

u n o r t h o d o x

an ancient tradition - a contemporary context

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For my Grandmother

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abstract

For decades, New Zealand historians and architects have sought answers to the question: What is New Zealand architecture? New Zealand longs for a place in the architectural world, seeking the significance of our buildings in the wider realm of world architecture. In 2016, in a presentation based on his book *Worship: a history of New Zealand church design*, Bill McKay suggested that perhaps, “our most interesting architecture lies in the intersections of our cultures”.

An opportunity is offered by the current shifts of New Zealand society where the impact of immigration on society is one of the most pressing issues that currently needs addressing. This thesis endeavours to explore the specific relationship between the heritage and culture of the existing Assyrian community and its context of Wellington, with reference to McKay’s suggestion that our most interesting architecture is birthed from the intersection of different cultures.

Socially speaking, sense of identity and place attachment play a vital role in the integration of migrant communities into their new home country. Recalling and employing elements of not only tangible Assyrian heritage, but also the intangible qualities found in traditional Assyrian architecture, has the potential to create the connection and enhance the sense of identity which allows for the feeling of belonging in migrants in their host society. This thesis focuses on the space of worship.

This project of an Assyrian Orthodox church building in New Zealand might reflect the life of the migrants who occupy it. Is it a replica of the traditional building in its original context, unchanged and uninfluenced by the shift to a new place? Or is it influenced and integrated; a building which can identify with the soil it stands on? Furthermore, if one considers that architecture reflects society, it is hoped that this design led research will participate in the discussion about New Zealand architecture's unique identity and emerging new societal makeup.

This design led research discovers that creating a sense of belonging relies on both keeping aspects of the traditional *and* gaining influence from its new context. As focus shifts from the design of the building at a large scale to details and objects at a small scale, it becomes more important to reflect and retain the traditional qualities of the architecture. At a large scale, the building may be influenced by its context so as to be integrated into its new place, as if it belongs within its new urban fabric. As we move into the smaller scale in design, we draw closer to the body. It is these elements of the design which an occupant experiences more intimately, and through sensory experience and triggering memories of home, can help to create a feeling of belonging. The main findings of this research express the close relationship between architectural scales of intervention and the effects of individual and collective memory.

“However rootless and deterritorialized s/he might appear, unlike the nomad, the migrant’s aim/destiny was precisely to **reterritorialize** - to settle, to make a home, to become a citizen in a new place”

(Cairns, 1)

1

ONE // INTRODUCTION

PROBLEM STATEMENT, AIMS AND OBJECTIVES

This research investigates architecture in New Zealand that accommodates our migrant communities. It refers to the community centres, churches, temples, embassies that speak to both the tradition of a foreign culture, and the contrasting context within which it has been placed. This research portfolio addresses the growing cultural diversity in New Zealand, and explores how we might approach the design of these buildings to enhance in the migrant a sense of belonging, and a willingness to settle into a new home country. This research portfolio focuses specifically on the design of an Assyrian Orthodox Church for its community in Wellington, New Zealand, but what it aims to uncover is intended for revisit and reapplication for other cultures and contexts.

The research question asks this: What is the role of architecture in helping a migrant community in finding a sense of identity in a new context? More specifically, can an Orthodox Church in Wellington be designed to evoke in its Assyrian community a sense of belonging in New Zealand society? The research focuses predominantly on the collective memory and collective identity, and can employ this in a community building such as the church, gathering Assyrian people with common memories and thus the opportunity to form collective identity.

Recognising the duality of retaining tradition (for the purpose of recalling memory) and integrating with the existing context, this research aims to uncover which direction, if not a morph of the two, most effectively enhances sense of belonging in a migrant. The research achieves this through an iterative design process, testing various approaches to the design of the church exploring retention of tradition, integration with the existing, and a range of options in between. Together with what is known about the ancient roots of Orthodox architecture, this work uses elements of moments and drawings done from my own memory of being a participant in the Assyrian Orthodox mass, to inform the design process.

THEORISTS, DESIGN METHODOLOGY AND PROCESS

The key design theorists are environmental psychologists Professor Lynne C. Manzo and Professor Douglas D. Perkins, Professor Barbara Misztal of the Sociology school at the University of Leicester, and French philosopher and sociologist Maurice Halbwachs. Manzo and Perkins emphasise the importance of place attachment to see people rooted and invested in their communities. Halbwachs and Misztal, with the common theme of sense of identity in their literature, emphasise the importance of retaining memory in a group of people to inform collective identity. They both refer to the built environment to support their case for collective identity through memory.

This research looks at ancient church architecture, namely the architecture of the Byzantine period. This era informs much of the church architecture constructed across Europe (particularly Eastern Europe) and the Middle East in the early stages of the church. The style stayed prominent in the churches of these areas, and remains the key influence of traditional Orthodox Church architecture.

Selected precedents will introduce an interesting range of ways to approach the design of the multicultural building in question. They are: the Fo Guang Shan temple in Auckland, St Nicholas' Shrine at Ground Zero, and the Islamic Centre of Newport in Melbourne.

After the investigation into these case studies, three approaches are set up to begin the conceptual stage of the design led research. The design led research begins by exploring the three possible approaches to the design of a building that affiliates with more than one culture. They are defined in this research as follows:

Copy – The new building in the new context is reconstructed, essentially, as a replica of the original building in its original context.

