

Evolution

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List of figures

Figure 1. St Luke's church.	P.4
Figure 2. Toolbox	P.4
Figure 3. Folding plate tectonics.	P.8
Figure 4. Naoshima Pavilion.	P.8
Figure 5. The Port house	P.9
Figure 6. Pattern from the 'toolbox' idea.	P.10
Figure 7. Trying to use the pattern to lay on the roof in order to cast the shadow underneath.	P.10
Figure 8. Cutting holes	P.12
Figure 9. Side walls holes	P.12
Figure 10. The glass structure tunnel with shadow casting.	P.13
Figure 11. View from the tunnel to the chapel.	P.15
Figure 12. View from the chapel.	P.15
Figure 13. Side view.	P.16



Abstract

I have always loved the contemporary design, especially when old and new design being combine and compare. This project gave me an opportunity to choose a site and create something that I have always been interested in. The church, of course, would be a perfect site for design in order to compare and contrast. Since I have no experience in refurbishing a church before, I think this would be the time to experience something new.

My aim for this project is to create something different rather traditional. As I brought the words object and memories into the project. To me in this project, the word 'objects' means new structures, while 'memories' means something old the worth reminiscent of is the church.

I have been experimenting with different forms by following the traces on the folded paper and thinking about how to use them in the space. By experimenting with them, it gave me the ideas of how to structure them in space, as well as having to think about how does it affect the space and the community. The reason for choosing this technique for this project is because I wanted to do something challenging and new. A strong contrast of old and new design that reflects how this generation has been changing. I have also interpreted with the idea of body movement, spatial experience as well as light and shadow into this project. By the influences of key texts that support my thinking in creating the space of St Luke's church, are *body, memory, and architecture* and *mise-en-scène and interior design*. Therefore, the overall atmosphere will be completely different from the outside.

In the result of the comparison between the old and new design, I want people who first enter the church would be fascinated by the design. By having the idea of "never judge a book by its cover", it will then lead people into a whole new experience of the church. An experience of objects and memories, with the atmosphere of the spatial experience involving light and shadow.



Introduction



Fig.1 St Luke's church. (Photo taken by Arthur, 2019)

Thinking of how I should explore the matters through the makings of space and material. As well as to think about the broader context of my chosen site. I have been researching and developing my creative practice on an inconspicuous church at Portsmouth, St Luke's church. (see fig.1) Located at the corner of Greetham Street Portsmouth city and surrounded by business start-ups, public initiative, college and student accommodations. Although there are lots of things going on around the church, it has been closed and stood empty and quiet for five years, from 2009 to 2014.



Fig.2 Toolbox. (Photo taken by Arthur, 2019)



Developing from my 'toolbox', I have integrated the used of paper folding methods into this project. With the use of paper, black and white card paper and semi-transparent card, I have play along with the folding and structuring them from 2D to 3D. By experimenting with those techniques, it gave me the ideas of how to structure them in space, as well as having to think about how does it affect the space and the community. The reason for choosing the origami way for this project is because I wanted to do something challenging and new. As well as paper folding technique used in the design, I have also intend exploring light and shadow in the spatial configuration of the church. I will explain later about how I investigate with it and how does it affect the design of space. I am going to use a strong contrast of old and new design that reflects how this generation has been changing. Simply just by comparing the church and the new creation practice of what I did.

A church usually is a place where people feel safe and peaceful. Some people would stay longer and some do not. However, I want people to stay in St Luke's longer in order to feel the atmosphere of the church reflected on how the world is changing. And to do so, I decided to use the church as a small library, archive and a study area for people, researchers and student to use. A space that also tell the story of St Luke's, what it had been through in the past and how it's been reuse and retell the story from it.





Key words

- Objects and memories
- Spatial experience
- Body movement
- Structure
- Light & Shadow

Aims

1. Reimagine a future for St Luke's Church.
2. Examine the social, political and cultural context of the church.
3. To examine the existing spatial configuration of the church and from this develop a new spatial understanding of its future.

