

How to connect inside of the building with outside

Residential House

by Ayda Bagheri



Project Details

Designer:	Ayda Bagheri
Design participants:	UCA MA Interior design Students
Title:	How to conect inside of the building with outside
Type:	critical architectural and interior design
Site:	Dover south foreland
Session:	August2023





Research Agenda and Process

Overview

Creating nature Inside architecture, and eliminating the ceiling, and connecting the individual directly with the sky and nature . Architectural spaces and their surrounding environment should be integrated into the whole entity. “We no longer have an outside and an inside as two separate things. Now the outside may come inside and the inside may and does go outside” – Frank Lloyd Wright.

Interlacing the buildings and Nature into something that celebrates the two of them together. .architecture seeks to satisfy inside and outside space desires by bringing nature to people. A Good architectural space can provide good physical health, leisure, and habitation all of this in one place. One can not stay healthy in an inside space in absence of these attributes, the outdoor space benefits mentally and physically and improves the quality of life. Fresh air heals. Natural light benefits a healthy sleep cycle and much more. Establishing a connection between both spaces creates a more humane experience, human connection with nature is innate.

Research Questions

1. Do you want to live in an apartment or house that can help you determine the nature and extent of interactions between you and nature?
2. To what extent do surroundings influence thoughts and actions?
3. Exploring the possibilities of future world
4. How the design of architectural interiors can be used to improve connecting humans with nature to improve well-being

Significance and Contribution

Single sentence statement here.

Evidence-based design has shown that incorporating nature into interior design can profoundly affect the occupants' mental and physical well-being. For example, studies have found that exposure to natural materials such as wood, stone, and plants can reduce stress, increase productivity, and even improve air quality. Evidence-based design has shown that incorporating natural materials into interior design can profoundly affect the occupants' mental and physical well-being. For example, studies have found that exposure to natural materials such as wood, stone, and plants can reduce stress, increase productivity, and even improve air quality. The world of interior design has experienced a significant shift in recent years, with a growing emphasis on sustainability and the use of nature inside. As more and more people become conscious of their environmental impact, interior designers are embracing the benefits of incorporating nature into their designs. In an age where climate change and environmental degradation are pressing concerns, integrating nature in interior design is more important than ever. The design allows people to think about modern society through the eyes of a future world. Whether and how our developments will have an impact on the future. This will lead to changes in the way we live and approach the world in the present.

Methodologies

1. Exploring the possibilities of future world
2. Exploring the possible consequences and effects of nature to human
3. critical thinking about social issues and to respond to social realities.
4. Exploring the lifestyles and habits of different groups of people and substituting them into the design.

Interior Design





Design Proposal

This project uses a sense of spatial so that people can have a place to relax and live away from anxiety. These designs will be a space that everyone wants to release their stress after experiencing a great deal of stress in their lives, giving them a place to share a place of peace through the environment of the space. When people enter this space, A central courtyard connects you with nature, but it also creates an open, outdoor space in the middle of your house. This arrangement can make the interior of your home feel more spacious and inviting. people can release their worries by connecting with nature So this space will be a spirituals anctuary for human beings. In this house, the acts of reading, meditating and communicating are relaxing. Empty (negative) spaces give form and meaning to full (positive) shapes and spaces. expands it and makes it transparent to the "divine light" and allows the soul to breathe and expand, on the other hand It will enhance its spiritual importance . It's a house for multiple generations of a growing family and allows the owner's daughters, their husbands and their children to reside under one roof ,accommodating their desire to be together and their desire to be apart.

Key outcomes of proposal

1. I used revit to design a plan
2. I used 3d smax and render in order to show how can I connect inside of the building with outside which i could convey the feeling of the users of the house to the viewers.

Design Research Context

Field of Work

The project encompasses a variety of designs for future spaces, future human lifestyles and the transformation of existing buildings to make them multipurpose in the future and visual impact on the viewer.

It's a house for multiple generations of a growing family and allows the owner's daughters, their husbands and their children to reside under one roof, accommodating their desire to be together and their desire to be apart. The open plan ground floor creates a light, airy atmosphere. Different 'rooms' are formed by walls moving in and out of alignment – offering only glimpses into the different areas, rather than a full view down the length of the house. This provides the practical and accessible ease of open plan living. And I designed the slope of the roof in such a way that it directs the rainwater towards the open roof and from there inside. magical relationship between house in one hand and the water. natural swimming pond or pool. it is a pool that the kitchen is a floating island. when it rains, it is poured in to the pool from the open roof, and you can experience the view of the rain inside.

