Design for a Cause

Pre-brief research

Biodiversity, is the variety and abundance of life on earth. It is crucial that biodiversity is maintained as nature provides an abundance of resources and ecological life support services. These services and resources will no longer be available to us if we keep reducing biodiversity. Vital resources include: wood, fibres, oils, fuels and food.

Physiological research can be carried out on some species as their adaptations may expand our understanding of the world and improve our resources. For example, studying Marsupial's development in a mother's pouch is easier than studying a child in a womb so may be more effective in understanding developmental problems in unborn babies. Studying the acid secreted from a Hippo's skin may assist burn victims as it acts as a natural sunscreen. Tests of new medicines are carried out on sea urchin embryos as to test whether new medicines are teratogenic, this doesn't affect sea urchin populations as they're abundant and one mother can produce half a million embryos per spawn.

Another benefit of studying biodiversity is biomimetics. This is the practical utilisation of knowledge of species adaptations, using them to design things such as vehicles (using an eagles wing tips on aircrafts to increase fuel efficiency), architecture (termite mound's natural ventilation system is utilised in many structures), infection control (shark skin prevents bacteria from sticking easily so has been copied in hospitals to reduce infection rates), adhesion (gecko feet, plant seeds and lotus flowers have adhesion or repellent properties) and materials (spider silk is being researched because of its strong tensile strength).

Conservation

Conservation – *'preservation, protection, or restoration of the natural environment and of wildlife'.*

It is believed that about 150 species of flora or fauna are become extinct every day due to threats to biodiversity.

One of the major threats to biodiversity is direct exploitation, due to pressures caused by demand for food, fashion, pets and entertainment, furniture and ornaments, traditional medicines and other reasons such as pharmaceutical products made from whales.

Another contributing factor is the eradication of predators and competitors. We have killed many animals because we can perceive them as dangerous to us (sharks, snakes and crocodiles etc) and many more because they carry disease (mosquitos, badgers), eat livestock (wolves, birds of prey) and eat crops (rabbits).

Humans also affect the abiotic and biotic factors in an environment. Biotic factors include: water availability, dissolved oxygen, temperature, water turbidity and physical damage. Biotic factors include: pollinators, seed dispersal and food chains.

Over time, due to exploration, humans have introduced non-native species into different regions which have in turn eradicated the indigenous species due to their different traits and survivability. These introduced species also introduce pathogens which the local wildlife is susceptible to.

The threat to biodiversity that we are all most familiar with is habitat destruction which comes from deforestation, grassland ploughing, reservoirs, mining and urban expansion.

Species conservation is something I feel passionate about and consequently, in my view there are few more important causes on which to base my design.

Sustainability

Sustainability – *'avoidance of the depletion of natural resources in order to maintain an ecological balance'.*

The Brutland Commission defined sustainability as: Sustainable development meets the needs of the present generation without compromising the ability of future generations to meet their own needs"

Some believe that sustainability is the 'right thing to do' whilst others feel that not protecting the ecosystem is more problematic than doing so.

Overall environmental impact of an area depends on two factors: total population and individual impact of each person.

Most activities carried out by individuals or small communities such as small-scale fishing or farming can be sustainable but become unsustainable when carried out for/by a vastly increased population, creating global demands which are so great that farming and fishing have become unsustainable as we are consuming too much. In urban areas, resources are transported from other parts of the world, so we are usually unaware when one area of resource collection is no longer producing so the producers (organisations) move to exploit another area without fixing the previous area, leaving its equilibrium out of balance, letting it die.

The reason for the neglect of sustainability by the general public is mostly due to the problems that occur elsewhere or much later in time so the general attitude is "it's not my problem". However, I do feel that with recent generations, the problem has been increasing addressed.

Many individuals are prepared to make lifestyle changes for sustainability reasons but a large group/area/civilisation need to all make sustainable choices to be genuinely sustainable rather that doing 'less damage'.

- Linking abstract ideas to practical designs
- Elements of organising space
- Site analysis

Through my final project, I will attempt to utilise all of the above in my design.

I have achieved:

Design for Art Exhibition Space (MC Escher)

Experiments in Spatial Design

Maggie's Centre

Section 2 Project Proposal – Design for a Cause

Concept: In common with many people of my generation, my main area of concern for my future is related to environmental issues. In particular biodiversity and wildlife conservation are areas where I am passionate. As such my project will focus on Biodiversity, highlighting how humans have the opportunity to interact with the natural world without unduly affecting it. Therefore, this design should focus on the creation of an environment that offers a tangible purpose for the Human users, whilst having minimal impact on the environment, enhancing its natural aspects to promote the environment and encouraging wildlife to become part of the structure.

Criteria such as incorporating organic elements, use of water (which is after-all the foundation for all life on the planet), use of natural shapes and forms should be used in the design.

The design needs to seamlessly blend into its environment, rather than being seen as a structure placed into a location – even if done in a sympathetic way.

It should nevertheless have a practical purpose – perhaps a gallery or an information centre to educate the public.

Overall Aim. Create a structure that seamlessly blends into its environment with a practical purpose promoting Biodiversity.

- Supporting Ideas.
- Natural Geometry & Form, Natural Materials, Natural Colours, Tangible Benefits.
- Research:
- Biophilic Design, Form Experimentation, Reference Sites, Environment Constraints

Resources Required:

- Modelling materials, Design software, Time.

- Presentation method:
- Physical Model 1:50, Sketch-up renders, Presentation Board, Sway Presentation.

It is understood that this is an evolving process and as such the opportunity exists to change criteria or outcomes as a result of research or experimentation.

Section 3

Throughout the process it will be important to continually assess the evolving design against the overall aim of the project whilst ensuring that the supporting ideas are heavily utilised.

I feel that this project went well, the design process was quite difficult as i was left completely to my own accord, so doing research and development by my own pace and style was quite tough. Through this project though, i feel that I've found my own way of researching and developing a design from my own proposal.

In regards to the design, i feel that it was a success although i admit there were some details that i somewhat overlooked, such as the entrance at the 'tail' of the building not having quite enough room to be a viable entrance, and the fact that my design is quite far-fetched.

The Sketchup model went surprisingly well especially as it was such a difficult shape to make in Sketchup, I think it reflects my design very well apart from some details that I didn't have time to correct.

The model was also very difficult to construct as i had never built a model from carving foam, so the whole process was an experiment, there were lots of obstacles to overcome with the model, mainly being the fact that very few glues work on the foam.

Overall though, i feel that my final project was a success as i managed to complete a full design to a good standard including a Sketchup model as well as a physical one completed to the deadline.

Biophilic Design

Biophilic Design is a concept used to promote connectivity with nature by utilising direct, indirect nature and space and place conditions. This design concept boasts environmental, mental and economic benefits for the occupants and surrounding environment. It is thought that this principle was used for the iconic, Hanging Gardens of Babylon – one of the 'Seven Wonders of the World!.

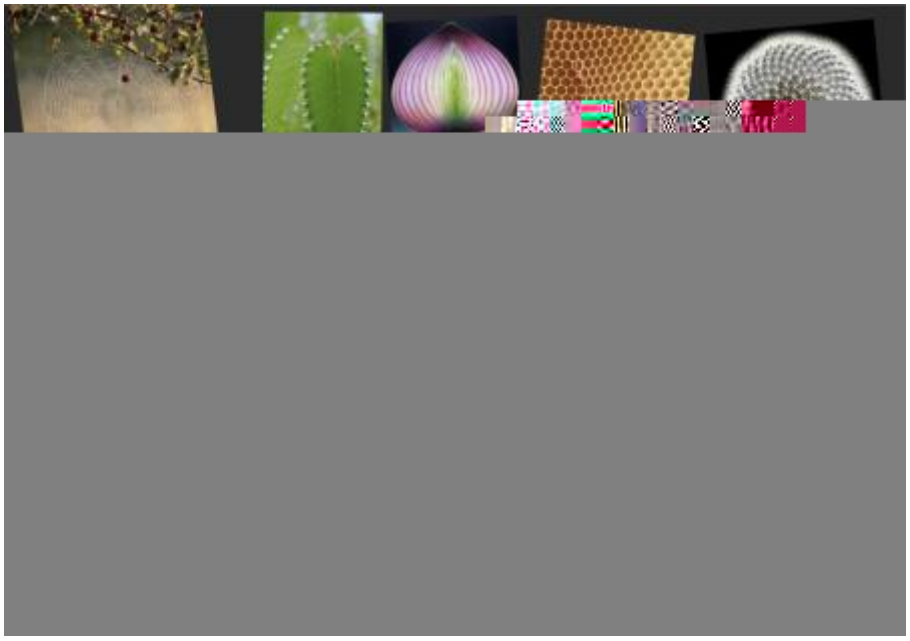
This design principle is based on the word 'Biophilia' which was used by psychoanalysts who said that it was the "passionate love of life and all that is alive... whether in a person, a plant, an idea, or a social group". Essentially, it describes the human need to enjoy and connect with nature, although we also have bio phobia which is a fear of certain natural aspects such as: snakes, spiders, small areas, large open expanses, darkness, heights etc.