Objectives

- Explore the existing surfaces and light in the space of the church.
- Examine the spatial configuration of the church.
- Explore the relationship between the new and old, between objects, memories and people.
- To make a design proposal.

Questions

1. How do the current spatial structures of the church influence its future? What is the relationship of the church to new forms of worship and how do they impact on the spatial narratives of the space?
2. What is the connection between objects, memories and space?



Context

The perspective view of a church has always been traditional, of what I understood a church contribute to the public. It is a place where many people feel free, safe and to have questions or guidance from the priest. However, I want St Luke's church to have a cluster area that people not only can spend their private time in doing their prayer, but also a space that they can find out more about it and explore the whole new revolution of the church. By having to think of, what if the church has different hospitality of space and how would I segment the use of space.

I have been looking through several texts that help developed my project such as, 'Body, Memory, and Architecture' by Kent C. Bloomer and Charles W. Moore, the senses considered as perceptual systems by James J. Gibson, as well as Creating interior atmosphere: mise-en-scène and interior design by Jean Whitehead. These texts were the influences for the development upon my project, as it helps me to progress the idea further and understands some perspectives of how my idea should develop.

What challenges me was the paper folding structure part of the design. Because I have to think about the usage, the space organizing and the material used for the structure. According to Jean W. (2018, P.17) mentioned that: "We live in worlds in which the material and the mental, the experienced, remembered, and imagined completely fuse into each other." Therefore, choosing the right material to fit in with space needs a lot of efforts in researching and testing.

"We make places that are an expression of our haptic experiences even as these experiences are generated by the places, we have already crated whether we are conscious or innocent of this process, our bodies and our movements are in constant dialogue with our building." (Kent C. Bloomer, 1977, p.57)

In addition to looking through texts, I have been looking for some precedent examples of artists who previously used the folding methods, in order to get some mindsets of the material matter. Nevertheless, the material used for this project was one of the biggest factors. Having to think about the materiality for the project was challenging, due to the fact that I wanted something strong to have the contrast of old and new. Material is one of the best options to do so, while 'old' can be mean of the building and 'new' can be represented by the materials or the design structure.

Looking through different artists' work, it has influenced me on the material used for my project. I believed that all of the precedents I found were similar to my folding method structures in their design, except with different material used respectively. One of the main focus of my project is materiality. I want to investigate through making and drawing of which kind of material gives me an idea of what I can use for the form and structure. How it will be when used in the space.



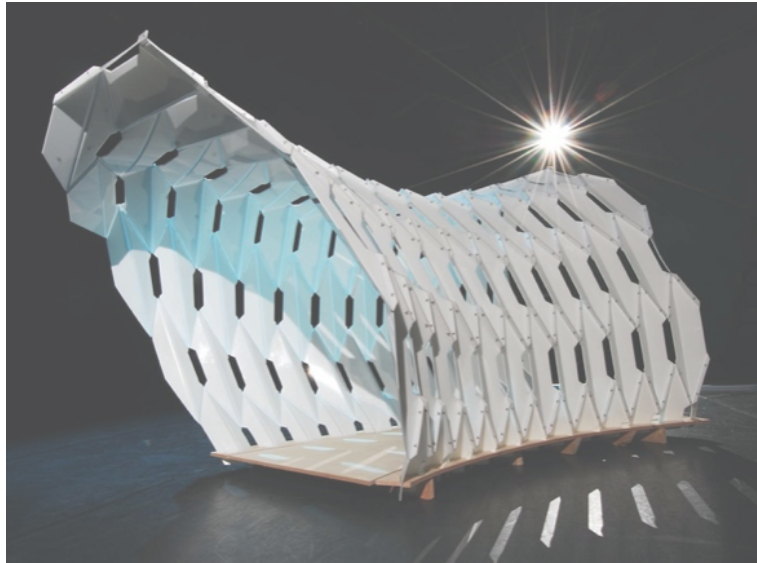


Fig.3 Folding plate tectonics. (Andrew W.)

