

ACCESSIBILITY

t h e o r y & u s e

Maria Esteban Gómez

SEMINAR 4 – Architecture in designer's eye

Jonas ANDERSSON - KTH

INDEX

ACCESSIBILITY

- definition and education
- värdig entré
- in architecture
- proposals



Accessibility is usually an overused term and, therefore, its meaning could sometimes become confusing and vague. What do we mean by the word accessibility? Who does this term involve?

According to the Danish Law:

“Access to buildings must ensure accessibility for all. Each dwelling and other unit must be directly accessible from the outside or via a shared access route from the outside.”¹

Accessibility becomes a matter of fact that it is an important issue to solve, but it is still a quite general and undefined idea. Although nowadays the term accessibility is used in a daily basis, it is often misused in the architect’s speech. We could say that “Accessibility – in buildings or parts of buildings - means that people, regardless of disability, age or gender, are able to gain access to buildings or part of buildings, into them, within them and exit from them”²

We should also point out that accessibility implies equal access to social, political, and economic life which includes not only physical access but access to the same tools, services, organizations and facilities for which everyone pays. No physic, psychic or sensorial condition should discriminate anybody when taking part in public activities

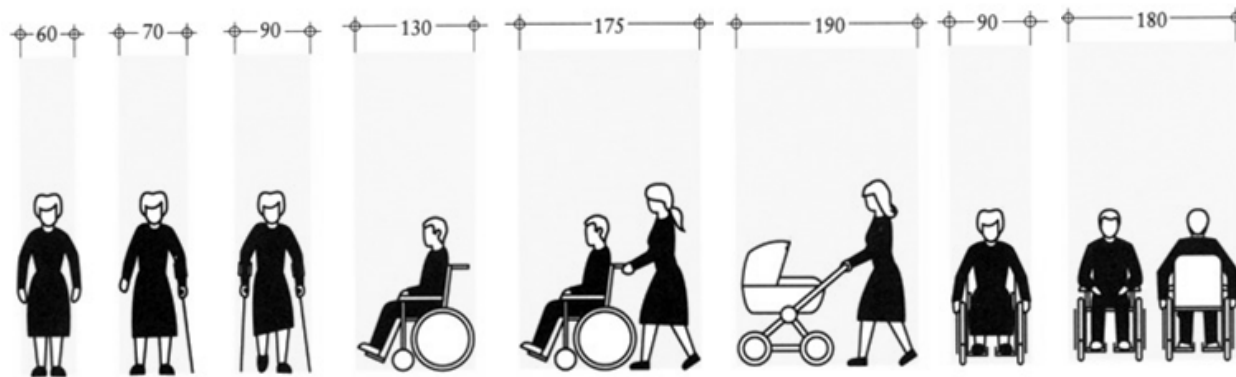
Another often used concept is “barrier free” architecture, which means that architecture and construction elements should not turn into obstacles for any user. We can usually find later added solutions to overcome such problems but, is this the way it is supposed to be?

That is why it becomes very important to take into consideration these aspects from an early stage in the design process. Assuring complete accessibility in a building affects highly its architectural

1. Building Regulations - The Danish Ministry of Economic and Business Affairs
2. Seminar lectures – Jonas Andersson

configuration and its overall system or structure: Aspects like the location of the entrance to the building, the allocation of corridors and other space for communication, and the design of the individual room come of relevance. Therefore, the architect's role becomes an essential mediator between functional requirements and individual patterns of using the building.

The relationship between an early awareness of accessibility in the creation of architectural space, also makes it important to introduce the matter early on in the training of young architects. By doing so, they will have a spatial interpretation of architectural elements that are active in creating accessible architecture.



3. accessible architecture construction and design manual - philipp meuser

Today, accessibility as an element in the training to become an architect is often left aside. As students, we are hardly ever asked to look up the requirements for accessibility in the building code. We only have this opportunity as elective courses. One good example of how accessibility has been introduced in the training of architecture students is the School of Architecture in Barcelona. Here, seminars encourage students to experience the effect of a cognitive or functional impairment by hands-on experiences. The aim of this activity is to raise awareness among students on how important and relevant accessibility is in everyday life for a person with a cognitive or functional impairment.

