

Merging architecture and accessibility: Ordrupgaard and the Danish Jewish Museum

Philip Jensen, accessibility consultant for the Department of Building Design and Technology at the Danish Building Research Institute, Aalborg University (Denmark), examines and evaluates the development of two Danish museums, paying particular attention to how accessibility issues have been approached and tackled.

In the Nordic countries, improving disabled people's access to museums, art galleries and other cultural institutions has been an important consideration for a number of years. It is evident that museum buildings and the way displayed objects are presented should embrace all visitors; one of the challenges confronting museums at the turn of the twenty-first century is to ensure the greatest possible accessibility for all without compromising the architectural expression.

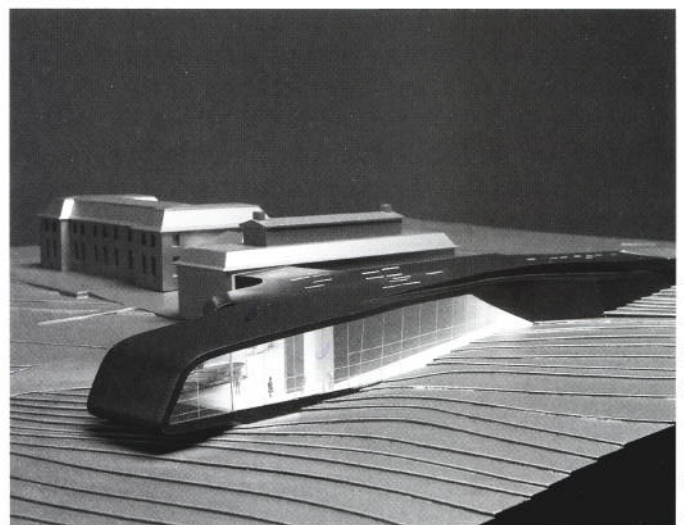
This article looks at two architecturally exceptional museums located in the Danish capital of Copenhagen: a recently built extension to an art museum designed by Zaha Hadid, and a new museum that focuses on Jewish history and culture, designed by Daniel Libeskind, and housed within a listed building. It analyses the accessibility and usability of the buildings and their immediate surroundings.

The new extension to Ordrupgaard

An extension to the state-owned art museum Ordrupgaard in Charlottenlund, on the outskirts of Copenhagen, was inaugurated in the summer of 2005. Since 1918, this country house has formed the setting for Ordrupgaard's collection of French impressionist art and Danish art from the Golden Age period of 1800 to 1850. In contrast to this, the 1150 sq m charcoal-grey concrete building, which conjures up visions of a beached whale, houses a new step-free entrance, a reception area, rooms for temporary

exhibitions, a multi-purpose auditorium and a café. The extension overlooking the beautiful Ordrupgaard park was designed by the British-Iraqi architect Zaha Hadid, acknowledged as a designer who constantly pushes the boundaries of architecture.

In March 2001, the Danish Ministry of Culture organised a competition to find the best design for an extension to the Ordrupgaard museum. The competition was carried out according to the existing EU Directive, and a total of seven architectural firms submitted proposals. The architectural, functional and technical solutions of the projects were evaluated in relation to the criteria of the competition brief. The jury



Credit: Zaha Hadid Architects.

A model of Zaha Hadid's impressive extension in the foreground, with the old country house in the background



Credit: Lone Sigbrand

The new accessible entrance to Ordrupgaard

concluded its task in September 2001 when they unanimously decided the project from Zaha Hadid Architects was the best proposal.

Zaha Hadid's winning proposal was based on a strategy in which the existing topography of the Ordrupgaard park was decoded, interpreted and translated, creating a sensational organic construction with architecturally unique flows of spaces; the aim was to give visitors a high-quality experience when they viewed the extension's temporary exhibitions and visited the wooded park.

The construction of the extension proved to be a most demanding task. The pouring of the carapace concrete required much skill to solve; the extension's organic curves meant that it had to be done in situ. It was difficult to mould the curves that connect floors, walls and roof, because the concrete had to be pushed upwards from the bottom of the forms in order to reduce the amount of air bubbles in the surface. In addition, because of their atypical curved shapes, the large glass panels in the café area and elsewhere in the building had to be specially manufactured for this project.