Adapt – The new building is redesigned to adjust to the conditions of its new site, such as the climate, and the current needs of the Assyrian community in Wellington.

Merge – The new building is influenced by the existing buildings that surround the chosen site, in terms of form, planning, materiality, and other attributes. It is deliberate in its efforts to blend into the existing building typology and urban fabric.

Using these three approaches, the concept design stage begins, and involves a type of iterative process within each approach. The process leads to an evaluation of each approach for the specificity of the programme and context, site location etc. A possible hybrid of these approaches will be tested.

After reflecting on the various concept design outcomes, one is selected to take through to the next stages of development. The design decisions and developments which come after are constantly referring back to the definition of the approach itself, and this is how the architecture develops. The developed design stage is largely driven by a series of intuitive drawings based on memory of an old church, and researched historical aspects of ancient church architecture. These drawings inform some of the final design decisions and are copied, adapted, or merged themselves as part of the design. This is done in accordance with the key aim of this research – to create sense of belonging for the Assyrian migrants who occupy the church building.

SCOPE OF DESIGN AND THESIS STRUCTURE

The focus of this research portfolio is to explore the role of architecture and design in enhancing a people's sense of belonging to a society. Through development of design iterations, it explores various ways in which we can design an architecture, calling upon two main approaches: retaining tradition for recollection of memory, and formal integration of a building into a new context. In this specific example of the Assyrian Orthodox church, the design led investigation does not address changes to the programme of the building in order to encourage integration with the new context, and is not concerned with morphing the Orthodox Church with other denominations of the Christian faith in order to integrate the minority community with the wider Christian community. The scale of the site is appropriate to accommodate the members of the Assyrian Orthodox community who



Fig. 1.01. 'Translating Christianity' - A History of Migration in New Zealand.

are living in Wellington's northern suburbs, far from the existing church in Strathmore, Wellington.

Following this chapter is the literature review, which covers collective memory and identity. This leads into the project review, which begins by detailing what it is that we might be retaining and recreating memory of, by covering the Byzantine influence on Orthodox Church architecture. The second part of the project review goes over precedents, which are instrumental in the generation of the three concept design approaches. The site and programme analyses, which come after that, precede the beginning of the design process, which carries through to the design outcome. This is followed by conclusions and critical reflection on the research portfolio. This work will question the relationship that may exist between scale, body proximity, authenticity and the effects of memory in enhancing sense of belonging.

2

TWO //

LITERATURE REVIEW

MEMORY, RITUAL AND COMMUNITY

In his work titled *Drifting... Architecture and Migrancy*, Cairns writes about the aim of the migrant. He claims that the migrant, unlike the nomad, wishes to settle, to grow roots in a new place, and to find a new home (1). This research explores how architecture can help connect people to their new home. It aims to create a new place attachment, one as strong as the ones which migrants once had with the places they left behind.

The literature reviewed in researching the notion of connecting migrants to a new home came up with three main ideas, which link together and have the potential to achieve the aims of this research through architecture. The first is the idea that **recalling memory and familiarity** helps to install a sense of belonging, and attachment to a new place. The second, the idea that **ritual, repetition and routine** associated with a certain place can **strengthen** the memory triggers, and reinforce sense of belonging. Finally, the idea that recalling memory in a **community of people** with common memories and history will inform **collective identity**.

“If peoples identity and values are indeed informed by places they deem significant, then it follows that peoples bonds with those places will impact their engagement in such places, whether it be to maintain or improve them, respond to changes within them, or simply to stay in that place” (Manzo & Perkins, 337).

2.1. MANZO & PERKINS ON PLACE ATTACHMENT

Lynne C. Manzo and Douglas D. Perkins write on place attachment in their text, *Finding Common Ground: The Importance of Place Attachment to Community Participation*. Their text looks at how place attachment is created through shared values, or common ground, and how it encourages community participation, relating to the notion of rootedness, settling into the new place and finding a new home. Their literature not only focuses on the feeling of attachment for the individual, but also how these bonds are placed in a larger, socio-political context which makes the literature particularly relevant to research regarding the built environment and architecture for a community.

Manzo and Perkins quote Altman and Low to define place attachment as, “an effective bond between people and places” (337). Place *identity* relates to the parts of the *self* that are formed in relation to a person’s physical environment (337), through the effective bond of the person to the place. That is to say that when there is a separation between a person and their home, the place that they have grown bonds with, a part of their identity is missing. The physical environment that the migrant then occupies instantly takes on the responsibility of allowing for those bonds to be recreated in a new place, to rebuild the part of the occupants identity which was compromised through deterritorialisation. The way that the building which houses the migrant is designed will inform a part of their identity.

While their work dates 2006, its content is more relevant now than ever, in a world of globalisation and in New Zealand, a country with a rapidly increasing ethnic diversity, a culture of inclusion and celebration of the minority, and a willingness to welcome those seeking asylum.

2.2. BARBARA MISZTAL ON MEMORY EXPERIENCE

Among the initial research into sense of belonging, place attachment and place identity, a prominent theme was the notion of memory: how recalling memory for a displaced person can help them generate attachment to a new place, and help them to feel a sense of belonging in their new home. Professor Barbara Misztal is interested in sociological theory, with a focus on the collective memory. Her text, *Memory Experience: The forms and functions of memory* links memory with identity and sense of belonging.