Students are asked to evaluate different commercial areas in the city. These in situ evaluations will focus on levels in sidewalks or in the access zone to buildings. Students simulate a cognitive or functional impairment by using a wheelchair, a stick or other assistive equipment. Sandra Bestraten, the head of the course, states: "It is on the urban level we have to think of the most comfortable ways in order to ease life for everyone"



4. More information available in their website: http://eldigital.bcn.cat/els-arquitectes-de-dema-aporten-millores-daccessibilitat-per-avui_101734.html?lang=ca

Students that have taken part in this experience state that it is not until you put yourself in the same situation that you realize what you are talking about. Learning by experiencing is the whole point about this topic. It actually increases your awareness in this field of architectural thinking. The highlight of the course is “architecture solves problems with creativity”. In consequence, the students in architecture have come up with several ideas to solve the problems they have faced up.

However, to solve the great problem of accessibility goes far beyond the mere physical obstacle, it deals equally with other problems like social inclusion, since a barrier-full environment may discriminate people who experience a cognitive or functional impairment.

When facing an obstacle, it is not only about the fact that you cannot enter that establishment or room, but also that you are not able to move more independently through the city. Undoubtedly, you will have to ask someone to help you out. This leads us to the following study case on dignified entrance conditions (Värdig Entré in Swedish).





Värdig Entré ("Dignified Entrance") was a collaborative project run jointly by the Swedish National Property Board, the City of Stockholm and the non-profit organisation EIDD Design for All Sweden.

The idea behind the Värdig Entré project was that everyone should be able to use the same entrance and do so with dignity. Visitors arriving by wheelchair and those using a walking frame or pushing a pram should not be directed to an entrance at the back of the building or have to use the goods lift. The entrance should be dignified for visitors and for the building itself.

Another aspect that this organization was working with was ensuring dignified access to the cultural heritage. Since most of the heritage buildings and environments were created in the Middle Ages and the centuries that followed, most of them are not accessible for disabled people. There was therefore a strong need to find technical solutions which enabled everyone to visit public buildings - solutions which also would show respect for the buildings' heritage values.

VÄDRIG ENTRÉ

5. More information available can be found here:
<http://www.sfv.se/en/about-us/tradition-is-change/availability/dignified-entrance/>

How to deal with this heritage buildings and its entrances has become a controversial and not easy deal with issue for the city of Stockholm. We can find different kind of solutions to solve accessibility problems, some more appropriate and some not so appropriate. What follows is an overview of different solutions and some reflections on its pros and cons.



This solution gives the chance for everybody to enter the building through the same door. But the way it is orientated brakes the composition of the façade. On the other hand, there is no dialog in terms of materiality between the existing building and the new piece.

IN ARCHITECTURE

6. <http://wheelchairramp.com/build-wheelchair-ramp-car/>



We often see this kind of accessibility solutions in order to overcome the few steps into a residential building.

Since most of the buildings were not designed with level-free access from the outside to the inside, a small number of steps may become a real problem for those who experience locomotary problems. This may lead to severe problems for them to go outside their own house.

Although this solution may not be the most desired one - in terms of aesthetics and spatial solutions – we have to consider that sometimes it can be the best solution you

can afford. Since it is a prefabricated solution, it offers a very fast, cheap and easy to build and transport way to solve such problems. But on the other hand, it requires an extra use of land, whose property is ambiguous. We have to consider that this solution could not be implemented in a dense city environment for instance, it would only work in an open suburban environment.

Lately, one of the problems that the Swedish government has had to face is rehabilitating and adapting all the buildings which were part of the 1970's investment in new modern housing, the so-called Million program. Most of them presented these problems and that was the easiest solution they came up with.

6. <http://www.clmramps.com/es/barreras-arquitectonicas/rampa-para-minusvalidos/>

An interesting project in this field of overcoming minor levels in the built environment, is the one that the Danish manufacturer Guldmann has developed.

