



| PORTFOLIO



LETTER

I am keen to be accepted into your programme as all my life I have been interested in designing and making things. My brother, [REDACTED], and I have become well known on Waiheke for our wacky inventions. For a long time we toyed with junk and, as a result, won many prizes in the local Recycling Awards (Junk to Funk). Most people on Waiheke remember our movie - Junkass - a poorly filmed home video of our inventions; this includes an 18 wheeled go-cart train and our seven storey tree hut (please take a look - I have included it in the Portfolio).

After this we progressed onto explosives and projectiles; one of our major achievements being a 3 metre high trebuchet which slung a rugby ball around 100 metres. We are still perfecting our potato canon.

My passion for design has slowly moved to more complex creations. I am constantly rebuilding and experimenting with electronica: stereos and computers, fans, lighting and websites; improving and changing them. I like both the conceptual and the physical aspect of design. I am teaching myself C++ for the fun of it. As you will see in the portfolio, Lego is a recurring theme for me. First I played with it, then I made films from it, won prizes with it (see 48 Hour Film Making Festival) and now I have even designed an apartment with it (Level 3 Transformable Apartment). My other interest is basketball; I am coaching the juniors at school and play it every day.

One of the key features to my development is having a twin brother. Either he or I start with an idea and then we develop it. Working as a team makes things happen for us really quickly. When we work in groups (such as the 48 Hour Film festival), I often become the leader as I can see what needs to be done and how to go about it. We always receive a placing in People's Choice and one of the highlights was being chosen as finalists for Best Teen Film in 2009.

I would be designing things even if I wasn't at school. However, by taking Graphics as a subject, I believe that I have a good understanding of the design process. In 2010 (last year) I received the school trophy for Excellence in Graphics and Design and also First in Class in Graphics. The year before, I received Diligence in Graphics (pipped to second place by my brother). I have also received awards in Hard Technology and Physics. So far I in NCEA I have Excellence in Level 1, a Merit Certificate in Level 2 (I only missed out on Excellence by 4 points) and I have already gained around 28 Excellence points in my internals at Level 3. While these grades sound great, I have had to work extremely hard to get them. This means no weekends.

I love learning and I want to apply my design abilities to tangible outcomes while the conceptual aspects also appeal to me as I am intrigued by the physics behind how objects work. This is why I am asking you to accept me into your course. I think that I am capable of doing great things if I am extended and shown how. I need the opportunity to step up and take my design ideas to a higher level.

[REDACTED]

GRADES

AUT ID: [REDACTED]

NCEA Grades

Level 3: To Date

Graphics/Design and Visual Communication

Geography

Chemistry

Physics

Maths with Calculus

Total:

Number of Credits

Excellence

Merit

Achieved

5

12

6

5

4 (under review)

28

4

Level 2: With Merit

Graphics/Design and Visual Communication

English

Chemistry

Physics

Maths

Total:

Number of Credits

Excellence

Merit

Achieved

18

3

12

7

8

4

7

8

12

4

9

5

8

46

33

26

Level 1: With Excellence

Graphics/Design and Visual Communication

Geography

English

Biology

Chemistry

Physics

General science

Maths

History

Economics

Total

Number of Credits

Excellence

Merit

Achieved

15

7

17

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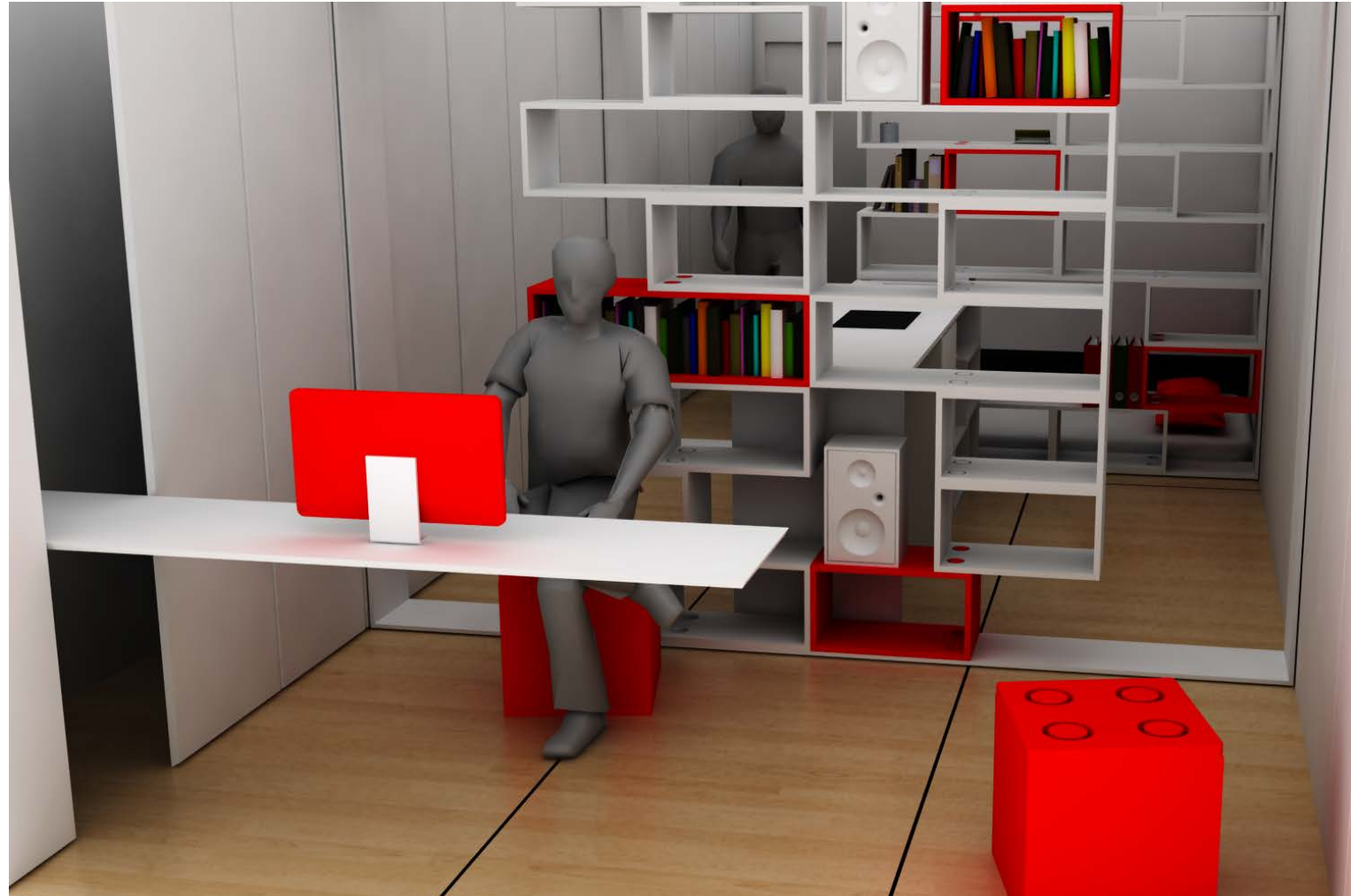
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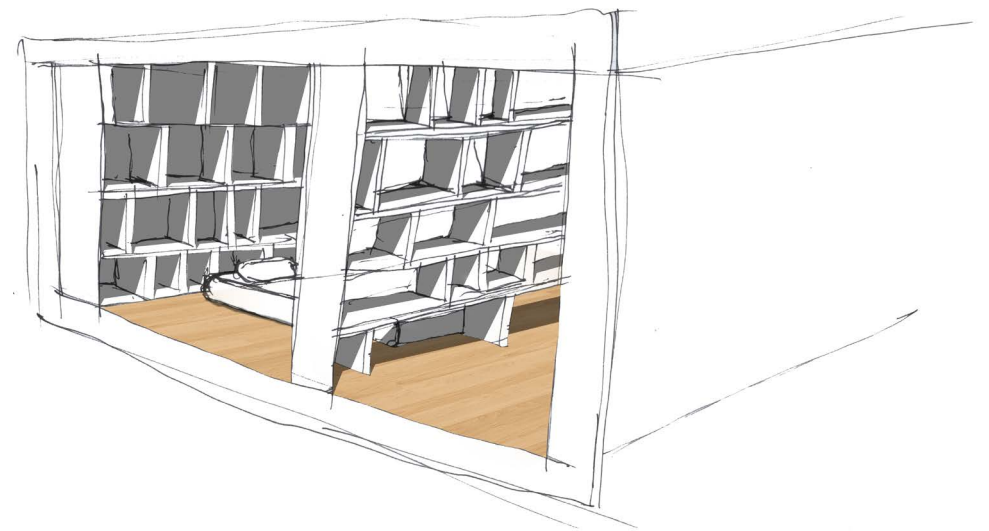
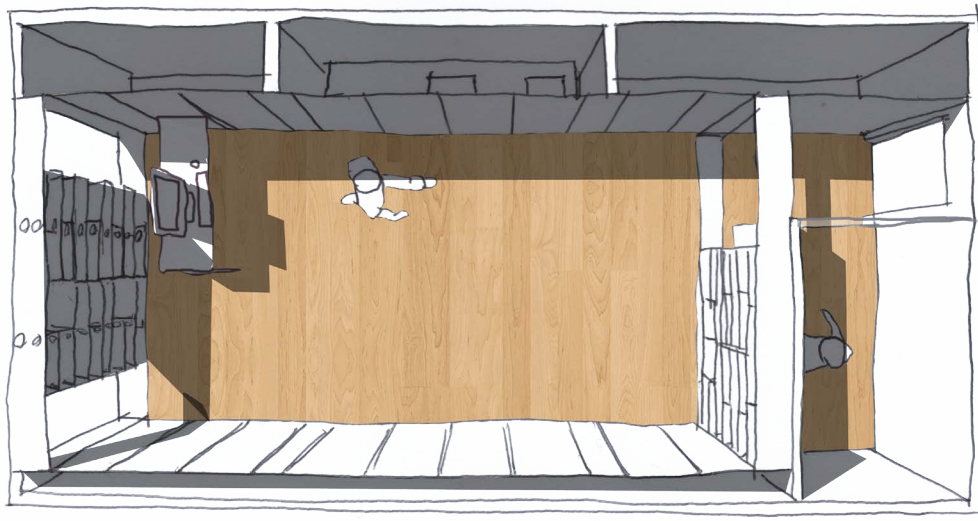
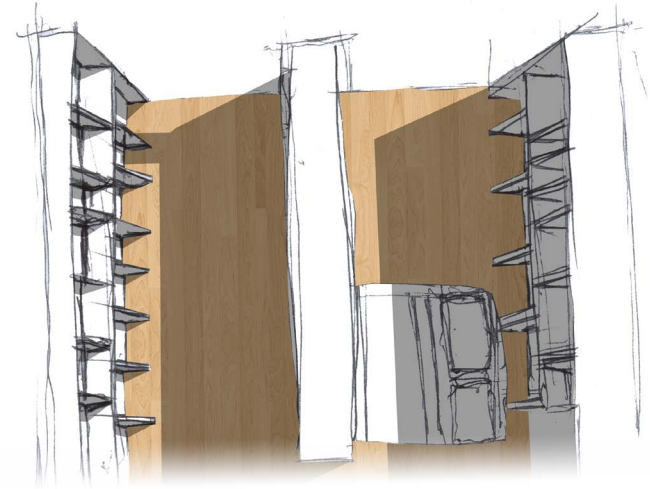
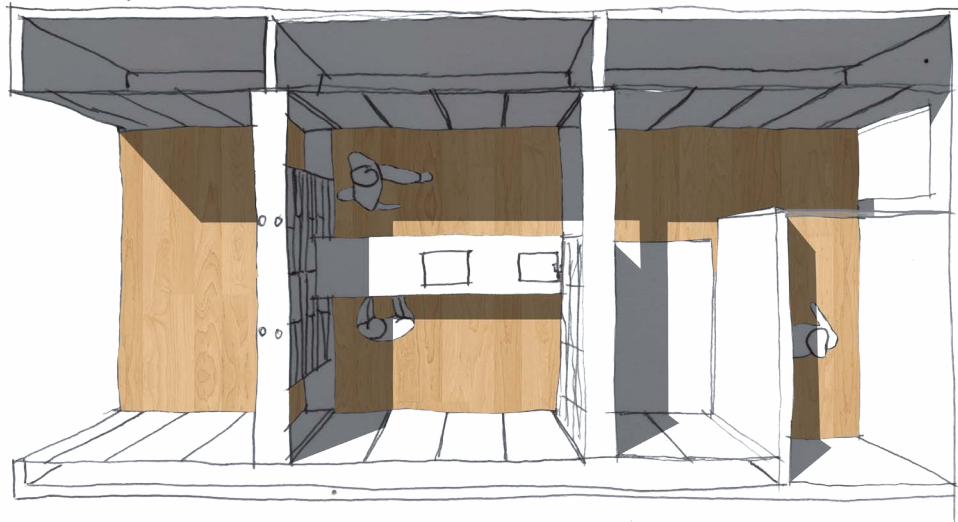
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TRANSFORMABLE APARTMENT