Design Methodologies

The project is an exploratory spatial experience which uses different technical modes such as Revit in order to design 2D of the project plans since This software is beneficial in projects that require a high degree of detail, accuracy, and also i used 3D Max and photorealistic renders in order to model my design, This technique is used to represent real objects within the digital environment and visualize objects that still don't exist in order to allow viewers to create realistic visualizations. on the other hand they can see how the space will look in the real world. they are in the loop and have a direct impact on the project

Minimalist architecture was uses simplicity to create a unique space.The area that surrounds your swimming pool is called a pool deck. For in-ground pools,I chose a concrete pool deck, which is not only waterproof ,but also durable material and One of the biggest trends in outdoor design today is installing a decorative concrete pool deck: a colored, textured, and inviting area surrounding the pool that provides a safe, slip-resistant deck for sunbathing and barbecuing. that can be customized.Decorative concrete has opened the doors to creating pool decks that complement the exterior of the home, meld with the outdoor environment,

Using big Windows in my design are far more than mere openings for the purpose of ushering in light. At a house, they are the interface between interior and exterior, which bring the private into contact with the outside world and vice versa connect the environment with the private space.All the more so when it comes to big and high windows. Then a broad outlook is possible and generous insight is granted, fresh air can flow unrestrained into the room, as well as the sounds of nature; thus a large window can definitely influence the interior ambience of a home.

Critical Design Elements

1. The design portrays the unique living spaces within the community
2. 2. The futuristic and contemporary feel of the interior spaces
3. 4. Making 3D Visualization model of a particular part of the whole project

Design Narrative

In this project I develop the basic model of the site, the initial concept and development of the design drawings, and the final design proposal and real-time rendering and the project began to take shape with the development of the different design elements merging

1. Develop the site: Firstly, site visits, photos, measurements and collection of information from Google Earth and the official website. Secondly, digital redevelopment of the site structure and three models using 3D Max and Revit

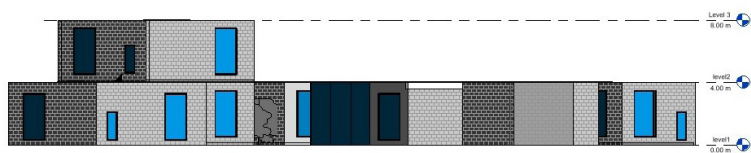
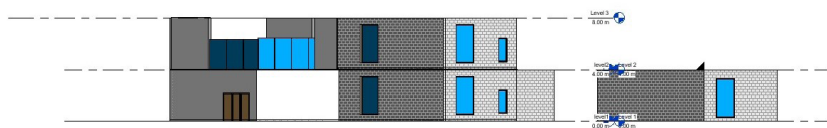
2. Drawing plans: 2D Drawing was done by Revit in detail and accurate

3. Create Interior environment: complete 3D max model and Interior floor plan were combined to create the internal environment of the site

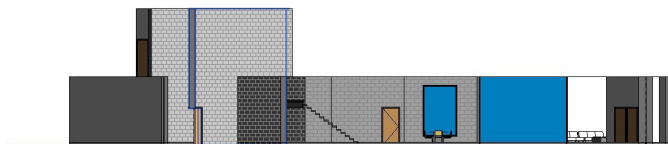
4. Material application: After creating the interior space of the site, different materials select based on the research done during the project.

