



CHAPTER 4

Precedents

4-1 Building Precedents

Plexus Architecture
Museu Exploratorio de Ciencias
Campinas, São Paulo, Brazil

The relationships between different surfaces are investigated. Spaces are created where elements intersect.

The relationship between the street and the building entrance is also investigated. The building is lower at the entrance with a high visual backdrop behind it. The scale on the sidewalk is on a pedestrian level and does not overwhelm the visitor.

The design consists of several linear elements that interact with one another. The elements are broken up into smaller elements with holes and extruded portions. The various parts reads as a continuous whole (Plexus 2010).



Figure 4-1. Model of the Museu Exploratorio de Ciencias.

Figure 4-2. Exterior rendering of the Museu Exploratorio de Ciencias.



Figure 4-3. Night rendering of the Museu Exploratorio de Ciencias.



Figure 4-4. Exterior rendering of the Museu Exploratorio de Ciencias.



Figure 4-5. Interior rendering of the Museu Exploratorio de Ciencias.

Plexus Architecture
LaVilla Medical Office Building
Jacksonville, Florida, USA

The interaction of different planes are investigated to generate space.
The skin over the building forms a new layer of space that envelops the internal functions.
The apparent random holes punched into the skin are investigated in order to replicate.
The material characteristic of copper is analyzed.



Figure 4-5. Photo of LaVilla Medical Office Building.



Figure 4-6. Photo of LaVilla Medical Office Building.

Plexus Architecture
Zhongguancun Life Science Centre
Beijing, China

The interaction of morphic forms and more rigid building elements in Architecture is investigated.
The building illustrates that only portions of the building needs to be morphic. The key is merging the morphic and the ridged elements.
The building consist of linear elements that are broken up. The gaps are connected by planes on the outside to make the building read as one element.



Figure 4-7. Exterior rendering of the Zhongguancun Life Science Centre.

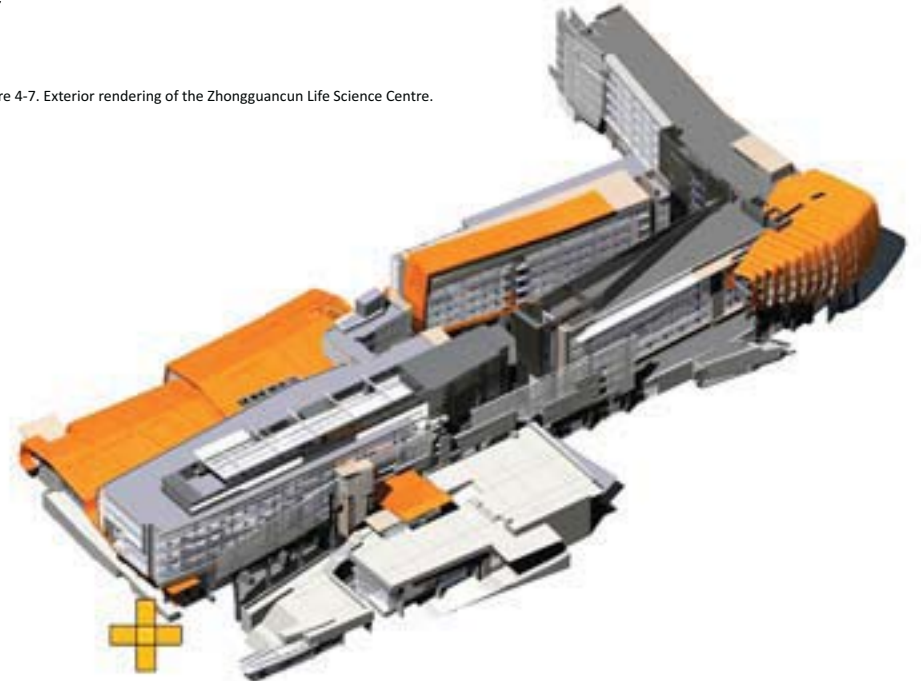


Figure 4-8. Exterior rendering of the Zhongguancun Life Science Centre.