Year 13 | Graphics | Transformable Apartment



Designed in Year 13 (2011), the brief was to develop a 32 square meter transformable apartment for a design graduate from AUT. It was located in the central building district of Auckland. This apartment was based on De Stijl, Yuko Shibata and Japanese Architecture along with a lego theme. The apartment can transform from domestic dwelling to work space to a studio space for client consultation.



Images shown are rendered and photoshopped developmental sketches



Almost every aspect of this apartment transforms; shifting from a large open plan living area to a functional compact multiroomed space. It uses Shibata's moving perforated walls as inspiration.

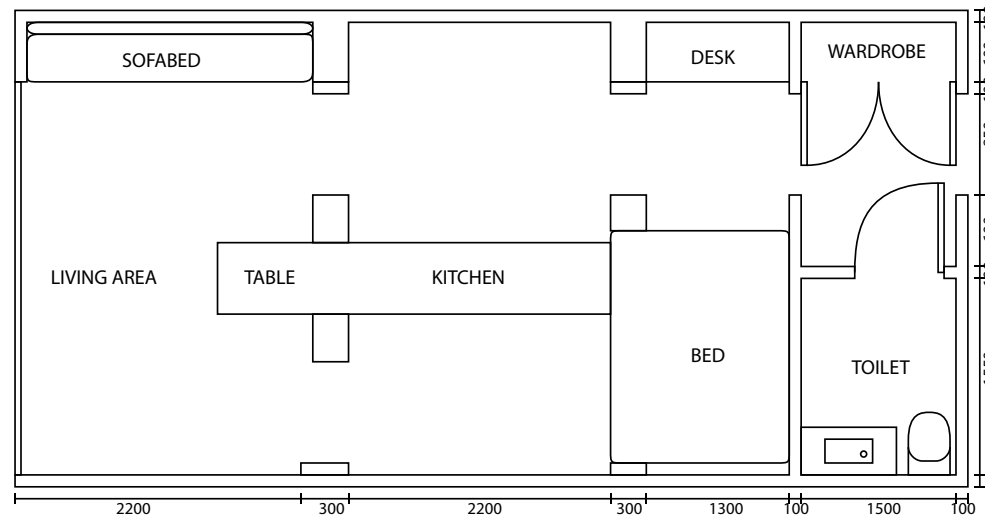
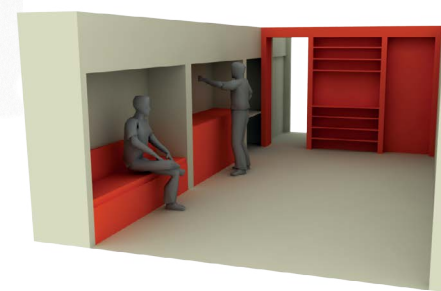
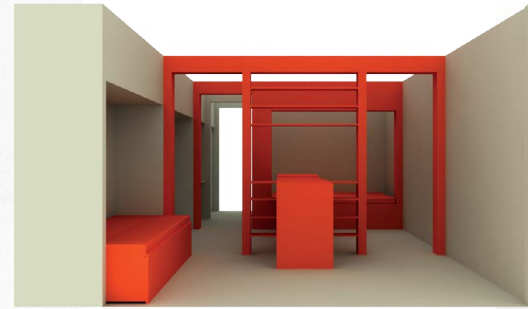
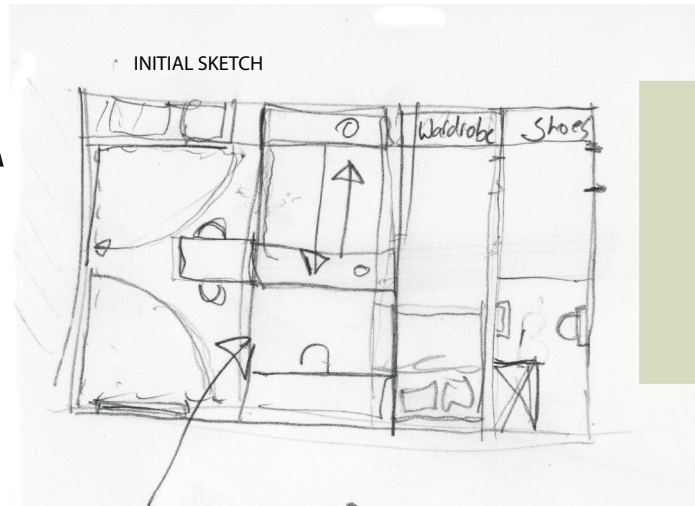
The asymmetrical apartment is simple, functional and ornamentation free. The clutter free open plan area will appeal to the minimalist aesthetic of the client while functioning well as both work and recreational space. Order is gained by inbuilding some of the furnishings. For example, the inbuilt seating simplifies the space and provides good sightline and easy access to a large multimedia screen. The shelving on the wall also provides space for creative works and books.

The advantage of this design is that the apartment does not need to be fully transformed to be functional. For example, sliding the kitchen back into the wall cavity enables it to be accessible when the apartment is at both transformation stages.

An issue with this design is the position of the desk; it is functional due to its large size (1300x600), but its position is not ideal as it faces the wall and lacks natural light. The client spends much of his time at home working at the desk so it needs to be in a dynamic space that stimulates him.

Compared to the following concepts, this design makes the most efficient use of space. It can even accommodate two full sized beds in the space, one for a guest and one for the client.

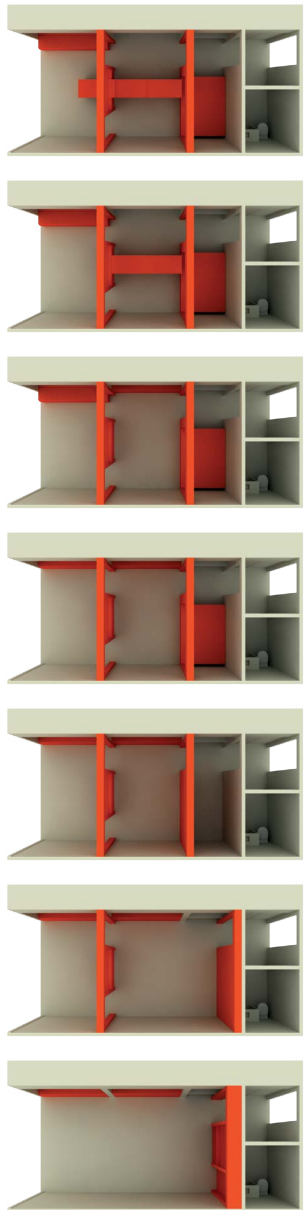
CONCEPT ONE



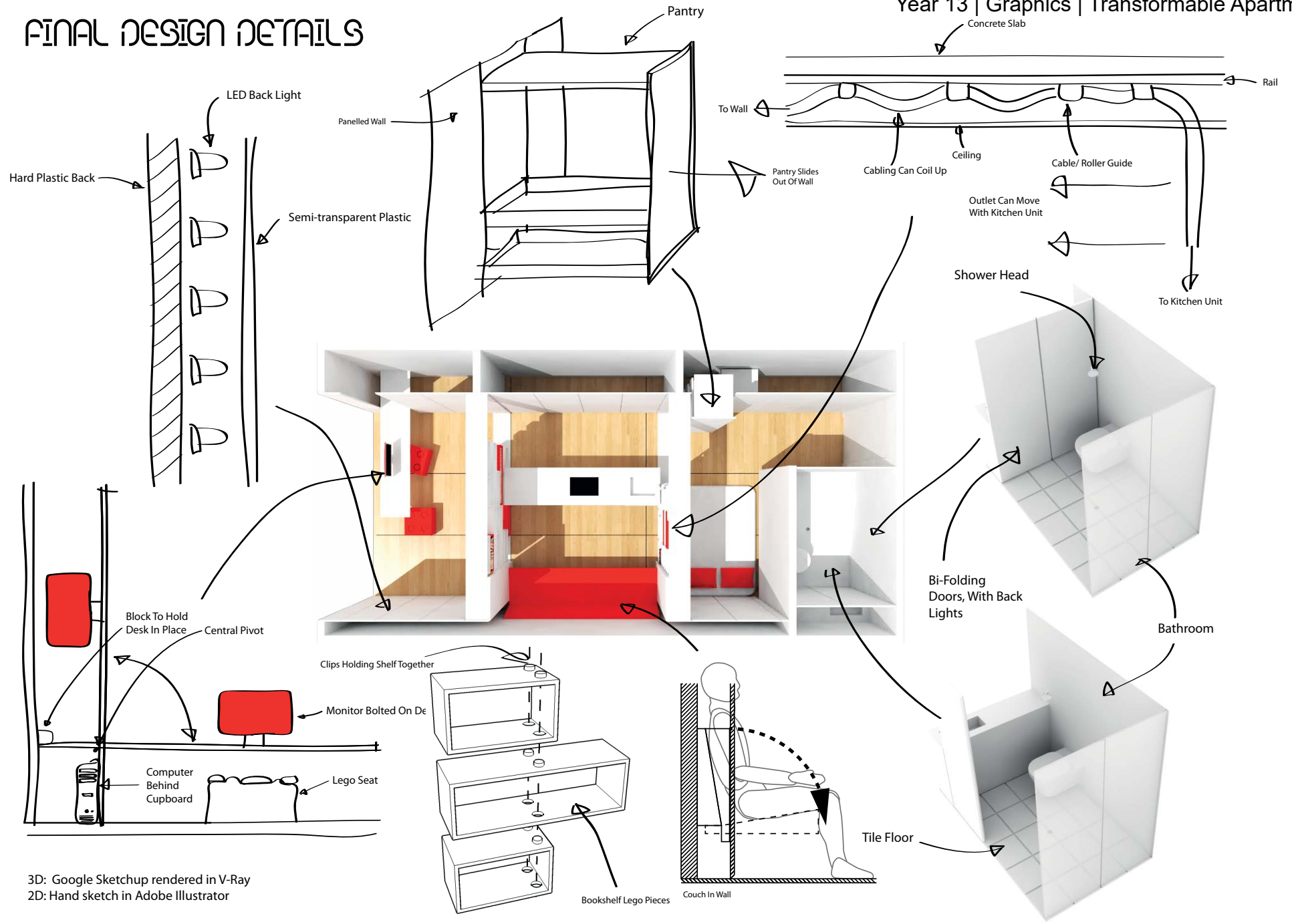
2D: Adobe Illustrator 3D: Google Sketchup rendered in V-Ray