Misztal writes on how place attachment and identity can be created through memory, particularly through the collective memory of a community. Memory is the “main source of collective identity” (Misztal, 393) and, “collective memory allows people to have a certain social identification, both on an individual and societal level” (Misztal, 383). It is proposed that individuals who have migrated from the same country or area will inevitably share memories. This thesis offers the idea that architecture can be designed and built to create a sense of belonging, and to be a setting within which a community gathers to share memories, where the growth of collective identity is possible.

“a group’s memory is linked to places, ruins, landscapes, monuments and urban architecture, which - as they are overlain with symbolic associations to past events - play an important role in helping to preserve group memory. Such sites, and also locations where a significant event is regularly celebrated and replayed, remain ‘concrete and distinct regardless of whether they are mythological or historical’” (Misztal, 385).

Here Misztal reflects on the kinds of places which are most effective in creating place identity through collective memory. Not only are they the places which recall shared memories among a group, but ones that have been repeated. Thus it becomes ritual, regularity and repetition associated with memories of a certain place which are most effective. A location where a “significant event is replayed” (Misztal, 385) can refer to the ritual of Sunday mass, or shared memories of repetitive visits to a church, in the case of religion. The replaying of mass rituals, and gathering together within a place of which the sensory experience recalls past moments shared with the community, might enhance and encourage the community’s formation of a new collective identity.



Fig. 2.01. 'Modified Memory' - Remembering under influence.

2.3. MAURICE HALBWACHS ON THE COLLECTIVE MEMORY

Maurice Halbwachs, French philosopher and sociologist, elaborates on the concept of collective memory. His text, *The Collective Memory*, covers the ideas reiterated by Manzo & Perkins, and Barbara Misztal about collective identity and loss of identity through displacement, but also focuses on the ideas of permanence and stability, which are important to this research.

Halbwachs focuses greatly on identity in place, which is where we derive ideas on place attachment. Our regular images of the world around us are, in fact, inseparable from who we are (Halbwachs, 128), and a group's images of the external world and relationships with this environment becomes paramount in the way that it views itself (Halbwachs, 130). He states, "our physical surroundings bear our and others' imprint. Our home – furniture and its arrangement, room décor – recalls family and friends whom we see frequently within this framework" (129). Physical objects and places have significance because we associate them with things that have great meaning to us. In the case of the church, our building not only recalls the friends and family that become the community we share our lives with, but the rituals and activities which took place within the walls of the building begin to resurface as memories, evoking feelings of belonging and identification with place.

The idea of loss of identity through shifting is also covered in the text. Halbwachs mentions how we might react to moving to new surroundings that we have not yet adapted to, likening this period of uncertainty to leaving behind our whole personality (128). It is possible, however, to create new identity and, importantly, a sense of permanence. To a group of individuals who have lost identity through place, a building which reconnects with the old, particularly in its arrangement and occupation of spaces, can provide a sense of continuity and stability. In a world that is constantly changing, evolving and leaving things behind, a building which remains the same and embodies permanence, may enhance that sense of stability. This perhaps helps to answer the question of which parts of the traditional building are vital to retain in order to recall memory and create sense of belonging.

Halbwachs focuses on the objects and environments that refer to the routine and ritual of the old, the stable or repetitive parts of the old life. These are parts which are important to retain. Certain details of the old place contain "a meaning intelligent only to members of the group, for each portion of its space corresponds to various and different aspects of the structure and life of their society, at least of what is most stable of it" (130). Certain parts

of a building correspond to specific aspects of a life prior to exile. In this case of the church building, he states, "A believer entering a church... knows he will recover a mental state he has experienced many times. Together with fellow believers he will re-establish, in addition to their visible community, a common thought and remembrance formed and maintained there throughout the ages" (151). The arrangement of the various spaces in the building recalls the continuity found in religious ritual, an aspect of life to the Assyrian Christian which has remained unchanged throughout not only the life of the individual, but that of his/her ancestors too. Returning to this place, as Halbwachs argues, recovers the feeling of being at home, and belonging. Halbwachs places emphasis on the layout of the church, that it "deeply engraves in their minds images that become fixed and immutable as the rituals, prayers, and dogmas" (153) and that the "arrangement reflects devotional needs" (153).

REFLECTION ON COLLECTIVE MEMORY

Misztal's critique of collective memory addresses the unique memory of the individual. She writes, "The collective memory of a group is quite different from the sum total of the personal recollections of its various individual members, as it includes only those that are commonly shared by all of them" (381). When we focus on the collective memory, the uncommon individual memories slip through the cracks. Therefore one could ask, can we really say that the collective memory, which is made up of common memories, can accurately reflect and represent an entire group? How often are two people's experience of the same event or place exactly the same?

The response to this involves the idea that memories continue to be formed after the experience. The collective memory "refers to both a past that is commonly shared and a past that it collectively commemorated" (Misztal, 382). Therefore, collective memory is in fact, a combination of both what is experienced and what is *commemorated*. That is to say, our memories continue to be formed after an event, through commemoration. In this way, how the past is remembered can not only be influenced or controlled, but also shared, and made collective. Through architecture, we can then shape collective memory, by recalling common experiences, and through collective memory, enabling a community to form closer, and root itself in society in a real way.

