

AS ART AND DESIGN 3D DESIGN

UNIT 1 PERSONAL CREATIVE ENQUIRY

AO1 = 35 / 40

AO2 = 32 / 40

AO3 = 32 / 40

AO4 = 33 / 40

TOTAL = 132 / 160

Tick the title for which you are entered

Art, Craft & Design	Fine Art	Contextual Studies	Textile Design	Graphic Comm.	3D Design	Photography
					✓	

LEARNER STATEMENT

COMPLETION OF THIS FORM IS COMPULSORY

Complete and submit the learner statement with your work as it will be referred to when it is assessed.

To place your submission in a suitable context, use the template below:

Explain the **MAIN IDEA(S)** for the development of your responses

My exploratory project revolves around the exploration into materials and the development of ideas, the unit challenged me to create a series of design ideas that explore different techniques, artist works and materials. The central idea for my exploratory project revolves around an exploration into my artists for example Thomas Heatherwick and architecture.

After my exploratory project I embarked on a personal investigation project based on structure, as I wanted to understand more the science behind structure and come up with my own design ideas and models.

Outline your **PLAN(S)** for the development of your work

My plan is to develop a piece of sculpture based

different techniques, artist works and materials. The central idea for my exploratory project revolved around an exploration into my artists for example Thomas Heatherwick and architecture.

After my exploratory project I embarked on a personal investigation project based on structure, as I wanted to understand more the science behind structure and come up with my own design ideas and models.

Outline your **PLAN(S)** for the development of your work

My plan is to develop a piece of sculpture based around my chosen artist, I intend to challenge myself through producing a high quality piece of sculpture that showcases various techniques.

For my second personal investigation project I planned to show through design how I have developed my ideas inspired by an artist.

Describe the **CONTEXT** (influences, purposes and meanings) of your work

I achieved the ideas for my work through various different sources. I went on several trips throughout my projects, such as: the Museum of Science and Industry and the Royal Armouries taking primary source photography to influence my ideas. I have also created ideas through refining my drawings and digital work on Photoshop.

REFLECT on your work critically as it progresses and on its completion

... myself & developed work

ideas through refining my drawings
and digital work on photoshop.

REFLECT on your work critically as it progresses and on its completion

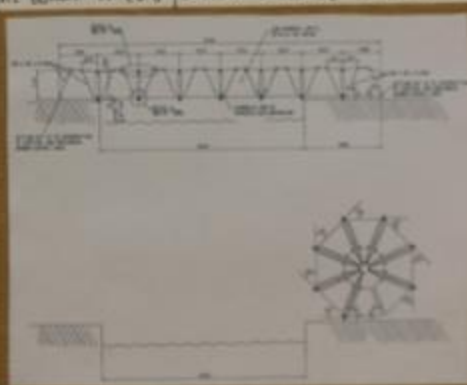
For my exploratory project I developed work
based around the artist I have chosen.
I used the design techniques and
through refinement I developed a model
idea. In order to develop the design
I carried out several drawings and
mock ups and then refined my final
piece. I then had the model
photographed properly in the studio and
after reviewing my piece, I feel
I could have stretched or challenged
myself by trying to advance my ~~understand~~
understanding of sketch up and equipment
or tools that I used in the work shop.

The Rolling Bridge

The rolling Heatherwick Bridge is a bridge in London designed by Thomas Heatherwick. The bridge is both functional and a piece of sculpture. In its functional form it looks like a simple bridge, however when the bridge is transforming it looks like a scorpions tail.

This bridge makes me feel curious because it is such a simple yet clever design that makes me wonder if it could be used in anything else or what other designs the designer has come up with. The bridge evokes a simple and minimalist feeling in its environment. This bridge leaves a lasting impression as it is interesting and different and is a talking point each time you see it. The materials that appear to have been used are stainless steel to prevent rust and corrosion with timber used for the base as it is a damper and is easily replaceable. The main function of this bridge comes from a pair of hydraulics for each segment.

ng.



The steel and wood link to the industrial revolution period of time which give the sculpture a timeless effect, also the shape used in the sculpture are in a continuous pattern that look very simplistic but it works. It looks like a normal bridge however when it is all rolled up it reminds me of a scorpions tail.

Finally some of the skills I can see that have been used are obviously the maths involved in designing the bridge, welding the steel joints, cutting the timber to size and installing the hydraulic pumps and making sure the bridge works properly.



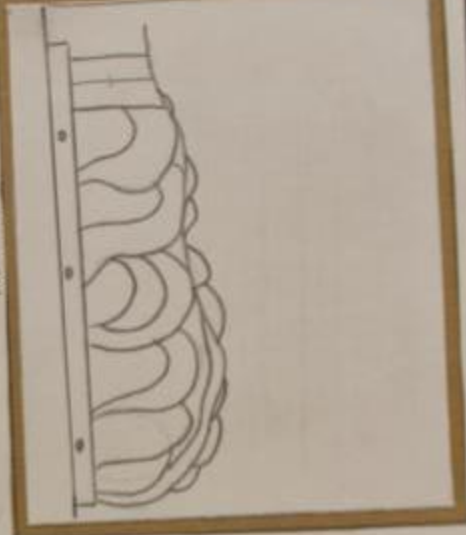
East Beach Cafe

East beach cafe was completed in June 2007 and has since won more than 20 national and international awards for design, architecture, steelwork, craftsmanship and engineering. The original inspiration for the design was a piece of driftwood, though it references many natural shapes of the coast including sand dunes, waves, rocks and even shells. Made in Lymington, the exterior is made from four separate pieces of mild steel. I would describe this piece of architecture as something that mimicks the surroundings; it is in.



This piece of architecture mainly uses mild steel which uses the interior structure. There was clearly a lot of steelwork used to bend the steel into these complex and complicated shapes. I believe the artist started out looking at different natural structures within the seaside environment and deciding to base his design on a piece of driftwood. He clearly spent a long time designing, designing a final layout, map, site and design before coming up with this. Overall I think this is a fantastic piece of architecture that blends in to its environment really well with a fantastic modern yet organic feel.

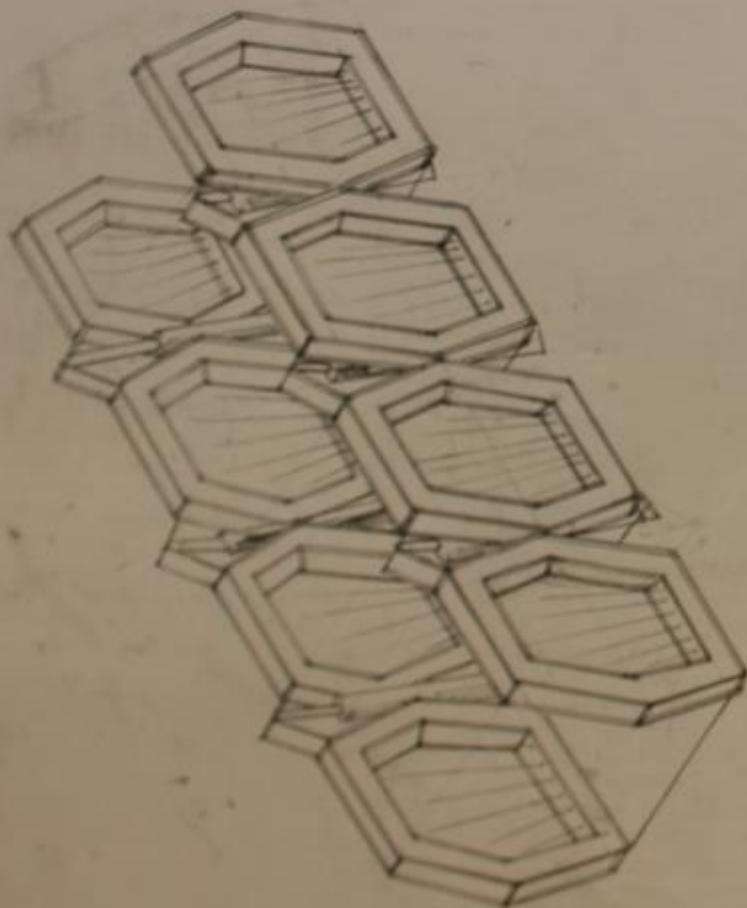
My design student



The purpose of the cafe is to be an interesting piece of architecture that constantly complimenting its environment whilst being a functional cafe with spectacular views. I think that the artist has tried to achieve a timeless piece that compliments its environment the more it ages it seems of colour. I think that the length of the building is very exaggerated however the shape of the building is very subtle to its environment. The shape is a very long slender abstract shape with a series of disc shapes with a rock theme. To me.

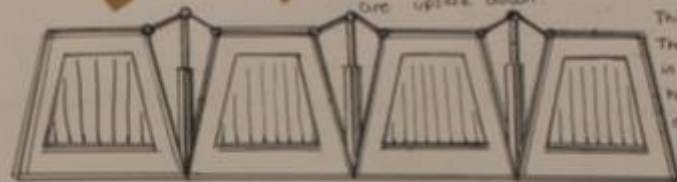
All of these shapes are arranged in a pattern continuously flowing along the side of the building creating a smooth effect. This building makes me feel calm with its neutral colour and minimalist feel.





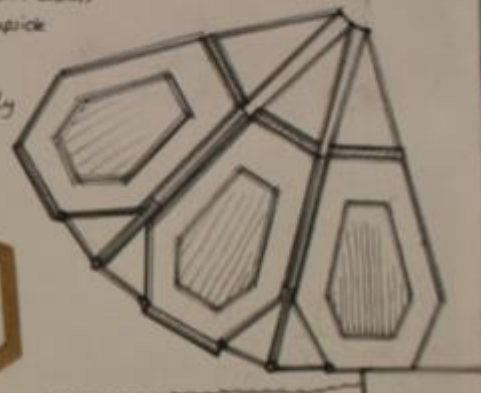
Thomas Heatherwick Bridge

this is the base design
I am using to create
a new one of my own using
a more like shaped link, that is
reversed at the links and hydraulics
are upside down.

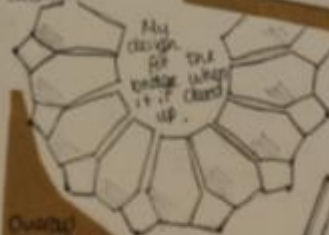


This is a drawing of
Thomas Heatherwick's bridge
in London which I
have developed into my
own design below.

