarvsstyrelsen ©

14.2.1 The challenge

The access to the front building has always been difficult. From Gammel Strand there are six external steps leading up to the main entrance door, followed by another stairs of four steps inside the building, leading to the ground floor. This arrangement also applies to the court side.

The property stretches to Læderstræde, where a gate passage leads into the courtyard. In the 1950s a goods lift to the front building was installed in the courtyard. As this did not function well and was not suitable for carrying people, it was to be replaced by a new lift.



FIG 14–5. The lift in the courtyard. Ebbe Keld Pedersen, Kulturarvsstyrelsen ©

14.2.2 The solution

The new lift was built in 2000. There is direct access to the lift from the courtyard level. On each floor there is access to the landings of the main stairs.

The lift tower is made of stainless steel and glass. All exterior steel parts and doors are painted. The doors and walls of the lift are also made of stainless steel and glass. The lift tower presents itself as visually co-

herent and is in marked contrast to the secondary and rather anonymous architectural expression of the courtyard.

14.3 Den Frie Udstillingsbygning, Den Frie Centre of Contemporary Art

Den Frie Udstillingsbygning Oslo Plads in Copenhagen was built in 1913, designed by the painter and sculptor J F Willumsen. The building originally consisted of three halls, but by 1921 it had been extended by another three. The building represents the desire of the Art-Nouveau period to allow painters to design buildings. In 1953 the building was once more extended by the addition of some smaller halls designed by Thyge Hvass.



FIG 14-6 Den Frie Udstillingsbygning, Ebbe Keld Pedersen, Kulturarvsstyrelsen ©

14.3.1 The challenge

The main entrance to the building has a small roof supported by double columns. The steps, originally three steps, lead up to the main entrance door. Up until a few years ago wheelchair users wanting to get into and around the building had to be accompanied by members of the Centre's staff carrying a removable ramp, as there is a difference in floor levels throughout the building.

The challenge was to make a proper disabled access to the building itself and to the different levels inside.



FIG 14-7 The new side entrance. Ebbe Keld Pedersen, Kulturarvsstyrelsen ©



FIG 14–8. Den Frie Udstillingsbygning, internal lift. Ebbe Keld Pedersen, Kulturarvsstyrelsen ©



FIG 14–9. Den Frie Udstillingsbygning, internal lift. Ebbe Keld Pedersen, Kulturarvsstyrelsen



FIG 14–10. Internal lift in contemporary design. Ebbe Keld Pedersen, Kulturarvstyrelsen ©

14.3.2 The solution

As the proportions of the main entrance are small and the fine details are vulnerable to changes, a side entrance was chosen. A ramp parallel to the façade leads to the side entrance, replacing a previous window into the cloakroom.

The differences in level of four steps between the exhibition halls have been overcome by installing floor lifts. These are level with the lower floors but are raised up to the higher level when in use. When not in use they are virtually invisible.

While the external ramp is permanent and fits in well with the exterior of the building, the internal floor lifts are discreet and do not intrude into the visual appreciation of the building's interior.

14.4 Rødovre Rådhus, Rødovre Town Hall

Rødovre Rådhus was built 1952–6, and was designed by Arne Jacobsen. The buildings, the offices and the town council wings are unchanged. The interiors show the refined details of Jacobsen's personal style, not least in the delicate hanging stairs made of steel and glass.



FIG 14–11. Rødovre Rådhus, external entrance. Ebbe keld Pedersen, Kulturarvsstyrelsen ©

14.4.1 The challenge

The main entrance is marked by a low baldachin, canopy, supported by two steel columns. In front of this there is a bigger and higher baldachin, which is an independent construction. From the level of the town hall square two steps lead up under the baldachin to the entrance door. Once inside the building there are a further two steps up to the ground floor. The challenge was to find solutions for wheelchair users that would harmonise with the building's refined architectural details.

