05 CHAPTER

PRECEDENT STUDIES

INTRODUCTION

In this chapter three architectural precedent studies are investigated and analyzed. The precedent studies are divided into three categories. The first category looks at strategies and design principles used to *integrate architecture and the landscape* with each other. The second category investigates how design guidelines and intentions are used in the f*orm and layout of the building*. The third category investigates how *inclusive design strategies* are used and incorporated into a building. The precedent studies where critically selected to illustrate the influence that architecture can have on the direct urban environment and the user experience and well-being. The objective is to produce a list of guidelines that can be incorporated into the design development and design strategies.

PRECEDENT A: Health Care Facility Josefhof

In 2019 a health Care facility was designed by Dietger Wissounig Architekten in Austria (ArchDaily, 2019). The aim of the design was to create a harmonious space that brings nature and people closer together (ArchDaily, 2019). The design drew inspiration from its surroundings. Orchard meadows are typically found in this region, and is what the design was based on (ArchDaily, 2019). The health care facility intwines with the landscape striving to bridge the gap between architecture in isolation and the natural landscape.

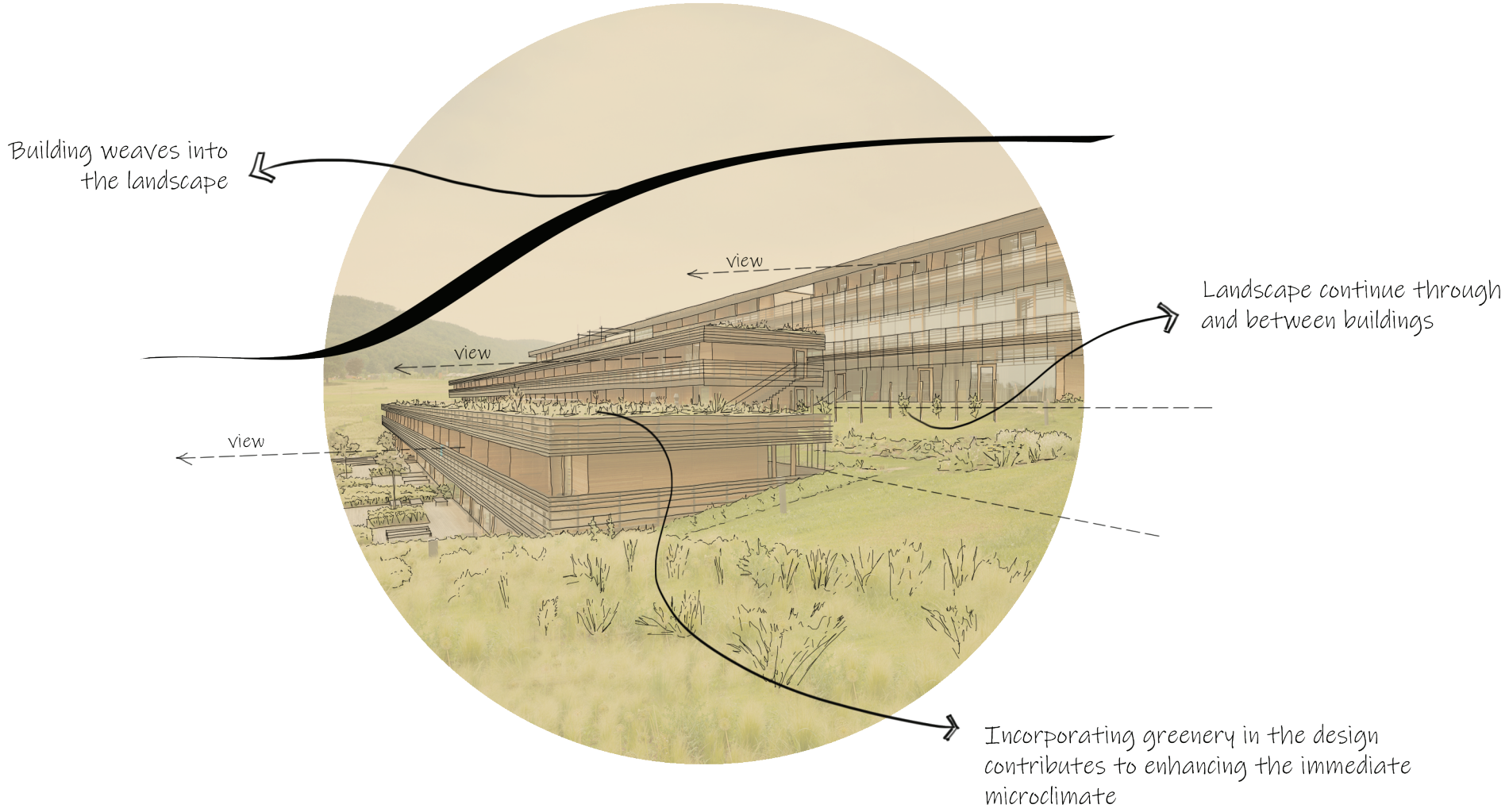


Figure 5.1: Perspective view diagram with brief analysis (Author 2020)

Fig.5.2

Fig.5.3

Fig.5.4

Critical analysis

The facility consists of three elongated and narrow buildings placed in such a way to be aligned with the natural sloping topography. The buildings placed on site is constructed in such a way that at some points it seems as though it is hovering over the terrain and at other points it appears to be embedded into the terrain (ArchDaily, 2019).

There is an open connection between the landscape and building, with the landscape allowing to continue through the building and between the buildings, along with ground level exits directly into the natural landscape (ArchDaily, 2019). This can allow the users to have a personal experience and direct interaction with the landscape. The load-bearing structure of the building allows for a high degree of prefabrication (ArchDaily, 2019).