My design is similar to Thomas Heatherwick's
however the hydraulics are flipped upside
down with taller more stable
segments, the hydraulics and
all of the segments are completely
waterproofed, and I am adding
some form of grip tape to the
base instead of wood making it
easier to walk on.



This is the
template I
used for
my
design.



Overall I am
happy with my design
however I think
a flatter more
stable segment
would work
better.

This is an
isometric
drawing of
Thomas
Heatherwick's
bridge design
in London.
After looking
at his
design I specially
appreciate how he
designed each hydraulic
piston as it seems really
complicated but more sure each
one extends at the same time with
the same speed.



My Trip To

The Museum Of Science & Industry



METAL WORK



I started
out by
using a
piece of
aluminum
rod and
using a
hammer
to shape
it.



Then I
took the
rod and
used a
hammer
to shape
it into a
ball.



I carried on
until I had
a ball of
metal.

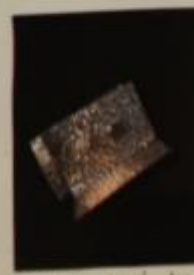
Using a pair of
pliers I bent the
rod into two
pieces. I thought
this was interesting
because it was
different from
what I had
done before.

I took another
piece of metal
from the
store and I
bent it into
a different
shape.

Finally, when I was
finishing up my
project I used a different
method to finish it.
I used a hammer
to shape the metal
into a different
shape.



After you can see
the finished product
I finished up
my project and
was very proud
of my work.



For the final two
pictures I did
a lot of work
and used a
hammer to shape
the metal into
a different
shape.

I then used the
pliers again to bend
the end of the metal
into a different
shape.

WOOD WORK



1. Smoothed
2. Stained
3. Sealed



1. Smoothed
2. Stained
3. Sealed



1. Carved
2. Smoothed
3. Stained

1. Carved
2. Smoothed
3. Stained



1. Carved
2. Smoothed
3. Stained



1. Carved
2. Smoothed
3. Stained



1. Carved
2. Smoothed
3. Stained



1. Carved
2. Smoothed
3. Stained



1. Carved
2. Smoothed
3. Stained



CLAY WORK



1. Shaped
2. Smoothed
3. Stained



1. Shaped
2. Smoothed
3. Stained



1. Shaped
2. Smoothed
3. Stained



1. Shaped
2. Smoothed
3. Stained



Industrial Style architecture
being references to the industrial
revolution, however also with a
very modern feel. Contemporary
architecture which compliments
its surroundings very well.

Very modern
architecture such
as the rolling
bridge and east beach
cape. stands out from its
environment but at the same
time it compliments its environment.

Colours are very minimalist
and depend on the setting that the
architecture is in. Rolling Bridge is
all one colour 'steel grey' with hints
of woodgrain in the rail, however
East beach cape is all one almost
raw colour which compliments its
seaside setting. If a modern piece of
architecture were to be on a mountain
side I would expect there to be lots
of white and grey used to represent
the rocks and the snow.

Another challenge is minor
design, once you have
finished a building on
the outside making it look
artistically pleasing on the
inside, modern furniture,
decoration, making
everything match.

Coming up with new
designs to beat the competition
when designing new cars is a
challenge, one brand of car
I would like to look at is
Koenigsegg with cars like the
Koenigsegg Agera and Koenigsegg
One.

An example of
a famous
architect that
might be good to
use is Alvaro Siza
Vieira who was
the architect for
creations such as;
Porto school of
Architecture,
Adega maior,
Pavillion of Portugal
and New Ocean.

Brain Storm

Vehicles:

modern cars, bikes, trains
buses, airplanes, super cars,
military vehicles all have
important colour choices and
styling themes.

Different Brands:

Bugatti, Aston Martin,
Audi, Mercedes, Boeing,
Kawasaki, Harley Davidson,
Ford, fighter/
military jets.

Famous Buildings:

Shard, Burj al Arab,
Burj al Khalifa,
empire state building,
Olympic torch (London),
Birds nest stadium,

Materials being used:

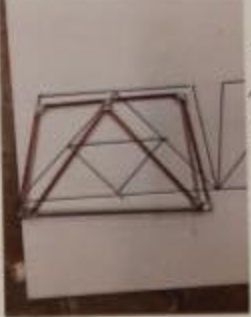
Stainless steel, steel shrouded
concrete, drift wood, timber,
oak, chipboard, glass (lots of
glass), more colourful
metals like the rusted kind of
steel used on East Beach Cape.



I started out by drawing each link for my bridge.

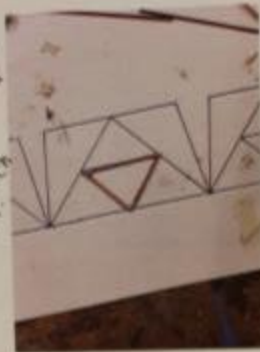


I even began cutting my pieces out with wire cutters.

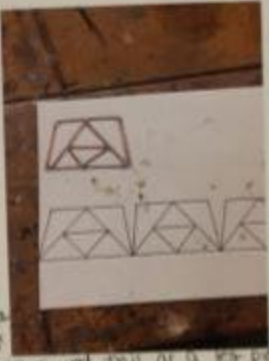


Next I began soldering the pieces of wire together to make a small bridge frame.

I then soldered the smaller pieces of metal together to form out the bridge which adds strength.



After soldering these two pieces together I mixed that metal to make the bridge frame.



So I used this as a base.



Here I began soldering the bridge sections and adding on the metal.



Here you can see how I taped each section down for soldering.



For the top hand side of my bridge I decided to make out the bridge.

Finally I soldered the bridge together making my final bridge link.



How I made my model

The two architects behind the Eiffel Tower are Gustave Eiffel and Stephen Sauvestre. This tower is a wrought iron lattice tower in the shape of a lattice in Paris, France. It is named after the engineer Gustave Eiffel, whose company designed and built the tower.

The Eiffel Tower was built in 1889 to commemorate the French Revolution, although this ended 10 years before. The tower stands as a major tourist attraction and a monument. The structure is mainly made of iron, with repetitive structural and cross bracing members. The tower is made of iron.

I would say that the Eiffel Tower was a great inspiration and model for the rest of the world. The tower is a great example of a lattice tower. The tower is a great example of a lattice tower.

The tower is a great example of a lattice tower. The tower is a great example of a lattice tower. The tower is a great example of a lattice tower. The tower is a great example of a lattice tower.

I have chosen to use the Eiffel Tower as it has a similar look to the rolling bridge with its individual feet, however the Eiffel Tower was actually made during this period of time.

I would describe this piece as innovative and bold as it clearly stands out and dominates the Paris skyline. The piece is simple yet complicated at the same time. It is very unique as it was some design which for the time the construction was made would have been difficult.

I think once the size of the tower is magnified to make it stand out in the surroundings.

The shape of the Eiffel Tower has one set of curves flowing up the side. It is pretty much all one solid which is made from the iron or steel.

The materials used in the Eiffel tower were mainly iron in a lattice structure.

The Eiffel tower was originally intended for exposition but was removed and built in Paris.

The Eiffel Tower's lattice structure is very similar to that of the original or design on Thomas Heatherwick's Bridge in London.



The Thomas Heatherwick Bridge has a very industrial look almost as if Thomas Heatherwick was taking inspiration from the industrial style design of the Eiffel Tower and the Industrial Revolution period in time.

The use of materials used in both of these pieces of architecture are also very similar as they both use a mainly steel or iron lattice structure design, however the Thomas Heatherwick rolling bridge also includes wooden boards on the base.

One area that I think the two pieces of architecture are very different is the size and scale of the two pieces of architecture.



In comparison this is one of the Thomas Heatherwick's rolling bridge which is made of steel and wood. It is a very simple design but it is very unique.

This is a hand-drawn sketch of the Eiffel Tower. It shows the tower's lattice structure and its four legs. The drawing is done in a simple, sketchy style.



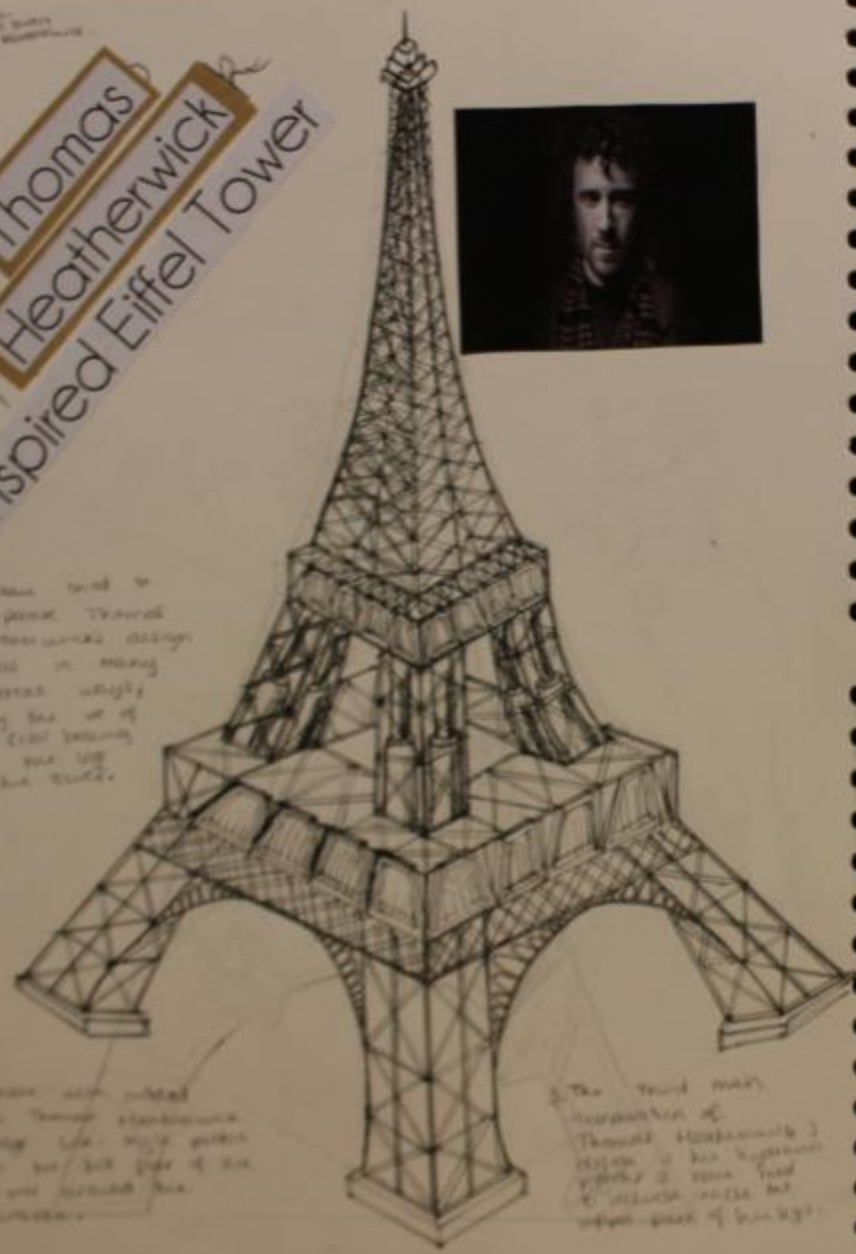
The Eiffel Tower.