This research portfolio presents a sort of paradox. Through research into ideas regarding sense of belonging, place identity and place attachment, I discovered that key theorists identify the recollection of memory, regularity and familiarity as an effective means to help people feel a sense of belonging in a given place. That is to say, in this case, that the architecture for a migrant community should recall memories of that which is familiar to the group which occupies it, which suggests a focus on reflecting tradition. At first glance, this direction seemed to contradict the notion of integration into a new context. A focus on the old, or the original, is an effective way to evoke the comfort in a migrant that familiarity brings. However, it fails to pick up on the potential that integration with the new context might have to offer towards the conception of sense of belonging. It seems counter-intuitive, when seeking to show a group that they belong in the new context, to do nothing but remind them of their difference, and where they used to be.

The literature successfully outlines the importance and relevance of memory to belonging, and can be logically applied to architecture and the design which comes out of this research. However, presented in the previous paragraph is an argument which might see the design being pulled in the opposite direction - one that embraces the new context rather than solely focusing on the old. The position of this research and what I wish to explore is the relationship between recalling the old, and integrating with the new in one building. If the design of the building is viewed as a ratio of these two notions, which part has more weight? If it is seen as a spectrum between the two notions, where does the building sit? The design led research will investigate, test and reflect on recalling memory through architecture, and identify the key areas which most effectively evoke sense of belonging.

3

THREE // BYZANTINE ARCHITECTURE

BYZANTINE ROOTS OF ASSYRIAN CHURCH ARCHITECTURE

Early Christian architecture took influence from the Byzantine period of art and architecture. Before 313AD, there had been little in the form of Christian building, but after this, a new architecture appeared; it was one that would now house the celebrations of a new faith (MacDonald, 12). Christian architecture inevitably reflected that which already existed where the new faith was flourishing, in terms of form, visual effect, and structure. Christianity spread quickly in the Hellenistic East and Italy, and thus the first Christian monumental buildings were influenced by the architecture of the last two centuries of the pre-Christian empire (MacDonald, 13).

The reign of emperors Constantine and Justinian saw the construction of many notable buildings across the Eastern empire. Justinian, who used the production of great buildings to build his fame, including the “greatest of all” (Hamilton, 3) Santa Sophia in Constantinople (fig. 3.04), helped the Byzantine style to reach maturity in the sixth century AD. Constantinople was the centre of Byzantine art, and had great influence on the rest of the Eastern Empire. Byzantine art and architecture was adopted by the rest of the empire as visitors flocked to the city and took the culture and craft back home with them (Hamilton, 2). Evidence of this influence can be found in churches across Eastern Europe, Syria, Egypt and others. It flourished and spread in the Eastern Empire until Constantinople was taken by the Turks in 1453 (Hamilton, 1).

Byzantine architecture is described by Hamilton as “a fusion of principles”, in how it combines two different backgrounds. The first is that of Hellenistic culture, from the cities of Alexandria, Antioch and Ephesus. These cities “practised a picturesque, naturalistic and graceful, if somewhat languid art, which had its origins in Hellenism” (Hamilton, 10). Intermingled with Hellenistic culture in Byzantine art was that of Syrian origin, in terms of pattern and colour. The art of Syria was decorative and non-representational, which was favoured in an era where there was controversy around iconography in the church (Hamilton, 11).

3.1. ARCHITECTURAL QUALITIES OF BYZANTINE BUILDINGS

“The Byzantine church is logical and free from superfluous features. Each part of it fulfils its definite function in maintaining the equilibrium of the whole and in meeting liturgical demands. Its appearance explains its construction and its exterior decoration is appropriate and restrained.” (Hamilton, 12)

This section looks at the qualities of the architecture of Byzantine tradition. It begins by looking at what literature and precedent tell us about the era, and moves further to use my own memory of the church to analyse its most memorable tangible and intangible qualities. These are the qualities that the design outcome of this research may employ in order to recall memory and create sense of belonging in the migrant, as outlined in the literature review chapter.

The focus on function meant that the architecture and construction of the Byzantine church could sometimes appear modest and simple, unlike the grandeur of height and intricacy of ornamentation developed in the west. Its exterior decoration is modest and its appearance explains its construction (Hamilton, 12). The main example of this is the “essential characteristic” of the architectural style, which is the carrying of the dome roof over a square plan (Stewart, 49). The dome, representing heaven, was placed over a square plan, presenting the issue of how it was to be supported. There were three techniques used to construct this:

1. Slabs were laid across the angles of the square to create a polygon for the dome to rest on (fig. 3.01) (Hamilton, 15.).

2. The squinch (fig. 3.02). This was a series of small arches which spanned across the corners of the square (Hamilton, 16).
3. The pendentive (fig 3.03). This was a curved triangle constructed from stone or brick, which was built into the space between arches supporting the dome over the square (Hamilton, 17).

What began as simply a means to construction, and a solution to a functional issue, became quite a distinctive feature of the Byzantine church. The pendentives are often the canvas for the church's main form of decoration: mosaic and painting.