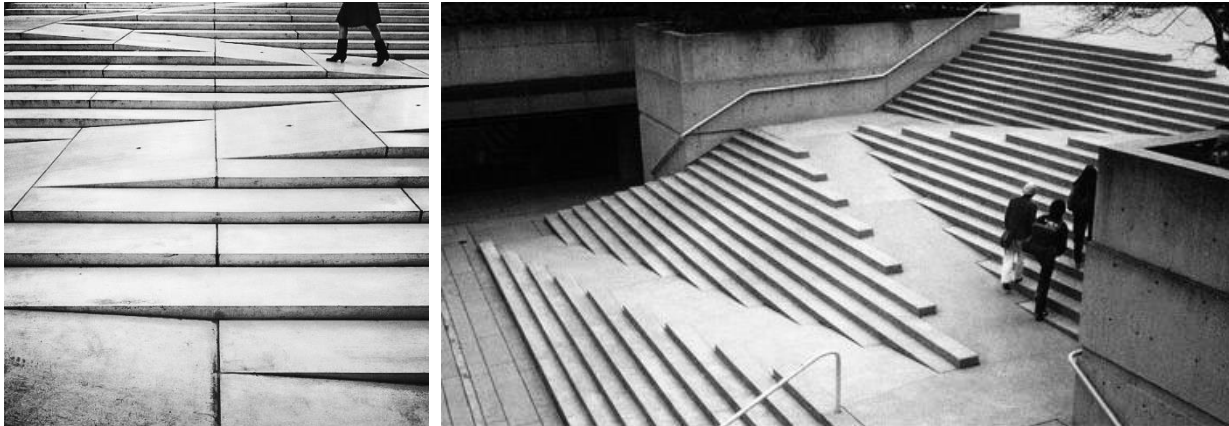
In the summer 2008, they established a development corporation with the Swedish “Värdig Entré”. It gave them an ideal opportunity to learn more about how the heritage environments work with the the challenges in adjusting the existing built environment to contemporary demands on accessibility. The manufacturer came up with a series of technical solutions to guarantee a dignified entrance in public buildings. Dignified Entrance was very ambitious to promote the products which they believe play a significant role in the Nordic welfare.

The solutions were more sophisticated and expensive since they used motored machinery to solve the difference between levels. But on the other hand, they offered a more respectful solution to the image of the existing building. That was the reason why they had been oftened used in public buildings that were financed by the government.



7. For more information and solutions visit:
<http://www.guldmann.com/>

So far, we have been referring to solutions for already existing problems but what would be ideal, is to design buildings with these ideas in mind from the very beginning. What comes next are some examples of projects that have integrated the accessibility in their design.



Take this example of Robson Square in Vancouver, Canada, which integrates a sloping ramp across the staircase, thus, melting them together. This gives everybody the chance to take the same path to cross the square. Although, it has not been evaluated by a person with poor upper body strength, and therefore it is likely that a user in wheelchair have to have a helper.

8. Robson Square – Vancouver, Canada
Arthur Erickson

If designers have received a full education on this field including hands-on experience, they will come up with new and creative solutions but often regulations and building codes are way too strict and that conditions the designer's mind not letting him or her design ingeniously.

The same idea has been used to develop this project. The awarded piece of landscape design from Måløv Axis combines different slopes and ramps with terraces and pieces of vegetation. This allows everybody to enjoy this park by finding intimate spaces all along the paths that he creates.



9. Måløv Axis
ADEPT @<http://adept.dk/>

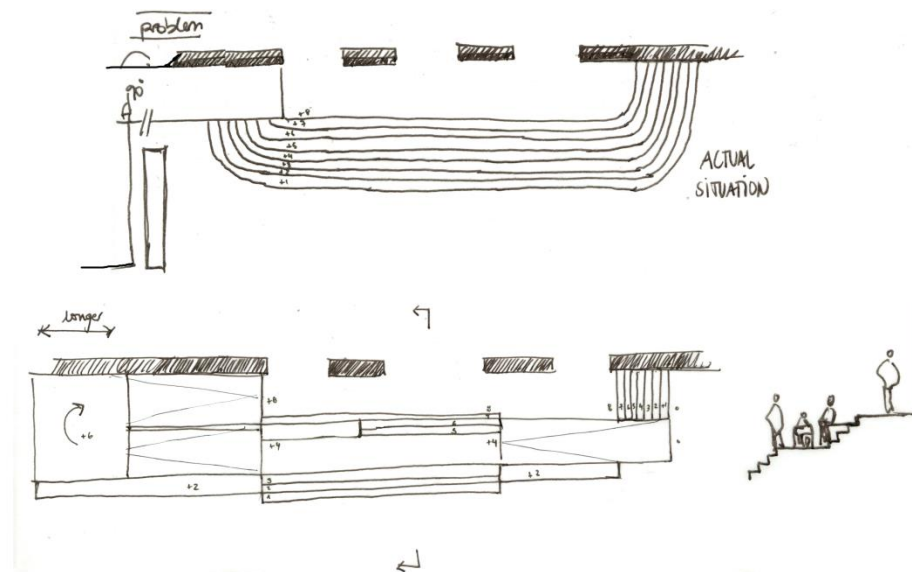
PROPOSALS

With these examples in mind, I would like to present a few proposals for different situations that I have met during the elective course "universal architecture".