Eiffel Tower and Style Bridge



Thomas Heatherwick
Inspired Eiffel Tower

Thomas Heatherwick Inspired Eiffel Tower



I have tried to incorporate Thomas Heatherwick's design ideas in many different ways, being one of his most famous is the use of his 'Eiffel Tower' design.

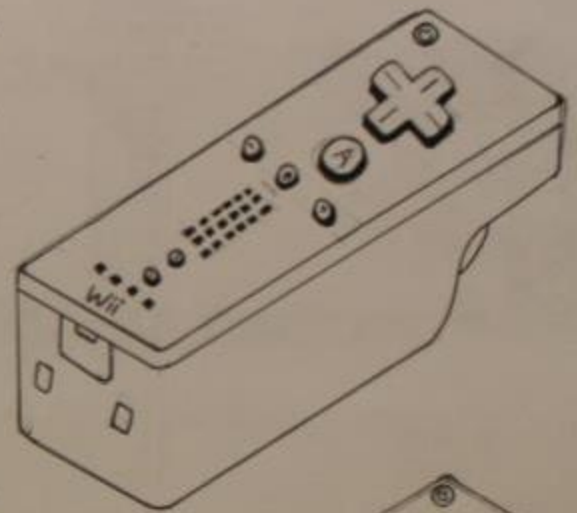
I have also added his 'Eiffel Tower' design to the top of the tower, which is the most famous part of his design.

The 'Eiffel Tower' design is a very famous design, and I have added it to the top of the tower, which is the most famous part of his design.

My Controller Design

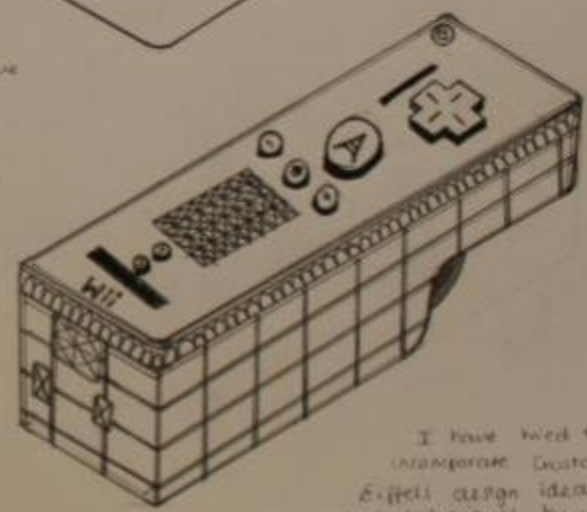
I chose to use the Nintendo Wii controller as it was a very innovative product; the first of its kind, as it used optical sensors to enable you to interact with the controller.

Nintendo Wii controller



I think that the Eiffel Tower was also very innovative in the design and engineering world, and in my opinion the Wii Remote is a very innovative design concept.

Eiffel Tower Nintendo Wii controller



I have tried to incorporate Gustave Eiffel's design ideas and techniques by using the 'Eiffel Tower' design, which is the most famous part of his design, and adding some of his patterns from the Eiffel Tower.

Finally I added
the material
and a
map
in the
map
slot -
the map
of the
map.



Step 2: Add
a new material
and the floor
blue, green,
red, yellow, and
black. Add
a material map
and a material
map. Add a
material map
and a material
map.



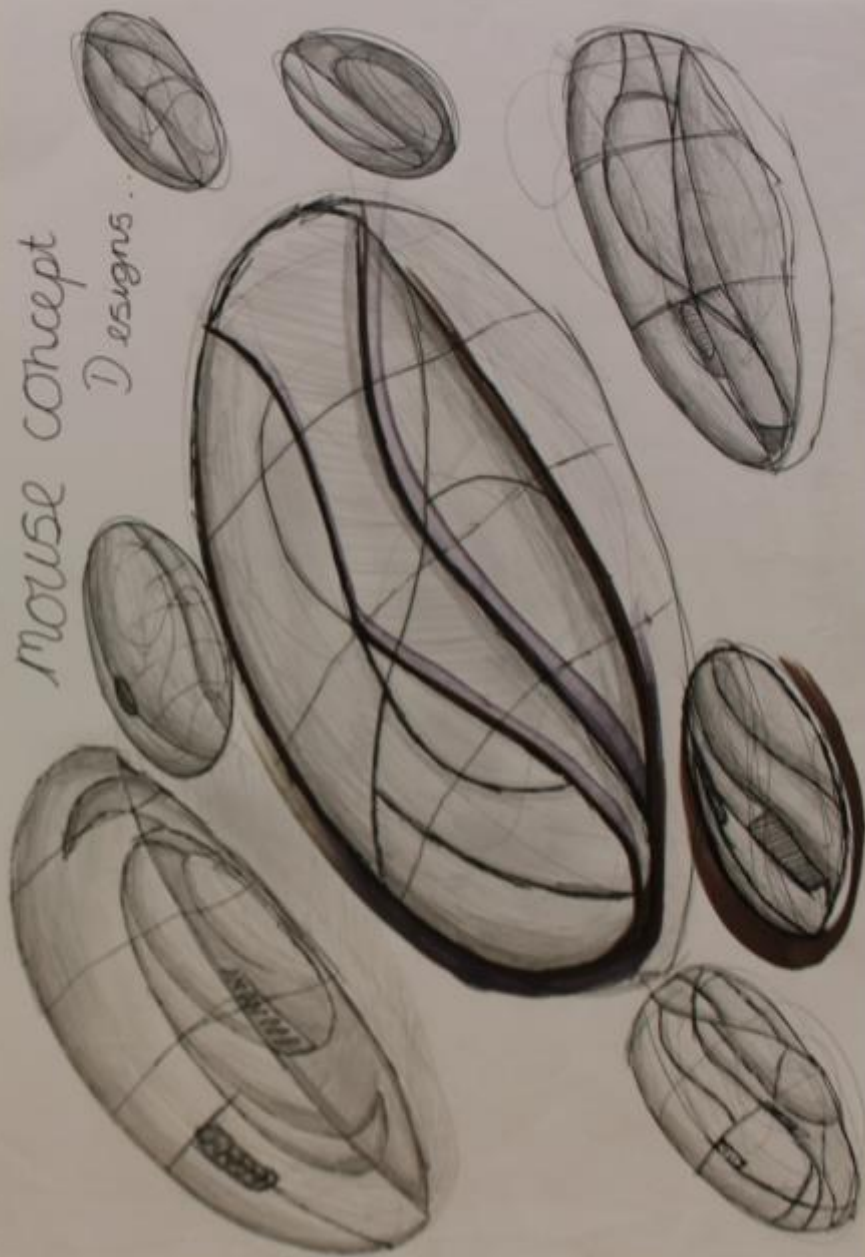
Finally I added
the material
and a
map
in the
map
slot -
the map
of the
map.



Finally I added
the material
and a
map
in the
map
slot -
the map
of the
map.



mouse concept
Designs





Step 1 done not my most design
and began shading in this design
with the lighter parts being where
the light source is coming from.



Step 2 added some color to my
most design, which in my opinion
is to like by adding a
small amount of complexity in
the color itself (not the
material of the work drawing).



Step 3 added some neon light
effects using a lighter shade of
blue and green adding the
neon light effects to the
inside of each light.



Step 4 added the shadow
and made the object look
more real.





First, I used an image of a pair of headphones and added it onto a blank Photoshop page. I chose this pair as they already had an almost shimmery color theme.