German De Sol
Hotel Atacama Oasis
San Pedro, Atacama Desert

The relationship between an internal courtyard and the building. The placing of vegetation in such an enclosed space with seating around to maximise the use of shading. The linking of spaces with ramps in stead of stairs.

Erratic pathways prolongs the experience of the space. In a public building this element could lead to socializing between users.

Figure 4-10. Photo of the Hotel Atacama Oasis.



Figure 4-11. Photo of the Hotel Atacama Oasis.



Figure 4-9. Photo of the Hotel Atacama Oasis.

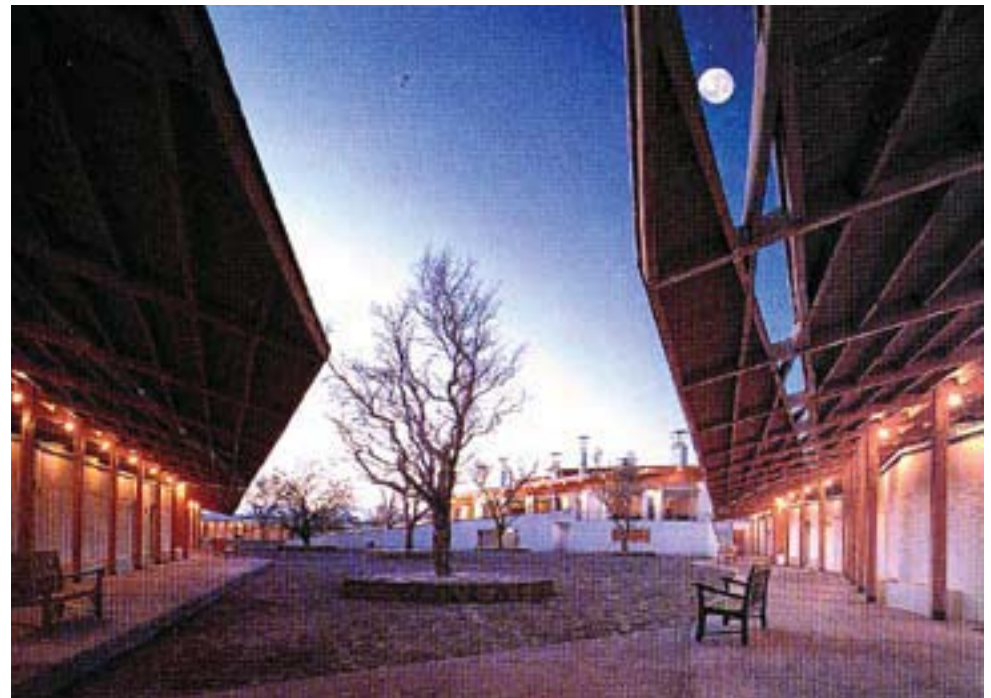


Figure 4-12. Photo of the Hotel Atacama Oasis.

New Headquarters Central Chinese Television CCTV
Beijing, China
OMA Architects

The new CCTV headquarters, at a height of 230 meter and a floor area of about 400,000 square meters, combines administration with news, broadcasting, studios and program production. Although the building is 230 meter tall it is not a traditional tower, but a continuous loop of horizontal and vertical sections that establish an urban site rather than point to the sky. The irregular grid on the building's facades started as an expression of the forces traveling throughout its structure. (archspace 2002)

The idea of a contemporary bridge structure is investigated to add to the surrealism of video game architecture.

The structure consist mainly of steel that is clad with glass and titanium.

Figure 4-14. Photo of Central Chinese Television Headquarters



Figure 4-13. Photo of Central Chinese Television Headquarters



Figure 4-15. Photo of Central Chinese Television Headquarters

Hepburn Springs Bathhouse
COX Architects

Building consisting of plains that is separated by light.
Light is either from artificial sources or glazing.
The structure consists of a square steel portal frame that has been placed at an angle.
Portions of the building is buried under ground with skylights that protrude out through the landscape.