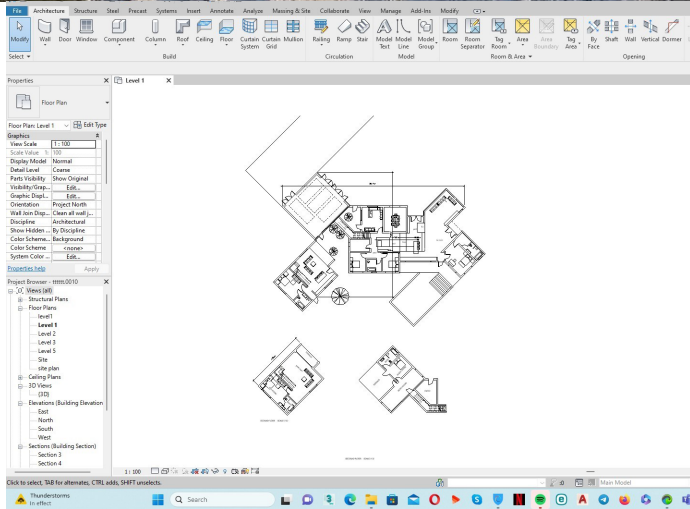
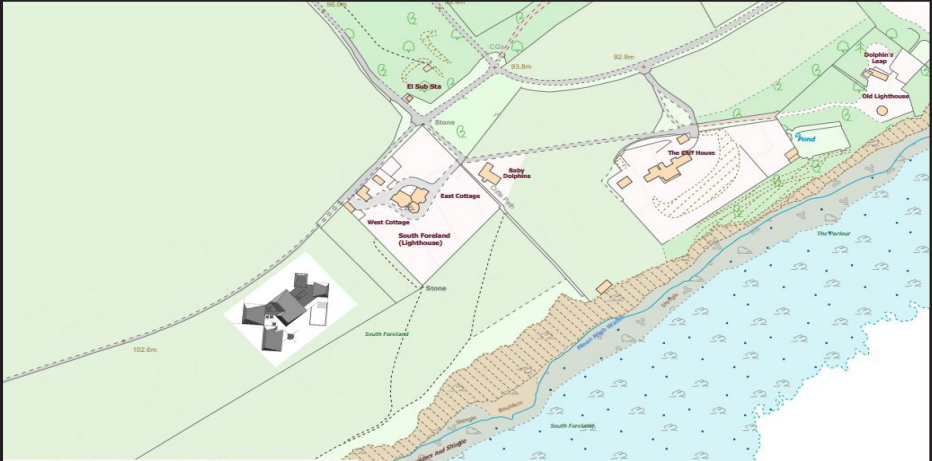
5. Lighting application: After the material application, the next step was to install different types of lighting in the space to ensure that the space experience could use at night and during lightfree hours.