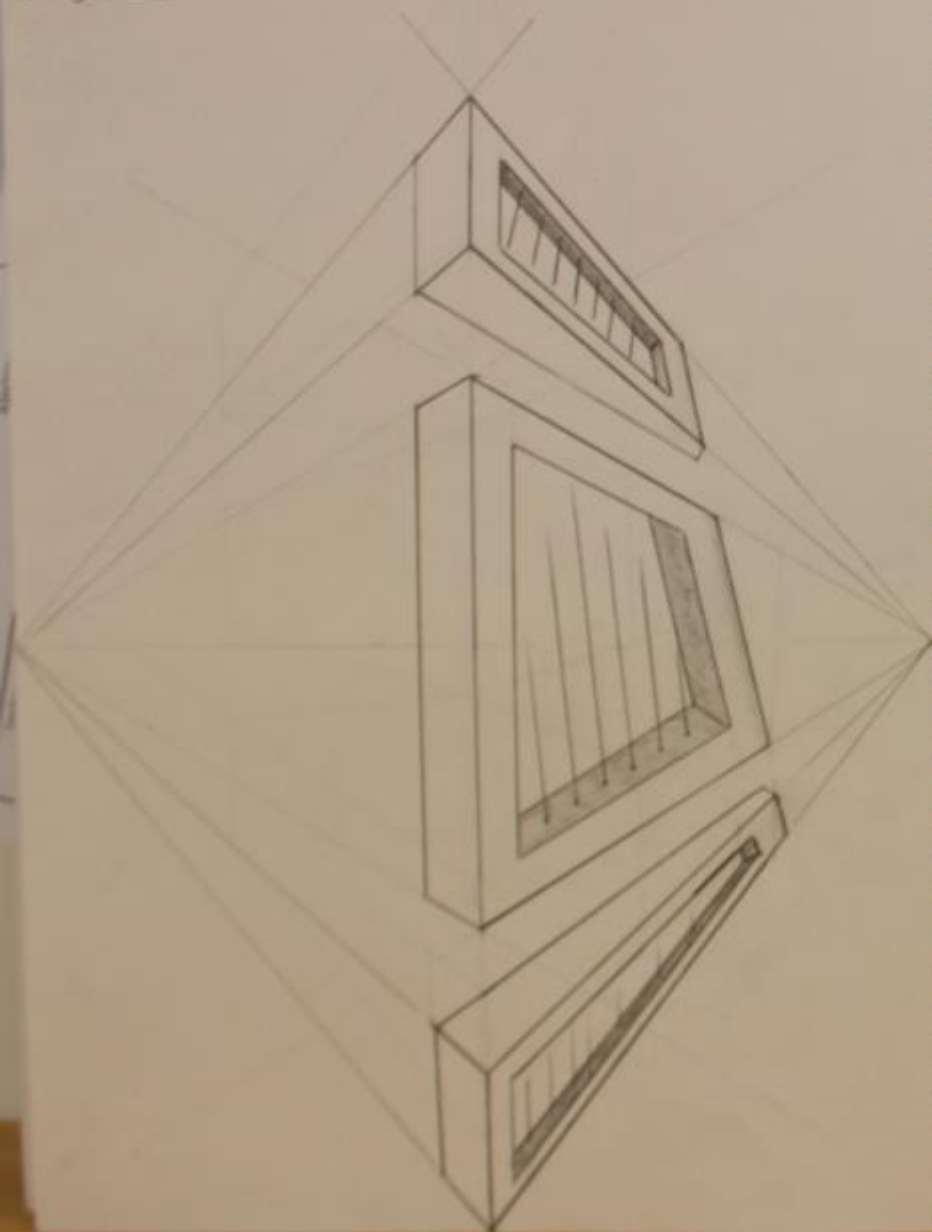


Next, I used several photos of hubcaps and various other parts of machinery and began adding it to where I thought it looked necessary or suitable.



Finally, I added a colored background which made the headphones look less isolated. I also used various colors and textures to make the headphones look more realistic.





Moshe Safdie

Art Science Museum



This piece of architecture is modelled around a lotus flower. The Art Science Museum is in Singapore. I would describe this piece as obscure, however I would say that this piece of architecture does complement its surroundings as it is measured at an extremely large scale and like the Lotus Flower on which it is based, it is set right next to the water edge. The fact that the building is built on top of a lotus flower is not obvious but is really a



The purpose for this building is to be an Art & Science Museum but also to look aesthetically pleasing, and entice the public to enter or draw their attention. I think that the shape of this building are extremely exaggerated like the big lotus petals look really long and overgrown. I would describe the colour of this building as really dull but that could just be down to the use of aluminium or metal that make up the lotus flower. The building almost reminds me of the Imperial War Museum in Manchester which has similar aesthetics but for different reasons. The piece makes me feel inspired as it is amazing to see how single pieces of material can be manipulated into such amazing shapes, sizes and dimensions. The atmosphere that this piece of architecture creates is very magical as it clearly stands out and will grab people's attention which I think is the effect that the architect is going for. I would say that this piece does leave a lasting impression as it stands out so much and is like no other building.

These features of the building, being the oversized flower shape have a jaw dropping effect that looks mesmerising. These shapes are arranged in a very busy and chaotic order, however you can clearly see the resemblance of the lotus flower which gives the arrangement of the shape a more organised feel. I would say that the design is determined by the repetition of the lotus shape which makes each petal, it is a very organic shape made out of a very industrial material.

The main material used in this piece of architecture is metal, possibly aluminium or steel. I would imagine that the main techniques used were welding. I would imagine that the architect started by studying the lotus flower and then working out ways to simplify it and make it bigger, then working out the best materials to manipulate into the shape.

Moshe Safdie Comparison

The cost of PPS charges

In contrast with the Art Center Museum, the class of 1999 chased a much more linear approach and also took the basic shape for the main structure, a cylinder and a square based pyramid. I would decrease the size of the cylinder as they changed the request as the pyramid is made from glass, also the way that the glass pyramid goes over and under the cylinder. The cylinder being I think the architect has said is a cylinder is a way of making simple shapes look unusual and complex I think that the way the cylinder is placed looks as though it is peeking around the pyramid is suggested however I think that the overall effect is a better one. However the logic is clear and the way for the cylinder. In contrast with the Art Center Museum which is also found on being raised above the ground the class of 1999 chose a very much more of the ground with the cylinder and square very much more and it is with the great surroundings. The whole design was on the cylinder which only it is left and more is shown out in the surroundings.

I have found that the design is
simplified by my previous stage
in a way that is really just not
large enough. The information and
the power, very very organic
Growth - it's very interesting
Project that you know me.
The message I have particularly
taken the first and I don't
know if you will work that
it is to our house and the
the whole message which is what
I like about the way I have
learned. The kind of the message
is something of the message that he
has been put in the world in a way
that is not to be the

I would say that the price of
the material was a factor in my
choice. I like the color and
the quality of the material and
the fact that it is a natural
material.
The main material used in this
building is to be a kind of
wood with a green ring in it
which makes it very strong
and resistant to weathering and
decay. It is also a good
material for making
furniture and other things.
I have seen it in many places
and I like it very much. I
like the color and the texture
of the material. I like the
fact that it is a natural
material and that it is
strong and resistant to weathering
and decay.

Comparsion with Heatherwick

The End (continued) - Thomas H. H. H. H.



The seed collected by Thomas Weddell was a very rounded cup-like shape, narrower at the edge than the middle, with all of the ribs coming out of the middle of the building much like the An Sonce Kisseron. It is a really strange building, a piece of architecture which to me looks like two circles together in half, but very different. The two round inside just I think fit in, with their wings and surroundings, around the Seed. (Architectural terms being one of those and is the most first point and is the only thing really of note, in connection with what Thomas Weddell told me about. So far as the Seed (Architectural) does not fit conventional measures and the many cast in the Art Science Museum and his going back. Similarly, I do think that the Seed (Architectural) does have a history, repeated. An Sonce Kisseron - more subtle.

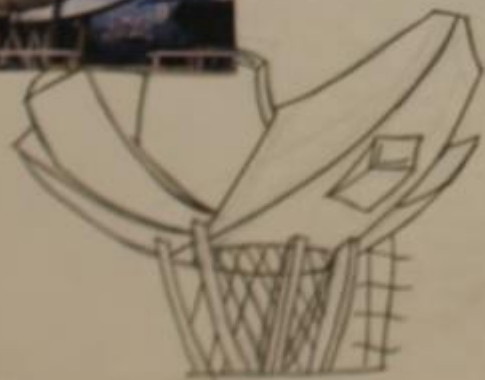
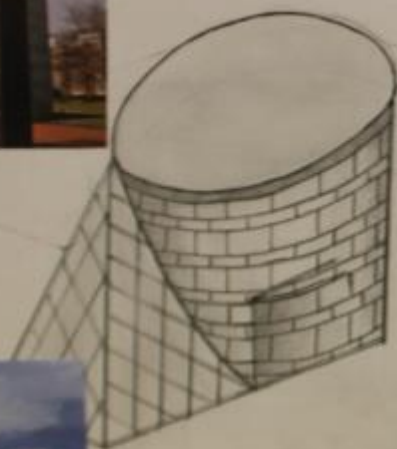
The class of 1894 chapel has similar aspects to that of the Thomas Humberstone Gun Quarry to Company Insular Machine Works seen in glass and metal throughout the design, however they have completely different outcomes in structure, shape and style. The Gun Quarry has much more curved and organic form with a smooth flowing shape with the corners of the metal, on the other hand the class of 1894 chapel is much more squared and angular. It looks much more plain made and there are water but rounded shape. The shape of 1894 chapel will link to the roof material with the over all bold shape as although the end construction is completed it has a more like shape for the the chapel was a basic set of shapes as it appears and perhaps overall it like the of the other/contrast as they are very different and the way they are they names and their history.



Будет ли это означать, что в будущем мы сможем избежать катастрофы?

Art Science Museum

The Class Of 1959 Chapel



KAUFFMAN CENTER

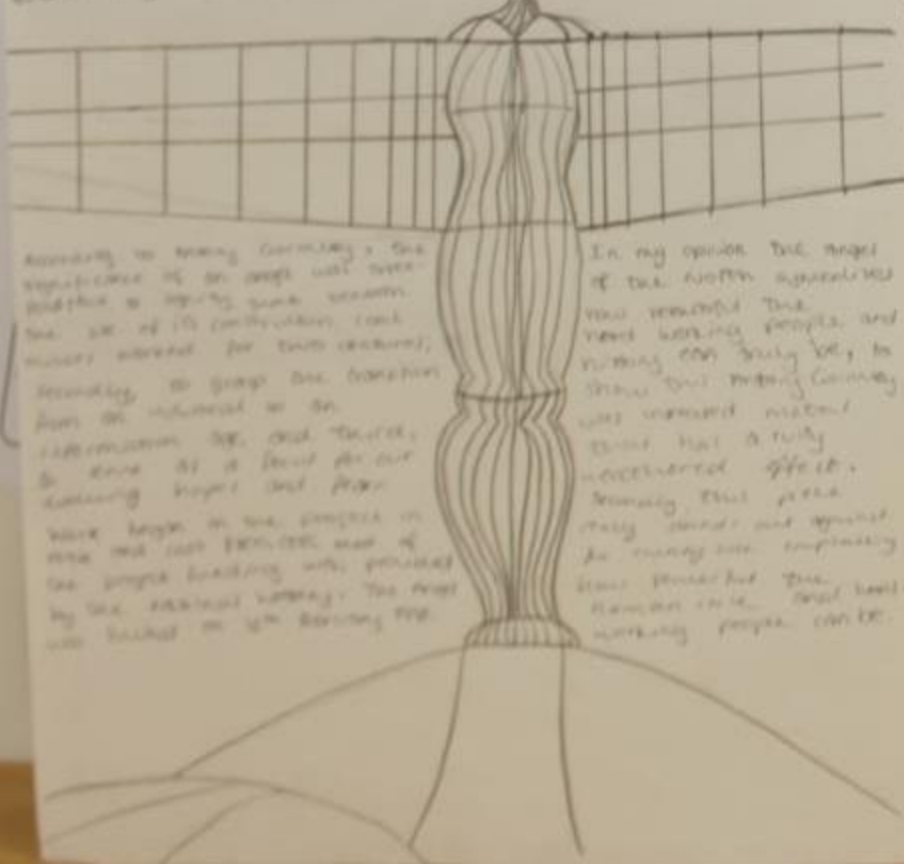
The Kauffman Center for the Performing Arts opened on September 16, 2011. The main architect is the building was Helmut Jahn. It is located in downtown Kansas City, Missouri, USA. Its construction was a major part of the ongoing redevelopment of downtown Kansas City. The building, which took nearly five years to complete, covers 40,000 square feet of glass, 25,000 cubic yards of concrete, and 27 steel cables. The main auditorium, known as Bandwagon Great Hall, is built with a glass ceiling with glass slapping walls which effectively provides a panoramic view of Kansas City towards the center. The cost of the whole project was approximately \$48 million. The center's interior consists of two symmetrical half shells of vertical arches that open towards the center. Each shell hosts its own acoustic performance venue. In my opinion, The Kauffman Center is a great addition to the area as it really stands out and looks very modern and organic at the same time.