(Cox 2010)

Figure 4-17. Photo of the Hepburn Springs Bathhouse



Figure 4-16. Photo of the Hepburn Springs Bathhouse



Figure 4-18. Photo of the Hepburn Springs Bathhouse

Figure 4-19. Photo of the Sports Hall Sveti Martin



Figure 4-20. Photo of the Sports Hall Sveti Martin



Figure 4-21. Photo of the Sports Hall Sveti Martin



Figure 4-22. Photo of the Sports Hall Sveti Martin

Sports Hall Sveti Martin / Sangrad Croatia

Architect: Sangrad d.o.o.

Constructed Area: 1,328 sqm

The Project consist of a two-part sports arena that is located close to the outer sporting courts (tennis, football, basketball, table tennis, volleyball). The sports facility is named Spa and Golf resort Saint Martin.

The lightweight steel structure is investigated. The building is constructed of steel portal frames clad with large sheets of copper. The different surfaces is separated by glass. The hall itself contain tracks on the ceiling to accommodate different functions in the hall.

(Martin S. 2008)



Figure 4-23. Photo of the Sports Hall Sveti Martin

Figure 4-24. Photo of the Circle Bath Hospital



Figure 4-25. Photo of the Circle Bath Hospital



Figure 4-26. Photo of the Circle Bath Hospital

◀ **Circle Bath Hospital, Bath**
Foster & Partners

Design aspects that are investigated are the use of metal for the external walls. The choice of metal and colour was determined by the surroundings, with the base in contrasting black giving the building the appearance of floating.

The deep recessed windows accommodate balconies inside the building.
(Foster 2010)

▼ **Blessings Golf Clubhouse Luxury Club House**
Marlon Blackwell Architect

Linear box building that has a broken up facade. The building is placed on a stone plinth and constructed of lightweight copper cladding and glass.



Figure 4-27. Photo of the Blessings Golf Clubhouse

Roy McMurtry Youth Centre
Kleinfeldt
Mychajlowycz Architects

The project is constructed of an array of complex of buildings designed around an old women's prison. Most of it was demolished to make way for the new youth centre. The Building is made up of different boxes intersecting one another. The building is arranged over different levels each reading different.

(Roy McMurtry 2009)



Figure 4-28. Photo of the Roy McMurtry Youth Centre



Figure 4-29. Photo of the Roy McMurtry Youth Centre



Figure 4-30. Photo of the Roy McMurtry Youth Centre



Figure 4-31. Photo of the Roy McMurtry Youth Centre



Figure 4-32. Photo of the Cantilevering tower Building

◀ Cantilevering tower Building

The building consist of a strong circulation and service core. The bulk of the building cantilevers out of the core in four directions (Cantilevering 2010)

▼ MVRDV Villa VPRO - Broadcasting Company Hilversum, Holland

A building consisting of folded floors layered on top of one another. The building is a good example of merging plains and surfaces in a building. (Siebe Swart 2010)



Figure 4-33. Photo of Villa VPRO

Buildings of a giant Nintendo's DS and a PlayStation 3

Architect: Joseph Ford

Previous attempts to use video games as inspiration for architecture.
The function of the building does not necessarily reflect the form of the building.

The use of video game consoles pose an interesting challenge to the architect to make the building functional.

<http://www.techeblog.com/index.php/tech-gadget/geeky-video-game-console-buildings>



Figure 4-36. Photo of the Nintendo DS building



Figure 4-37. Photo of the PlayStation 3 building



4-2 Interior Precedents

Montessori College Oost Netherland

Movement corridors serve a double function. The vertical circulation forms seating and stages where students can sit and socialize as well as study.

(Montessori. 2009)

Montessori School Berkeley California Pfau Architecture

Outside movement spaces are also designed to function as more. Built in seating and shading make spaces usable even during bad weather

(Pfau. 2009)



Figure 4-36. Photo of the Montessori College Oost



Figure 4-37. Photo of the Montessori School Berkeley

Northside Youth Centre

Example of a multipurpose hall. The facility is big enough to accommodate a variety of functions

(Fredericton 2010)



Figure 4-38. Photo of the Northside Youth Centre

Makkuttukkuvik Youth Centre

Activities housed in a youth centre's indoor entertainment hall.