The first one is an alternative system to solve the entrance in Högalidskyrkan. This church is one of the heritage buildings in Stockholm that has integrated a new ramp system in order to comply with the demands of the dignified entrance project. In this case, the ramp has not been executed in the most suitable way, which creates problems during funeral services, since the coffin has to make an L-turn.

The new proposal introduces ramps in the system of stairs, so that people can make use of the space in front of the church as a resting area as well as provides an easy way up to the church accessible for everyone.

Here we can see a sketch of the actual situation and how that could change:



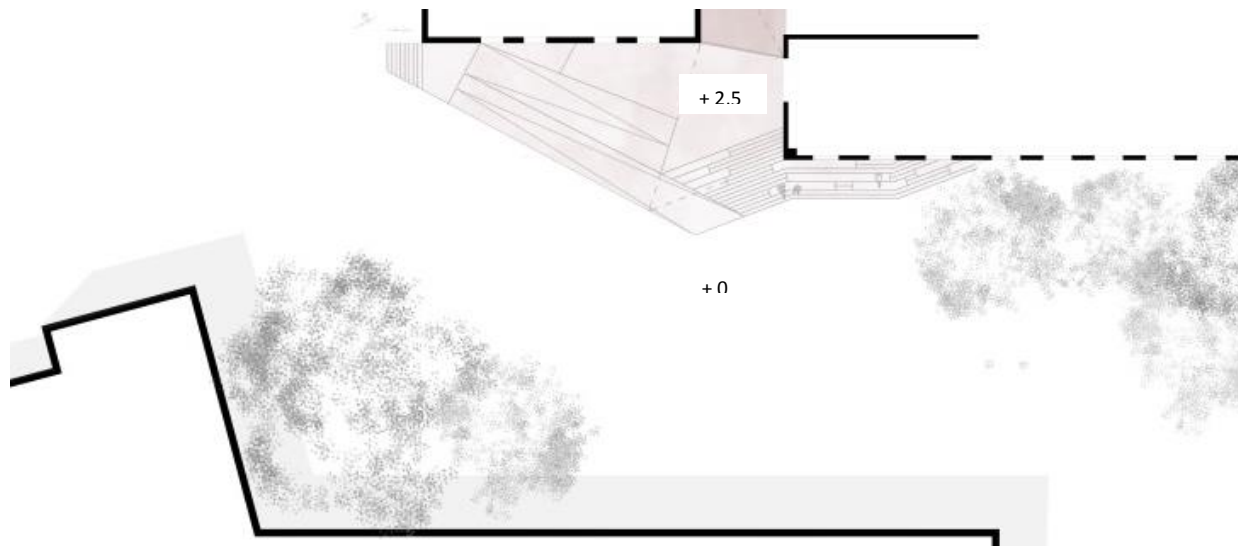


11. View from the entrance to Högalidskyrkan
@ image by author

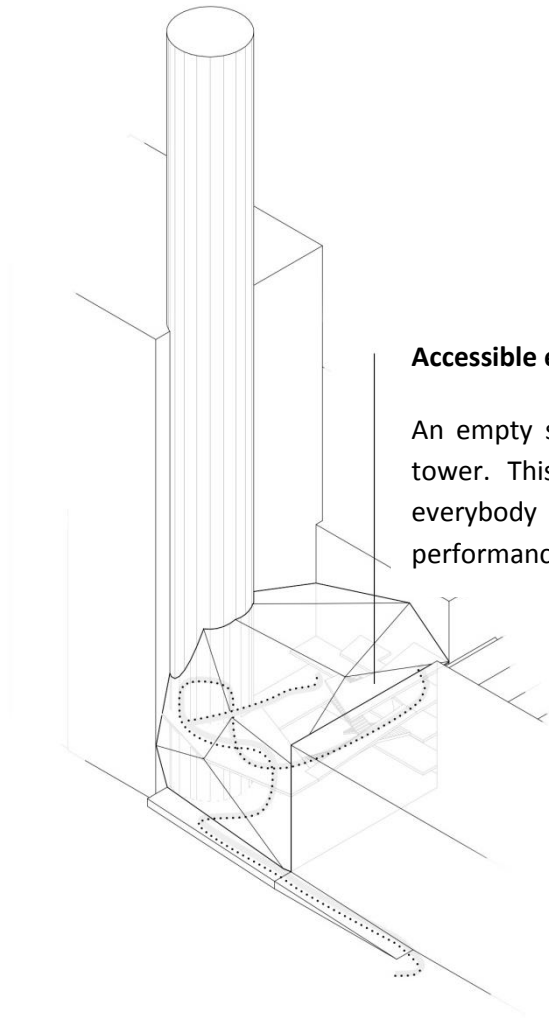
The other proposal is a project that I have developed in my studio project for this semester. This project refers to the conversion of an abandoned power plant in Norrköping into a Culture House. Most of the parts that compose this culture house are opened to all public. Therefore, they should become completely accessible for the citizens that want to visit it.