Dimensions of Biophilic Design

- **Direct Experience** (Tangible contact with nature)·

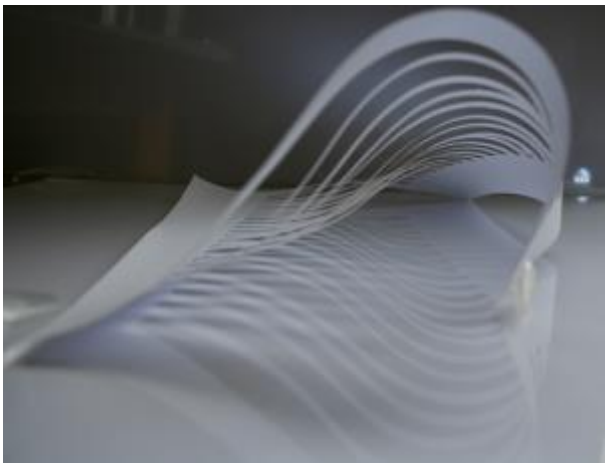
- **Light**: Allows orientation of time and season. It can also cause natural patterns, forms, movement and shadows, providing wellbeing for occupants. (Clerestories, reflective materials, skylights, glass, and atriums)·
- **Air**: Links with ventilation, temperature, and humidity. These can be utilised through windows and circulation promoting comfort and productivity.·
- **Water**: Is multi-sensory and can be used to provide movement, sounds, touch, and sight

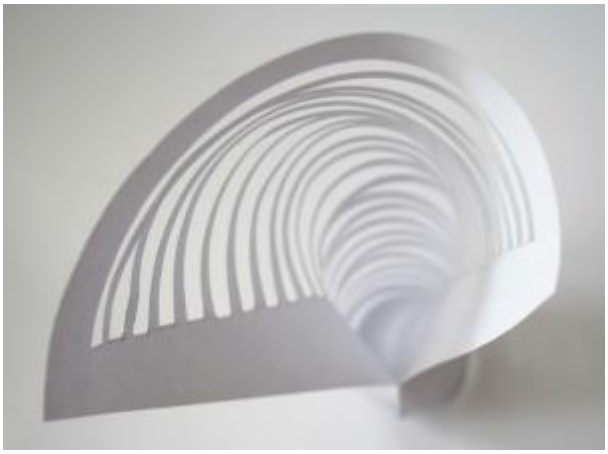
- **Images of Nature**: Proven to be intellectually and emotionally stimulating. (Paintings, photos, sculptures, murals, videos etc. ·
- **Natural Materials**: Can be mentally stimulating and are susceptible to the patina of time (weathering) which invokes responses from people. (Wood and stone, natural fabrics, furnishings and leather)·
- **Natural Colours**: Natural colours and "earth-tones" are abundant in nature (subdued brown, green and blue tones), which provide a connection to the natural world potentially producing calming and relaxing emotions in humans, whereas brighter colours should only be used sparingly as they can be fatiguing and distracting.·
- **Light and Air Simulations**: mechanical ventilation and creative interior lighting should be used when natural ventilation and light can't be achieved. (Varied lighting through lighting types, reflective materials and natural geometries for light to shine through) . Natural airflow can be imitated through temperature, humidity and air velocity.·
- **Natural Shapes**: This can be achieved through columns and nature-based patterns on facades. Including these can change a static space into a complex area.·
- **Evoking Nature**: Using natural characteristics to influence structural design. These may be shapes that that don't necessarily occur in nature *per se*, but elements that represent nature (mimicking plant heights, animals, water or plant features)·
- **Information Richness**: Including the abiotic and biotic elements of the environment into a building space. This can be achieved by providing complex but quiet environments that invoke curiosity and thought.·
- **Change and the Patina of Time**: People are interested in the fact that nature evolves and changes through time, so to replicated this, use organic materials that are susceptible to weathering or colour change is beneficial when creating a connection between a structure and the natural environment.·
- **Natural Geometry**: Using repetitive natural forms such as fractals in facades or structural components can give another connection to nature. These geometries give winding flows rather than harsh angles. (Honeycombs and water ripples)·
- **Biomimicry**: This is a way of imitating certain properties of organisms found in nature for functional purposes, these can also increase the link between an occupant and nature.

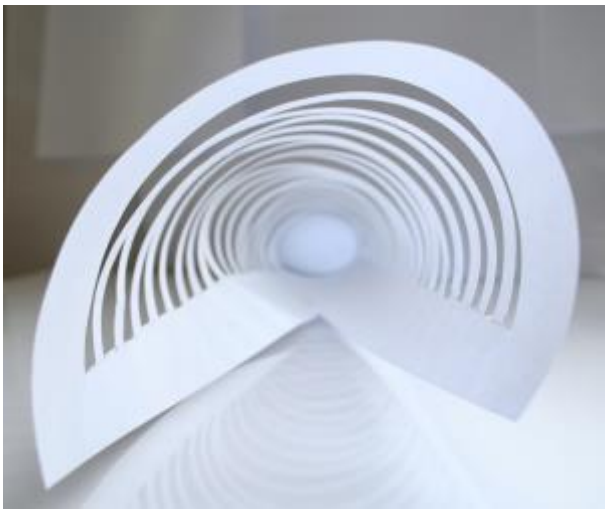


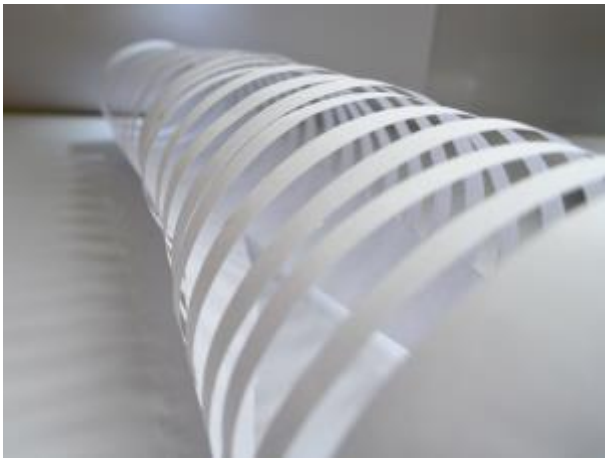
2 - This is a mood board of natural geometries, to inspire my later experimentations

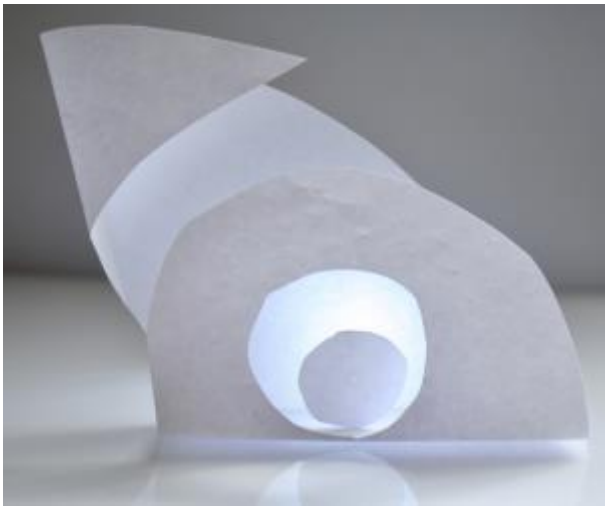
- **Experience of Space and Place** (Spatial Relationships)·
- **Prospects and Refuge**: Prospects emphasises horizons, movement and danger whilst refuge refers to the ability to provide comfortable and nurturing interiors. (Balconies, alcoves, lighting changes and spaciousness (savanna environment))·
- **Organised Complexity**: Meant to simulate the need for controlled variability (repetition, change and architectural details)·
- **Integration of Parts**: Different parts all being part of a whole give viewing/experiencing pleasure, this can be clearly *'boundaried'* interior spaces or the integration of a central space.·
- **Transitional Spaces**: Aim to connect the interior space to the outside and create comfort by providing access between spaces. (Porches, decks, atriums, doors, bridges, fenestrations and foyers)·
- **Mobility**: Gives the ability for occupants to move comfortably through spaces. Can be achieved through making points of entry and exit clear, providing a feeling of security.·
- **Cultural and Ecological Place Attachment**: Can create human connection and identity by creating a cultural sense of place in the environment. This can be achieved by incorporating an area's geography and history into the design. The ecological identity can be done through creating ecosystems that use local fauna and flora.