Cecil Stewart wrote, "The Christian temple, unlike the Greek, was designed to house and to inspire the congregation inside, not to attract the attention of worshippers outside; it was as though the Greek temple were turned inside out" (9). Stewart explains that though the construction of the church was very simple (22), the church revealed its richness on the interior, through the paintings and mosaics which were added later (19), once the carcass of the building was built and "allowed to settle" (58). This is a characteristic unique to the early church building, unlike many Roman Catholic and Anglican cathedrals which display richness in decoration and ornamentation on their exterior. The Byzantine church, then,

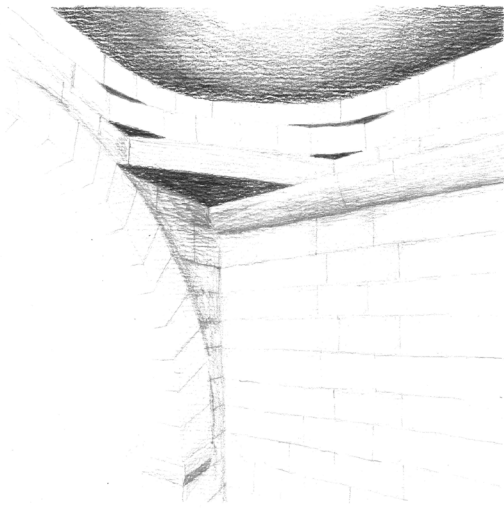


Fig. 3.01. Solution for dome over square.

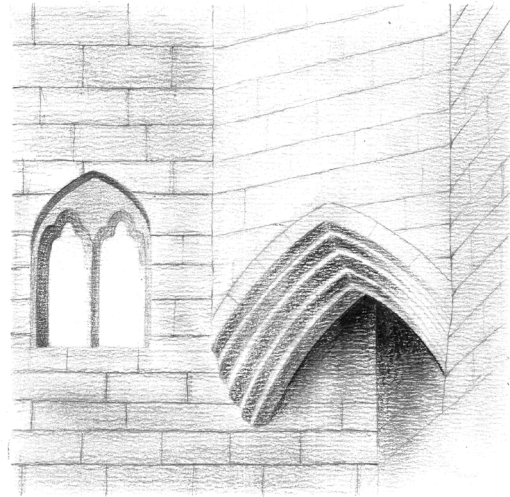


Fig. 3.02. The squinch.

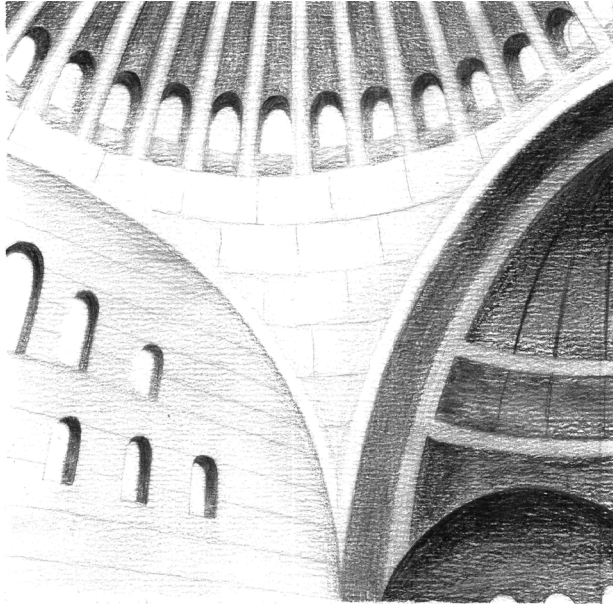


Fig. 3.03. The Pendentive.

Fig. 3.04. Santa Sophia - post Islamic conquest.

becomes almost a container, or canvas for that which brings intricacy, beauty and richness to the experience of the building.

“... Byzantine Art is also well represented by numerous smaller objects of art, such as diptychs, chalices, coffers, and reliquaries. These were often designed and fashioned with meticulous care and consummate skill.” (Hamilton, 13)

The above statement by Hamilton highlights the importance of objects used in the church, which we will call artefacts. They, like the paintings and mosaics, are treasures which are contained inside the carcase, and are unique to Byzantine churches. However, unlike the dome roof, the arched windows, and even the paintings and mosaics, they are not considered as architectural elements. Even so, they are objects of art, as Hamilton has said, and are designed to serve purposes specifically within the church. These are the objects which Halbwachs suggests can bring senses of continuity and stability, through the meaning they hold to the people who use them (130). Much like the dominating architectural features, they have spread throughout the world, and survived centuries.

3.2. THE PLAN - THE FACILITATOR OF RITUAL

The plan of a Byzantine church is defined fundamentally by its three main divisions: the sanctuary, made up of three apses, adjacent to it is the nave, and finally the narthex. This was to cater for three classes: the officers of the church occupied the sanctuary, the members of the church who had been admitted to communion, in the nave, and those who were excluded and through repentance would return, occupied the narthex (Stewart, 3).

According to Cecil Stewart, ancient catacombs are where we can trace much of the origin of the building type that was the early Christian church. The catacombs, which date back to the second century, served both as burial grounds and buildings in which chapels for Christian worship were furnished (Stewart, 2). The earliest of chapels is Capella Greca in the Catacombs of Saint Priscilla. It has an apse over the tomb at the end of a rectangular plan. At Saint Sotere's cemetery, the chapel contains an early reflection of the traditional separation of the church into three main divisions (Stewart, 2).

Plans of Byzantine churches fall into five main categories. The basilica and the circular hall were developments of pre-existing classical forms, while the cruciform building, the domed basilica and the cross-in-square were new Byzantine contributions, as they involved the

Fig. 3.05. The cruciform plan.
Lyouboten, Serbia.

Fig. 3.06. The circular hall.
Cathedral of Bosra.

Fig. 3.07. Dair-al-Baramus,
Natrun Valley, Egypt.