Key: ■ = Transformable ■ = Non-Transformable

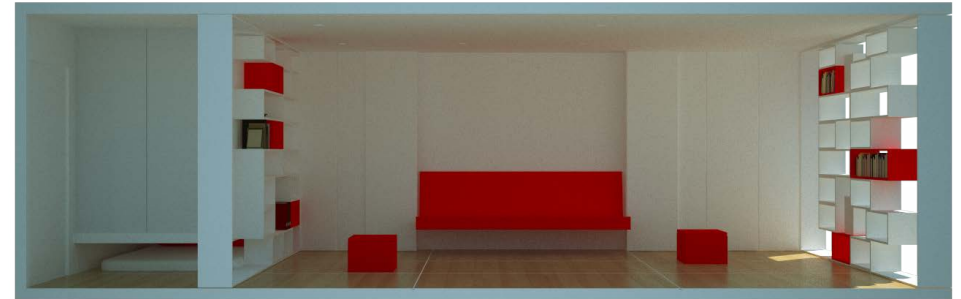
TRANSFORMING



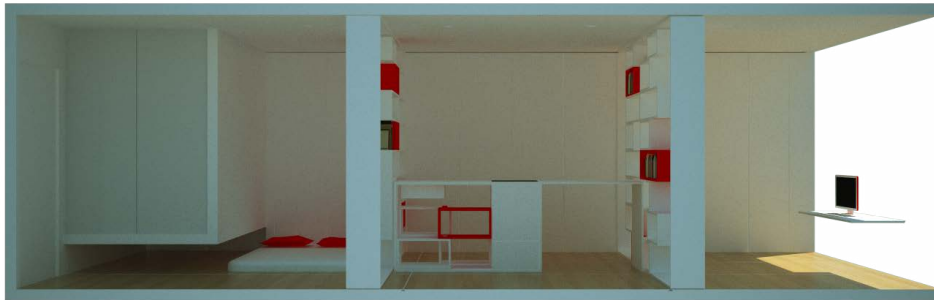
FINAL DESIGN DETAILS



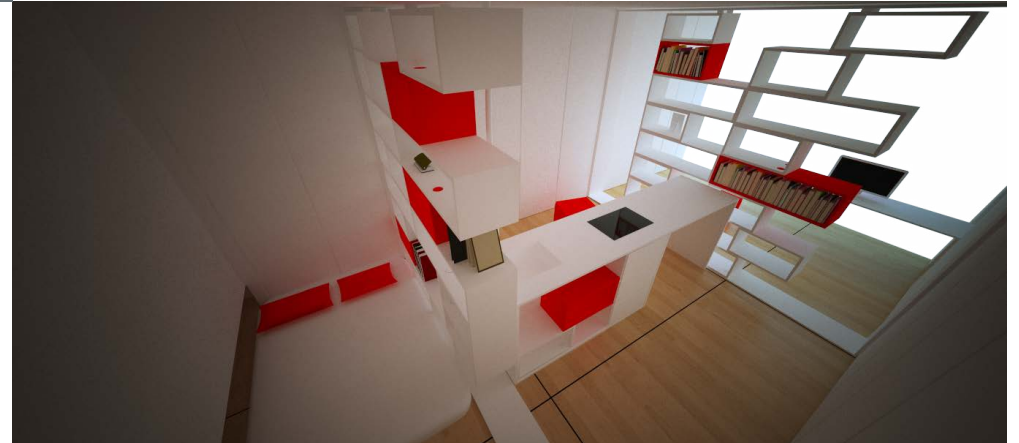
3D: Google Sketchup rendered in V-Ray
2D: Hand sketch in Adobe Illustrator



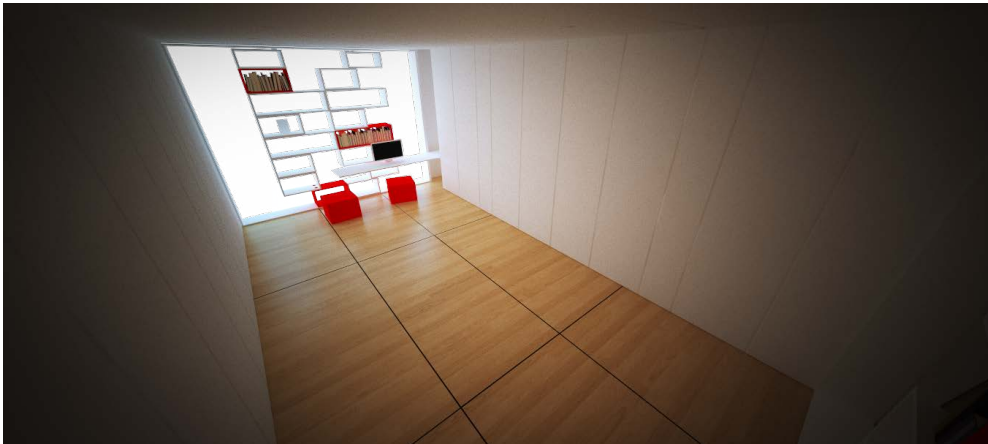
Apartment in media lounge mode



Apartment in sleeping, cooking and office mode



Apartment in product display show room mode



TRANSFORMABLE FURNITURE

Year 13 | Graphics | Transformable Furniture



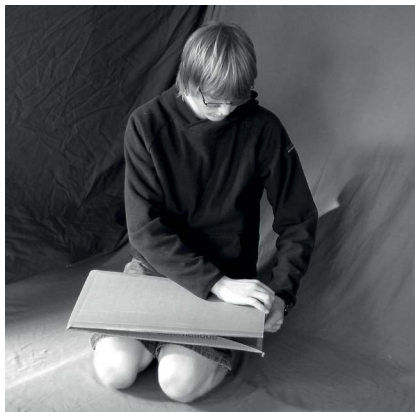
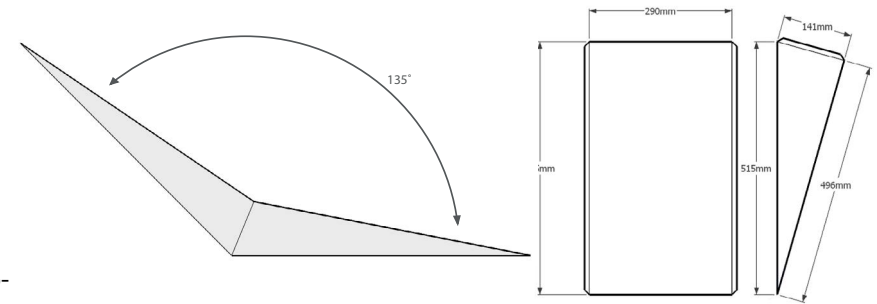
The transformable furniture (pictured) was designed in 2011 response to the transformable apartment brief. The client required a furniture item which reflected the themes and aesthetics of the existing apartment. It needed to transform, echo the Lego theme and be ergonomic. A chair was designed which could transform between lounge, desk chair and stool. Space was maximised by making the chair entirely deconstructible and able to be stored in its own box within the existing bookcase.

ERGONOMIC MOCK UP

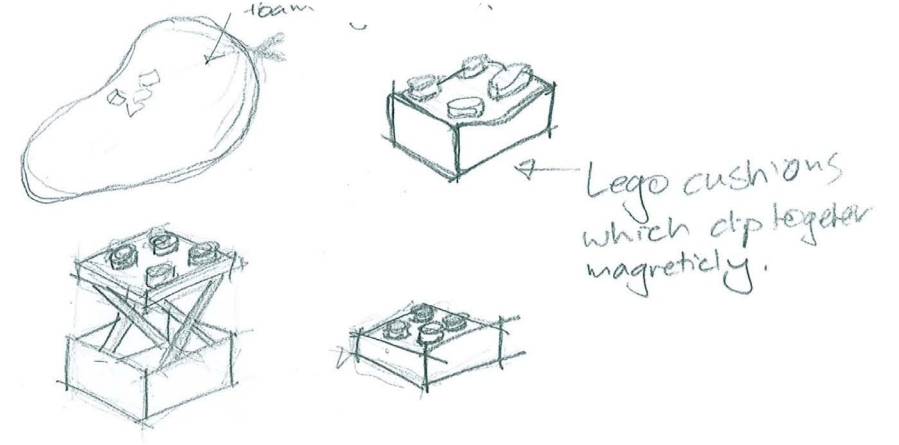
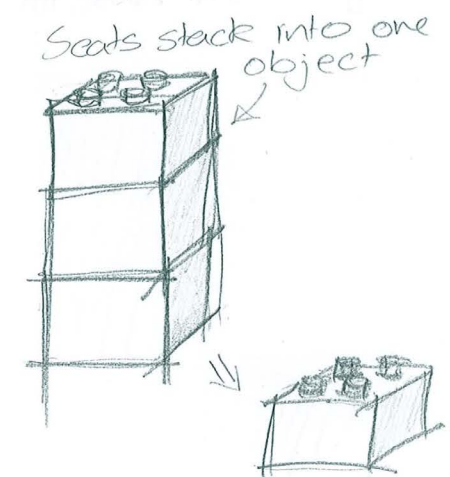
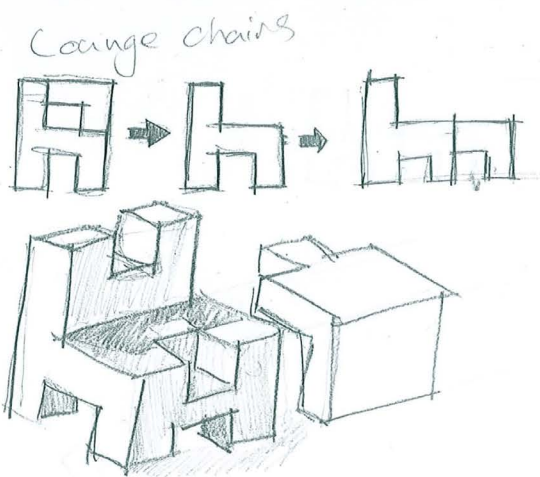
Testing the proposed design in full scale (1:1) helped to ascertain the level of comfort and ease of transformability for the chair top.

The angle and width of the chair fits the body shape well, being wider in the trunk and hips; it also meets the ergonomic specifications. It transforms simply and easily without any complicated levering or joints (which would weaken the overall design). The person (pictured) is over 6 ft yet the chair still fitted him comfortably. It should therefore be comfortable for the average person. The leg rest has not been included here as the main concern of this mockup is related to back angle and width.