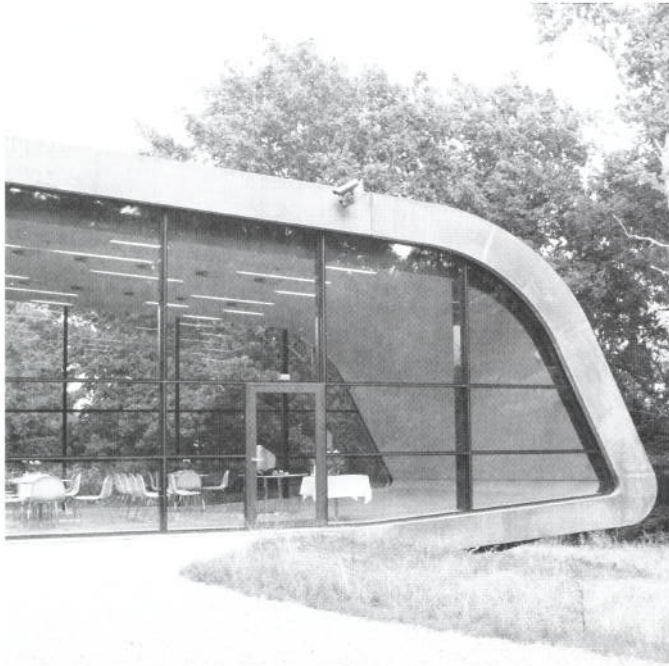
The new extension is connected to the old museum building, but since the country house is not accessible for all, it was imperative that the new extension should be designed in such a way

as to accommodate people with disabilities. Designated parking spaces are provided close to the extension, set apart from the large car parking area. A footpath covered with concrete flagstones guides visitors to a step-free entrance that has been created in the extension, providing access for everyone.



Credit: Lone Sigbrand

The ramp linking the café with the exhibition areas. Note the illuminated directional guidance embedded in the ramp



Credit: Lone Sigbrant

Access from the café is made difficult by differences in level and unsuitable surfacing outside

The reception desk can be clearly seen from the new entrance. At the desk, manual wheelchairs and audio guides that relay information about the permanent collection are available on request. Furthermore, each carer who accompanies a disabled visitor gains free access to the exhibitions.

Next to the cloakroom, three toilets are available for the use of visitors; one of these is a unisex accessible corner toilet equipped with drop-down grabrails that comply with the accessibility requirements of the Danish Building Regulations. The washbasin's water supply is activated automatically when hands are placed under the tap.

Wheelchair access is provided throughout the exhibition rooms in the extension. The exhibition rooms and the café are connected by internal ramps, which have rest landings and continuous handrails on either side. In addition, the floors of the ramps are lit to help with wayfinding; this provides directional guidance to people with impaired vision.

The café overlooks the Ordrupgaard park and offers outdoor service during summer. However,

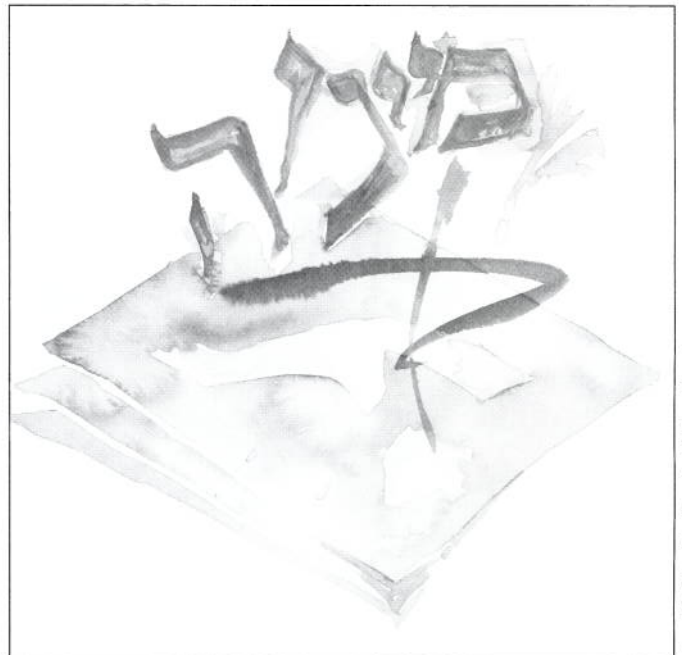
both the difference in level between the café and the park and the loose gravel surface of the refreshment area are not conducive to wheelchair or walker access.

The Danish Jewish Museum

The Danish Jewish Museum is the first minority museum of its kind in Denmark. It is housed in the Royal Boat House in the old part of the Royal Library located on the island of Slotsholmen, the seat of the Danish Parliament. It is especially poignant that the Royal Boat House should house a museum dedicated to Jewish history and culture in Denmark; the building dates back to the reign of King Christian IV (1588-1648) who invited the first Jews to Denmark in 1622. At the turn of the twentieth century the Royal Boat House was finally converted, enveloped by the walls of the Royal Library.