Likewise, the folding plate tectonics (see fig3) by Andrew Wolking, he used plastic to form the folded plate structure together. From his work, I quickly got an idea of having holes in the structure and try to play with light and shadow. To see what effect of the structure space is provided.



Fig.4 Naoshima Pavilion. (Fernanda C., 2017)

As well as using plastic, there are some examples that used steel and glass for this structure technique methods. Like Naoshima pavilion (see fig.4), by the Sou Fujimoto Architects. They used white painted stainless-steel framework that was highly-transparent mesh-like structure to create the pavilion in Japan. Its irregular shape and light appearance produce shadows and wind trespass, creating the overall experience feels relaxing.



Fig.5 The Port house (DIVISARE, 2016)

The port house designed by Zaha Hadid Architects, created a glass structure using the similar paper folding techniques I used (see fig. 5). What inspired me is the material used within the structure, due to what I have been testing and making. Referring to my previous unit brief, the only materials I have been using were cards and papers. However, from the used of glass, it gave me an idea of using this method onto the windows of the church. Combining with the folding structures in the church's window, it can create a different feeling of the atmosphere. With the effects of natural daylighting, the shadows from the structures and the colour of the window can immediately produce a different feeling of the space.

Methods



Fig.6 Pattern from the 'toolbox' idea (Arthur, 2020)

By reimagining and understanding how would the space function in the church, I have made a scale @1:100 model to understand the space, how can I organise space with the paper folding methods, and how would I change the circulation of the space. I have then used the ideas from my 'tool-box' and overlay them on top of each other, to create an image of highlights of the patterns created (see fig. 6). My concept of this is to see how the patterns reflect light and shadows into the space of the model. However, as I tried to lay on the roof (see fig. 7) in order to have the shadow reflect to the flooring. The outcome of it failed as printing on the acetate did not strongly show-off the pattern when having casting lights on it.



Fig.7 Trying to use the pattern to lay on the roof in order to cast the shadow underneath. (Arthur, 2020)



Despite the pattern casting process of light and shadow failed, and with the fact that taking off the roof was not the way this project wanted to be. Therefore, I have to have a stronger connection of what was this project direction was and how does the concept relate to my project brief.

Regarding the development of the project alongside with keywords, key texts and precedents. I have to progress these mostly through making and drawing. Admittedly, I have visited St Luke's church and have been photographing the site. I have even brought my 'tool-box' with me and imagine how the paper folding can lay in the space. But by holding it up and image it with space, did not really give me an idea of blending in with space. So, I tried to use photoshop and overlay the pictures I have taken of the church and got the effect. In my opinion, the photoshop result came out perfect, as it clearly gave me the idea of how to blend those paper structure in the church and I can also edit it and cut some pieces out in order to see the effect changes. The first method (see fig. 8) from the front entrance, I investigated the space by using the folding structure that I have in my 'toolbox'. By having holes on them, space then showed an interesting pattern of looking through the holes. As well as playing with the holes of the space, I have tried putting them onto the sidewall (see fig.9), so when natural lighting enters the building, it can somehow change the way how shadow reflect to space.