An economic column grid form is used, with all fixtures and partitioning manufactured in assembly construction (ArchDaily, 2019). A timber module is used for the rooms, with completed interiors that is delivered to the site (ArchDaily, 2019).

The technology concept for the building is based on a low-tech approach, where natural shading and ventilation solutions are given preference (ArchDaily, 2019). Windows are to be shielded from most direct sunlight, for interiors of the building natural building material like clay is used, and incorporating green roofs to improve the buildings climate using a low-tech approach (ArchDaily, 2019).

The buildings design is committed to being dominated by natural materials which in return underlines the program of the facility as a health center and compliments the natural landscape that is present throughout the building (ArchDaily, 2019).

The choice in structure, material and technology is a response to achieving the lowest possible primary energy consumption (ArchDaily, 2019). Incorporating greenery and landscape elements into the design contributes to enhancing the immediate microclimate, and can act as a noise buffer (ArchDaily, 2019).

Fig.5.5

Fig.5.6

Fig.5.7

Guidelines

·The choice in using natural materials in the interior of the building emphasizes the integration of architecture and landscape.

·Having the different floor levels exiting into the natural landscape through strategic viewpoints, large glass doors opening into the garden or overlooking green roofs establishes continuity between the building and the landscape.

·Allowing the landscape to continue through, in and on top of the building helps dissolve the barrier that architecture can face standing in isolation separate from the landscape.

·Using natural materials, a low-tech approach and prefabricated construction systems can help contribute to low energy consumption.

Figure 5.2: Contextual view of building (Archdaily 2019)

Figure 5.3: Building connection to the landscape (Archdaily 2019)

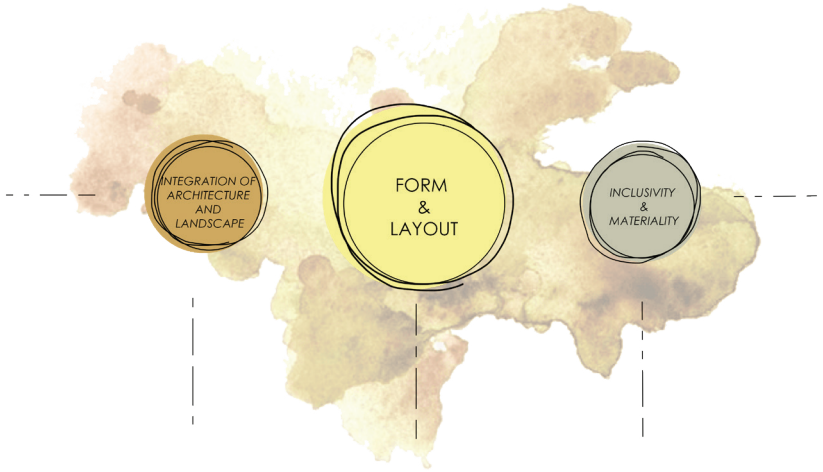
Figure 5.4: Interior view of materials (Archdaily 2019)

Figure 5.5: View of interior space (Archdaily 2019)

Figure 5.6: Planting used in the design (Archdaily 2019)

Figure 5.7: Building and building façade connecting with nature (Archdaily 2019)

PRECEDENT B: Urban Hospice



The Urban Hospice was designed in 2016 as part of the redevelopment for social and health-care facilities (Pearman, 2017).