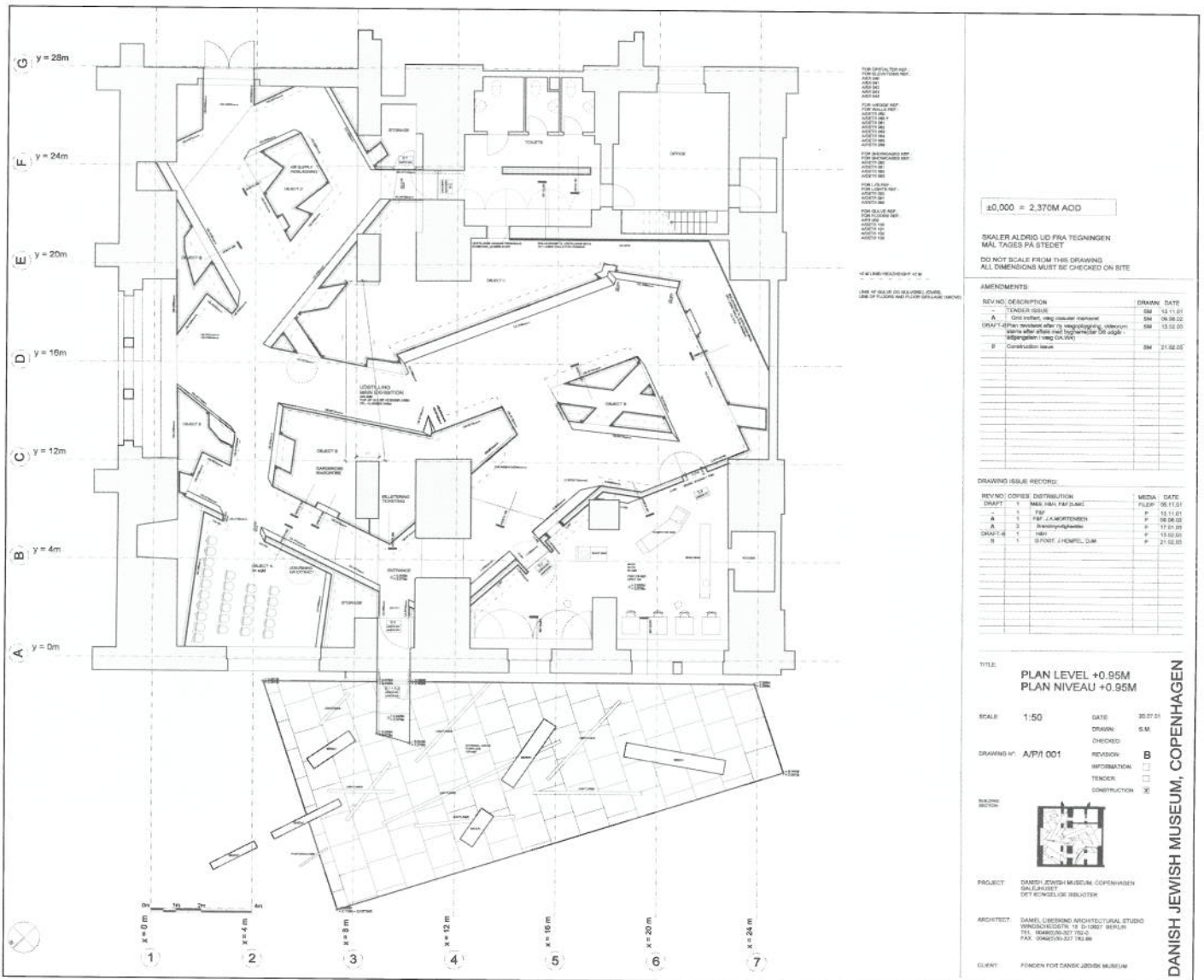
Within the context of this historically important building, Polish-born American architect Daniel Libeskind, of Studio Daniel Libeskind, has designed the interior of The Danish Jewish Museum, which was inaugurated in 2004.

Previously, Libeskind, having lost most of his family in the Holocaust, designed the controversial Jewish Museum in Berlin, which opened in 2001. It focused on the history of Jews in Germany and the repercussions of the mass killings of Jews. In the case of Copenhagen, however, Libeskind's



Credit: Studio Daniel Libeskind

Libeskind drew his inspiration for the museum's circulation routes from the Hebrew word 'Mitzvah'



Plan of the Danish Jewish Museum

underlying idea of the design originated from the Hebrew word 'Mitzvah'.

This translates as 'deep response', 'commitment', and 'precept', referring to the fact that the majority of the Danish Jews were saved from Nazi persecution by their fellow citizens during the Second World War.