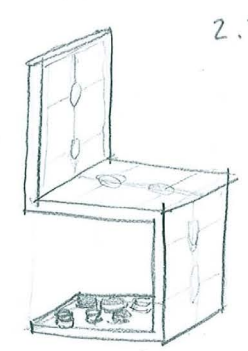
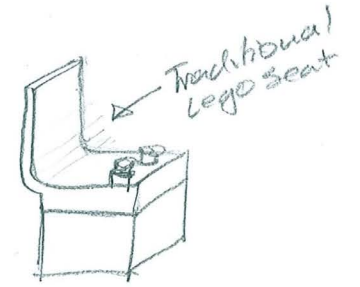
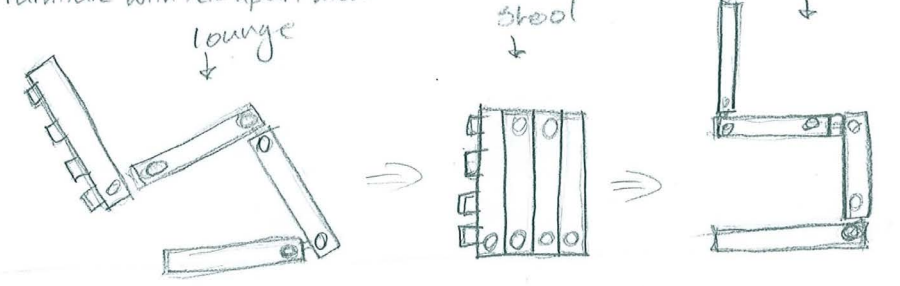
However, given that the design needs to transform and be multifunctional yet simplistic, some compromises have been made in terms of ergonomics. There is no headrest on the seat and it does not extend past the shoulder blades. This is because it needs to fit in the bookshelf.



Initial Concepts of Furniture



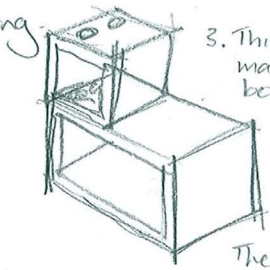
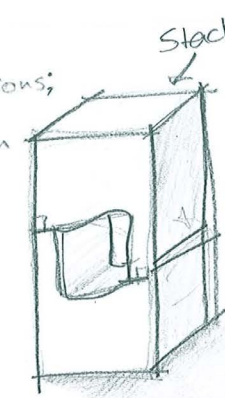
1. This design echos the block form of Lego. Colour is important as it will unify the furniture with the apartment space.



2. This is a versatile design with three different transformations; including a smaller packed down form. The strong lego aesthetic helps unify it to the apartment. This design will be further developed as it is both innovative and functional.



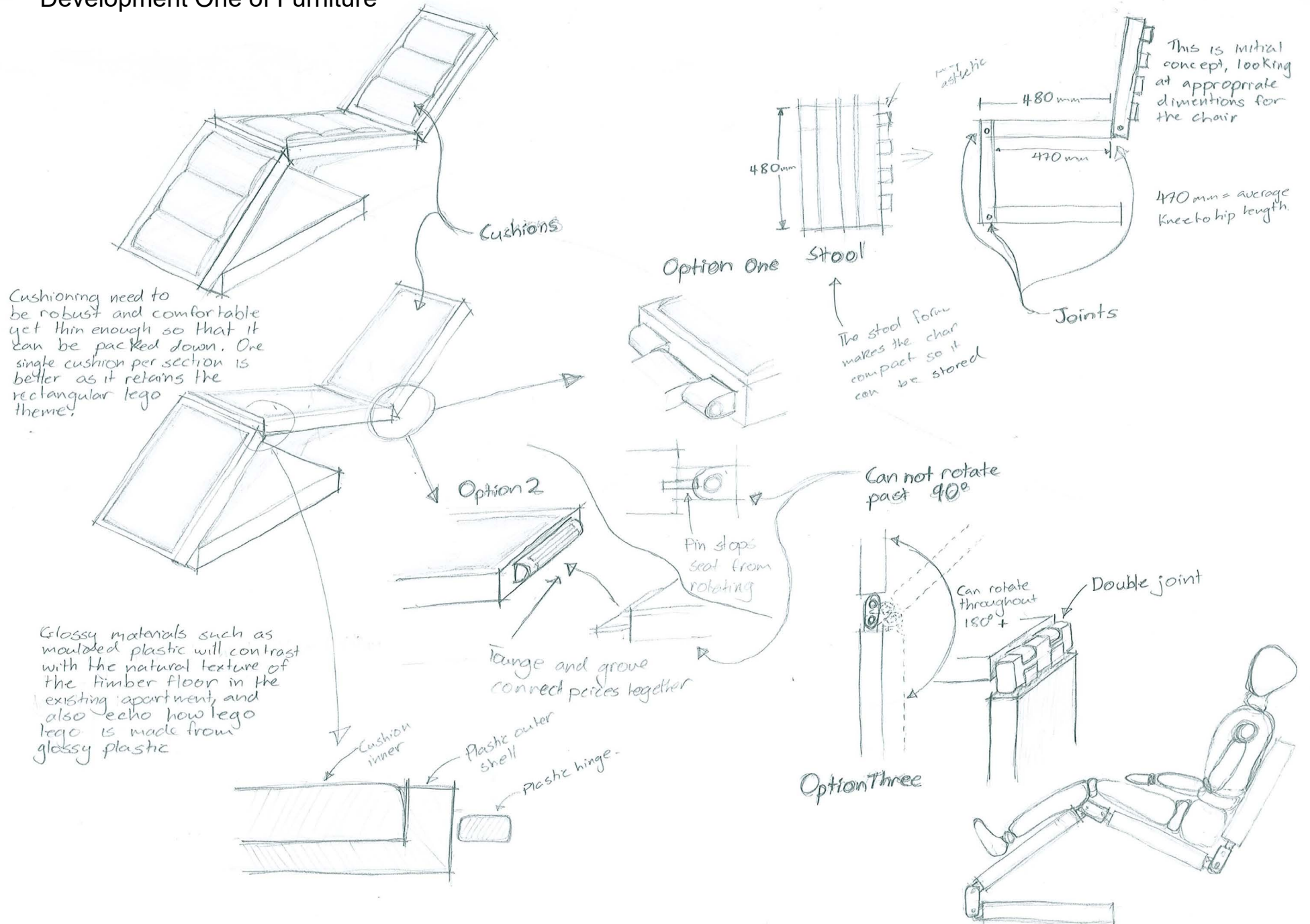
4. Reducing the size of the lego to component parts increases the complexity of the design. While it would allow for more detail it seems too close to the original dining chair -> lego translation.



3. This seat is formed through manipulating the already bookshelf in the apartment. This reduces clutter and makes an more efficient use of the space as well as unifying it with the rest of the apartment. The stackability and integrated nature would be good to develop. Though this design needs to be made more ergonomic.

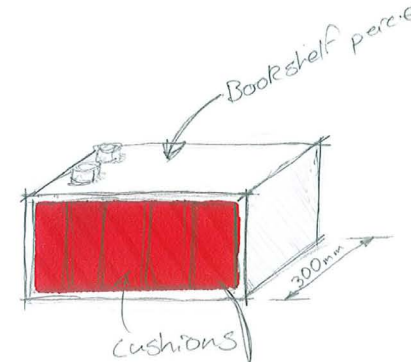
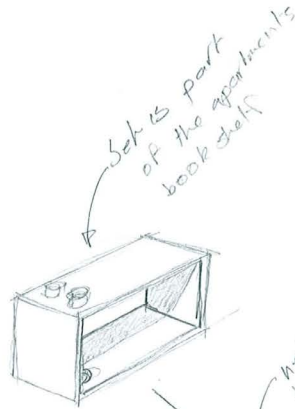
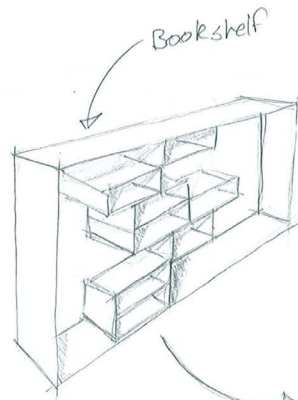
5. The simplicity of this design is effective however the inability to flex/transform limits its functionality.

Development One of Furniture

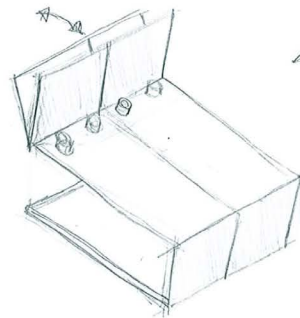
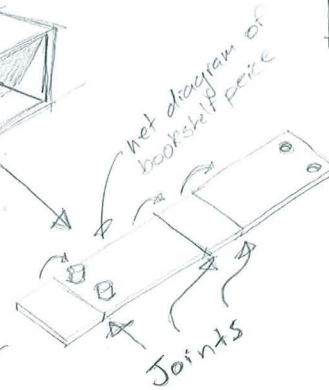
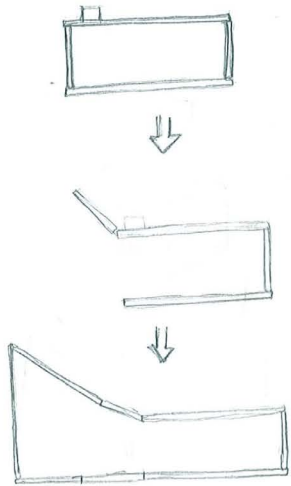


Development Two of Furniture

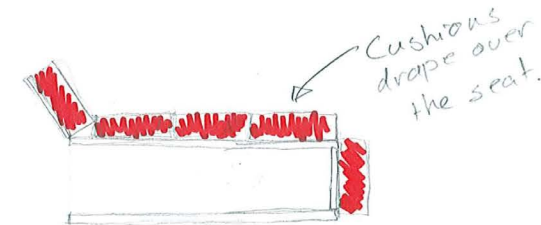
A strength of this design is that it can be integrated into the bookshelf, which is easily accessible, and the furniture can be stacked (not in the cupboard). However 4 bookshelf compartments are used to create one seat, as they are only 300mm in depth. This will limit the storage in the bookshelf.



Storing the cushion (a development of concept 9) inside the compartments of the shelving unit is efficient use of space and keeps the pieces together in a designated area.