14.4.2 The solution



FIG 14–12. Internal lift in contemporary design. Ebbe Keld Pedersen, Kulturarvsstyrelsen ©



FIG 14–13. Internal lift in contemporary design. Ebbe Keld Pedersen, Kulturarvsstyrelsen ©

The external difference in level is bridged by a freestanding ramp that is parallel to the façade. The upper wide step makes it possible for the wheelchair user to turn directly to the entrance door.

The difference in level between the entrance and the ground floor has been overcome by installing a floor lift next to the main lift in the office wing. This floor lift is only visible when in use. Matching the floor of the entrance the floor of the lift is made of Gjellebæk marble. The door leading into it is made of glass and steel.

Due to using the same materials as in the entrance area and due to the same careful detailing of the lift's control panel and railings this solution matches the architectural standard of the town hall.

14.5 Summary

Listed buildings are unique. Each represents special architectural and cultural historical values, which the listing should uphold. All works in a listed building should therefore be scrutinised thoroughly, because the limit of tolerance differs from one building to the other. Whether or not these limits have led to the right choices and solutions is for posterity to decide.

In the pursuit of making public buildings accessible there is a potential conflict between the users' interests and the tasks of the listing authorities. But this does not always have to be so. Often the different interests can be united through constructive dialogue and cooperation. Through this constructive dialogue public buildings shall be – and must be – made accessible to everybody.

16. Sammendrag

Tilgjengelighet til kulturminner handler om bevissthet, kunnskap, kreativitet og balansegang. Det er mennesket som definerer steder og bygninger som kulturminner. Kulturminnene har derfor kun mening i møtet med mennesker. Rapporten utforsker og diskuterer ulike former for tilgjengelighet for alle til kulturminner, først og fremst den åpenbare fysiske tilgjengelighet, men også tilgjengelighet i form av forståelse og opplevelse. Hensikten har *ikke* vært å sammenligne landenes lovverk, politikk eller ideologi på dette området.

I en del tilfeller kan den fysiske tilgjengeligheten skygge for forståelse og opplevelse, som for eksempel i møtet med de store arkeologiske landskap. I andre tilfeller tenker de fleste knapt på kulturminneverdiene i det hele tatt fordi de besøkende først og fremst har behov for tjenesten som utføres i bygningen eller på det stedet som utgjør kulturminnet. Variasjonene i utfordringer knyttet til tilgjengelighet er store og det er derfor vanskelig å generalisere omkring løsninger.

Rapporten viser hvordan man tenker rundt tilgjengelighetsspørsmålene i noen utvalgte eksempler i Norden. Det er stor forskjell på hvordan man kan arbeide med fysisk tilgjengelighet i en liten, sårbar og øde liggende kirke på en øy på Island og i et barokkpalass i Stockholm sentrum der gjerne tusener av mennesker har et ærend hver dag.

De fleste eksemplene i rapporten har funnet sine løsninger, noen endelige og andre midlertidige, mens andre eksempler representerer utfordringer man fremdeles arbeider med. I noen tilfeller er det umulig å unngå løsninger som får negative konsekvenser for kulturminneverdiene. Det gjelder da å ha en grundig prosess på forhånd for å skape bevissthet rundt valgene som gjøres. Hensikten med rapporten er å øke bevisstheten rundt disse problemstillingene og å være til hjelp for andre som arbeider med denne type problemstillinger.

Utviklingen går raskt innen dette feltet, både ideologisk og teknisk. Bevaringsideologien vil alltid være i utvikling slik som også samfunnets behov og verdisyn er i utvikling. Nye tekniske løsninger ser dagens lys, og arkitekter og designere kommer med bedre løsninger i et voksende marked.

Ofte trenger de gode og varige løsningene modning. Tilgjengelighet til kulturminner er for viktig til at man skal velge brutale og overilte løsninger, men det betyr at man skal arbeide målrettet for å finne de gode og mest mulig varige.