Antony Gormley Angel Of The North

The Angel of the North...

The Angel of the North is a contemporary sculpture designed by Antony Gormley. Located near Gateshead in Tyne and Wear, England. Completed in 1998, it is a steel sculpture of an angel, 20 metres (66 feet) tall, with wings measuring 36 metres (118 feet) across. The wings are not joined, appearing straight in drawings, but are crossed 3.5 degrees. Gormley, Antony Gormley said that it creates "a sense of envelope". It stands on a hill due to the north of Birtley, overlooking the A1 and A167 roads into Tyne-side.



According to Antony Gormley, the significance of an angel will never diminish as long as there is war. The art of its construction could inspire war for two decades, according to Gormley and his team. In 1998, the artist said that the sculpture was a "symbol of our common hope and fear". Work began in the project in 1998 and was finished in 1998. The project was funded by the Gateshead Council and the Tyne and Wear Development Corporation.

In my opinion, the Angel of the North represents the most powerful people and nothing can truly be, to show that Antony Gormley was inspired and that it was a truly powerful effect. Antony said that the sculpture was a "symbol of our common hope and fear". Work began in the project in 1998 and was finished in 1998. The project was funded by the Gateshead Council and the Tyne and Wear Development Corporation.



MY FINAL PIECE

For my first knife I am not completely sure on
the design. I, however I would like to
start with a knife to make some kind of
for a moment, a small knife or a small knife.
I want to build my own wooden knife
with a bow in the finger that it
comfortable to hold in the hand and
it should make sense. I am an old or
young man and for the knife is
to have a comfortable handle that is well
crafted and well polished. The kind of
wood and shape of that piece of wood will
determine the look, texture, feel and overall
design of my knife.



Concept Designs



Fig 1: The first cut, the first piece of wood.



I have also decided to make a cutting board as I found a flat, smooth board.

I began my project by using the rule to cut out a board in the middle of my cutting board.

I did not know how to make the board as I will use the same side of the board to cut on.



I have found that working by hand to make a piece better than by machine.

But I brought my blade in, which is just an old bread knife.

Finally, I found that pieces of wood were used instead of for the pointers and handles. I have added two blades and my knife was made.

I have started working on a wooden box of one end of one side of wood.



I started with working on the ends on a thin board. Until I had a high shape to work with.

I have found that the best wood and the best way to work with individual pieces of wood and make it.

I have found that working with a full range of wood in my hands.



This piece of wood was a strange shape as I had to make it to fit the shape of the wood that I had found to make it.

I have found it was not as easy as I thought it would be to make it.



Here is my final product.

One thing that I would improve on my design would be to fill in the holes and sand them down to give my knife a better finish, also I would measure out the blade first to make a better fit for the blade, therefore improving the overall quality of the final product.



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Modern Architecture

Falling Water house

OMA studio

The shard

Burj Khalifa

Burj al Arab

Glass
height
lines
strengthen

Structure is everywhere and in everything, from the largest building to the smallest insect.

"Unless structure follows strategy, inefficiency results."

- Alfred D. Chandler -

Engraving definition;

- a print made from an engraved plate, block, or other surface.
- the process or art of engraving a design on a hard surface, especially to make a print.



For many years, engraving was a process mostly done by skilled craftsmen such as goldsmiths or carpenters, depending on the materials used in the print. Prior to the fifteenth century, engravings were not washed painted. Instead, prints of drawings or paintings were copied then etched onto wood or metal.

Modern buildings seem to not concentrate on the details like buildings of old, instead they tend to focus on clean lines and jaw dropping angles whilst using premium materials such as glass and steel.

Definition of structure; - the arrangement of and relations between the parts or elements of something complex.

- a building or other object constructed from several parts.

In my opinion the two most complex structures in the world are the Great pyramid of Giza because of the time and what they had to work with and the Burj Khalifa.

STRUCTURE

ENGINEERING

Engraving has

Famous engravers;

Johannes Gutenberg

Robert Dornier

Michael Ford

Federico Cantu Garza

Constant Doulleux

Luis Ables

words related to engraving;
Swirly patterns
floral ripples
weapons
guns
Historic
detailed

Famous structural Engineers

Gustave Eiffel

James Buchanan

Jörg Schlaich

Peter Rice

Fazlur Khan

Isambard Kingdom Brunel

Bob Shaw

Santiago Calatrava

Empire State Building

Taj Mahal

Eiffel Tower

Colosseum

leaning Tower of Pisa

Sydney opera House

Space Needle

Parthenon

Chrysler Building

Willis Tower

Hagia Sophia

Platiron Building

Peter Rice

Dr. ASE Reed Rice joined our Army & Engineers. In 1951 he took leave to pursue post graduate studies at Imperial College regarding Arups in 1955. After three years working on Jern Utson shell for the roof of the Sydney Opera House in London, where he is credited with having done the geometry for the ribbed dome design, he moved to Sydney to be assistant engineer to Ian Mackenzie. After one month Mackenzie fell ill and was hospitalized. Showing Rice Mackenzie's work on the day of 28. On the his geometrical knowledge enabled him to write a computer program to create the segments of the shell correctly. In total he spent seven years working on the project. Afterwards, he spent 18 months in the United States, in New York City and is visiting scholar at Cornell University.

ing and its striking contrast to others including
In my opinion, the Siphon Opium House is an amazing piece of
architecture. Despite the design as it looks so different and uniquely
it looks like as if an alien space craft was landed in the middle
of Siphon, however being that I find fascinating about Siphon Opium
House is that it is located on the water which just adds an extra
beauty effect to the building also the water is roof on top of the
Siphon Opium House which have a really clever shape and design
since looks like each roof is growing from the last one.

[illegible]

GUSTAVE YOUNG

This is a magnificent Smith-Paul Game Gobbler. Young Engraved April 1855
Residence: Spelling Rifle.



This type was manufactured sometime between 1934 and 1936 and is featured on page 163 of R.L. Wilson's book, "Steel Frames." He states it is a book that the engineer, it features engineering on the practitioner, however, both end of the barrel, reviews and the edge of the middle. It was not quite done prepared as it was indicated the day is second only few more 1933 something from engineering.



After working some on this after
I reading about Celine Young
for how much work must have
gone into each section of
programming on the level of
detail is unusual.



Re the above matter
being regarding even
more special it has
once again be proved to
contain the true secret
is a different shade of
grey or fawn and is very
like the one I took during
previous to exhibition.

One of
the most
difficult parts of
the job is to explain
I imagine to the Council
that we are not
going to be making this
change in the way we
do it.

I am interested in trying my own
changes in but hope so too.
Small one willing, naturally and
whenever with a very important
local interest.

MOOD BOARD



I like the one of the pictures above.





Statement of Intent

The main focus for my project will revolve around looking at the central theme of structure however will focus on architecture. Researching Peter Rice has allowed me to gain a greater understanding on structural engineering, sculpture and architecture.

In order to create a set of design ideas I intend to develop my ideas through looking at rapid 3d ideas and drawings which show architecture. I hope to develop an understanding of architecture, large metal structural design using different media and tools. I intend to link all of my design ideas back to my artists through using similar media, colours and themes. I will use the shapes and ideas of my artist to complete drawings. After I have completed a series of drawings I intend to refine these through further drawings, photo shop or other media such as sketch up.

Another refinement I will take on is to build a series of Marquette's and models that represent and are inspired from my drawings and digital renderings.

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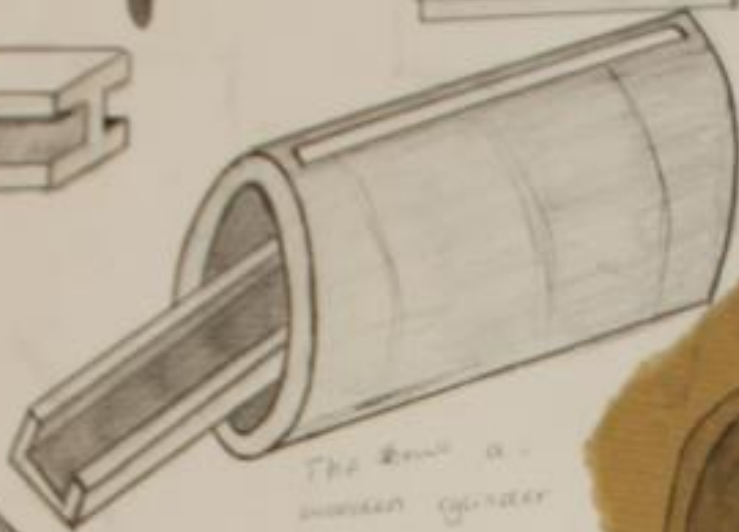
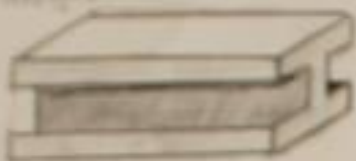
Another refinement I will take on is to build a series of Marquette's and models that represent and are inspired from my drawings and digital renderings.