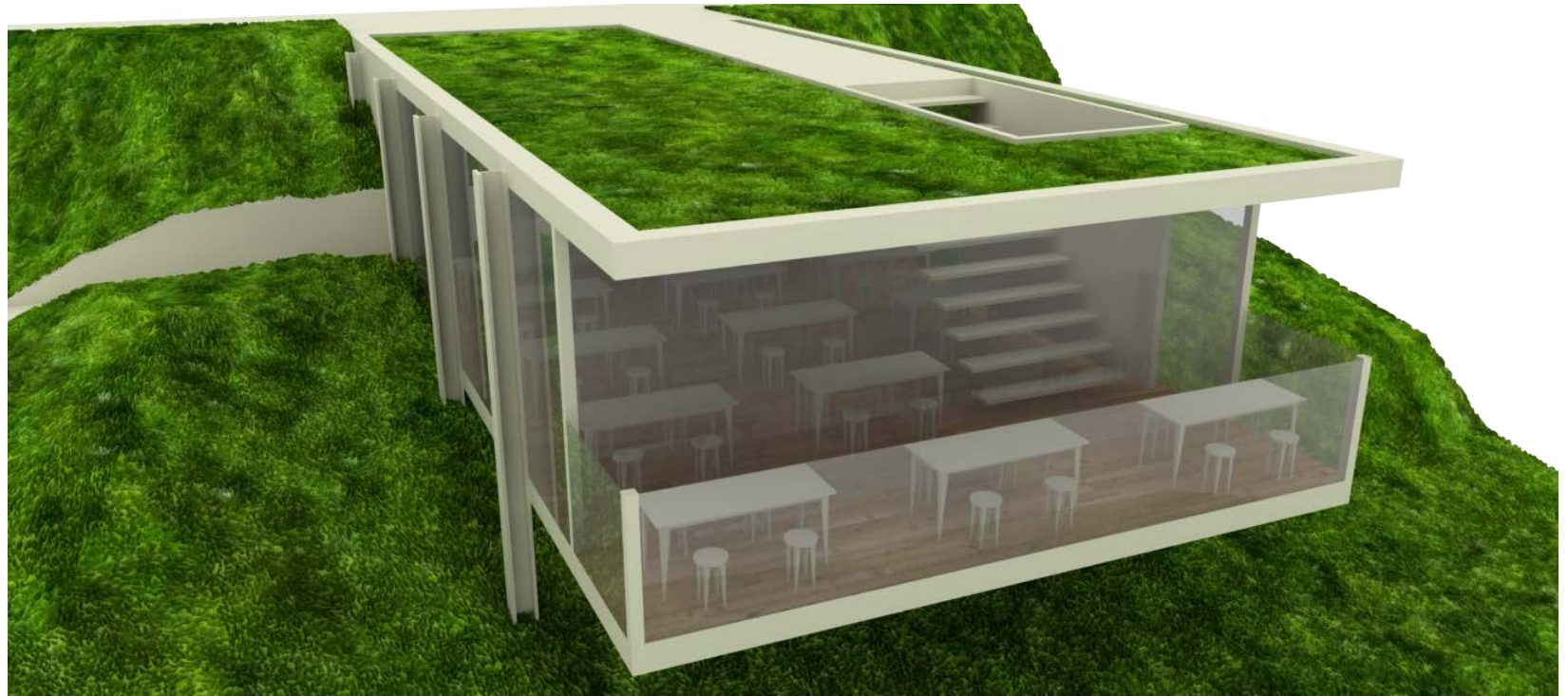


Seat



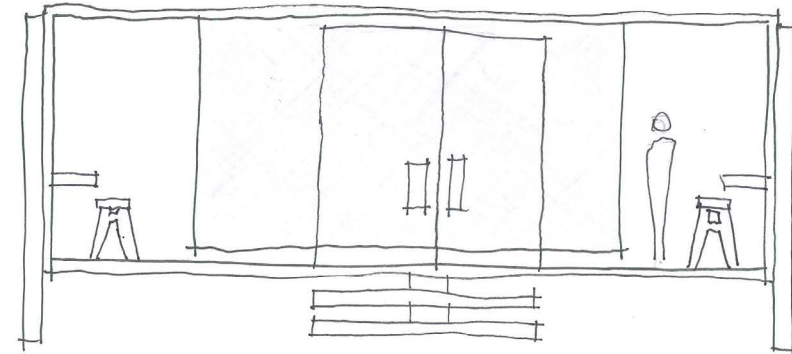
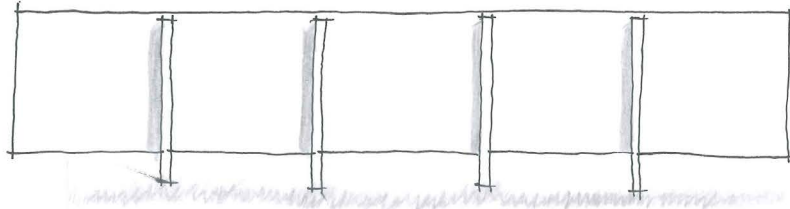
The contrasting red and white colours echo the colour scheme of the apartment and unify the furniture to the overall theme.

CAFE



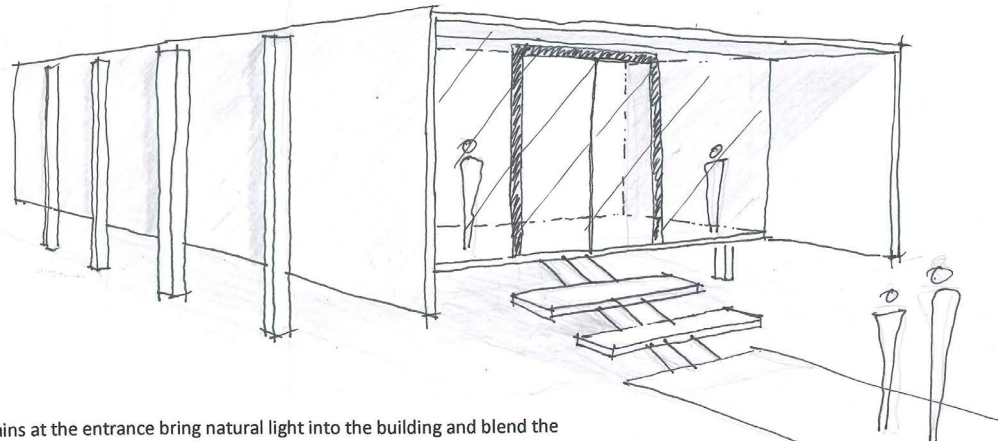
The cafe (pictured) was designed in Level 2 (2010) and explores the aesthetics of Mies Van Der Rohe. The cafe was designed to cater for 30 customers and I identified my own location, on the north facing slopes in Albert park close to AUT and the University of Auckland. It has the feel of an open air pavillion with its grass roof.

Development of Cafe



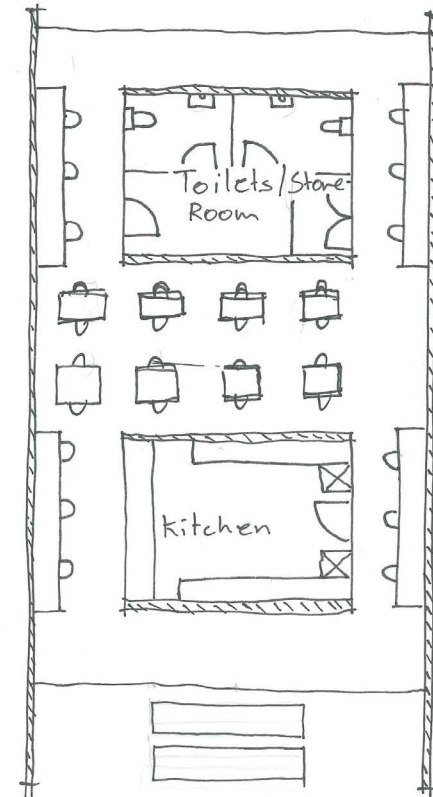
This café has a large eating area containing two separate pods; one for toilet facilities and storeroom, and the second, the kitchen. Keeping the facilities in the centre of the building helps with flow however, while some customer seating is located at the edge of the building (close to the windows and the view), the central eating space is dark and enclosed as windows do not go all the way around the building.

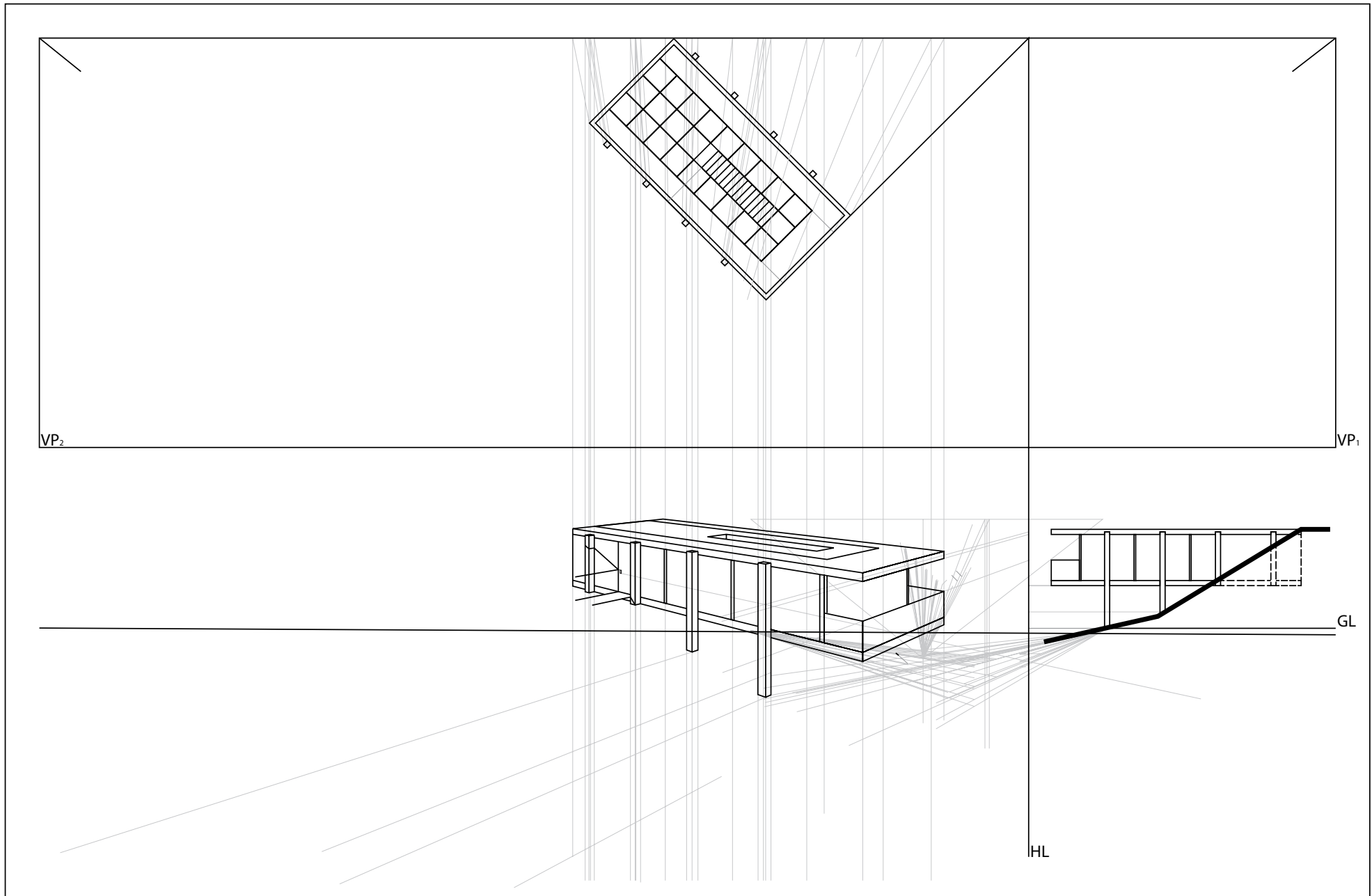
The design is symmetrical, relating to Mies van der Rohe's aesthetic. The three rectilinear forms in the building keep the design simple. This café uses clean lines and floating plains, echoing how Van der Rohe lifts his buildings off the ground. This idea is continued inside the building, as the pods are suspended and float off the floor.



The large glass plains at the entrance bring natural light into the building and blend the barrier between the exterior and interior. Customers step up into the building, making the entry more formal. The eaves at the front and rear of the building extend to protect the building from the weather and also give a sense of balance.

Placing the kitchen at the front of the building means that, when the customers enter the café, they are immediately brought to the counter, creating an ergonomic floor plan. This building has no stairs so access would not be a problem for the elderly or disabled.