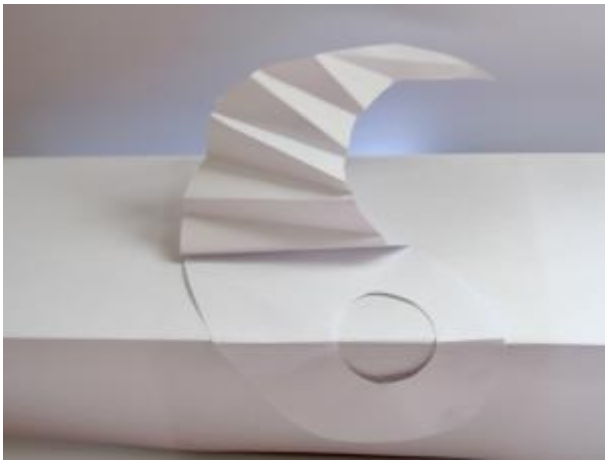


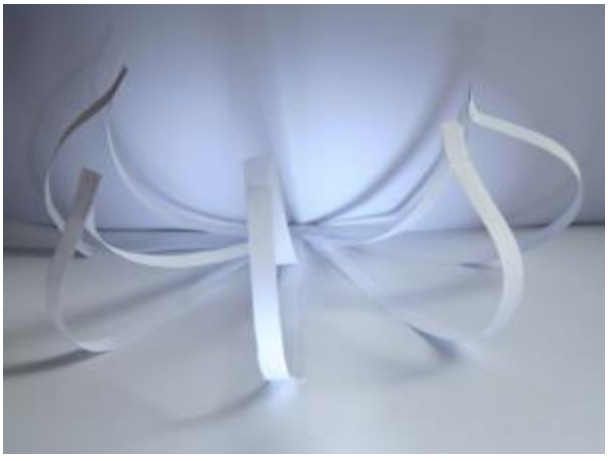


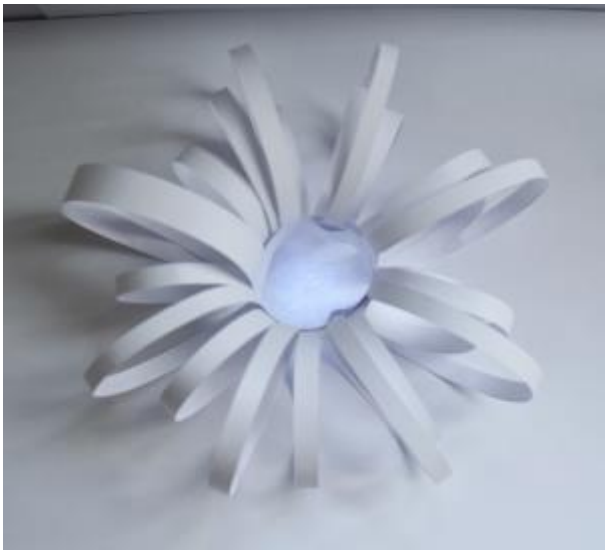












Benefits of Biophilic Design

Health Benefits

Natural sounds & smells have been proven to increase mental wellbeing (*Catherine Ryan found that elements such as nature sounds, improved mental health 37% faster than traditional urban noise after stressor exposure*) and reduce dependence on drugs in hospitals (*the same study found that when surgery patients were exposed to aromatherapy, 45% used less morphine and 56% used fewer painkillers overall*).

It has also been found that water elements & views of nature can be mentally restorative and also that the inclusion of plants in interiors can reduce stress & increase pain tolerance.

Peter Newman and Jana Soderlund found that increasing the quality of vistas in hospitals reduces the experienced pain & depression in patients in turn reducing their hospital stay from 3.67 days to 2.6 days.

Biophilic design has also proven to heighten community connectivity therefore reducing aspects such as crimes of violence or aggression.

Research has also found that implementing outdoor facilities such as green gyms has helped build social capital, increase physical activity, better mental health and quality of life by allowing people to help clear overgrown vegetation, build walking paths, plant foliage, and more readily exercise.

Environmental Benefits

Adding natural elements into an urban environment can help with things such as reducing damage from floods, storms etc by absorbing water which cannot escape through impermeable surfaces such as concrete. Nature incorporation can also increase the atmospheric cleanliness as plants

recycle CO2 into oxygen, whilst increasing biodiversity in the area. They can also decrease heating & cooling needs, and reduce temperature fluctuations by providing natural shade & cover.

Economic Benefits

Cities like New York can see savings nearing $470 million due to increased worker productivity and $1.7 billion from reduced crime expenses because of Peter Newman adding biophilic design & landscapes. Its also been found that retail stores can benefit from vegetation & skylighting, giving them greater profits.

Building-Scale Examples of Biophilic Design

Church of Mary Magdalene - Jerusalem

This church utilises biophilic design through its natural geometries, organic forms & organised complexities.

Organised complexity can be seen on the exterior of the building through the repetitive domes, their scale & placement.

The interior has symmetrical roofing with vaultings & domes and also has natural imagery through the leaf-like fronds on the columns.

The layout of the church allows it to have prospects through raised ceilings, good lighting & balconies, and refuges in lower areas where the lighting is reduced and there are alcoves with small windows.

Fallingwater - Pennsylvania USA

Designed by Frank Lloyd Wright, it is one of the most famous biophilic buildings in history.

This structure utilises the environment surrounding it, situated on top of a waterfall/stream and incorporating many parts of nature within it such as a bolder in the middle of the living room.

It also seeks to connect one to the outside/nature, this has been achieved through the waterfall being heard throughout most of the building, making it feel like you're actually experiencing the waterfall rather than just watching it. Another way it connects people to the outside is through the transitional spaces throughout the building such as porches, decks, large windows & views, these spaces also better the flow of the building.

The direct & indirect experiences of nature are enhanced by using multiple fireplaces, organic shapes, colours & materials.

Khoo Teck Puat Hospital - Singapore

Treated more as a social space for relaxation more than a hospital, the Khoo Teck Puat (KTP) hospital is known as the "Garden Hospital".

The designers utilised the surrounding landscape, similar to Fallingwater, by allowing the Yishun pond to flow through the courtyard creating an attachment to the pond whilst making it seem as if water is drawn from the pond by the building.

KTP makes sure to use as much nature as possible on the balconies, surrounding exterior, interior etc. The inclusion of vegetation has increased the local ecosystem's biodiversity whilst also allowing locals/residents to participate in ways such as growing plants, produce & experiencing nature which is facilitated by the roof garden.

The psychological effects of nature inclusion are very important in this design also, they improve the productivity of workers/doctors, increase wellbeing of visitors and also decrease the healing time & pain tolerance of patients.

KTP utilises natural ventilation by orienting itself in the direction of the north & South-East prevailing winds which has reduced energy consumption by 60% & increased airflow by 20-30%.

This structure uses lots of direct natural contact but also uses transitional spaces to the outside, creating connections with nature as well as being an organised complexity of space in its design

Sandy Hook Elementary School - Connecticut USA

After the disaster that struck in 2012, a new school was built to try heal the community & create a sense of security for the community.