My design solution revolves around establishing one main level for the whole of the building – so that the circulation through the building becomes easier. Once this is settled, the problem is that the levels in the existing building are not the same as the ground level. Hence, the strategy that is envisioned supposes two main entrances that have the function to reach the main level of the building inside. This “elevation system” has been designed combining ramps, stairs and places to rest and seat taken as examples the projects that we have seen before.

Here we can see the ground floor plan of the entrance to the power plant and how the difference in levels has been solved.



12. Entrances to Culture House – Norrköping
@ image by author

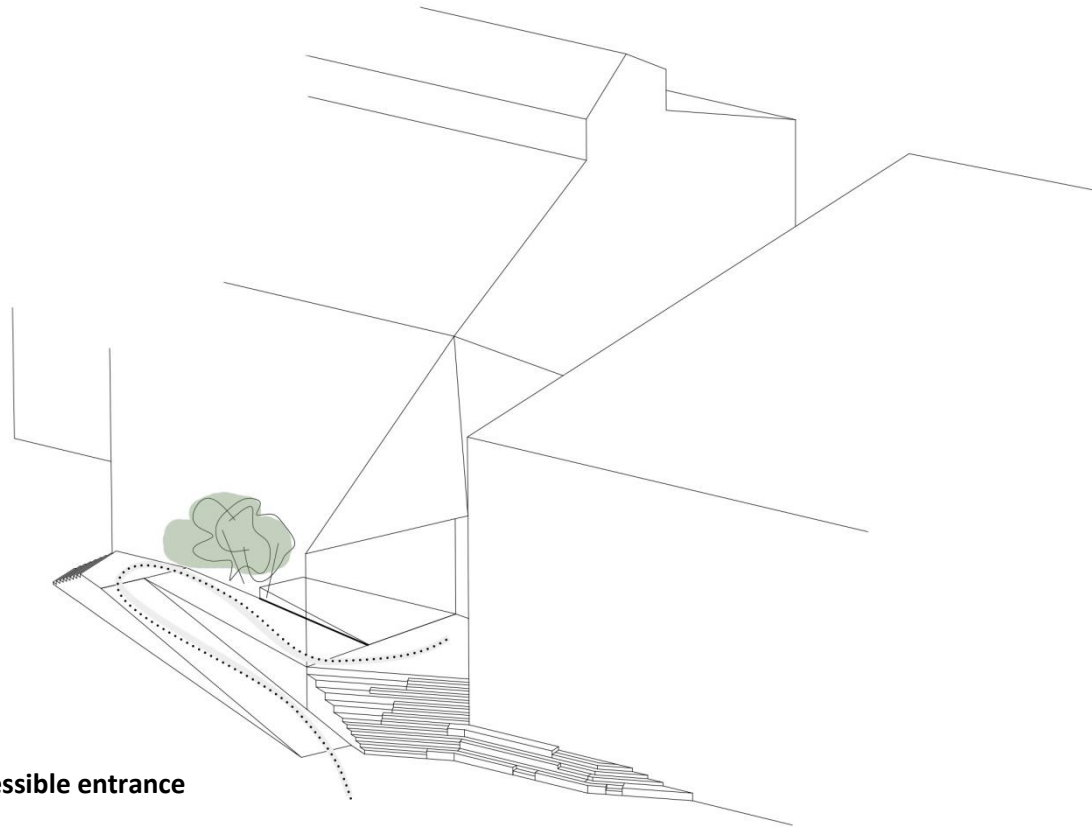


Accessible entrance

An empty space has been used as a hall to the theater and the tower. This has been designed with accessible ramps so that everybody can enjoy the moments before and in-between performances