- Pool Table
- Table Tennis
- Foosball
- Computers
- Vending Machines

(Iqaluit. 2010)



Figure 4-39. Photo of the Makkuttukkuvik Youth Centre



4-3 Landscape Precedents

Figure 4-40. Photo of the Los Silos Youth Centre



Figure 4-41. Photo of the Los Silos Youth Centre

Los Silos Youth Centre Lavin Architects

Green landscape on rooftop.
The building consist of a linear landscape element that flows from ground level up to roof with stairs and a ramp. The building is constructed of concrete with glass inserts.
(archdaily 2010)
<http://www.archdaily.com/9345/los-silos-youth-centre-lavin-arquitectos/>

Civic Youth Centre COX Architects

A skate park situated between two buildings. The skate park offer a variety possibilities to skaters. The park is made up from concrete ramps and stairs with steel handrails and surface edgings to provide durability. ▶

(Cox 2010)

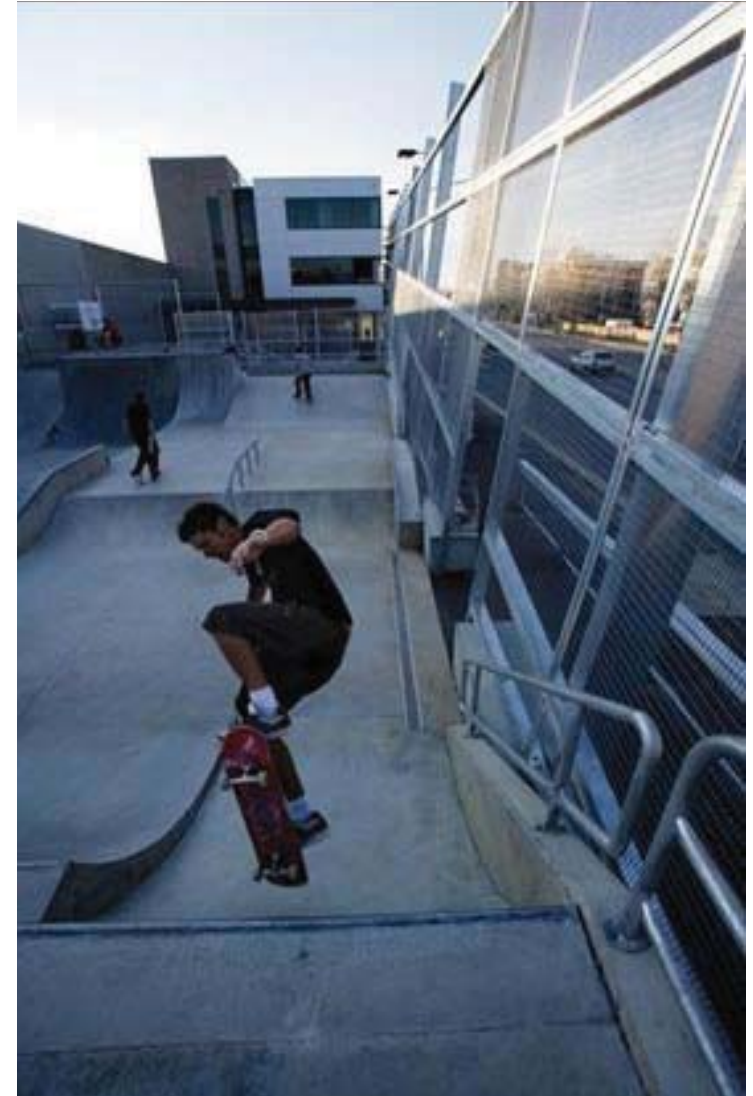


Figure 4-42. Photo of the Civic Youth Centre

Figure 4-43. Photo of the New Day Skate Park



Figure 4-44. Photo of the New Day Skate Park



Figure 4-45. Photo of the New Day Skate Park



Figure 4-46. Photo of the New Day Skate Park

New Day Skate Park Menlyn, Pretoria

A skate park consist of metal ramps and half pipes placed on concrete surfaces. The ramps can be moved around to alter the possibilities. The concrete surface is utilized as an event space as well.