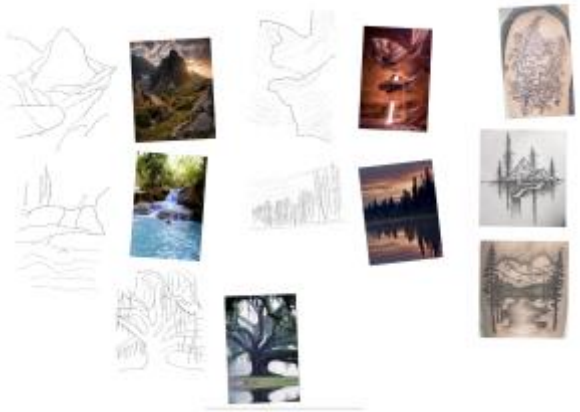
Some of the biophilic elements of this redesign are; animal feeders, wetlands, courtyards, natural shapes & patterns, natural materials, transitional spaces, nature images, natural colours, and natural light. They also incorporated a 'victory garden' which can be a way of healing for the children.

The architects also utilised the indirect experience of nature by pushing the school backwards towards the tree line and using large glass walls/windows to bring the nature of the woods into the school, they also constructed metal trees in the lobby which have reflective leaves which bounce light onto & through coloured glass. The indirect nature is emphasised by the use of natural materials such as wood & stone along with the curved, wavy design of the exterior/façade.

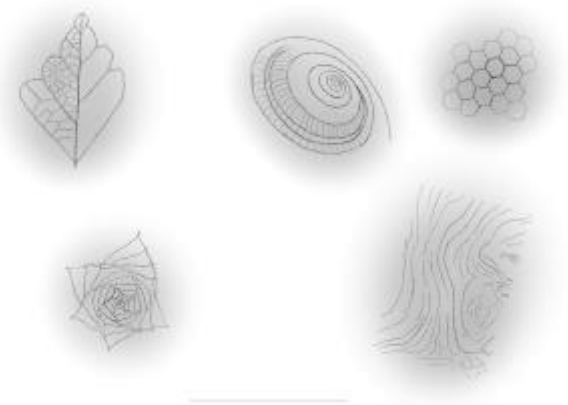
Windows acting as transitional spaces provide classrooms with nature connections, space & place experiences are also created through the variety of breezeways, bridges and pathways for students to use to move between spaces.

Initial Research

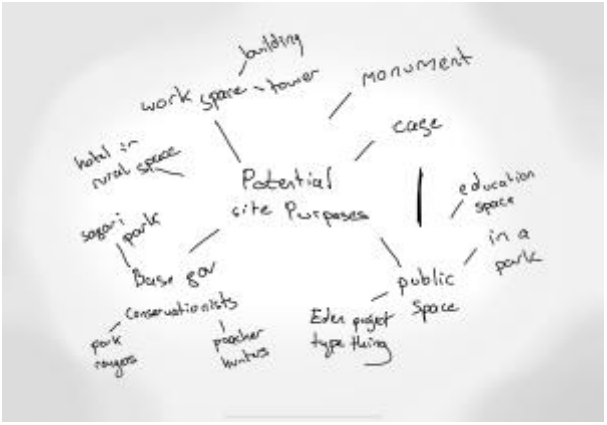
Natural Form Analysis



I have drawn on images from a variety of natural landscapes as well as interpretations of nature (tattoo images) to inspire my designs using the lines, curves and forms I have found. There seem to be no straight lines in nature, and the examples I have shown here, demonstrate this. I took these images and stripped them back to their basic form to leave me with simple shapes and lines which when combined, form complex structures. This will allow me to draw inspiration from nature hopefully resulting in a base design that acts as an extension of the landscape into which the structure has been placed, rather than an obtrusive structure imposed upon the natural environment. I have tried to highlight the transition from basic images, though breaking them down to their base form to then building them up into a comprehensive design which will act as an extension of the landscape, borrowing from nature, rather than imposing upon it.



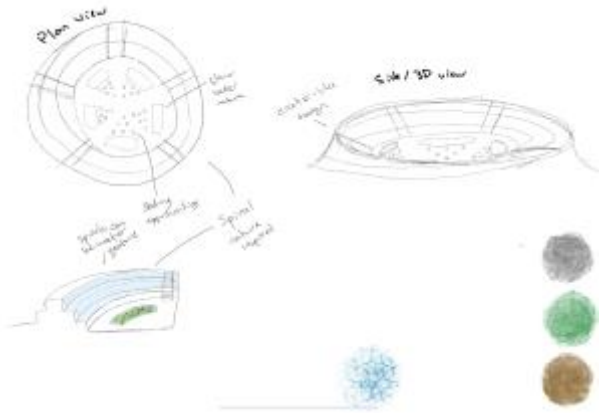
The images above are an extension of the process of borrowing from nature. I have tried to demonstrate borrowing 'form' from smaller natural object to also be incorporated into my design.



Initial Ideas

4 - Click Me! <-

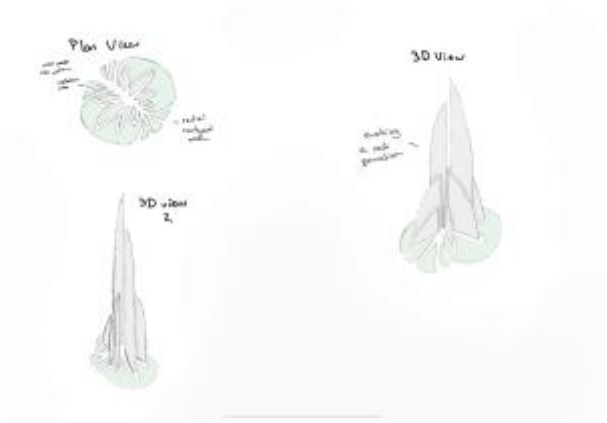
This is my initial attempt at designing a social space for a community as an opportunity to enjoy nature. The design is inspired by rock formations and gardens/fields. I want to create a space where you can enter the rock formation below to access a quiet cave like area but also be able to access the sociable gardens on the top which allows you to enjoy nature through the vegetation around you and the design evoking nature. I also wanted the design to show a mix between nature and geometry.



5 - Click me <-

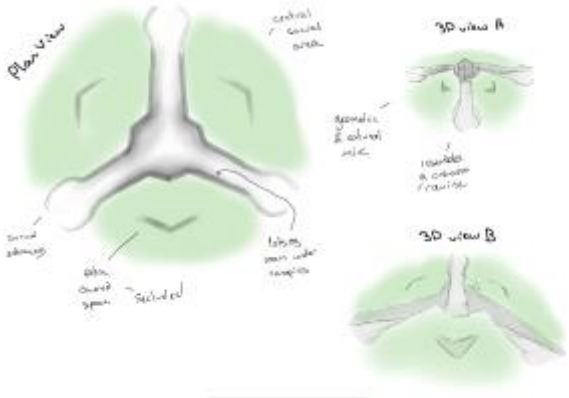
This is a spiralling crater social space for a community. I feel that the circular shape promotes social interaction and creates a space that can bromide a link between people and the nature that will literally surround them.

The spiral on the walls will also be mini waterfalls, as water features can be positive for mental health. There will be 5 sets of stairs around the structure with a symmetrical form across the whole design.



6 - Click me <-

This is an office complex/tower which utilises the natural rock form as a connection to nature. Workers need a nature connection more than most as office work can lead to poor mental wellbeing.



7 - Click me <-

This is a social space that has a hard integration with the surroundings as it acts almost as a chasm by lifting the terrain around it making space underneath.

I chose a geometric layout for the design as to mix futurism and naturalism in an ideal harmony.

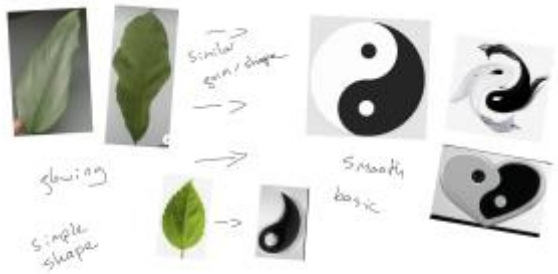
Yin-Yang Design Philosophy & its relation to Nature

The philosophy of Yin & Yang is based on the balance of all things; living and dead, good and bad, light and dark etc. In philosophy, there is also the belief that one half feeds into/births the other such as death creating life (dead carcasses feed surrounding plants). I would like to use this philosophy in my designs in a way that doesn't show the divide between nature and man but demonstrates that man can thrive from nature and therefore nature can thrive from man.