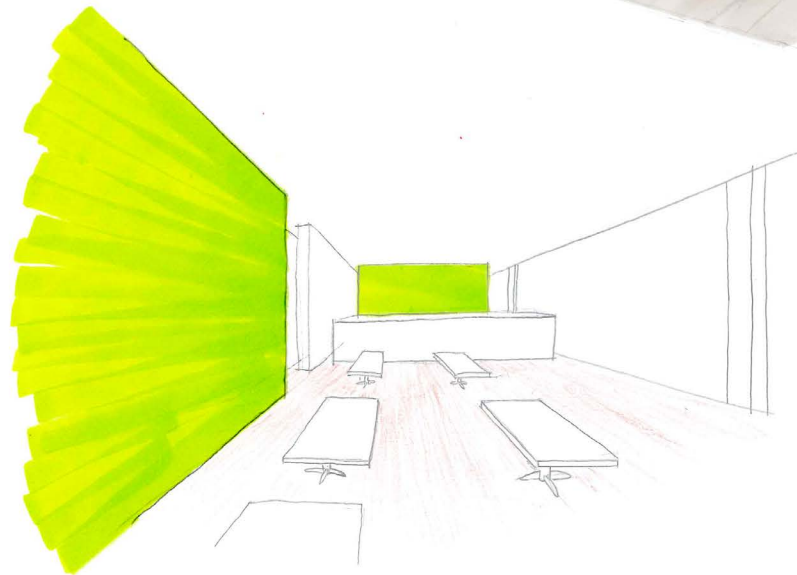
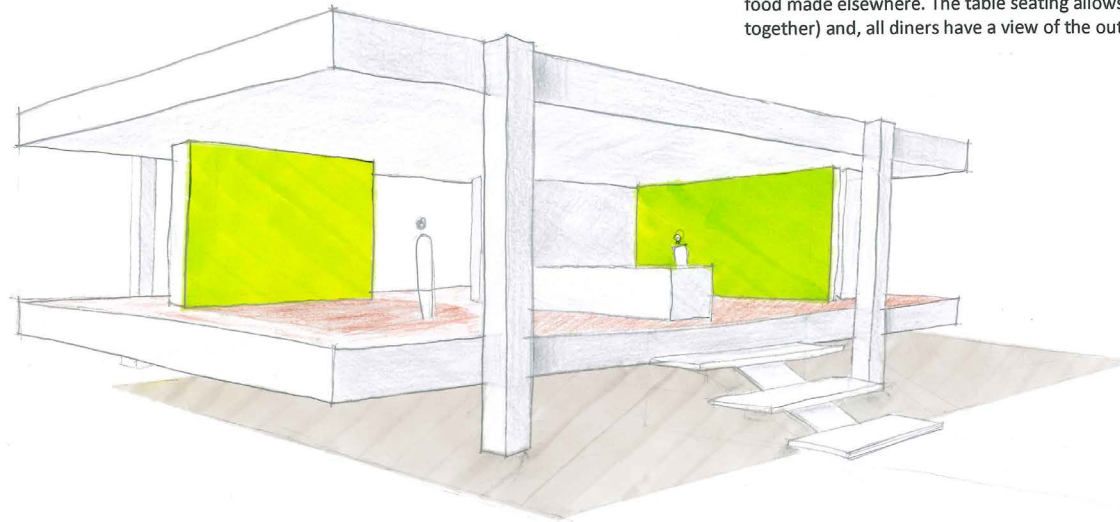


NAME: SAMUEL BLOKC	AFF DESIGN	SCALE: 1:200
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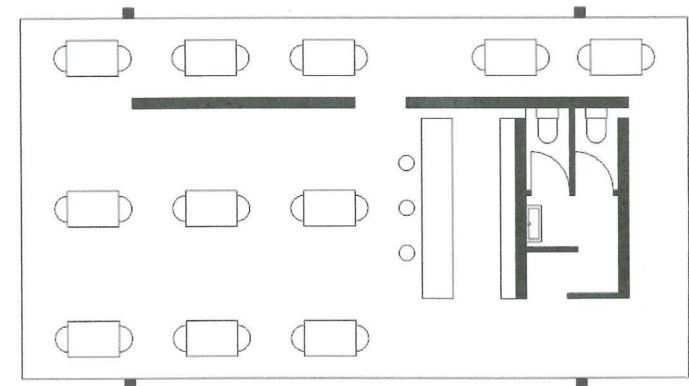
Development of Cafe

This café is an open pavilion, designed to make the most of the summer months. The addition of horizontal and vertical floating plains provides counterbalance, more definition between spaces and acts as windbreaks. This design is inspired by Van der Rohe's Barcelona pavilion. Because the building is not enclosed, it has a sense of spaciousness.

Customers need to step up into the entrance, making it feel formal. The café is ergonomic as customers have direct access to the serving bench and there is ample room around the tables to move. The kitchen is very small so it would not work for producing large meals but food made elsewhere. The table seating allows some flexibility (as they can be pushed together) and, all diners have a view of the outside.



This concept explores the colour palette described in the brief. The bright green colour accents contrast effectively with the natural wooden floor and neutral colour palette (white poles and roof).



LOGO



EXPOSURE



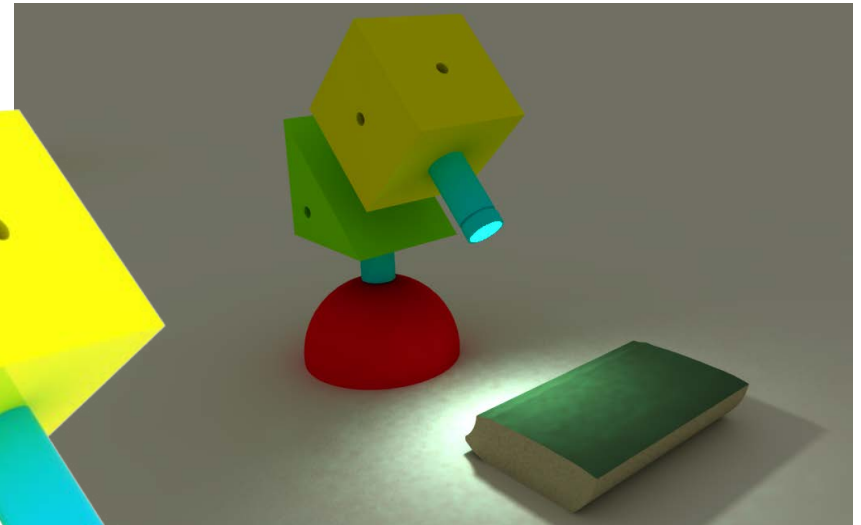
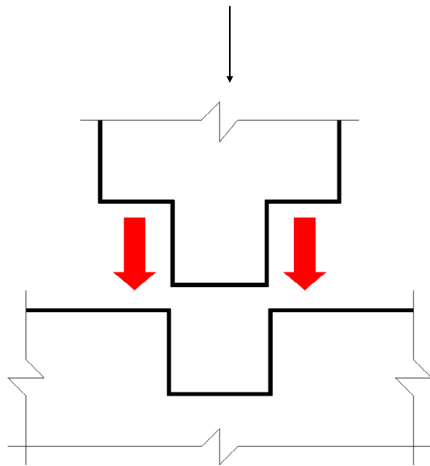
This logo was designed as part of a media brief in association with the architectural brief of the cafe (shown previously - 2010). The logo was also based on the designs of Mies Van Der Rohe and uses his iconic chair to symbolise the outdoor, open nature of the cafe, the concept of relaxation and the "EX" as in being seen in the cafe.

LAMP

The brief was to design a desk lamp with a targeted reading light (Level 2, 2010) Using Memphis styling, this lamp plays on the idea of Meccano, it uses advanced technologies which allows the parts to be deconstructed and rebuilt to taste. It also has a remote switch and runs from wireless electricity.

Holes allow the pieces to be put together in multiple different ways

Male Female Joint connection between blocks

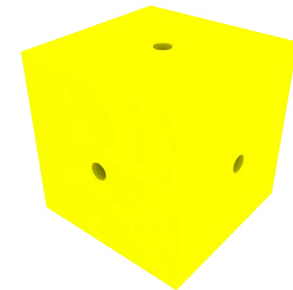
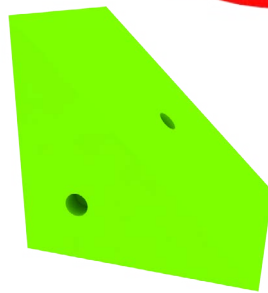
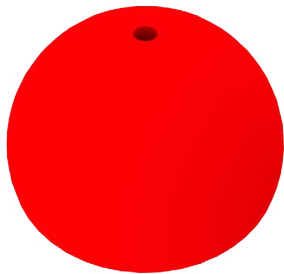