(Author)



Figure 4-47. Photo of the New Day Skate Park

4-4 Video Game Space Precedents

Mass Effect 2

Outside maps consist open landscapes with tall elements in the distance to guide the player to where he is suppose to go. The building itself should guide what is suppose to happen. The pathway to the building is not straight but force the player to experience the space. (Mass Effect 2010)

Mass Effect 2

This is a typical interior space found in the game of Mass Effect. Architecture is used to portray a technologically advanced planet. The spaces are mostly well lit with big openings to the view. Buildings are designed as linear elements to facilitate a narrative. The spaces are to be explored, understood and conquered before the game can be completed. (Mass Effect 2010)



Figure 4-48. Screen shot of Mass Effect 2

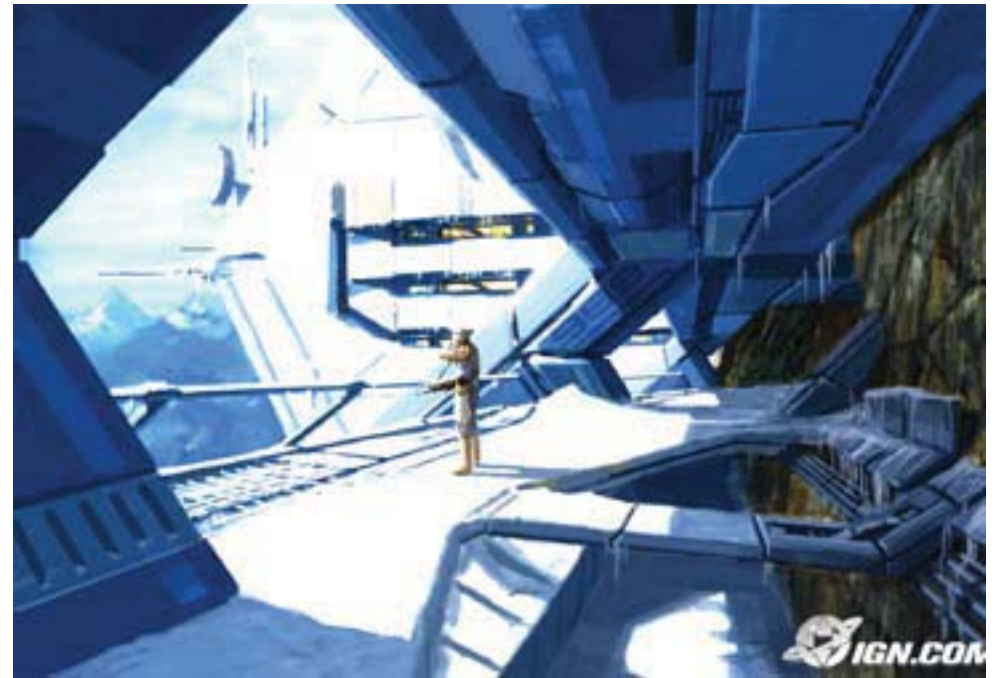


Figure 4-49. Screen shot of Mass Effect 2

Civilization

Aerial view of a map in the game Civilization. The map shows key elements that are more prominent than others. The player of the game can orientate himself according to these elements.

It is clear that these elements are more important and the player have to visit them.
(Civilization IV. The 2005)



Figure 4-50. Screen shot of Civilization

Journey

The map is sparsely vegetated and consist of a desert landscape. The player is guided through the landscape by tall tower and elements on the horizon.

(Journey. 2010)



Figure 4-51. Screen shot of Journey

Deus Ex 3

The map depicted in the battle below consist of a square where the action is taking place. The square is framed by tall buildings to create a sense of place as well as a backdrop for the activity to take place. Lower elements in the space provide hiding place that may be interpreted as more private spaces. All spaces are well lit.

(System Link 2010)

Figure 4-52. Screen shot of Deus Ex 3



Prince of Persia 4

Tall elements throughout the map guide the player and the unrealistic depiction of buildings add an element of surrealism to the stage.