Fig.8 Cutting holes (Arthur, 2020)

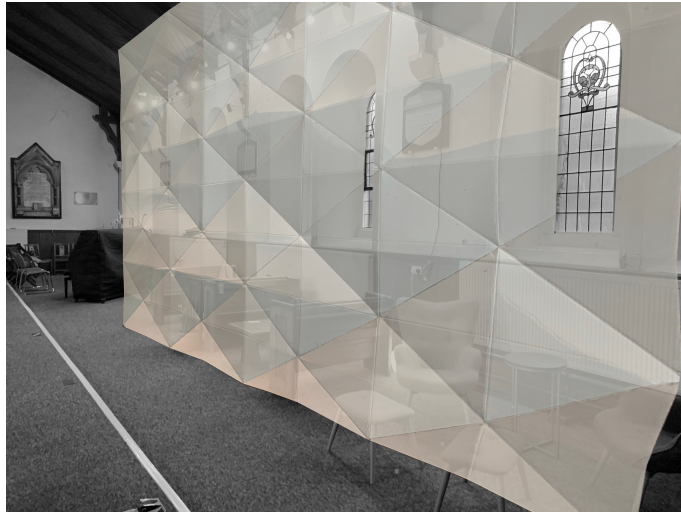


Fig.9 Side walls holes (Arthur, 2020)

In addition to using outline shadow to play around with space, I have also done a case study I in St Luke's church. The exercise was originally done at Clapham Junction, observing how people use the space. The research was quite useful for the design as to understand the people using the space, so it was like a guide on the design. In order to let people to stay in the church for longer, there must be a purpose on letting them to. Therefore, I have chosen an archive and a research space for the community.

Design content and process

Part 1

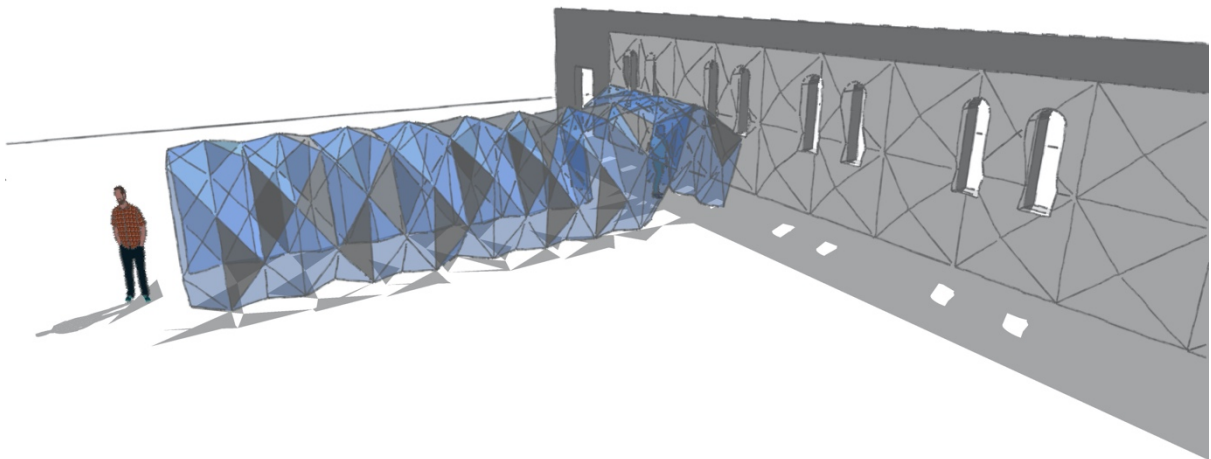
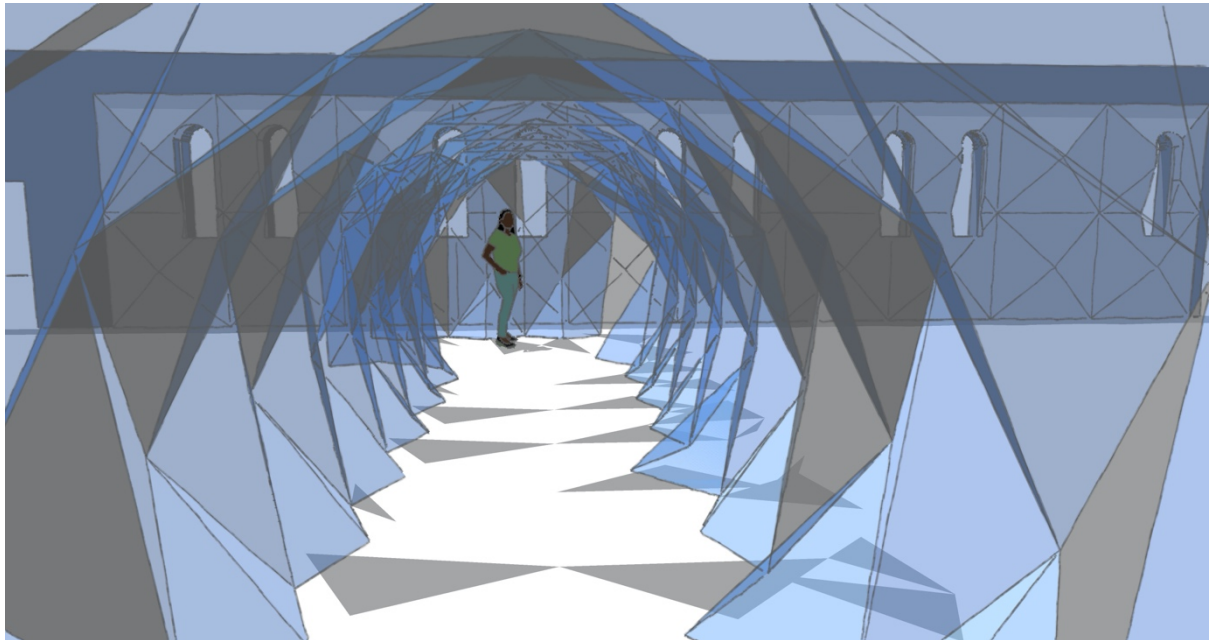