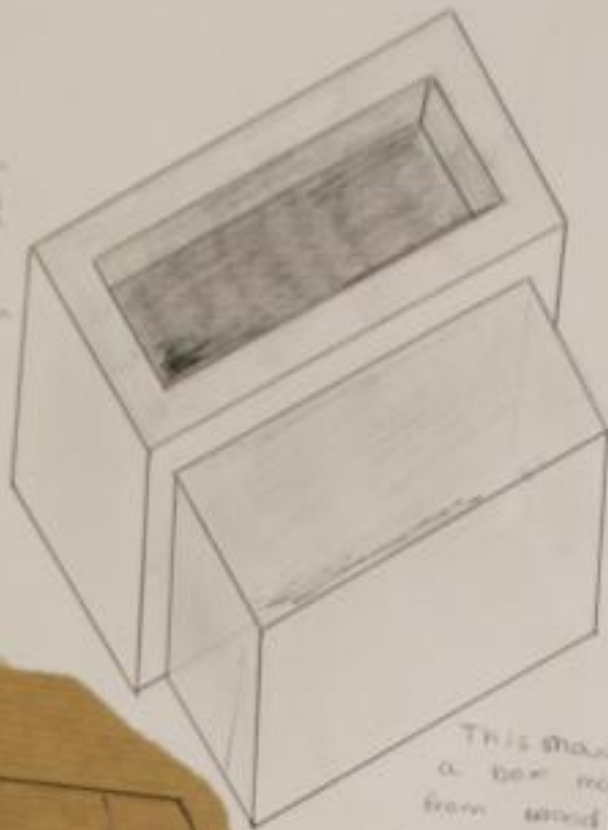
There are
some drawings
made in this
light pencil
which would
be useful for
making and
to show
the work
done.



This is a
drawing of a
cylinder
which
is made
of wood.



The box is
made of
wood. I used
a piece of
metal
to hold the
wire.



This shows
a box made
from wood and
card which I
added some
electrical wiring
design and
the object is
now done.



TRIP TO THE ROYAL ARMORIES



Over the Christmas break I went to The Royal Armories in Leeds with some of my family. I was very impressed with the vast variety of weaponry and armour, however the thing that I was most impressed with was all of the weapons that included very intricate engravings and decorative features. I realised that there was a lot of different types and methods of engraving ranging from more ornate styles of engraving to intricate pieces that look almost as though they are telling a story.



This image on the right is a photograph of a piece of engraving shown on one of the guns at the Royal Armories that I took. I was really impressed with how detailed the engraving is on such a small piece of metal on the gun. It also looks as though there is some kind of picture within the engraving, it looks to me like a man and a dog which maybe suggest his way of hunting life. I think that managing to include an image like this makes the piece even more impressive.



For many years, engraving was a process mostly done by skilled craftsmen such as goldsmiths or carpenters, depending on which materials were used.

Before the 18th century, engravers were not trained painters, instead, pieces of drawings or patterns were copied, then etched into wood or metal.

I started out using a photograph that I took for my rapid prototyping class. The photograph I used was of three clouds arranged on top of each other. I traced over an outline of the clouds at the top of the picture and laid the cardboard shape with a grey color.



...but I was a little bit nervous about it. I was sure it would be a great idea but I was a little bit nervous about it. I was sure it would be a great idea but I was a little bit nervous about it.



...the design of the 'M' shape was a little bit different. I was sure it would be a great idea but I was a little bit nervous about it. I was sure it would be a great idea but I was a little bit nervous about it.



at using a photograph that
 almost met. The photograph
 placed on top of each
 of the clump of the
 two random shape in with



a more urban structure. In
 a city. I also did not
 so allow for the red to



I started making my sphere
 I used the elliptical
 marquee tool to create
 a near perfect circle in the
 centre of the page. I then
 used the brush tool to add some
 shading to the whole circle, making
 the edges darker and a lighter shade
 towards the centre of the circle. I then
 added a metal background that had a
 brushed metal texture. After this I made that
 layer an overlaying layer to make it fit the shape
 of the sphere. To make the sphere seem more
 rounded I used the warp tool to almost
 stretch one side to make it seem more
 spherical. I found this warp tool difficult
 to use at first, however after a few minutes
 of messing around with it I got used to it
 and felt I could achieve a good and
 realistic result from this tool overall I
 am happy with my final outcome of my
 sphere. After I had completed my sphere I
 used the warp tool again and the coloured

gradient tool to add some colour variations to my
 design. These warped and
 distorted shapes almost
 remind me of
 two skulls
 with
 different
 hues on



To start making my sphere I used the elliptical marquee tool to create a near perfect circle in the centre of the page. I then used the brush tool to add some shading to the whole circle; making the edges darker and a lighter shine towards the centre of the circle. I then added a metal background that had a brushed metal texture. After this I made that layer an overlay layer to make it fit the shape of the sphere. To make the sphere seem more rounded I used the warp tool to almost stretch one line to make it seem more spherical. I found this warp tool difficult to use at first, however after a few minutes of messing around with it I got used to it and felt I could achieve a good and realistic result from this tool. Overall I am happy with my final outcome of my sphere. After I had completed my sphere I used the warp tool again and the coloured

gradient tool to add some colour variations to my designs. These warped and distorted shapes almost remind me of sea shells with different colours on.



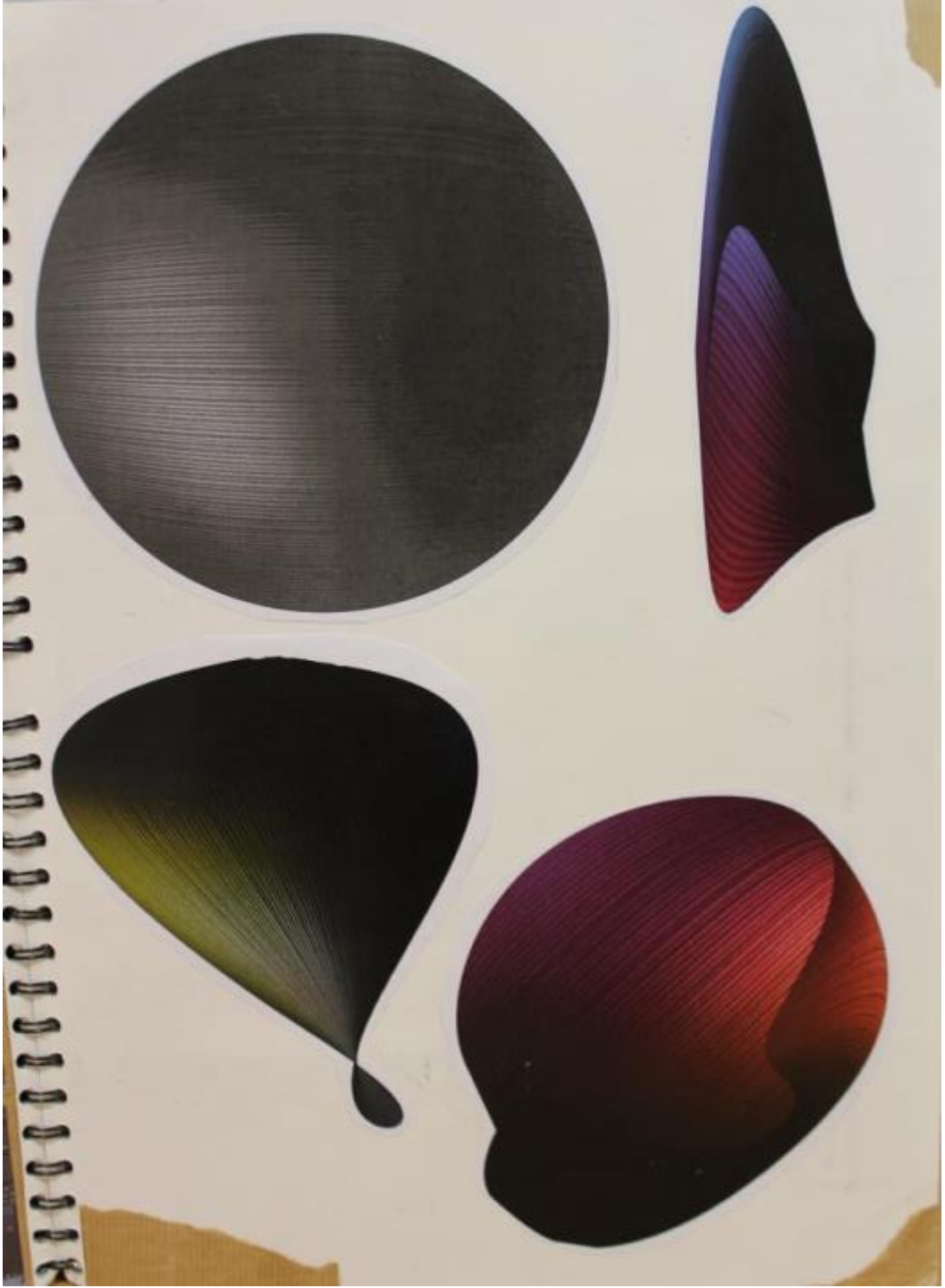
This second image looks to be a drawing of a muscle that reminds me of the stretched out shape that I made from my sphere, but shared me how your design inspirations can come from anywhere.

I found some images of some shells online that I thought looked quite similar to some of the warped shapes that I made from my sphere...



with.
I then
added
a
concrete
texture to

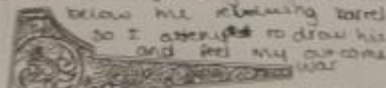




Gustave Young



This is a piece of engraving work that Gustave Young did on a revolver. I thought that the most interesting and detailed part of his engraving is the section below the revolving barrel, so I attempted to draw his and feel my outcome was



fairly accurate, however the one thing I would change is to draw it bigger so I had more room to concentrate on every detail.

Gustave Young was a very intricate engraver who used lots of fine details and delicate patterns in his work. Gustave Young worked on a range of different guns and metals. It is clear to me that Gustave Young is more obsessed by each detail, and the use of spirals and circles are clearly very influential to his work.



He is very different to Peter Rice, not only because they are in a different line of work. But because Gustave Young uses very small spaces and fills it with fine detailed patterns. However Peter Rice uses very large basic shapes, with a lot of science and intricate engineering behind the final piece.