The Urban Hospice was developed for people in need of palliative treatment with the design aims to provide a peaceful environment, with a positive and relaxed atmosphere, using the idea of the architecture as a healing factor (Arch-Daily, 2017). The project is situated within a densely populated residential area in the heart of Denmark in Copenhagen (ArchDaily, 2017). One of the biggest criteria for the design was that it should successfully fit into the surroundings while meeting the functional demands (Pearman, 2017).

The design takes on the task of placing a modern hospice in an urban fabric while taking the users and neighbors into account (Arch-Daily, 2017).

Figure 5.8: Perspective view diagram with brief analysis (Author 2020)

The building sits low with one and two stories, not trying to be a landmark but a safe and comforting space for the users

Fig.5.9

The building tries to mimic a protecting atmosphere through cureved and embracing froms

Fig.5.10

Secuded landscape spaces creating private and intimate areas

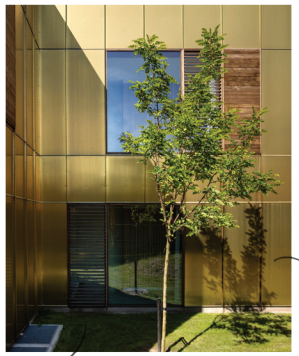


Fig.5.11

Facade of building is a brass-zinc alloy panels that is to weather to a greenish gold colour

Different viewpoint are created by a roof terrace that overlooks into the courtyards and smaller outdoor gardens

Fig.5.12

Building comfortably sits between surrounding

Critical analysis

The design required the building not to be a landmark but a safe and comforting space for the users. With secluded, landscape space for the users to go out and enjoy the light and fresh air and the interior spaces encouraging a self-contained community.

The form of the building was strongly influenced by the site conditions and the existing neighboring context (ArchDaily, 2017). Thus, an inclusive and welcoming layout was created, that allows opportunities for both the community to interact with the programs and spaces for the private users in more intimate areas (ArchDaily, 2017). The form and layout strive for and optimal functional layout by using a combination of curved and rectangular shapes. This form and layout aims to mimic a protecting atmosphere.

The façade of the building is a combination of flat and curved areas, cladded in brass-zinc alloy panels that is to weather to a greenish gold colour (Pearman, 2017), as well as timber window shutters. The façade's material and colours are to give a warm and welcoming tone to the building. The shape of the site and adjacent buildings informed the design, with some parts of the building façade extending out onto the site and some parts of the building having inward recessed areas into the façade that creates private and intimate areas (Griffiths, 2017). The building sits low with one and two stories. The building mass is broken down into a series of smaller units. The ground floor is divided by a courtyard with staff quarters occupying one side and patient room on the other side (Pearman, 2017).

The units are connected by a corridor that helps to optimize the movement and flow in the building (Griffiths, 2017). The corridors are used for causal meetings and gatherings whilst it embraces an inner private courtyard (Griffiths, 2017). The second floor is designed only for patient rooms. The building has very specific programmatic peculiarities making the massing and layout important to suite the users' needs for that space. A roof terrace on the single-story overlooks into the courtyards and smaller outdoor gardens (Griffiths, 2017) , supporting the vison for the project that the architecture can create positive experiences and spaces for the user.

The façades material and colours are to give a warm and welcoming tone

Fig.5.13

Timber window shutter used to contorl light exposure

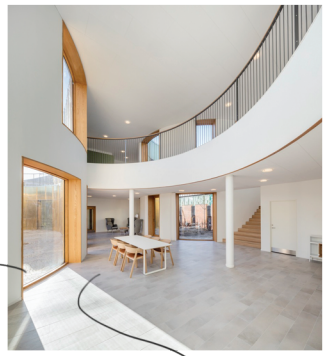


Fig.5.14

A central interior courtyar provides easy orientation

Timber used to frame interior windows creating continuity betweeen exterior materials and interior materials