13. Main entrance to Culture House - Norrköping

@ image by author

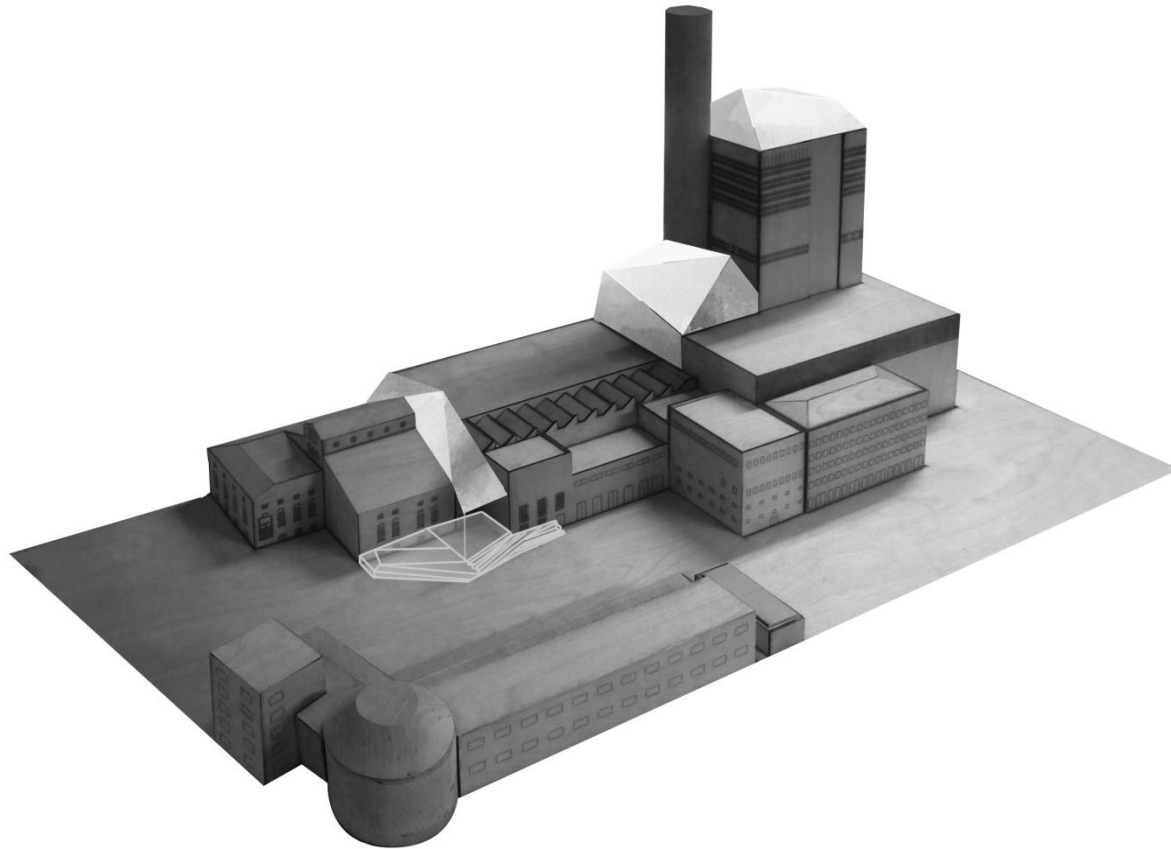


Accessible entrance

In this case, the design of the access to this entrance revolves around the idea that this place should be a place for rest and staying outdoor, an informal backyard.

14. Back entrance to Culture House - Norrköping

@ image by author



15. Model from the entire building, the two entrances are highlighted as new pieces of architecture in the building

@ image by author



16. Image from the entrance to the culture house

@ image by author