

Ataraxi

Portfolio

Adapt

Project 01

Adapt

Set 21st November - 15th December 2022

Exploring the flaws of a space can help open up to potential solutions for them. In this project, I set out to rebuild the space in which I inhabit and optimise it for maximum comfort. Birthed from the analysis of existing builds, using a range of drawing and modelling techniques, I have been able to completely transform and enhance the existing space.

A larger scale project comes with greater issues, which were certainly prevalent throughout, yet I was able to overcome them and propose an effective design to improve my living conditions greatly.



Adaptation Possibilities



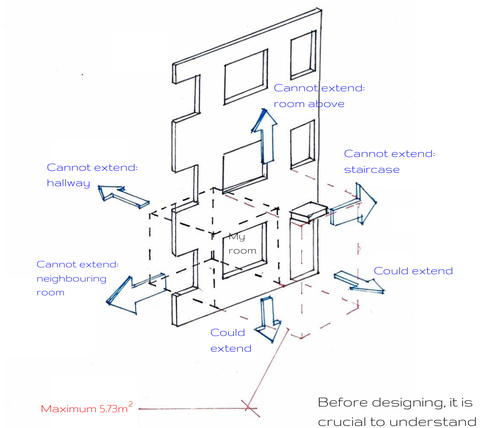


As part of my exploration into potential adaptation methods, I explored the possibility of constructing a new space entirely in a world in which I had no boundaries holding me back. I took a list of all of the flaws with my current room and then provided direct solutions to them. These solutions were then interpreted individually to ensure focus on solving them, hence the creation of this drastically different space. I have been able to restore my connection with nature, return to elevated living, have great privacy and have a larger, more freeing space altogether.

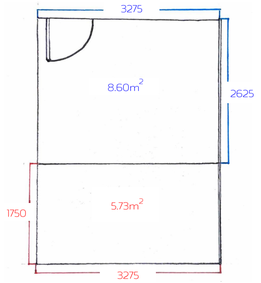
In relation to the true direction this project shall take, I must consider the space in which I am reshaping. Therefore restrictions may apply, whether they be stylistically or spatially, they must be considered and worked around. Therefore, creating a build such as this early in my project allows me to tap into what aspects make this adaptation successful for me, and they are as follows:

- Connection to nature
- Increased privacy
- Different levels used
- Greater use of natural light
- Personal facilities - bathroom and kitchen
- Larger bed
- Increased clothing storage
- Bigger workspace
- Modern aesthetic

Extension Potential



Unit: mm



Before designing, it is crucial to understand the context and boundaries of the build, as identified by the first diagram.

Restrictions are present in the brief, dictating that the extension must be of a maximum ⅔ of the existing floor area. Therefore, a total floor area of 14.33 square metres is possible.









Basic depiction of existing bedroom using scaled drawings.

I constructed a working model with an interchangeable facade area, which will allow me to switch between different designs without having to reconstruct the existing structure each time.

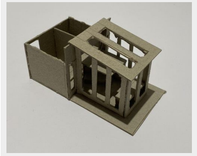
Initial Solutions

Model 1





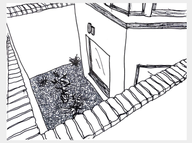
Precedents
- WT Architecture Glass Writer's Studio





Maximising light and visibility through the extensive use of large windows greatly benefits my quality of life, however this is counteracted by the extreme lack of privacy. Therefore, a fence will be required yet this will restrict the light and view, making the design rather problematic as a whole.

Model 2





Precedents
- ARCHEA Ltd Basement Lightwell
- Ms Jolly's Lightwell





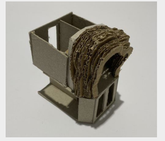
Lightwells enable me to integrate a garden area, however when segmented in a courtyard, light is obstructed. Further issues include the roof causing rainfall to be directed into the courtyard, as well as slightly protruding on the room above.