Directional Reading Light

Wireless switch/ power pack

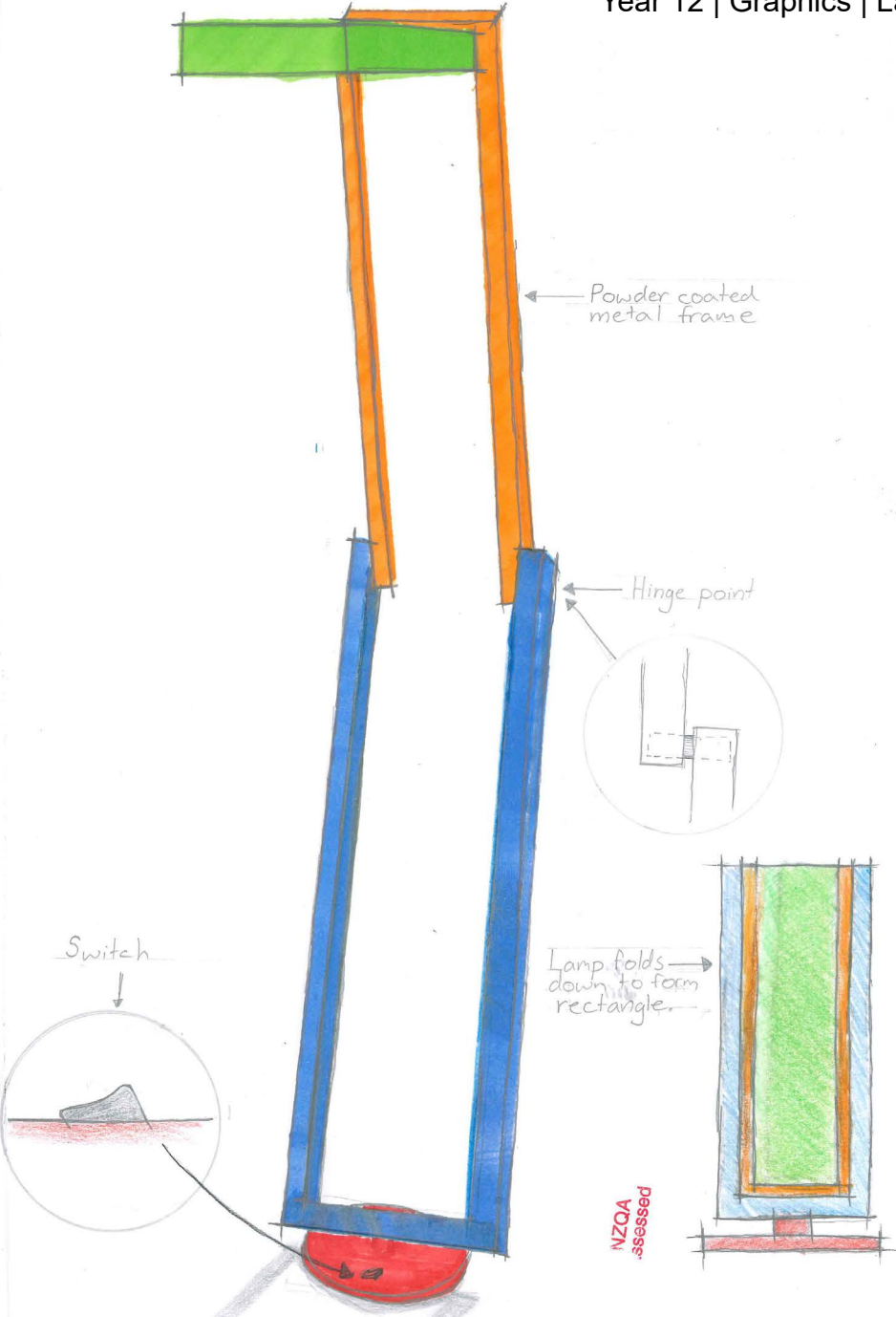
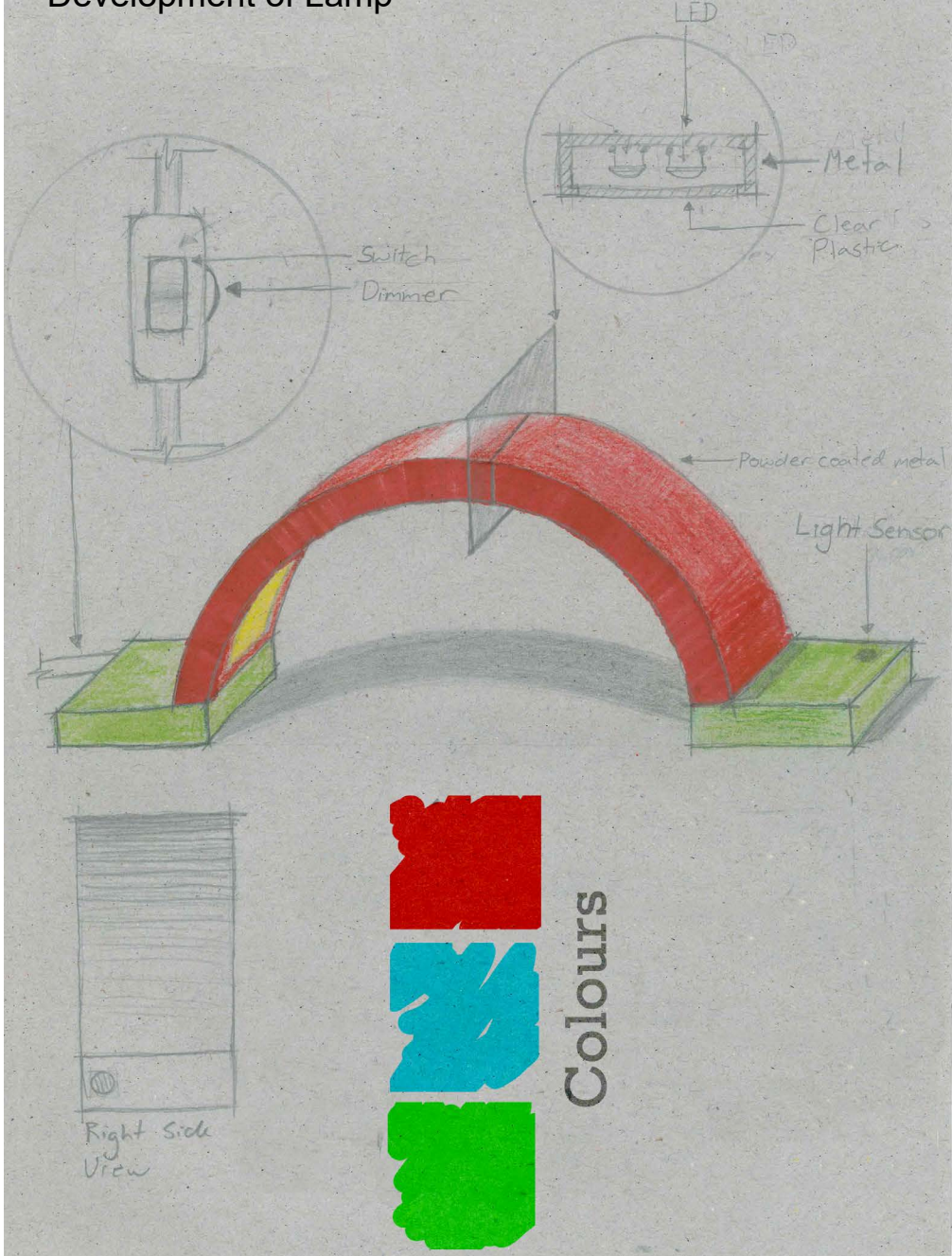
Heavy base keeps the lamp steady

Connector holds larger pieces together



Building blocks of lamp

Development of Lamp

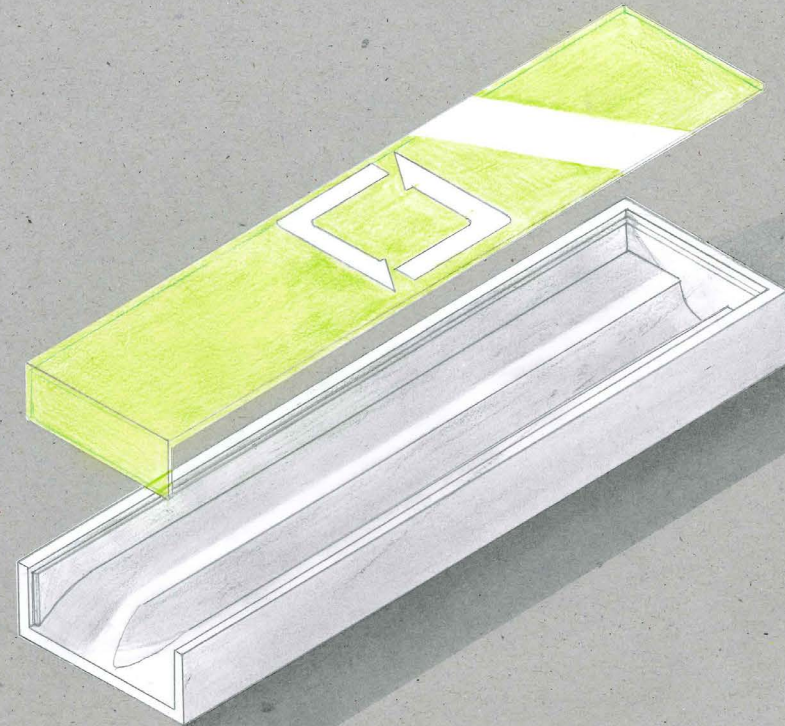


PEN AND PACKAGING

Year 11 | Graphics | Pen and Packaging

This final rendering of pen and packaging is drawn in isometric. I have used this drawing style because it shows more aspects of the product than, for example, oblique and it gives a good overall view. Furthermore, isometric allows for a more realistic image of the product as it does not distort the image.

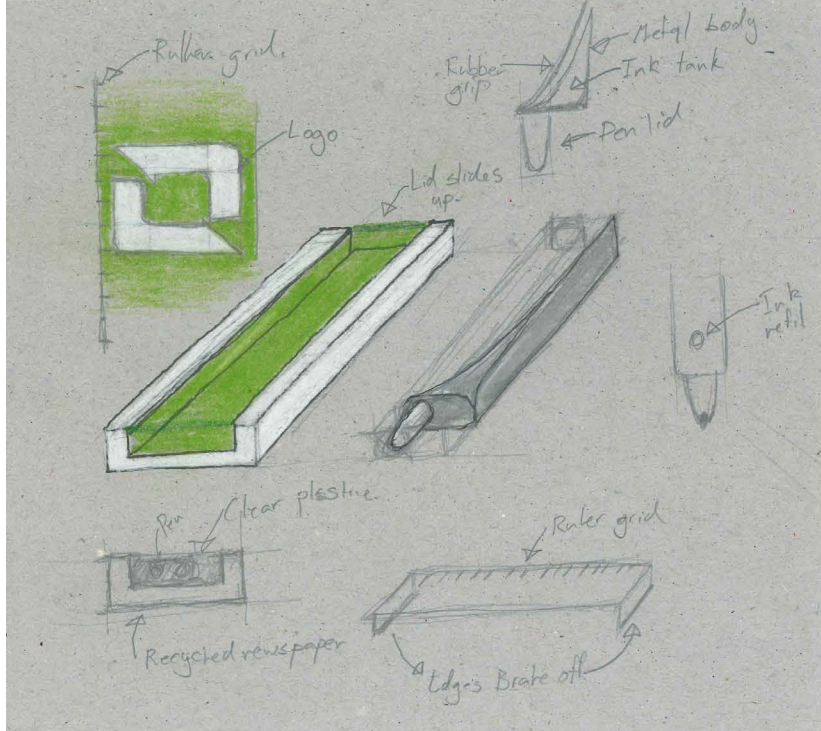
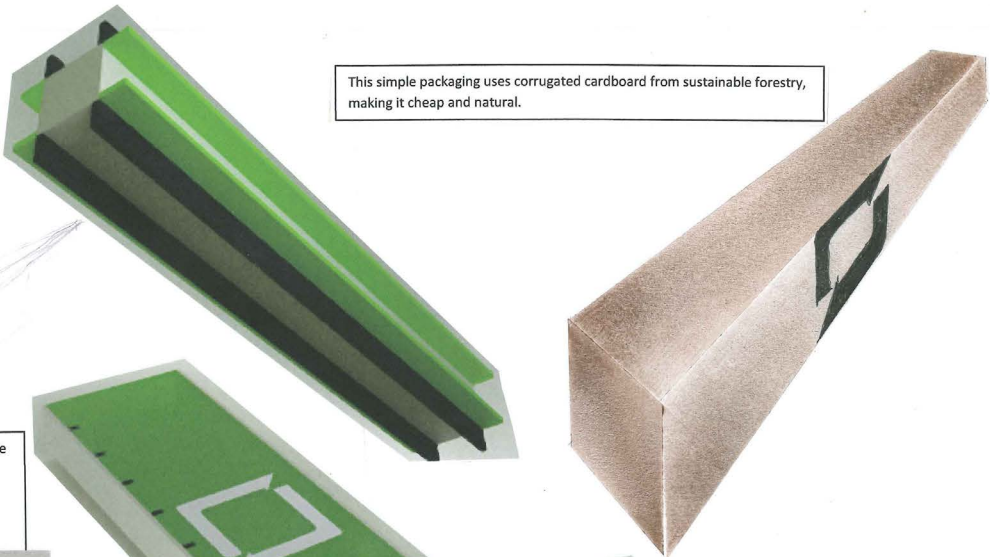
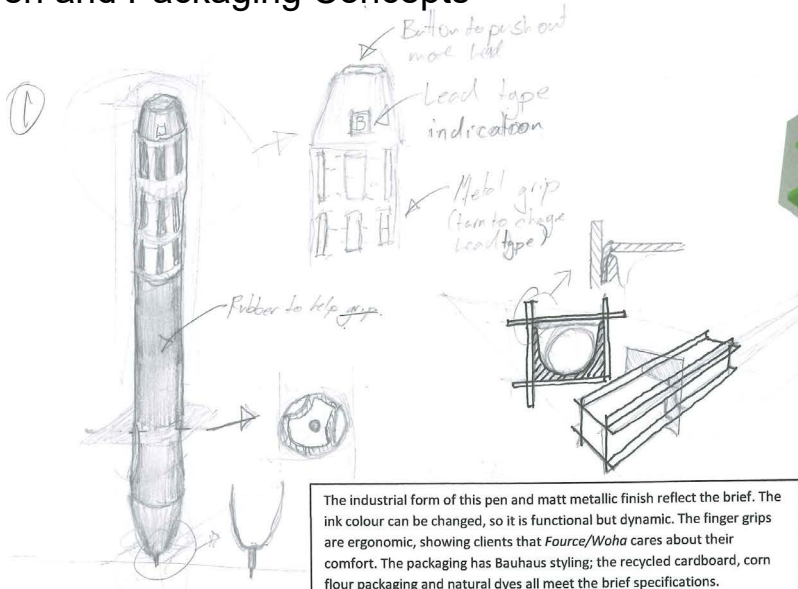
I have used a mixture of colour pencils and chalk pastels on a limited colour palette to give a clean slick look and therefore reflect the sleek design style of WOHA/Fource. Shadowing provide realism but also emphasizes the geometry of the products; a further specification of the brief. Both products would be fabricated from recycled plastic as this would provide a slick shiny and innovative look mimicking the design style of WOHA/Fource. The plastic is both recycled and recyclable so it would also meet the sustainability requirements of the brief.