Sydney Operah House

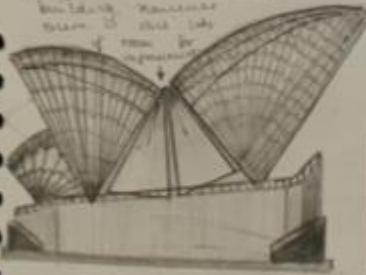


On the other hand, Peter Rice is a much more modern artist as you can see in the roof of the Sydney Opera House which he designed, from a distance these smooth looking pointy shells look like a solid white curve, however as you can see in the image it uses what looks like small perforated tiles to help with the curvature.

- The roof is covered with more than one million tiles made by Swedish engineering companies.
- The building was 6,225 square metres of glass and 245 kilometres of electrical cables.

• Work started on the Sydney Opera House in 1959 with 10,000 builders employed.

• My interpretation of the Sydney Opera House. I think that I have captured the main feeling and emotions of this building. However I think I have lost some of the detail of the roof.



- The building is 165 metres long and 130 metres wide.
- The Opera House built with white tiles using stained glass specifically for the job in black, with a cost of 1.5 million.

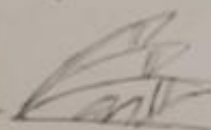


- The height of the roof is 11 metres.
- The building is made up of 1,000 tonnes of reinforced concrete.

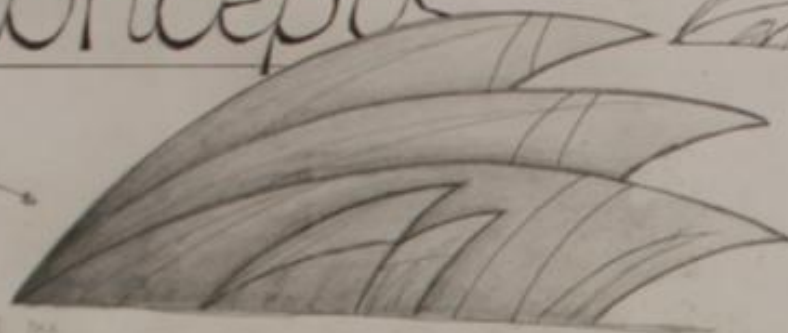
In comparison with the work of Gustave Young, Peter Rice's work looks almost like an alien space ship has landed in the middle of Sydney Harbour, Peter Rice's work is also on a much larger scale and is much more expensive. I do not have a favourite between the two artists as they are both very complex and intricate.

- The highest roof point is 67 metres above sea level - the same as the 24 Storey Singer Building.
- The roof is made of 2.1 million tiles and 245 kilometres of electrical cables.

Concepts



This one is
my favorite
to a
great many
of all the
time we living the
same way, which
is my spirit but a
great spirit. God



This one I like
my own favorite of mine
as to I like mine
the whole thing is
and a number of people
my painting is a sign of a
living.







The 1st time I made boat I made most of it
 using open boat using dark material and a piece of
 wood and some wood glue I used a small piece
 of wood and cut it into a curved shape and then cut
 triangles into the wood and folded it into I had a
 shape like a boat. I made the 1st time of open boat.
 I was a bit shy to see my first boat.
 The next I used the two piece of wood and
 the 1st time and cut to support my boat in the water.



This is a control that showing each stage of my model
 for now it was a right piece of wood to make
 parts and a nice curved shape. I also decided to
 use the my boat at the end to show my design
 and add a more accurate effect. I put the parts
 for now in a quick understanding of the boat design.



STUDIO SETUP



Camera



This is the camera I used to take the photograph of the model, it is a very high quality Canon camera with lots of settings and features enabling it to take high quality photographs.

Studio Set-up For Final Piece Photography



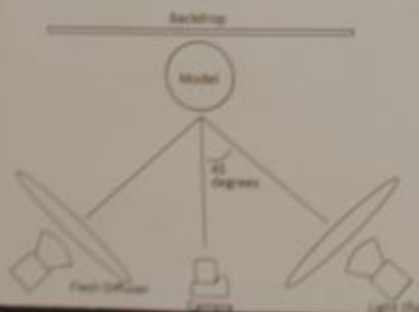
The flash is spread out at a 45° angle from the flash diffuses so you get an even spread of light, this means that you get no dark and light spots therefore meaning you can achieve your perfect lighting.

The studio is the perfect way to photograph my models as you are able to take clear and clean photographs of a really high quality.

Using the studio comes with many different benefits such as adding texture, detail and higher quality to all the photographs.

Placing my model on a solid background such as the white paper backdrop allows me to eliminate any shadows or light spots from the photograph, ensuring I have maximum quality in all of my pictures of my model.

Another feature that I used was a simultaneous flash which sets a burst of light in the photograph, ensuring there is no shadow from which the light came.



The Canon has many settings and functions such as ISO speed which means you are changing the speed at which the sensor picks up light from the outside.



Final Design.

This is my final outcome for my Sydney Opera House assignment. To make my model I used a hot glue gun & small piece of scrap wood and some card.



I started with the drawing of the house and then I cut out the pieces of wood and card. I then glued the pieces together to make the model. I also used a hot glue gun to glue the pieces together. I then added the wooden base and the final model was complete.

My Model...



Step By Step

There are some of the ^{step by step} photographs I used from my Sydney Opera House book up and they show the whole process that I went through to build my model in primary photography. These photographs show step by step how I made my model from the materials I've used in the lesson. We used to make my model, which include using the hot glue to cut my wood, to hot glue and binding my card into place. If I were to improve my model, I would improve on the large shapes and textures and adding more.



STUDIO SETUP

Final Design

This is my final entrance for my Sydney Opera House. To make my model I used a box of glue gun a small piece of scrap wood and some card.



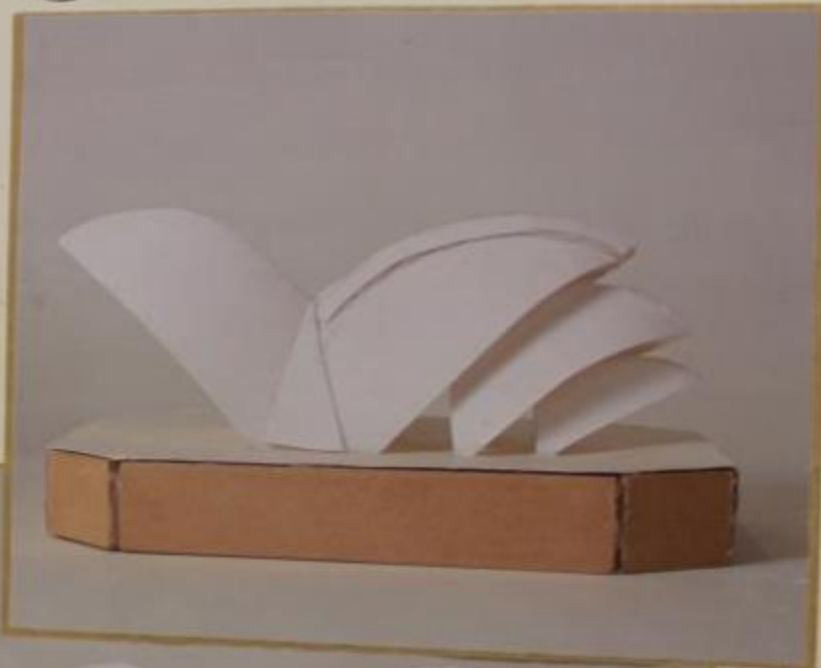
Overall, I am very happy with how my model came out. I feel it is a fairly accurate representation of the Sydney Opera House. If I were to make my model more accurate to the actual Sydney Opera House I would want to add more detail to the base to show on accurate representation of the building and its surroundings. I could also add more detail to the base to show on accurate representation of the building and its surroundings.

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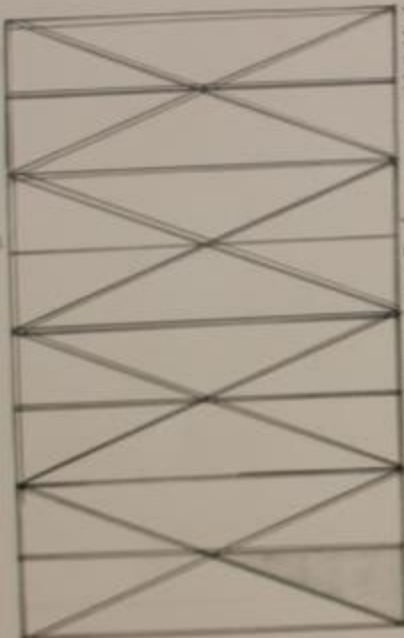
My Model...



M

aterials

→ This shows the pattern in which to fold the piece of card to achieve the design.



This is the main material I am going to use to make my next model. It is a unique way to fold card that makes a springy like design that has a very geometric design.

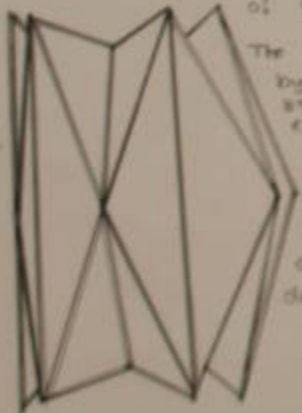
The card will be flexible enough to mold and manipulate into different shapes.

I am going to make another Sydney Opera House, however this time it will be my own interpretation of the Sydney Opera House including a lot of two geometric card design.

of two geometric card design.

The card design is created by folding the card into two and then creating over each two sections, and finally folding it flat.

I will also use different sizes of card to allow for a more interesting and varied design.

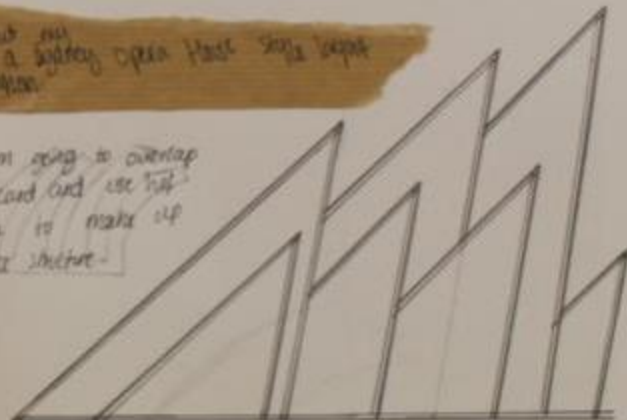


→ This shows the card design folded up.