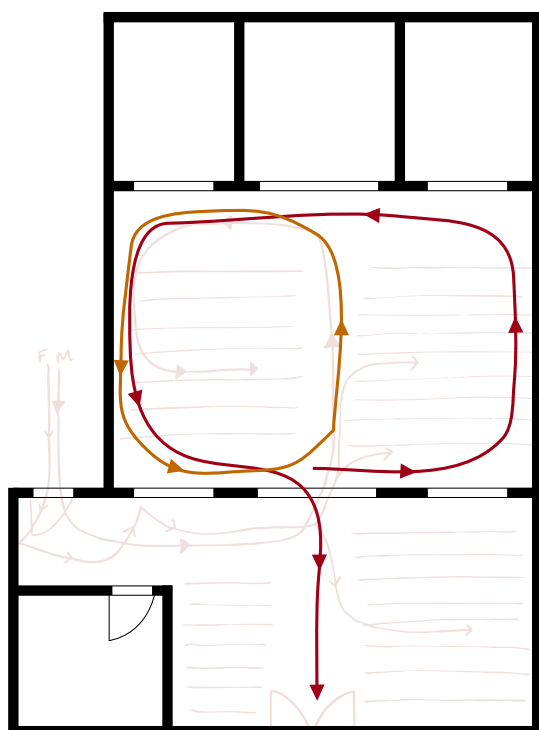
Fig. 3.08. Khakh, Mesopotamia.
Church of the Virgin.

unique structural feature of the dome over a square space (Stewart, 58). The circular hall (fig. 3.06) was more commonly used for baptiseries, as baptism was a private sacrament and did not require space for a congregation. A baptisery was essentially a bathroom, and took the shape that was common of Roman baths (Stewart, 59). Stewart states that it was not a suitable plan for church ritual, and the cruciform (fig. 3.05), too, was more commonly used for mausoleums and memorials because the plan type was, “most inconvenient and unsuitable to the church ritual” (59). This thesis focuses on the domed basilica category, which best accommodates church ritual, by harmoniously combining the “horizontal axis required by ritual with the vertical axis which is determined by the dome”, by setting the dome over the basilica plan (Stewart, 60) This decision is made in response to the theory of ritual and repetition being vital to instilling sense of belonging.

Stewart suggests that perhaps it is possible that the service itself was somewhat informed and dictated by the environment in the catacombs and in people’s houses which were used for worship (3). This notion provides further evidence of the correlation that exists between ritual (the liturgy) and the plan, but a correlation in the opposite direction. Not only can we see the way that the plan serves the procession of the liturgy, but on the contrary, the procession may have been designed to fit within and work around the existing building layout.

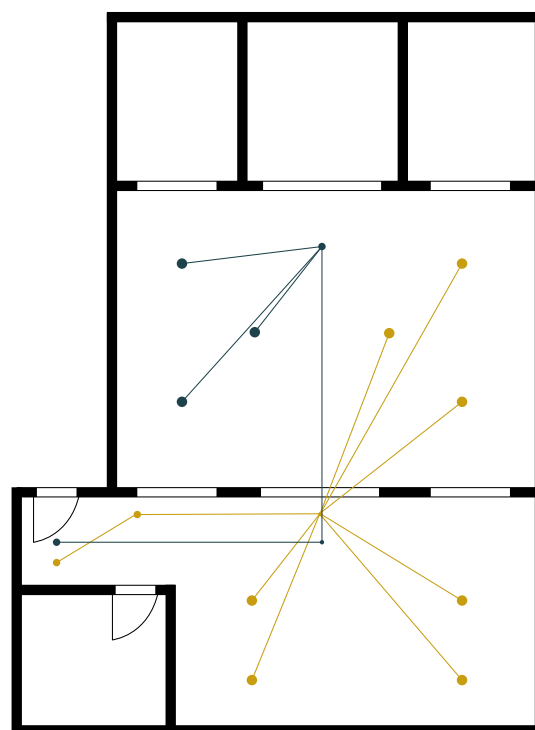
Drawing out memories of the church, my first instinct was to draw out a plan, and draw out circulation patterns at two points of the mass when there was most movement among the congregation (fig. 3.09). These points were at the beginning of the mass, as the congregation enters the church, and towards the end, when it was time to take communion at the front of the nave, at the threshold before the sanctuary. Linking in with Myszal’s and Halbwachs’ theories on memory and ritual being closely connected, these drawings helped to indicate the strong link between memory, ritual and the plan.

The plan facilitates ritual; ritual is intertwined with the plan. Whether the plan was dictated by the requirements of the ritual, or it was the plan which informed ritual as Stewart suggests, the strong connection between the two highlights the effect that a historic plan in which people move in a familiar way can have on someone who recognises it from their past. Acknowledging this is a step in recalling memory in order to create sense of belonging in the church building.



COMMUNION

- CIRCULATION - WOMEN
- CIRCULATION - MEN



ARRIVAL

- CIRCULATION - WOMEN
- RESTING POINTS - WOMEN
- CIRCULATION - MEN
- RESTING POINTS - MEN

Fig. 3.09. Memory plans with circulation paths.