Red Brick Art Museum - Beijing, China

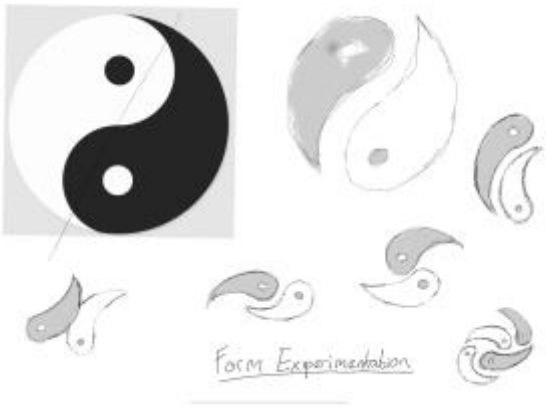
The Red Brick Museum was designed by architect Dong Yugan using red bricks as the primary material for the two-storey building sitting upon a basement including a projection room. The upper levels house 9 exhibition spaces, 2 public recreation areas, lecture hall, dining room, cafe & other facilities. As part of the project, a landscape garden was created using contrasting dark brick for pathways, walls & seating areas.

Developed Ideas



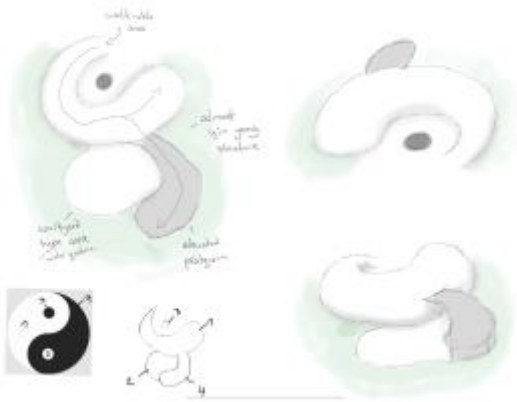
8 - Click Me <-

I found a link in shape between leaves and the symbols of Yin & Yang. I believe it is the smooth flowing simple form of both these shapes that gives the similarities. I thought this would be a good shape to use in a design as it i simple, calming and meaningful.



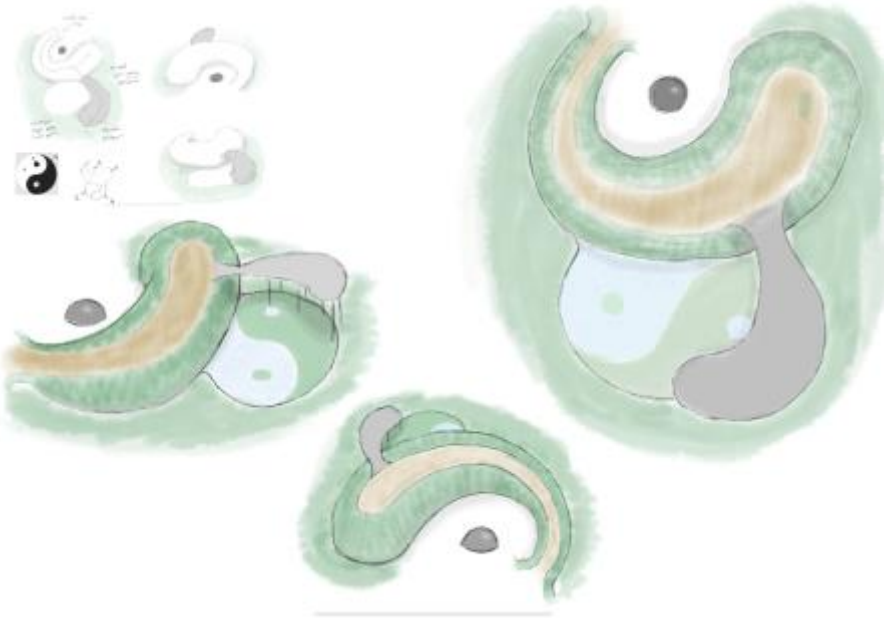
9 - Click Me <-

I thought that by separating the Yin & Yang, I could manipulate them into something different that could be viable as a structure promoting nature.



10 - Click Me <

I created this formation using both the Yin & Yang main 'swooshes' but used the 2 circles inside the 2 original swooshes in an interesting way by dilating one to make it its own space.



11 - Click Me <-

I have decided that this is going to be an interactive monument/communal space for people to appreciate nature and exist within & beside it. The main 'swoosh' is designed so that people can walk up the wooden walkway which will be flat as opposed to the mainly curved sides of the swoosh. The wooden path will lead to the "canopy" area which is purposefully rugged & industrial, being flat & supported by metal legs. This is a I've the yin yang garden which will be half land covered with nature, and half water with an island within it.

Developed x2 Ideas

Site Analysis

12 - Click Me <-

I have concluded that i would like to situate my design in an abandoned quarry as it is a further demonstration of the Yin-Yang philosophy where i am taking something that man took from nature (the quarry and minerals etc), and reclaiming it for nature and humans by introducing many different plant species whilst also making it a space for humans to enjoy nature. This creates a 'win-win' for nature and humans alike.

A quarry will also give the impression of an oasis in a wasteland that I feel will add to the spirituality and feeling of the space.

Design Options

13 - Click Me <-

This first option is for the design to be a small-scale space for people to come and enjoy and connect with nature. This can either be for urban spaces to introduce and educate people about nature in urban spaces or it can be in a quarry amongst other areas all for educating people about nature, for instance in a country park.

14 - Click Me<-

This will be a small enclosed ecosystem within the same form but on a much larger scale. This will be in the spirit of the Eden Project and will be to educate people on the environment.

Developed x3

The Purpose

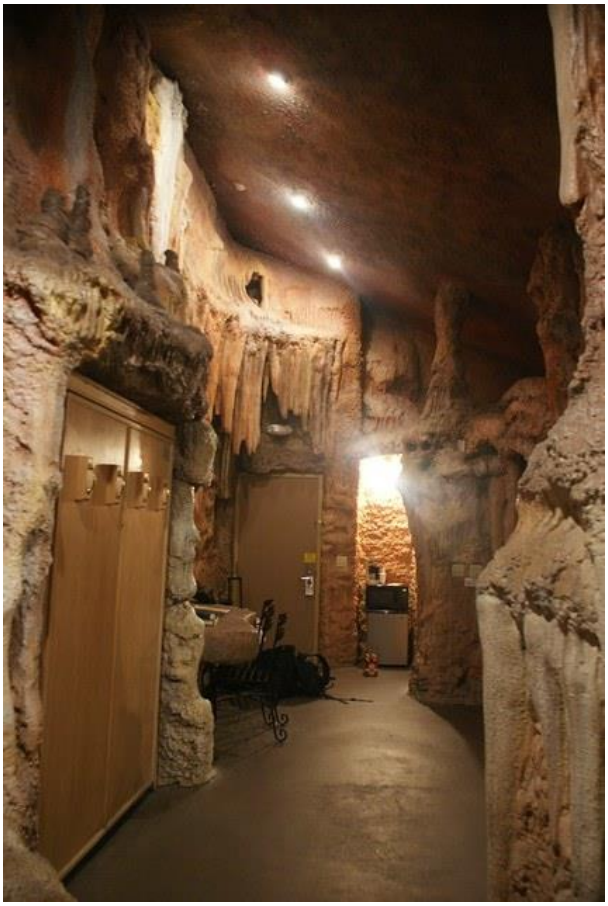
I have decided to make this building part of a collective of buildings or areas and re purpose the quarry that my design is situated in as a country park. I want my design to be an art exhibition area drawing inspiration from the "Core" of the Eden Project in Cornwall. The "Core" is a separate building, central in the Eden Project site, and acts as an art gallery for artwork nature based or inspired.

Cave Houses

The best example of the type of integration of the cave texture and rock formations i can find comes from the Beckham Creek Cave in Arkansas USA. This former bomb shelter has been converted to a getaway for richer customers such as Hillary and Bill Clinton, complete with extras such as a pond and helicopter pad.