Here is a design for how I could lay out my card designs to form a Sydney Opera House shape to my own interpretation.

I am going to overlap the card and use hot glue to make it one structure.



Side view ↑

I am using the arch shape of the folded card to make one arch shape of the Sydney Opera House and cut over and around some kind of frame or shape. I will next easily use hot glue to stick the card in place.



Rapid Prototypes

These are the rapid prototype design ideas that I have created for my design open house model. I tried to create as many different open house ideas through the width shape or the curvature of the house, I feel I achieved this better in some designs than others. Although overall I came up with some great ideas to use for my model.



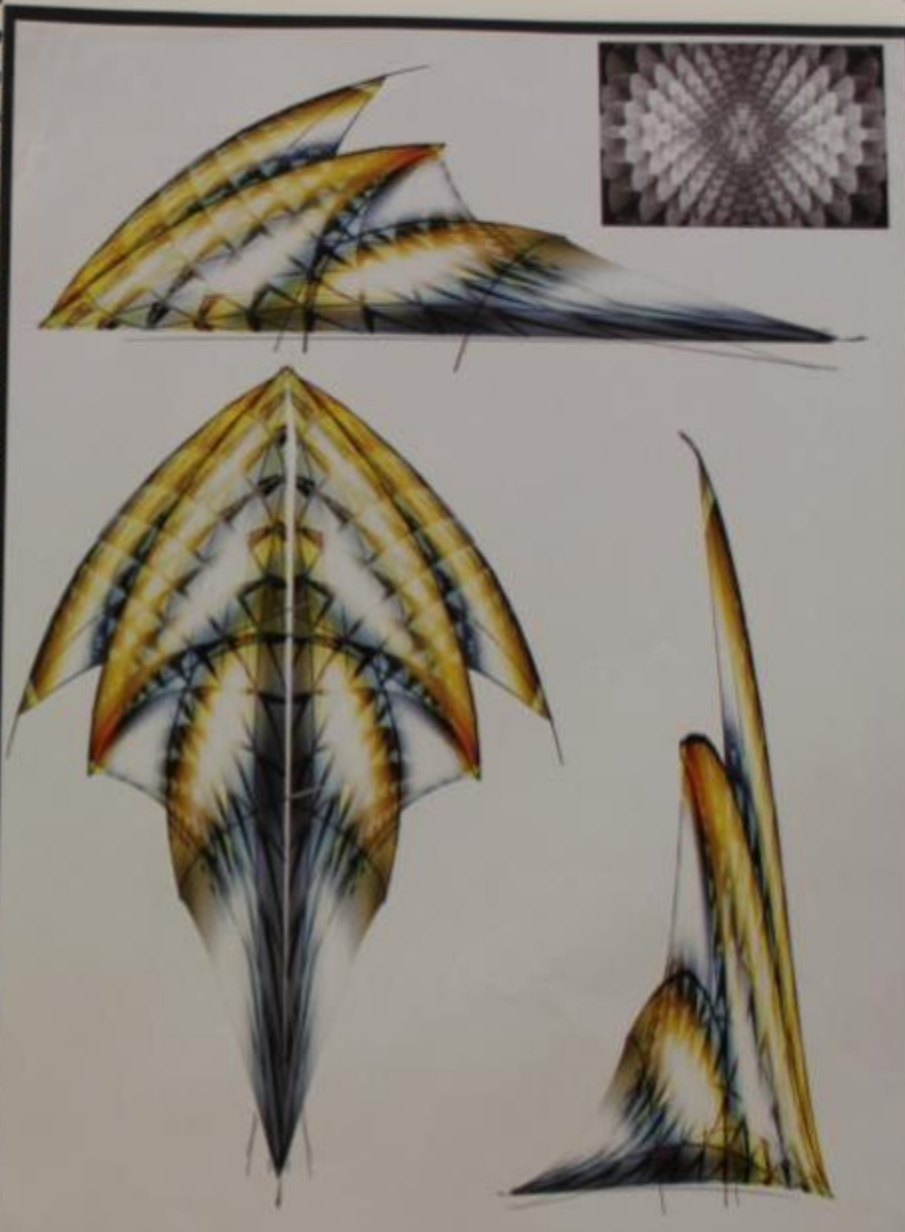
Concept Design

This is a design that I have made using one of my drawings on a previous page. Overall I am very happy with how this design came out. I started out by tracing the drawing using the polygon lasso tool and then began adding various layers of shading to the shape. I then added more layers of shading, however this time I used colour. I chose a brown/orange colour and a light blue. Finally, I warped a picture of a glass building onto the main shape at the bottom of the image until it looked as realistic as I felt I could have achieved. Overall I am very happy with my design, however if I could improve this piece I would improve the quality of the shading to make it smoother and flow through the shape more dynamically.





This so far is my
 favourite design idea
 yet. I am particularly
 fond of the
 construction lines,
 choice of colour, layer
 design and
 overall dynamic
 of the design.
 I added
 an extra
 overlay
 layer on
 top of
 the image
 with a
 texture on.
 I feel this
 really made
 my design
 pop.
 I chose
 the Golden
 Colour to
 represent
 the outbreak
 of Polio in
 which it
 where
 the signal
 came from
 is heard,
 as this was
 the even
 further to
 the design.



Design Concept



Contact Sheet

This is a contact sheet showing a range of photos, some photographs of how I made my first book, showing a range of different techniques, tools and ideas. These photographs also show my progress and progress as I went around to the printing and then out of the world I have used for this project is very. My design is heavily based off the design by the first and second of my concept design drawings.



My Final ...

Piece...



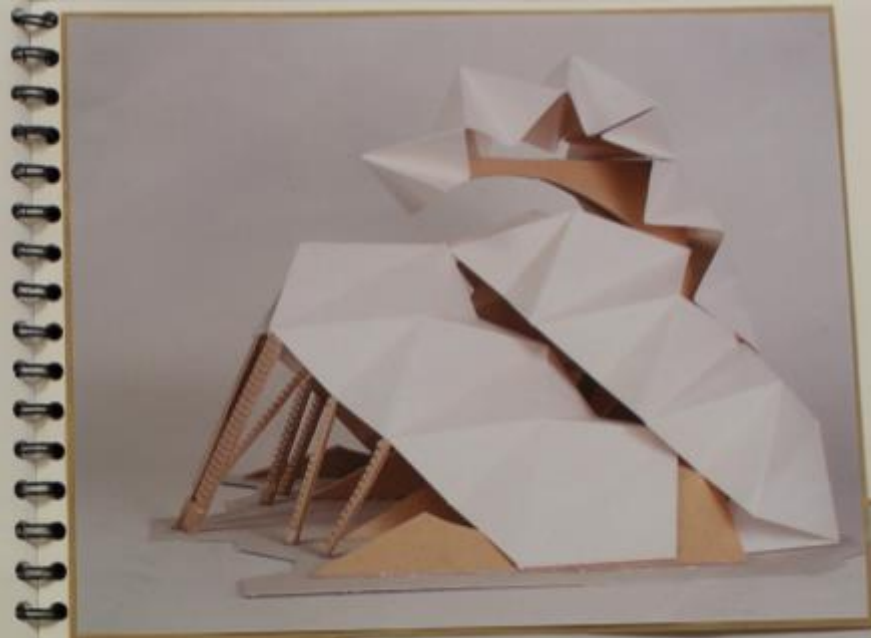
This is my primary source photograph which I took in the studio of my final piece. I am very happy with how both the photograph and the model came out. I feel as though my model was a clear link to the Spirit of Open House. However it also being different and show his piece I have one through to observe my unique design. If I were to create my piece I would say that I could have used higher quality materials and some paint to improve the overall quality and aesthetics of my design. I am extremely happy with how the spirit of his piece of my model came out as I feel my share my model pop.



Design Sketch...



This is a quick sketch I made when I started my design. I feel it's a good first design of my piece, but I still have a lot to learn.



These are the final pieces
some photographs of my past
main in the studio. From
the side people of my
design you can clearly see
how I have achieved
my original shape and
design from the side yet
not deleted my own hand
using the paper and making
the piece look solid yet
light and I like how the
old polygon like color
scheme of the paper have
to inspire my piece I could
have picked all of the
material with a different
color, for example, white.

A rough sketch
showing a side
view of
my final model



Evaluation

The aim of the brief was to design and develop a model or Marquette based off of a chosen artist following the theme of structure. I researched two artists; Peter Rice and Gustave Young, I chose Peter Rice because I thought that his design for the Sydney Opera House was a great example of extreme engineering and I could learn a lot about structure because of this. I chose to research Gustave Young as I had some primary source photography of his work from my trip to the Royal Armories. Although I didn't use any engraving in any of my final pieces I still learnt a lot about the delicacy of the art, however I decided that Peter Rice's design was more relevant and appropriate for my project.

I used my research of Peter Rice to inspire and develop my ideas as I based them all loosely on the design and shape of the Sydney Opera House. I found the curvature of the Sydney Opera House roof difficult to replicate through media such as wood and card, however I was successful in creating lots of design ideas. Firstly, I began by creating lots of drawings and sketches varying from the last to achieve new and original ideas. Next I began rendering my drawings on photo shop and refining my pieces adding colours, details and texture. The colours I chose for all of my renderings are bright and out there, however I added them in subtle amounts to add a more dramatic and dynamic effect to my ideas.

For my final piece I used many different techniques and materials to try and challenge

For my final piece I used many different techniques and materials to try and challenge myself and improve my skills as a designer. I used card mainly in a folded shape to give my model the desired curve from the Sydney Opera House. I then added a wooden support structure made from scrap wood as this was a more ecologically inspired decision. I then added some wooden support rods in an even design to the front of my model to add a nice aesthetic effect, also showcasing my ability to improve my design whilst I'm working on it.

If I were to improve my project I would add some paint to make it all the same colour, therefore adding some consistency to my model, I also would take more care sanding and gluing to make my model of a higher quality and a neater over all aesthetic.

I feel as though I have gained many new skills from this project mainly in how I develop my ideas as I have gained lots of experience in using photo shop and drawing my design ideas, I have learned many different ways and techniques to improve my ideas such as; adding colour, adding shading, using layering techniques and using fine liner and pen to add a dynamic effect to my drawings.