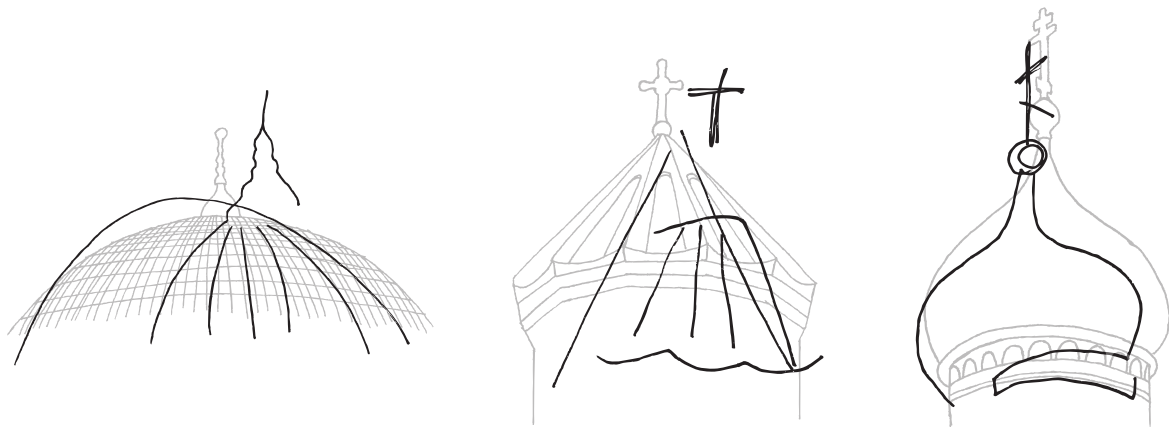


Fig. 3.10. Blind series - The roof form.

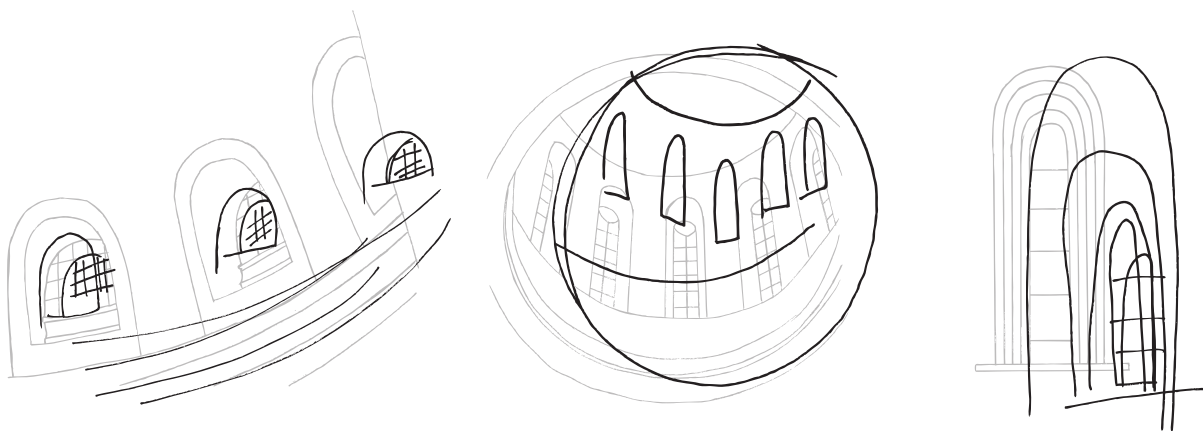


Fig. 3.11. Blind series - Windows.

3.3. ARCHITECTURE THROUGH MEMORY

Figures 3.10 - 3.12 display the result of an initial exercise conducted while looking over Byzantine churches across the middle east and Europe. It involved selecting parts of the elevation and doing blind line drawings of that part, looking at three examples of each. The blind drawing technique not only places further emphasis on the idea of memory, and abstracting the most memorable elements of the building form, but also more loosely highlights the general shapes and motions of the architecture, creating drawings which are unlimited to a specific part of the building.

The next series of intuitive paintings are done inspired by either historic traditions of Byzantine architecture, or personal memories of the church. The ones inspired by the latter are able to focus mainly on the sensory experience of the church, and pushing past the tangible qualities into the intangible.

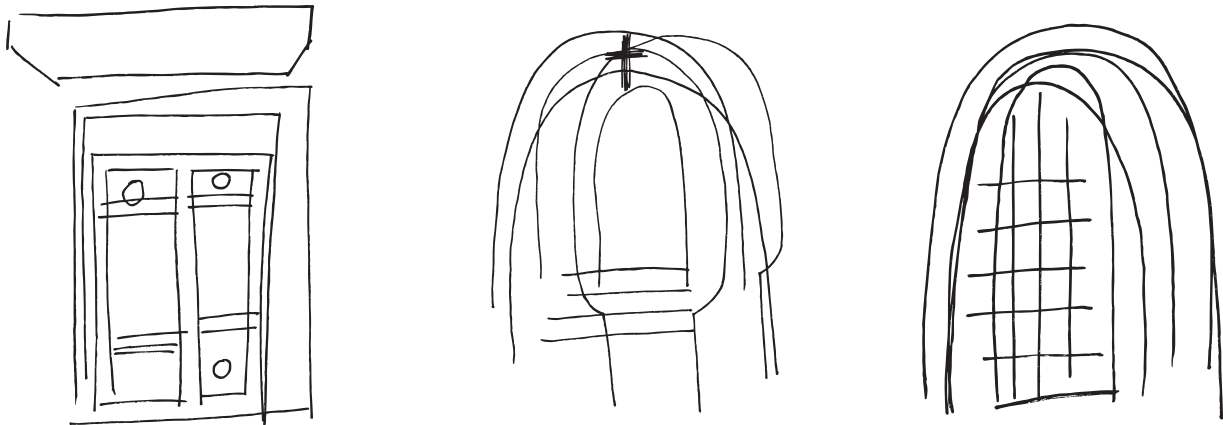


Fig. 3.12. Blind series - The entrance.