I love the way that a lot of the natural rock structures are left untampered and exposed to really emphasise the organic feeling of the space. I would like to incorporate some of the aspects of this place within my own design such as the unlevel low ceilings, organic form walls, and potentially utilising rock formations into furniture such as desks/surfaces or chairs.

In the interior space of my design I would like it to have the same organic feeling as the main building will be made from rock and will also have a glass retractable wall to allow for an open plan feeling for the courtyard & interior space.



The interior of my art ehibition area/museum will be designed as if its the inside of a cave, with exposed rock making up the complete interior of the walls and ceiling. The floor will be made of concrete with wooden panelling creating the feeling of different sections without imposing. The walls will also have curves that encourage the building's circulation. Countertops will be made from exposed rock to fit the natural aesthetic. There is a decorative reflective half sphere in the courtyard area as I feel it would introduce the courtyard as a void area, opposed to the main building (exterior) which will be the positive space as well as the Zen garden which can be viewed from the interior.

Zen Gardens

Otherwise known as Japanese rock gardens, they consist of carefully composed arrangements of rocks, trees, water features & moss. They also have areas of gravel that are raked to resemble ripples of water, the raking of the gravel acts as a form of meditation in itself. The gravel or white sand also represents empty space/void or Ma (practice of including negative space).

Zen gardens are usually quite small and framed by walls or a wall whilst being viewed from a selected viewpoint outside the garden which is usually a porch.

Zen gardens were originally created in Zen Buddhist Temples in Japan and were intended to imitate the essence of nature but not its actual appearance, this was to serve as an aid to their meditation whilst not being overly distracting.

Rock placing in Zen gardens is very precise with regard to where and how to place rocks as they are classified as; tall vertical, low vertical, arching, reclining, or flat. Igneous, rugged, and sharp rocks are typical for making mountainous formations, sedimentary rocks are typically used for the borders of gravel patches acting as shores. In the gardens of the Song Dynasty in China, (960AD - 1279AD), individual rocks that resembled animals or had other unusual features were the focal point of the garden, but typically, the emphasis is upon the composition and harmony of the rock collection.

CliffCLF

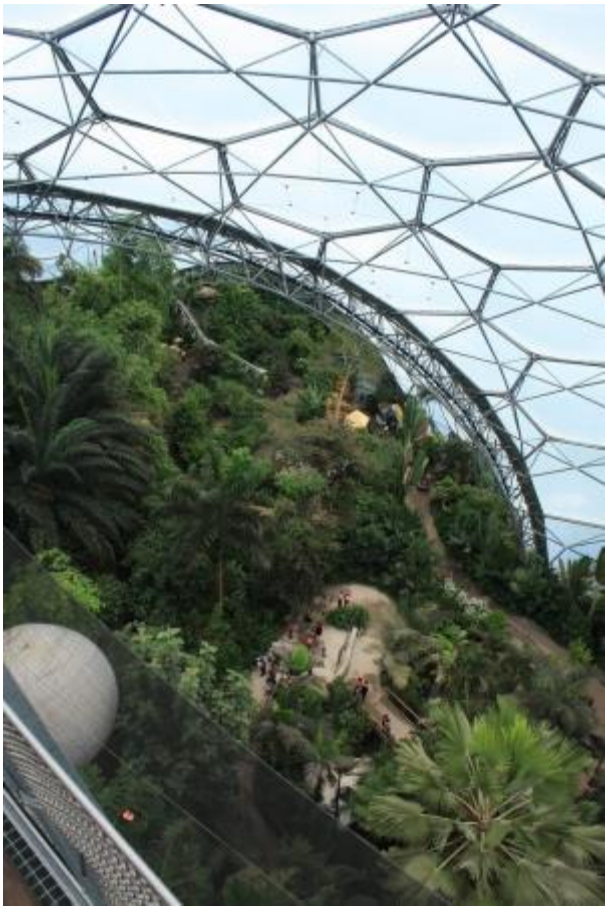
This Zen garden takes the yin-yang philosophy literally as it has a floor plan of the yin-yang symbol, one of the halves will be water and the other will be earth, showing another example of the opposites supporting each other. The garden will be inaccessible as all Zen gardens are but will be viewable from the interior of the main building and from the balcony area. The garden's water half is positioned slightly under the main building, so the lake will be visible beneath the feet of the viewers from inside the main building.

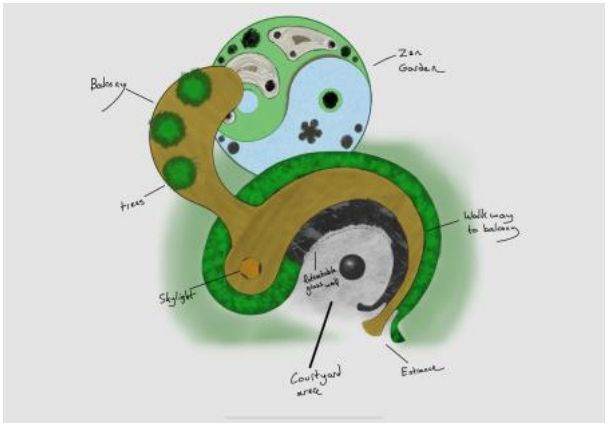
Staying true to Zen gardens, I have introduced gravel-raking areas of the garden as well as different rocks and rock formations including a large obelisk on the island point within the lake.

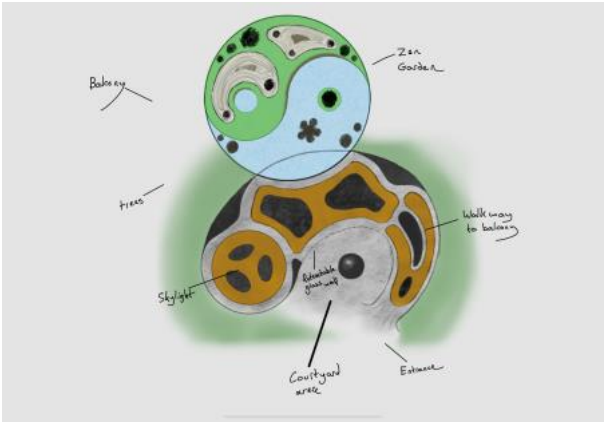
Eden Project

The Eden Project is an incredible example of a structure that highlights the connections between human kind and the nature surrounding us. It is a series of self sustaining ecosystems ranging from tropical rainforest to Mediterranean. The area surrounding the Geodisic domes isn't wasted either, the space is utilised as different exhibitions of local wildlife and art pieces emphasising man-made and natural links.

The newest instillation to the Eden Project is the Core, this is the main exhibition area for artworks and also provides educational classes. This building's design takes inspiration from nature as well most prominently shown through its soaring timber roof which gives a distinctive shape of a flower




Zen Garden
Balcony
trees
Walk way to balcony
Retractable glass wall
Skylight
Courtyard area
Entrance



This the full view of the final design for my project. It features a mini art exhibition area within the main building which is meant to display art pieces relating to nature. Within the building is a viewing area of the Zen garden with a glass flooring area covering a part of the garden lake.

There is a mini courtyard area which links to the art exhibition through an opening in the side of the building which will provide an open plan, freeing feeling. The courtyard will act as a void area with a decorative reflective half sphere which can evoke contemplation.

The main building will be made from rock with the exterior being covered with foliage and organic matter essentially becoming a hollow hill which will also integrate with the close surroundings.

The 'tail' of the building provides access to the roof of the building which leads to the balcony area. The roof is a long walkway which takes one along the whole structure which will be covered by foliage up to the skylight at the peak.

From the peak of the roof, one can access the balcony area which provides an opportunity to view the Zen garden from a different angle but will also allow one to access the canopy of three trees which will be penetrating the platforms. This will be a great sensory experience for visitors, allowing them to feel, smell, listen to and see up close the tree canopies along with the creatures within. The balcony itself is echoing the building form but reversed.