The word 'Mitzvah' has served as an inspiration for the actual construction of the space; the corridor area is shaped in the form of the four Hebrew letters, so visitors actually walk inside the huge letters. The oblique birch plywood walls, the sloping oak floors, interspersed with display cases of varying sizes, combined with the original vaulted brick spaces of the Royal Boat House together create a unique museum experience.

Early in the planning process, the Danish architectural firm Fogh & Følner Arkitektfirma A/S, acting as a consultant to Studio Daniel Libeskind, approached the now defunct Danish Centre of Accessibility for an access statement. The Centre subsequently advised the architectural firm, commenting specifically on circulation routes within the building including gradients of internal sloping floors, space requirements for an accessible toilet, low height viewing of display cases and other installations, and large typeface signage.

Two designated parking spaces are provided for disabled motorists. The distance from the parking spaces to the entrance of the museum is approximately 50m; the access route, being partly covered with cobblestones, is not ideal at all.



Credit: Jens Lindhe

The new entrance blends in well with the style of the listed building

There is also a setting-down point close to the museum's entrance. Access to the museum is via a new concrete ramp clad with granite.

Once inside, but before entering the permanent exhibition *Space and Spaciousness*, a cinema presents short introductions to the architecture and exhibition themes in Danish and English. The visitors are then guided through a space with gently sloping wooden floors and oblique walls that link the five exhibition themes: *Arrivals*, *Standpoints*, *Mitzvah*, *Traditions* and *Promised Lands*. The sloping floors are designed to give the visitors a sensation of being at sea, creating a slightly nauseating feeling of imbalance; the purpose is to evoke the perilous escape, via fishing boat, of the Danish Jews to neutral Sweden back in 1943.

Throughout the exhibition, continuous black metal grillage between the floor edges and walls, primarily designed to increase the air supply, can be used as tactile directional guidance.

Both the exhibits and the text accompanying them are presented in display cases placed at a wheelchair- and child-friendly height. To cater for

partially sighted people, the text on the signs is in large print, and information folders in large writing (magna print) in Danish and English are available on request. Several interactive touch-screen displays, easily reached from lower, accessible heights, offer detailed audible and visual information on selected exhibits.

In a group of three toilets, one unisex accessible corner toilet with drop-down grabrails is provided for disabled visitors, conforming to the accessibility requirements of the Danish Building Regulations. In addition, the accessible toilet is equipped with three emergency assistance alarm buttons, one operable from the toilet seat itself, another from the wall opposite the washbasin, and the final one from floor level. The washbasin itself is fitted with a mixer tap that can be easily operated using minimal force or a clenched fist.

Conclusion

I believe that these two museums have been successful in merging high quality architecture and general accessibility. Both museums meet the accessibility requirements stipulated in the Danish Building Regulations and, in several



Credit: Jens Lindhe

Walls and floors at slanting angles and vaulted brick spaces define the interior of the Danish Jewish Museum

instances, go beyond them. As the Danish Building Regulations mainly focus on wheelchair users and people with mobility-related disabilities, it is encouraging to note that the museums have considered the needs of other groups of disabled people, particularly people with visual impairments.

In the case of Ordrupgaard, provision of illuminated directional guidance embedded in the ramps makes for safe and easy access to and from the exhibition rooms and the café. However, whereas the new extension itself provides greatly enhanced facilities for disabled visitors, the surroundings are inadequate in terms of accessibility and usability. The difference in level between the café and the outdoor serving area could be rectified by using a temporary external ramp or, better still, by installing a ramp like the one at the new entrance. The surfacing of the serving area, however, consists of loose gravel, which is unsuitable for most people using mobility aids; concrete flagstones would have been a far better choice.

As for the Danish Jewish Museum, textual information about the exhibits placed at an accessible height, interactive touch-screen displays, and provision of text in large print are fine examples of providing accessible information for all.

For a great many people, though, a planned visit to a museum often begins at home with a perusal of the website. As expected, both Ordrupgaard and the Danish Jewish Museum have descriptive and informative websites in Danish and English. However, at the time of writing, neither website provided any information about facilities and access for disabled people, such as provision of designated parking spaces, or loan of audio guides, manual wheelchairs and large-print information folders. The websites also do not offer a choice of formats or typefaces for those with impaired vision. In order to provide everyone with the opportunity of appreciating Ordrupgaard and the Danish Jewish Museum to the full, it is strongly recommended that the museums' websites should be adapted to cater for the wider needs of the general public.

Further information on the museums discussed in this article is available from the following websites:

www.ordrupgaard.dk

www.jewmus.dk

www.danskjoediskmuseum.dk/dokument/mitzvah_english.pdf