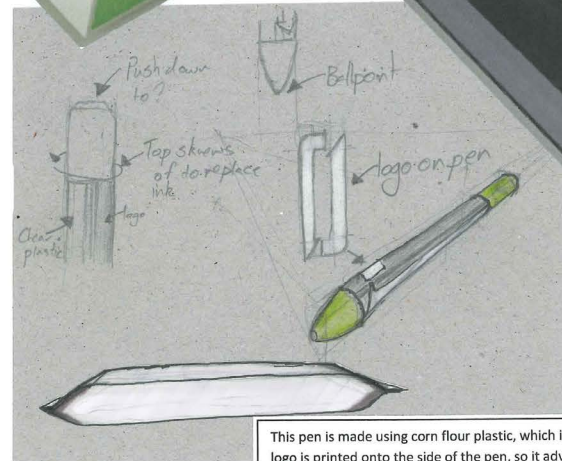
This pen and packaging (2009) were designed as part of a promotional packaging brief for a company of my own invention: FOURCE. It develops the design aesthetics of WOHA architects and Bauhaus. Recycled materials are used and it is multi-functional.

I have drawn the pen in a scale of 2:1, as it would look too small if it were in the scale of 1:1 like the packaging.

Pen and Packaging Concepts



This metal and rubber ink pen has industrial styling. It is functional and robust with a full metal shell, curved sides making it ergonomic. The pen is reusable, as the ink can be refilled, making it more sustainable. The plastic packaging, incorporating the colour scheme, can be used as a ruler. The logo is embedded in it, to remind users about Fource.



This pen is made using corn flour plastic, which is fully biodegradable. The logo is printed onto the side of the pen, so it advertises the firm. The packaging is an airtight container, protecting the pen and stopping it from biodegrading.

MEDIA PLAYER

This electronic media device/player (2009) uses advanced technologies and has an innovative sliding to enable movie viewing.

Design Elements:

Size: This portable music device is 70x5x39mm, making it smaller than most devices with screens. The device is very comfortable to hold and ergonomic, fitting easily into the user's hand and pocket. The exterior of the device splits open to reveal a screen half the size as the device. This is effective as the user gets the advantages of a small compact size but with a large screen.

Shape and Form: The top and bottom faces are rectangular so that the device fits snugly into the palm of the user's hand. The sides of the device are an extruded oval with no sharp edges, and continuing curved surfaces, making it comfortable to use. I think this gives the device a simple sophisticated look, which users would find appealing.

Contours, Rhythm, Proportion: The device is strongly symmetrical in that the control circle is in the center however, the split is offset to the side to keep the $2/3^{\text{rd}}$ of the control circle complete. The device is completely flush with no contours apart from where it splits open. This gives the device a stylish and unique look to attract a broad audience.

Colour: I have given my device a fresh colour theme, using bright primary colours. The colours reflect my goal of giving the device a fun, enthusiastic feel, often associated with music. The main colour will always be gloss while the secondary colour, on the end of the device, would be a dark matt gray as this makes production cheaper.

Contrast: The main contrast in this device is in its colours and proportions. This adds interest for the user and makes it unique.

Texture: This device has a smooth texture with no sharp edges so that it does not caught or destroyed inside the user's pocket. The control circle is slightly more textured than the rest of the device, giving more grip and helping the user locate the dial in the dark.

This photo shows the device in music viewing mode. Album covers can be moved around the screen with the circular button. It is held in a hand to show its proportions and how the user would interact with the device. The headphones have also been plugged in.

Year 11 | Graphics | Media Player

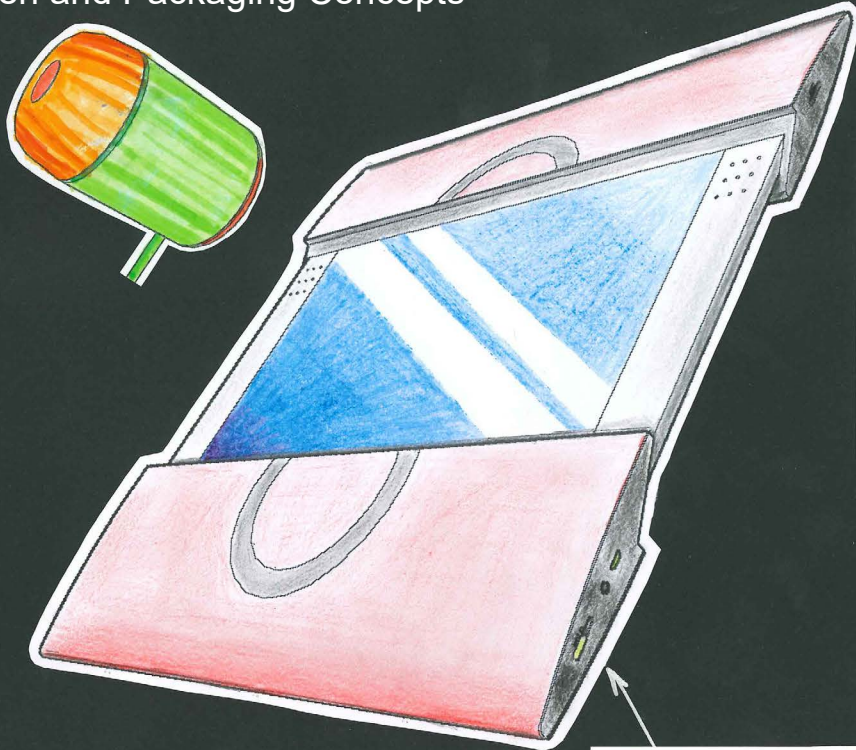
The final design model and Mock-Up 3 are shown lying flat to give a perspective of the device when open and closed.



This is the front face of the device when upright. The rectangular sliding covers of the device play with the form of the circular button, giving it an innovative edge. This is its defining feature.



Pen and Packaging Concepts

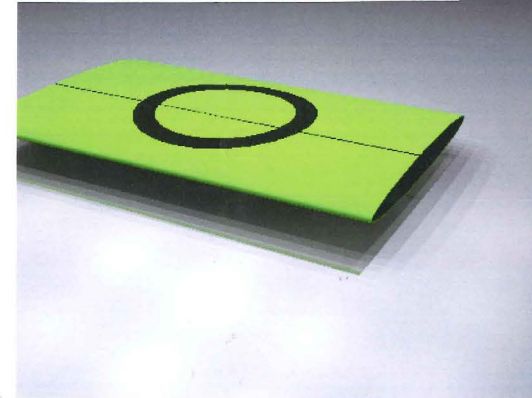


Final design

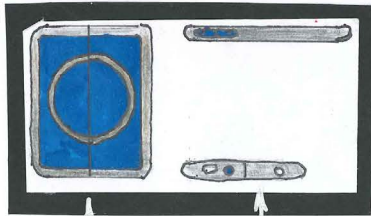
My final design, an MP4, is drawn in isometric as it gives a good overall view of the device as opposed to an oblique drawing, which would not show the back of the device and tends to look less realistic. Most of the details are on the front face so I have made this the prominent face of the drawing.

I have used soft pastels to give a smooth, unlined finish. The device is lime green as it is a fresh contemporary colour, which is popular in the design field at the moment and appropriate with both genders. The dark grey edges of the device are deliberately understated so that the green stands out.

The image has been cut out and glued onto a blue background to lift the device from the page. The fresh blue background contrasts with the green and makes the device the focus point. The edges of the device have been drawn with a Fineliner pen to give it definition.

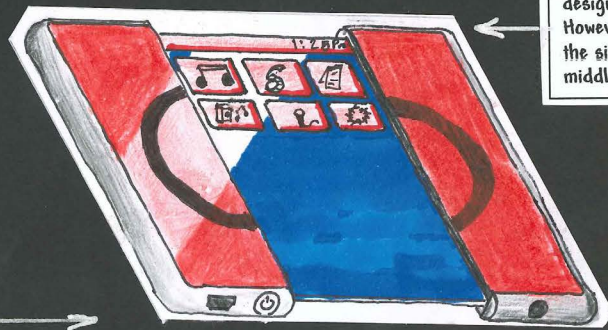


The device has two inputs like some of the other developments. It uses conventional cords and does not have internal speakers. This makes it quite simple and robust.



The screen is protected when not in use but when closed the circular shaped button can still be used (even if in a pocket). I like the half button idea and it would be good for branding.

Development 4 (an isometric drawing) is an MP4 with both music and video features. This design integrates ideas from Concept 5. However, rather than the screen pulling from the side of the device, the device slides in the middle to reveal a LCD screen display.



This device is made of painted and non-painted aluminum. This will make it cheap to produce and sell however it will be more robust than plastic.

This device has diverse features including AM/FM radio and a microphone to record voices.

HOME MADE STUFF

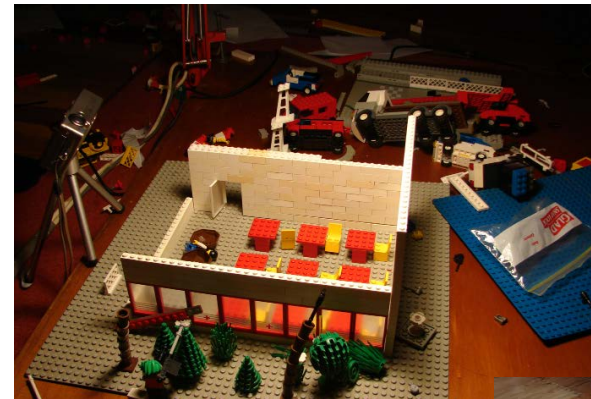
All Time | Home | Home Made



Above and right:
Home made boat - co-designed with peers (2009)



Above - Website made by my brother, Matthijs, and myself. Please see:
www.plasticpavement.freeiz. It contains all our 48 Hour Plastic Pavement short films.



Left - Lego film set from 48 Hour Film making festival



Above - **Go Train** - gocart with two trailers.



Left - **Mortar** - gunpowder ignition - shoots grapefruit.



Right - **Hovercraft** - using computer fan and pram wheel.



Below: **Mortar Mark 2**