Fig.10 The glass structure tunnel with shadow casting. (Arthur, 2020)



Utilising the idea from the photoshop method (see fig.8 & 9) and also by imagining the paper structure in the space of St Luke's. I have got the idea of using them on walls and also using it as part of the space. In my opinion, what is important to space is the effect of light and also material. According to Steven H. (2012, p.83), he quoted: "Space is generated by light." And "Shadow were revealed to be dense with colour and light-play and the spaces between 'things' solid with auratic emanation." Therefore, choosing the right material matters how space transforms and affect the overall experience. Nevertheless, material choosing was challenging for me, as the structure itself was quite complex. Having referencing artists' who had used this structured method and have been inspired by one of them from above (see fig.10). I have decided to use stainless steel framework for the window flame and coloured glass for the tunnel structure. The reason for choosing those materials is because I wanted to cooperate with new techniques into the old configuration of the church. The coloured-glass-flame structure tunnel is for people to experience not only the colour transitioning and also to feel how it is when they are inside the space looking towards the chapel area. Subsequently, there will be a strong comparison between object and memory in materiality.

According to the structure and material used of the tunnel, in my opinion, together they represent futuristic design fairly. This is because the structure itself is reasonably unique compare to the former design of the building. With light and shadow of the tunnel, it quickly creates a different sense within the tunnel and space. And as time goes by, due to sun day light effect, it might slightly affect the space by the shadow from the structure casted pattern.

"Light—both natural and artificial—also creates atmosphere, highlights and sculpts areas, and opens up spaces, influencing not just how you look at them but also how you feel about them. Light profoundly influences both ambience and mood." (Katherine S., 2005, p.58)