Fig.5.15

Corridors has a multi-purpose they are used for causal meetings and gatherings

Light interior materials used creating a calming and relaxing environment

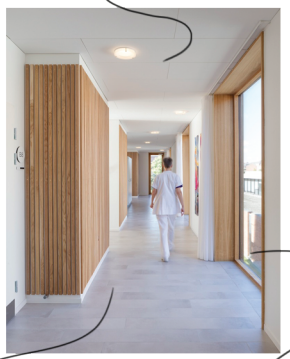


Fig.5.16

Large windows allow for a lot of natural light to penetrate into the space

The units are connected by a corridor that helps to optimize the movement and flow in the building

A high-tech approach to the building was conducted. Electric hoists are integrated into each room (Pearman, 2017), reason being, so that the staff are able to easily move around those users that are immobile. Acoustical needs are met with soundproofing that includes rubber seals on doors and triple-glazed windows (Pearman, 2017). This also contributes to the thermal comfort of the rooms. Each room is air-conditioned in a way that the staff can easily lower the thermostat in the case of a death of a patient (Pearman, 2017).

Guidelines

·Using the existing context as guidance for the design, viewpoints, and programmatic layout

·A simple layout plan for easy and clear circulation minimize any confusion and obstacles the user might experience

·Integrating natural materials and natural/organic forms that can be used to promote health and wellbeing

·The spaces strive for creating a comforting and more domestic environment rather than a clinical space

Figure 5.9: Exterior view of building shape (Archdaily 2017)

Figure 5.10: Landscape elements between the building (Archdaily 2017)

Figure 5.11: Secluded and private spaces (Archdaily 2017)

Figure 5.12: Contextual view of building (Archdaily 2017)

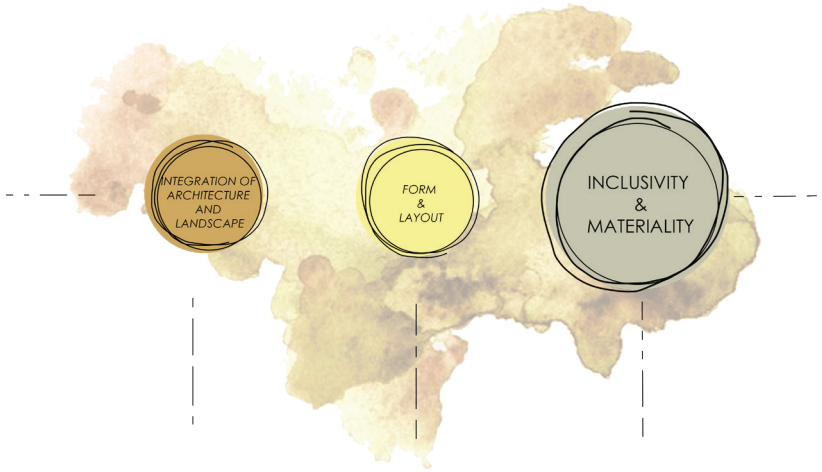
Figure 5.13: Materials used on the exterior (Archdaily 2017)

Figure 5.14: Interior circulation (Archdaily 2017)

Figure 5.15 Corridor interaction and activities (Archdaily 2017)

Figure 5.16 Interior materials and finishes (Archdaily 2017)

PRECEDENT C: Aspaym Avila_ Center for people with Disabilities



The ASPAYM Foundation for disabled people decided to build a small rehabilitation center near Avila, Spain. The design is based on a polyvalent notion (ArchDaily, 2018), this allows the building to have many different forms and functions. The buildings design approach is strongly influenced by inclusive design. It articulates open and blank spaces that can be described as liberated space in the form of patios, voids or subtractions (Rethinking The Future, 2020) All the rooms, bathrooms, corridors, and furniture are designed for people with disabilities. (ArchDaily, 2018).

Figure 5.17: Perspective view diagram with brief analysis (Author 2020)