Model 3





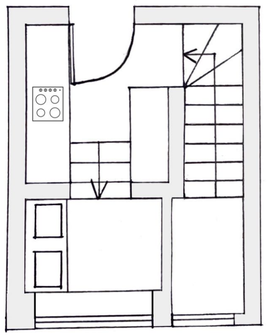
Precedents
- Cave for Kids, Trondheim
- Camper Store, Barcelona

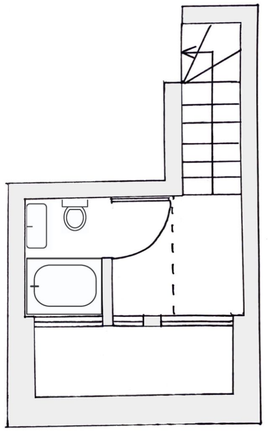




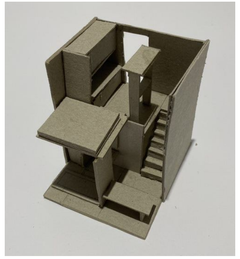
Complex shapes may be achieved by layering, as demonstrated in this model, although the facade is drastically contrasting to the remainder of the building. Ideally, the extension should be seamlessly integrated to the surrounding area, ensuring consistency throughout.

Layout Refinement





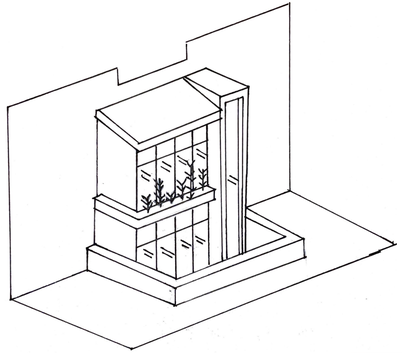
New Interior Layout
Plan Drawings and Model

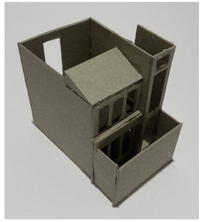




I found the greatest issue with previous designs was in the difficulty I had in organising the interior space. Therefore, I set out to create a universal space which could be utilised across various different facade designs, allowing me to ensure maximum utility of the space I had access to. Featured is a garden lightwell, bathroom, study area, kitchen, wardrobe, loft bed and staircase.

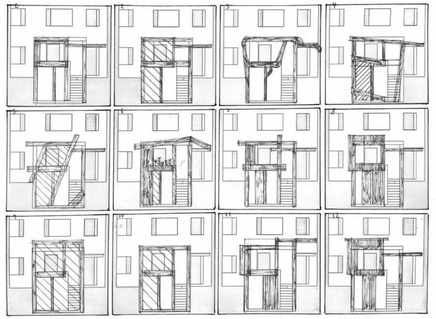
Facade Model Featuring New Interior Layout

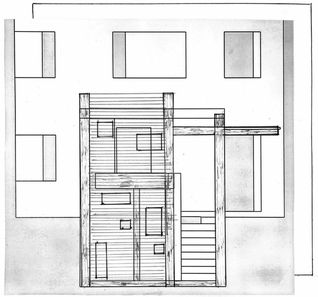






Facade Exploration and Construction

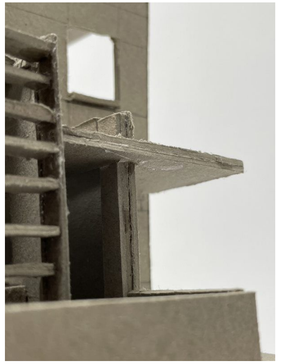




I experimented with a vast range of facade designs in order to find the most suitable one, leading me to the design on the left. The design adopted a sleek, modern and geometric form (reflecting the interior). Additionally, floor to ceiling windows offer a clear view of the miniature garden in the lightwell, rebuilding a connection to nature. Nonetheless, privacy remains a crucial factor in the design, maintained by shutters and separation of segments of the design. The design clearly brings attention to the entrance of the building, signified by the different colour materials and the overhang, which offers protection from the elements.

This was then constructed as a model and integrated into the building, however there were some changes to be made. In the event of heavy rain or snowfall, plants in the lightwell below may not survive. Therefore, integration of a retractable covering has been considered. Furthermore, shutters on such a small scale become overwhelming (as seen below), leading me to opt for glass which offers privacy..