(Techarena 2010)



Figure 4-53. Screen shot of Deus Ex 3



Figure 4-54. Screen shot of Prince of Persia 4

Quake

The building is designed from the inside out. The building's map shows that the building is clearly designed for exploration

(Aardappel; 2000)

<http://strlen.com/maps/>

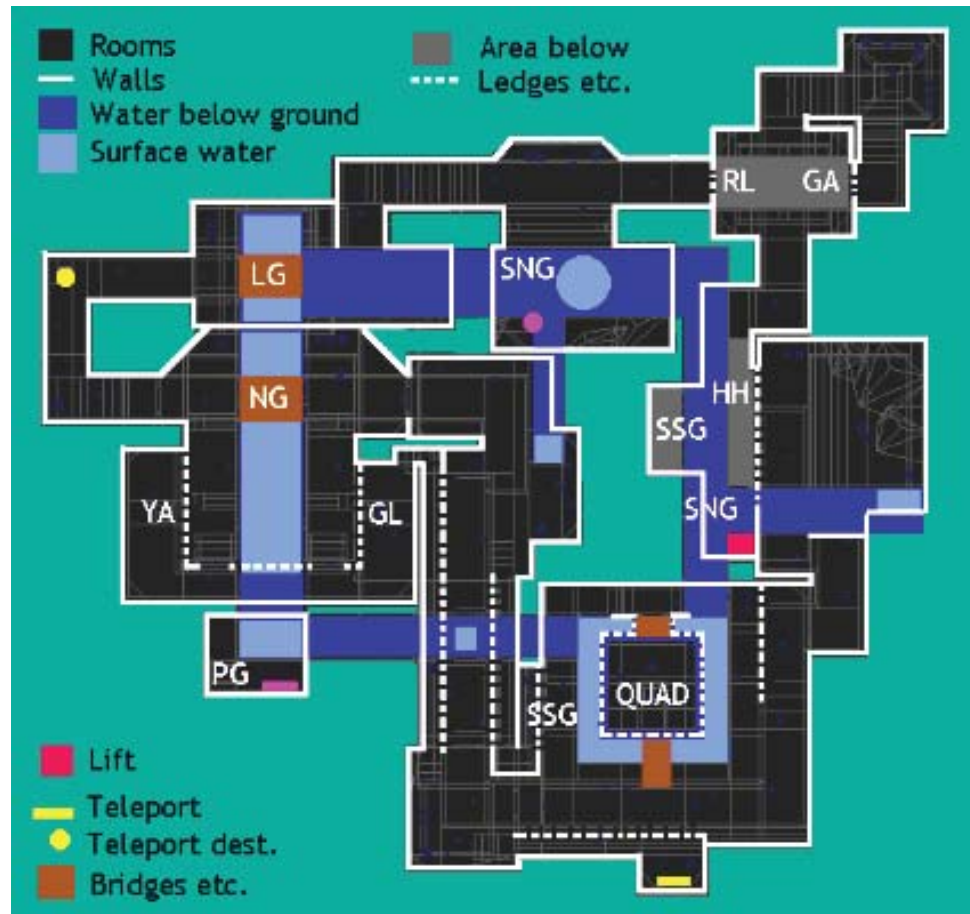


Figure 4-55. Screen shot of Quake

PlayStation Home

Digital representation of an indoor Spaces. This game is already an attempt to merge the virtual and the real world. Spaces vary from homes and private spaces to more public spaces like malls and indoor entertainment spaces

(Playstation. 2010)

Figure 4-56. Screen shot of PlayStation Home



Figure 4-57. Screen shot of PlayStation Home

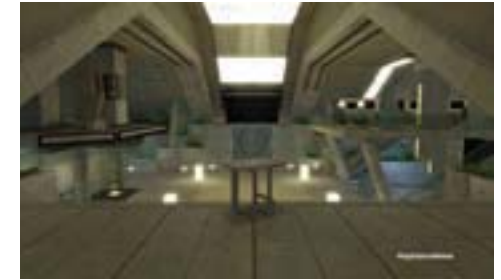


Figure 4-58. Screen shot of PlayStation Home