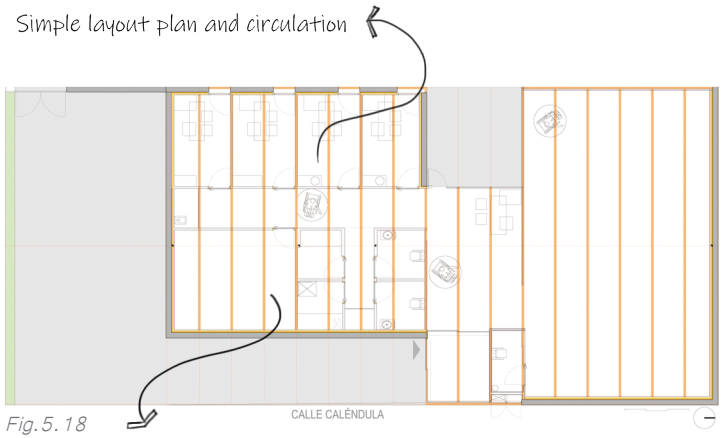


Fig.5.18


Laminated timber &
white concrete
Fig.5.19

Stong material presence
Fig.5.20


Walls highlighted through
dark and light colours
Fig.5.21

Critical analysis

The form of the building is simplistic and designed in the shape of a rectangle with only a ground floor. The building is and extension of an existing building and is situated along the street edge (ArchDaily, 2018). The building splits the lot into three areas, an access porch, parking area, and a garden backyard (Rethinking The Future, 2020). The building possesses a simplistic and minimalistic design approach with the absence of interior structures allowing a kind of multipurpose space fit for numerous user needs and activities.

The construction of the building holds a strong material presence, with the perimeter walls constructed with white concrete and a timber roof construction. The interior of the roof structure is left exposed consisting of laminated wood beams that highlights the roof presence (ArchDaily, 2018). The reason for this sculptural ceiling is based on the user experience, as the users would spend a great deal lying down facing the ceiling while busy with their rehabilitation activities (ArchDaily, 2018). All the conduits are hidden away in the false ceiling, allowing for visibility of the ceiling beams and sculptural ceiling (ArchDaily, 2018).

The interior walls are finished with a light, opaque colour and the floor finished with large-format non-slip porcelain tiles (ArchDaily, 2018).

Large glass windows are incorporated into the design facing the garden area and allows a great deal of natural light to penetrate the building (ArchDaily, 2018). Sticker patterns are placed onto the glass panes to avoid the users from walking into the glass. The windows run from floor to ceiling to preserve continuity in the space (ArchDaily, 2018).

Fig.5.22

Fig.5.23

Fig.5.24

Daylight distributed through indirect and singular openings

Patterns sticked to glass to avoid users walking into glass

Light interior colours

Sculptural ceiling with exposed timber beams

Large glass window panes from floor to ceiling

Views strech beyond the interior space

Guidelines

·Open interiors allow for multipurpose use and shared spaces due the space being flexible and able to accommodate different needs and programs

·The layout is broken into large main areas, that creates less confusion in circulation around and through the building

·Strong material presence gives clear indication of the building structure

·Sculptural ceiling allows a different users experience

·Large glass windows allow for a feeling of openness rather than being in a closed off environment

Figure 5.18: Plan view of building (Archdaily 2018)

Figure 5.19: Entrance to the building (Archdaily 2018)

Figure 5.20: Materials used (Archdaily 2018)

Figure 5.21: Interior colours used (Archdaily 2018)

Figure 5.22: Large windowpanes (Archdaily 2018)

Figure 5.23: Small opening allowing indirect light (Archdaily 2018)

Figure 5.24: Sculptural ceiling and extended views (Archdaily 2018)

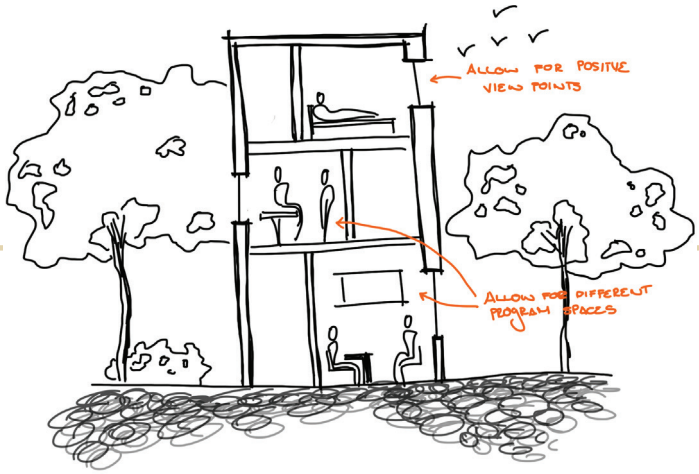


Figure 5.25: Chapter 5 diagram (Author 2020)

CONCLUSION

These three precedent studies helped to inform me how architectural designs and interventions can help overcome the idea of architecture standing in isolation. While also successfully fit into the surroundings and meeting functional demands. The precedent studies illustrated how architecture can contribute to creating positive experiences and spaces for the users. All three precedent studies share some form of multi-functionality highlighting how shared spaces can accommodate a range of different users due to the space's flexibility.