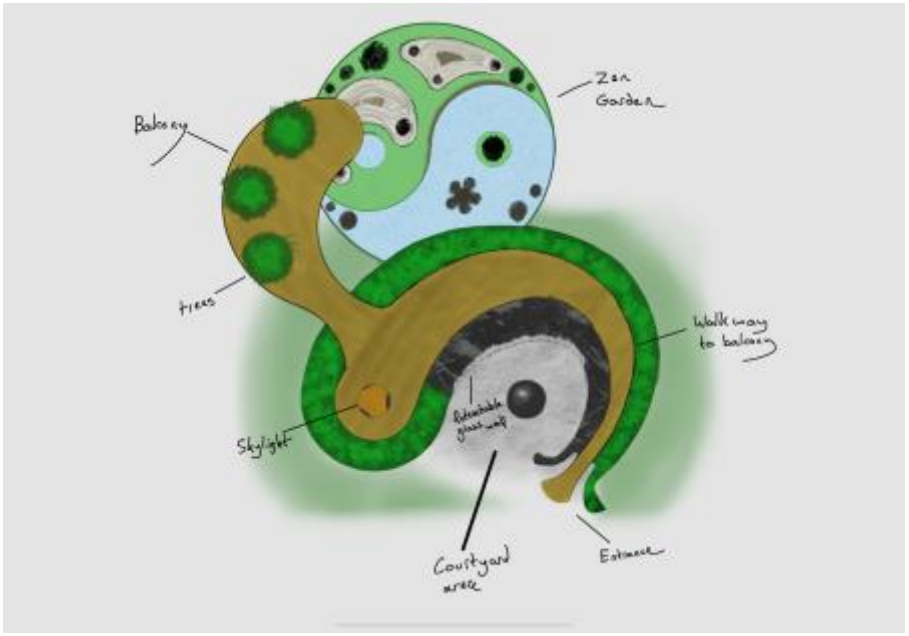
Quarry Sites

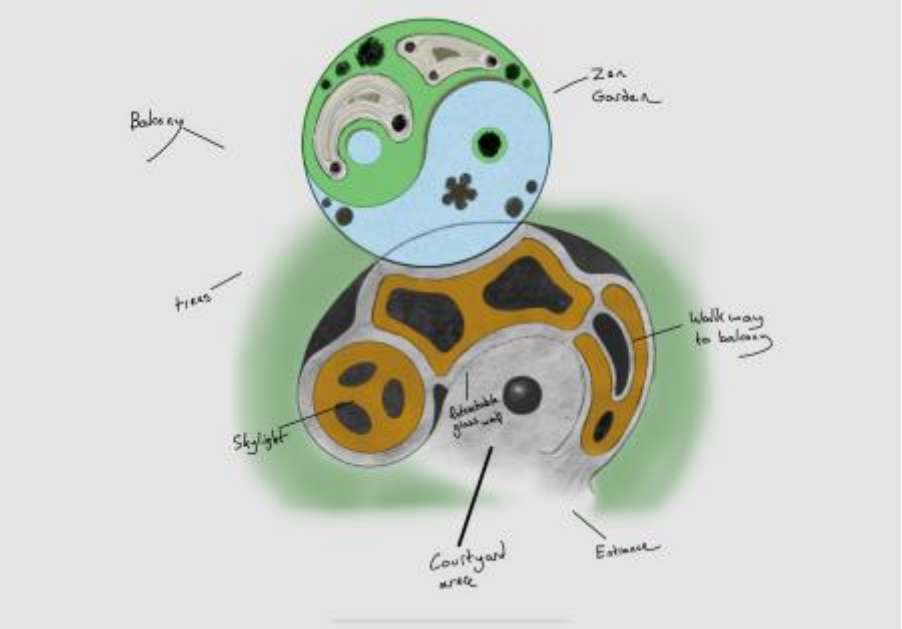
I have researched some eligible quarry though it has not been easy to identify the ideal site. However I have found a site in Wales which would be an ideal location as it offers all the elements which will be incorporated into my design. In my response, I've added a pathway that connects to

the walkway across the roof of my building, I think that these pathways would be great for connecting the entirety of the hypothetical country path.