6. Real-time rendering: After the material and light application, the next step was Rendering.

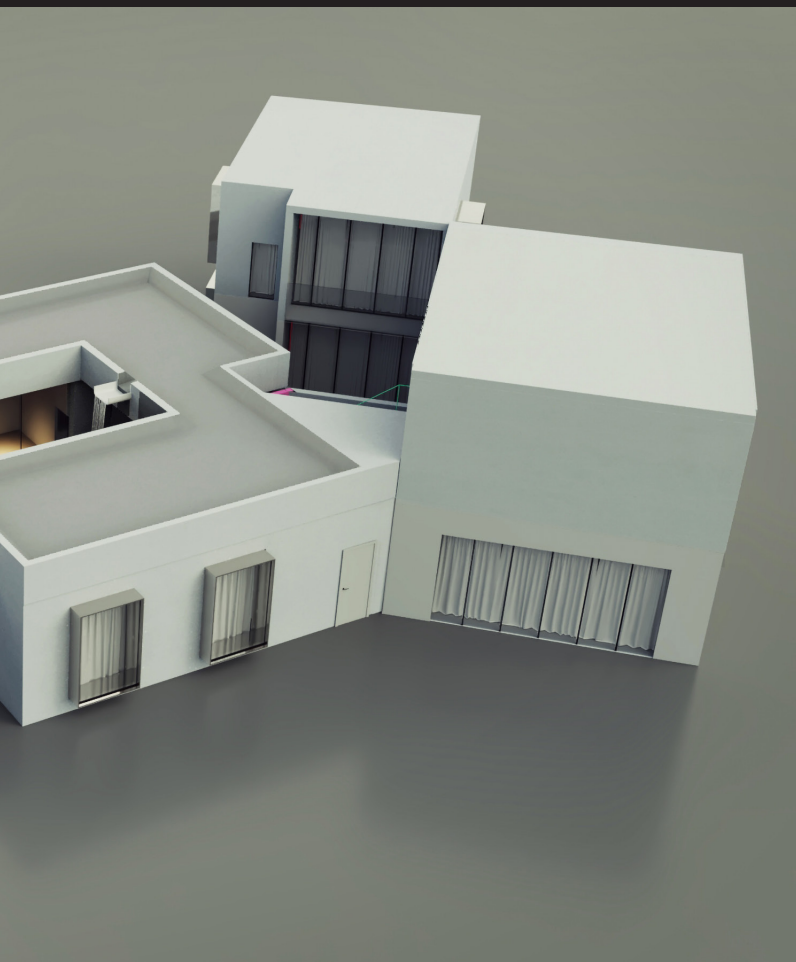


SOUTH ELEVATION SCALE 1:100









Visualisation and Realisation Techniques

The process of developing the interior space of the Residential house included:

- a. Site development :The site model was developed based on the analysis of the site by Revit and 3D max.
- b. Technical drawing:development The project drawings develop based on Revit and design sketches.
- c. Material Application:Natural materials are applied with the developed 3D space model,using Render to give a realistic feeling.
- d. Real-time Rendering:Realistic rendering

Challenges and Opportunities

During the design process of this project, I encountered some new challenges and design opportunities. At the same time, the process has made this project better

a. Challenges 1

First of all, before I designed this Residential house, I had no contact with this kind of space which is connect Inside of the building with outside So in the design process I searched for information about and designers who designed in this style and how to integrate these two functions in this space was a challenge for this project

b. Challenge 2

Secondly, I had to design the roof in such a way that it would direct the rainwater to the pool in the courtyard, and I had never designed a sloping roof or such roofs before so I found it difficult to design it

d. Opportunities This project is an excellent opportunity for me. This design can bring people a peaceful atmosphere to relax and get away from their worries. And most importantly, the design of this space gave me a good feeling, and in the course of researching about the overall design, I obtained useful information and enjoyed it, and I also consider this design as a form of respect for nature.

Inhabitation, Interaction & User Experience

This project have found a way to bridge the gap between the ever-growing amount of time humans tend to spend indoors and the importance of having a visual connection with nature. The importance of connection with nature, it's elements and processes .

We believe that the spaces where people spend the majority of their time should not only be functional and well decorated, but also have a positive impact on our well-being. It has been proven by various studies worldwide that the visuals of greenery and animals lowers the stress levels, our blood pressure and awakens the feeling of serenity. it is of utmost importance for humans to feel connected to nature on a daily basis.

In this project I considered several ways humans perceive the feeling of being connected with nature such as:

- Visual connection with Nature
- The Presence of Water
- Dynamic and Dispersed Lighting
- Proximity to Natural processes
- The exposure to Airflow changes

These connections can be established by a variety of different elements. By connecting inside of the building with outside , I was able to successfully narrow the gap between the modern-day humans and nature.

One of the easiest ways to incorporate different elements that simulate the feeling of being out,rainwater is poured in to the pool in the form of waterfall by the slope given to the roof.

people can also see the design which i did to relax even though they cannot physically exist in reality, that reflecting the inner space and the outer. It is important and necessary to encourage love and respect for nature.

Dissemination and Future Work

I aim is to raise awareness on how benefits of connecting with nature can have . People who are more connected with nature are happier, feel more vital, and have more meaning in their lives.on the other hand,to encourage people to preserve nature for future generation

This project is designed for all those who feel anxious and restless in city life. People in the city can have a lot of stress from work and life. When people in the town get tired of the fast-paced city life, they want to have a peaceful space to relax and get away from their worries and stress.

- making enough of an impression that people will recall my issue in the future people actually comprehend the issue and what needs to be done about it learning about the issue has caused them to become interested in taking action.

As an interior designer I enjoyed the process of the project that i start with what my passionate about because passion based learning is more engaging and more likely to be maintained over a long period of time

Credits

MA Interior design Course Convenor:

Lucy Jones

MA Interior design Design Tutor:

Alex Borrell

Student number:2220915

Ishigami, junya (2018) *Freeing architecture*. Tokyo: LIXIL Publishing ; Paris.

Riba House of the year 2017 (no date) RIBA. Available at: <https://www.architecture.com/awards-and-competitions-landing-page/awards/riba-house-of-the-year/riba-house-of-the-year-2017> (Accessed: 17 May 2023).