Part 2

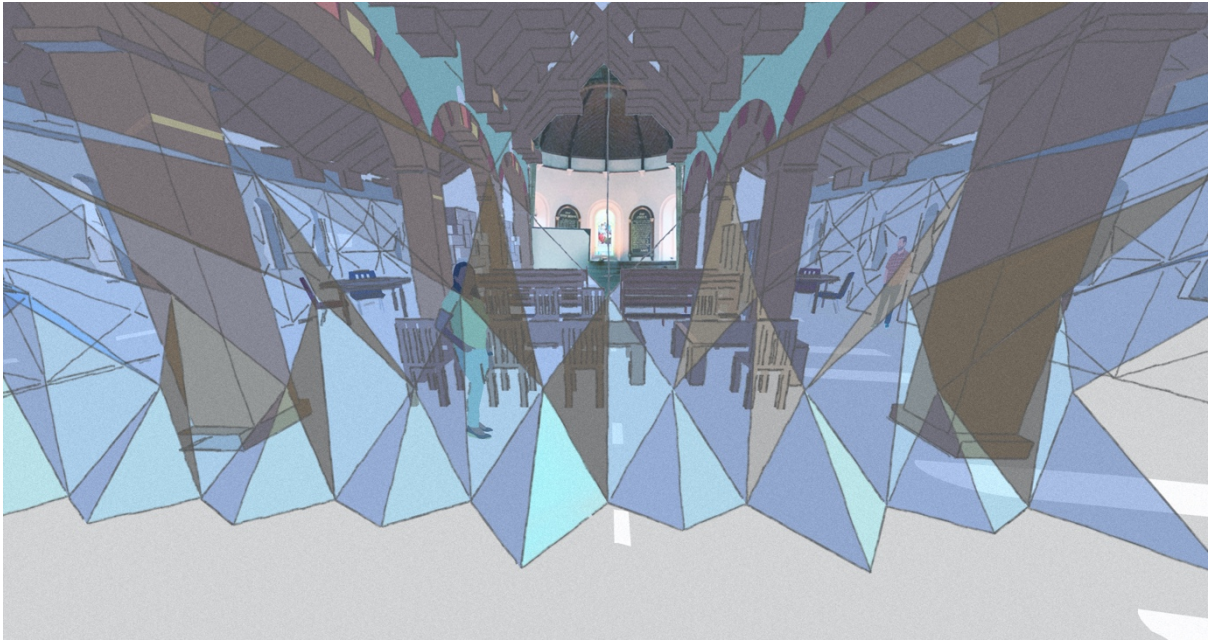


Fig.11. View from the tunnel to the chapel. (Arthur, 2020)



Fig.12. View from the chapel. (Arthur, 2020)