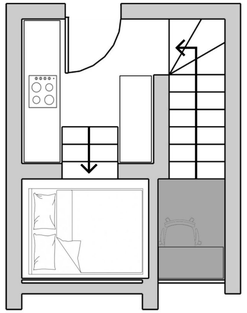


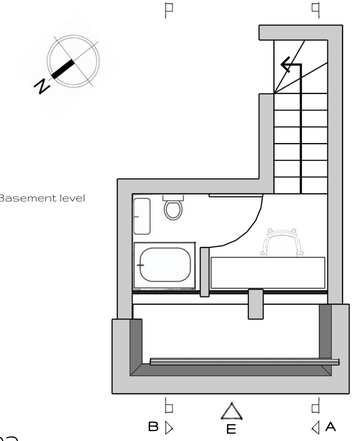


Orthographic Drawings

Plan View

Ground floor



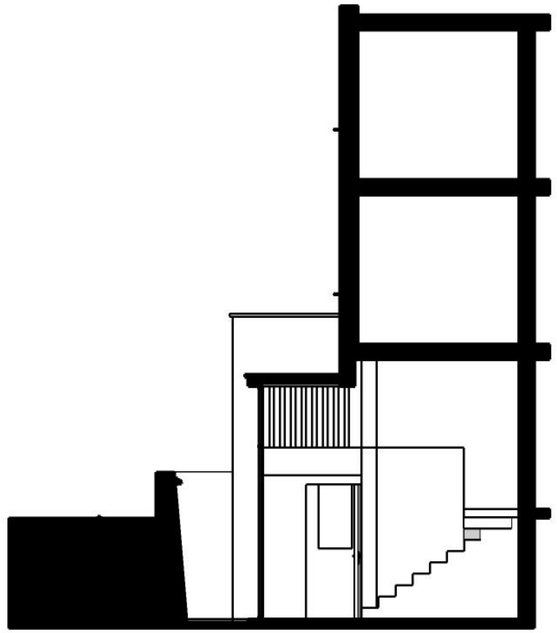


Elevation

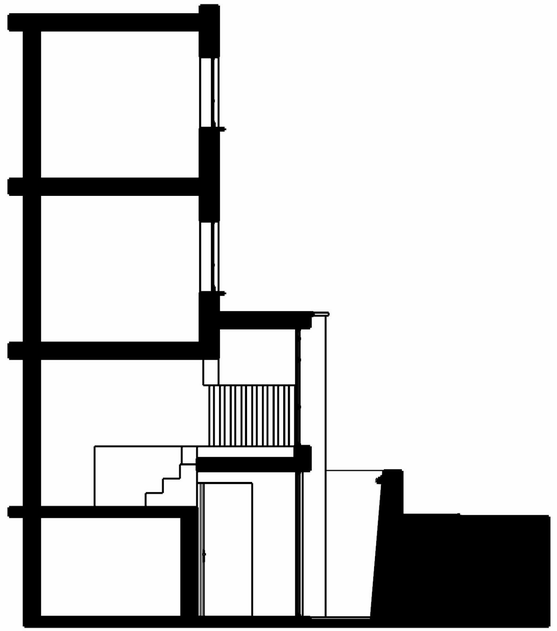


SCALE BAR 1:50 0 1000mm

Section A

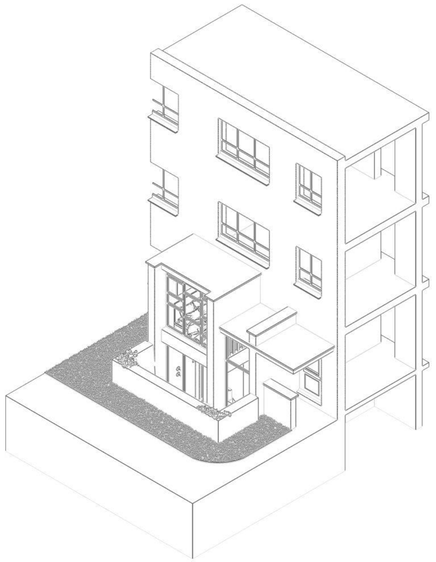


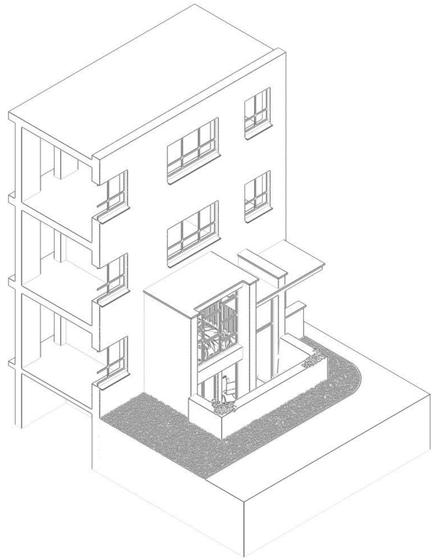
Section B



SCALE BAR 1:50 0 1000mm

Isometric Views





SCALE BAR 1:100 0 1000mm

Renders