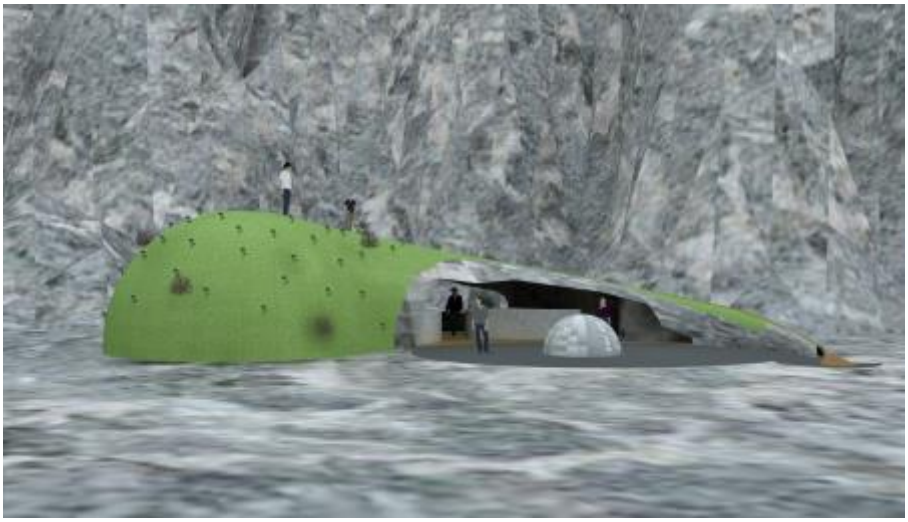
Final Design

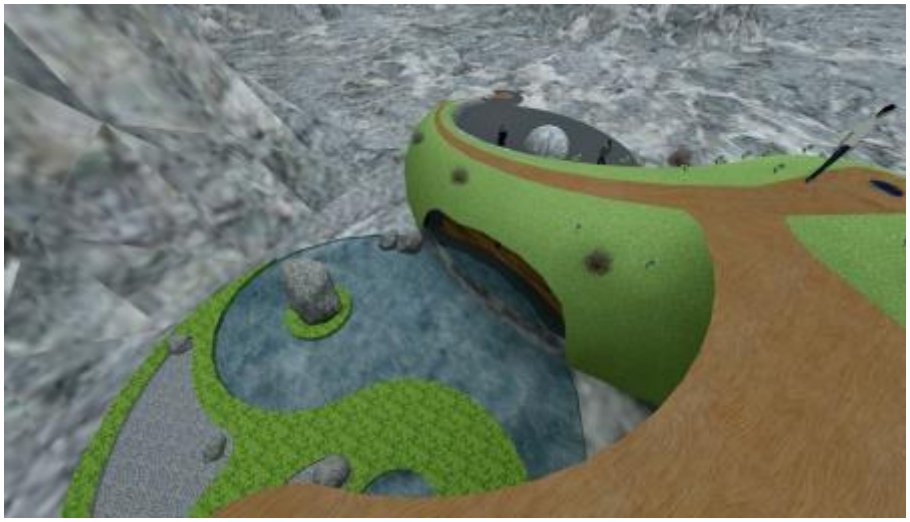
Floor Plan

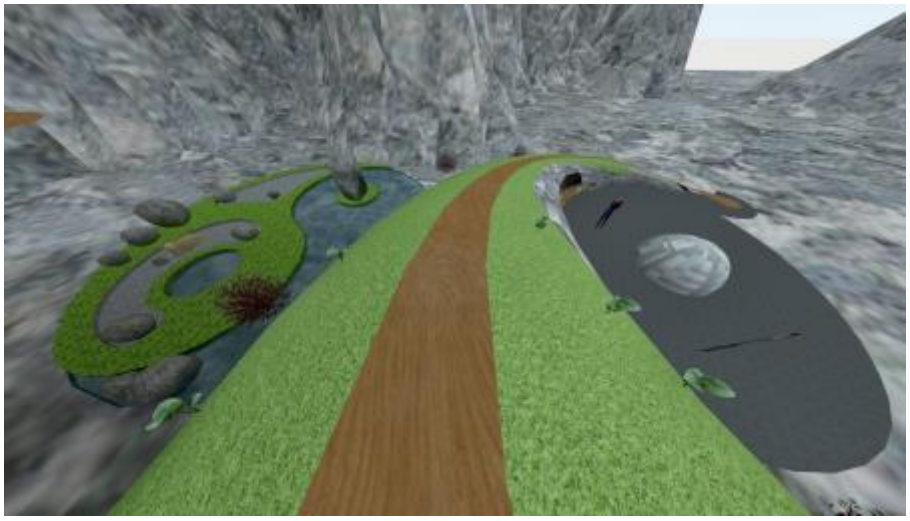


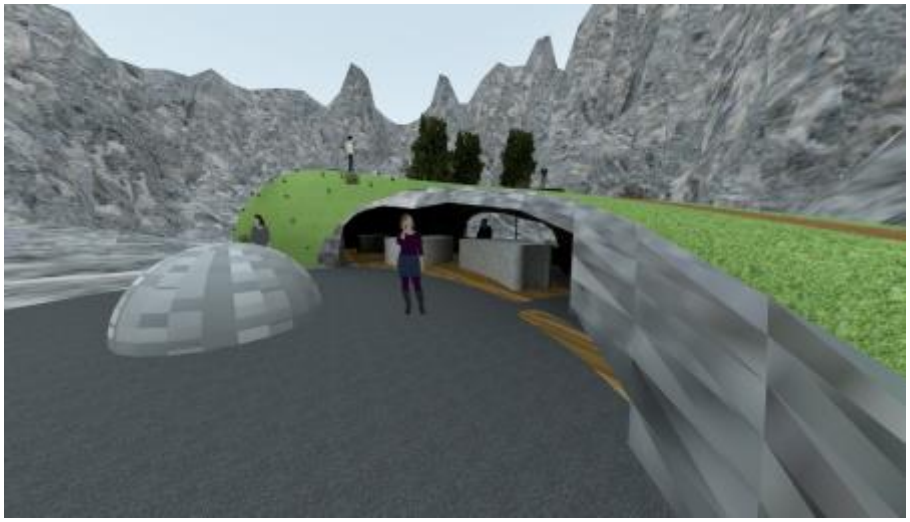


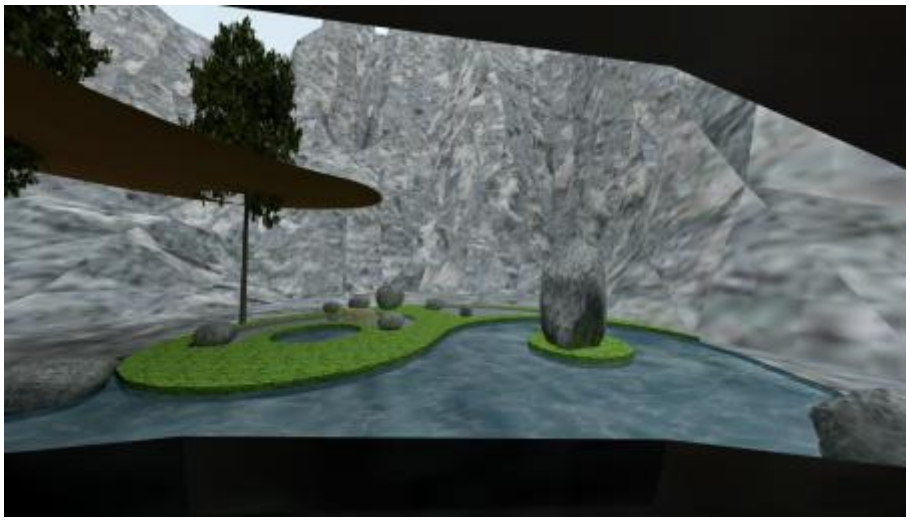
Sketchup Renders

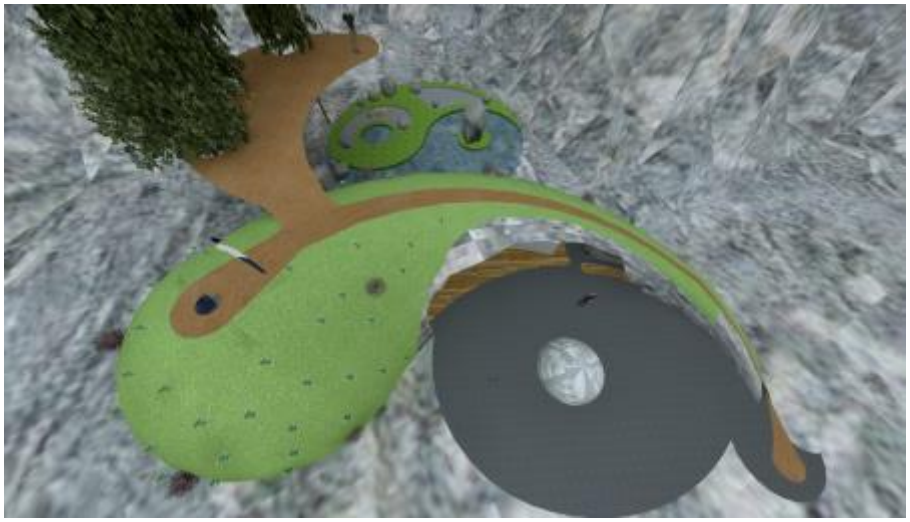


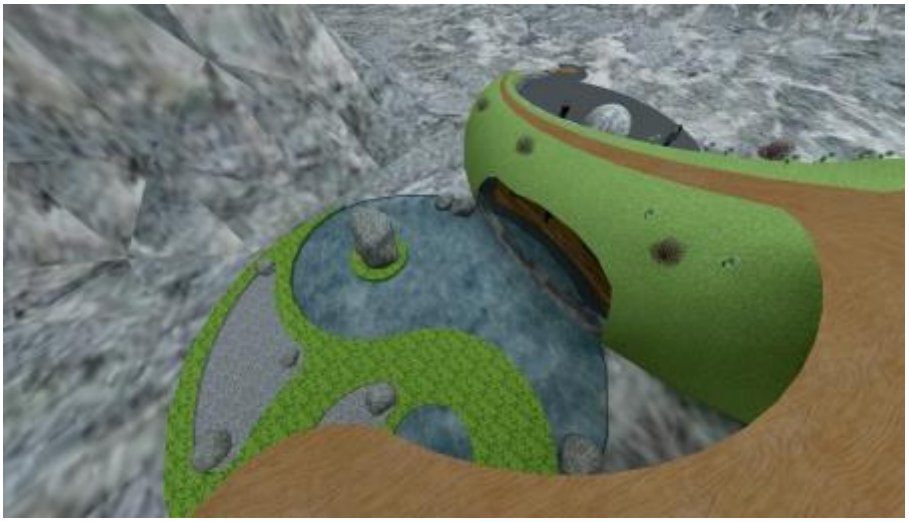












I have produced some renders from my Sketchup model which I feel accurately portray my vision for this space. Some of the colours and textures are not ideal due to the limitations of the Sketchup pallet . Some of the aspects such as the small entrance at the 'tail' of the building couldn't be accomplished in Sketchup because of the complexity of the design. This was also the case for items such as the lack of individual foliage on the building as it was too many entities for the renders to complete.

Final Model

I feel that the final model was an overall success. Some aspects of it are slightly out of proportion as i came across obstacles such as glue not working on the foam i had chosen to carve my model from and some parts such as the floor don't match up properly.

I think that despite some of the difficulties it was a success especially in regards to the zen garden area and exterior of the building.

Final Evaluation

I feel that this project went well, the design process was quite difficult as i was left completely to my own accord, so doing research and development by my own pace and style was quite tough. Through this project though, i feel that I've found my own way of researching and developing a design from my own proposal.

In regards to the design, i feel that it was a success although i admit there were some details that i somewhat overlooked, such as the entrance at the 'tail' of the building not having quite enough room to be a viable entrance, and the fact that my design is quite far-fetched.

The Sketchup model went surprisingly well especially as it was such a difficult shape to make in Sketchup, I think it reflects my design very well apart from some details that I didn't have time to correct.

The model was also very difficult to construct as i had never built a model from carving foam, so the whole process was an experiment, there were lots of obstacles to overcome with the model, mainly being the fact that very few glues work on the foam.

Overall though, i feel that my final project was a success as i managed to complete a full design to a good standard including a Sketchup model as well as a physical one completed to the deadline.