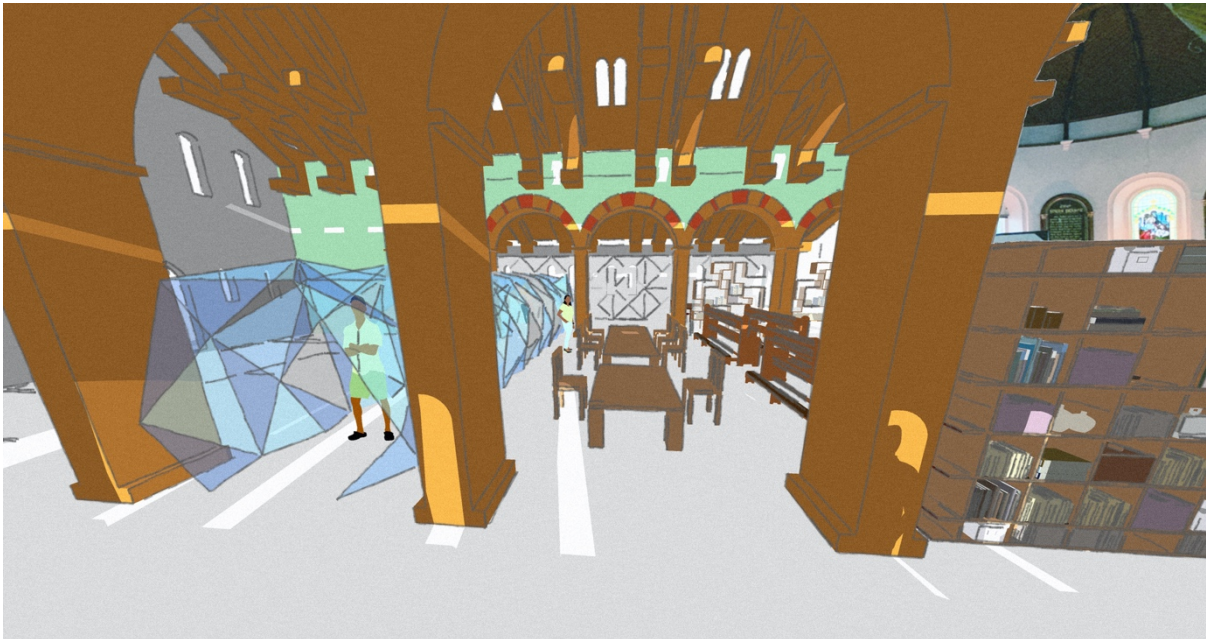


Fig.13. Side view. (Arthur, 2020)

A church in my perspective is always a quiet and peaceful place for the community. So, I have been following this perspective to think about a new usage space for the public, with also the concept I am following. The church has transformed into a cluster area where the community has not only for prayers but also a research area for study. St Luke's church is opened mainly for the local community researchers, but also welcoming others. The story I want to tell the design is that nowadays many people pursue 'contemporary', so I expressed through this design of how this generation been developing through object and memory in St Luke's church. As Jean W. (2018) stated that: "Atmosphere is something we inhabit; we experience it through our bodily engagement with the world around us." (p.17) Consequently, in my opinion, everything in space should have a connection. Yet, my design concept is about compare and contrast, everything has its connection especially with lighting involved. Since only material is not enough to fully express the idea of the design, with light and shadow it can enhance the space fully. "Whether natural or artificial, light accentuates objects or spaces, suggests movement and circulation, and aids the understanding of the interior." (Graeme B., Sally S., 2016, p.162)

The form of the paper folding techniques glass structure tunnel has a unique shape within the church. With natural and artificial lighting casting onto the structures whether, from the window structure or the tunnel, it can produce different shadow from time to time. As Graeme B. and Sally S. (2016) cited that: "Natural light can be manipulated to create rooms of great emotion and feeling. Light and shade together can be used to generate a narrative or sequence of differing atmospheres or spaces." (p.163) The glass structure tunnel is what I want it to enhance space with light and shadow. As it creates a lovely pattern with the different colours of the tunnel that produces special feelings toward the overall atmosphere of the church.



"Light invest colour with meaning; whether pale and natural or shrill and artificial, light lends significance to material as the purest of architectural means." (Riedijk, 2009, p.108)

With the relationship of the new form structures, the spatial narrative of the space can be unexpected of what a church should be like. Beside the new archive and research area, the glass tunnel is another different object compare to the original design of the church. It creates a strong comparison and a connection between object, memory and space. And because of these, it transforms the church into a whole new space. With all these together it creates one space, a place of connections where people want to stay longer for studying or prayers (memories), a space of a completely new experience (objects) and a space full of unexpected (space). (see fig. 10, 11 & 12)





Conclusion

During this project, I found out that research only my chosen site is not really enough in order to develop my concept of the design. But with the main texts that supports my idea and precedents from other artists'. Altogether it really helps me to understand more of the concept I am achieving and process it. The theories and texts I have read not only supports my thinking and making, but also proves the theory of the brief. From what I learn during this project might develop well in my future working. The processes and communicate ideas developed my way in critical thinking, which I think that it benefits me to progress my project well.

I have never done a project on a church before, even if I have the opportunity to choose one. To me a church is a very traditional design, as I have always loved contemporary design, I have never really thought about renovating a church. But after this project, I have found out that there are loads of development thinking in refurbishing and restructuring the facilities of the church. In my opinion, every design can have the concept of 'don't judge a book by its cover', it is not wrong to try something new in a historic building but challenging.



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