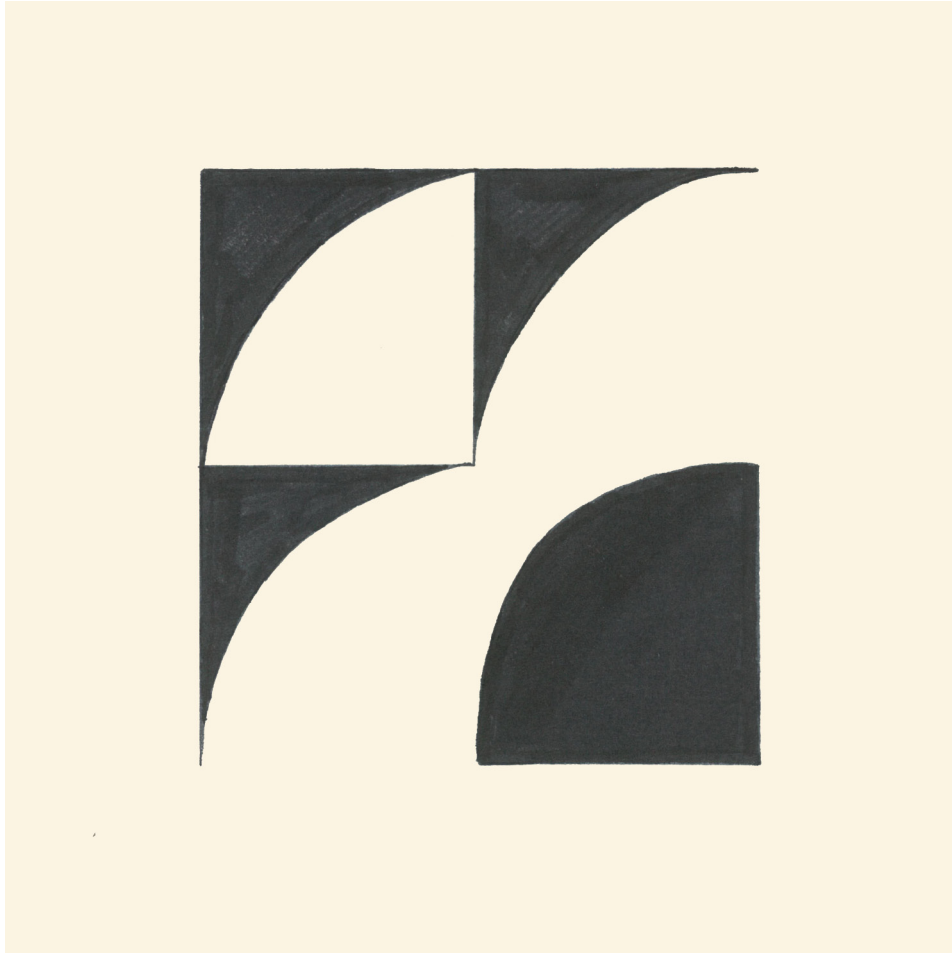


Fig. 3.13. Byzantine

Figure 3.13 looks at the foundational concept of Byzantine architecture - the dome over a square plan, this drawing a reflection of the circle meeting the square.

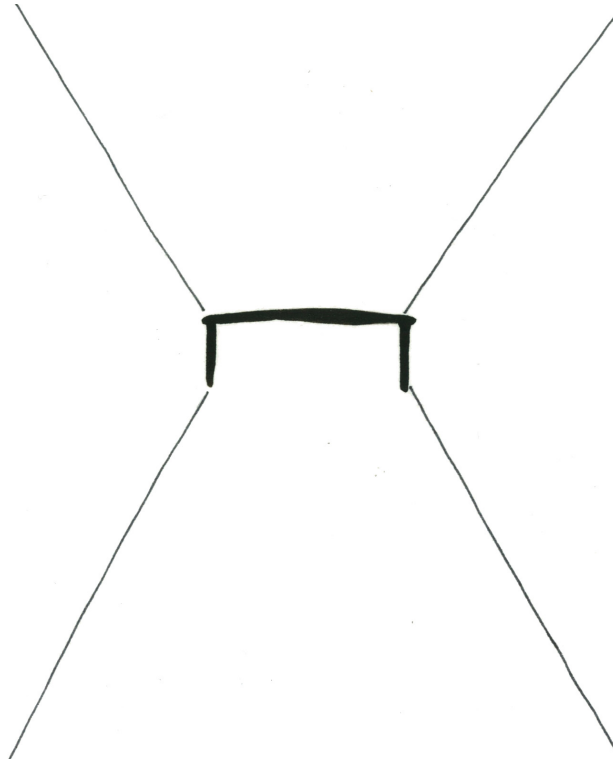


Fig. 3.14. Altar

Stewart writes of the way that the early church was designed to draw focus to the altar, inside the most sacred space, the sanctuary. Historically, this was done through the colonnade, defining the spaces of the interior, especially around the altar (9).

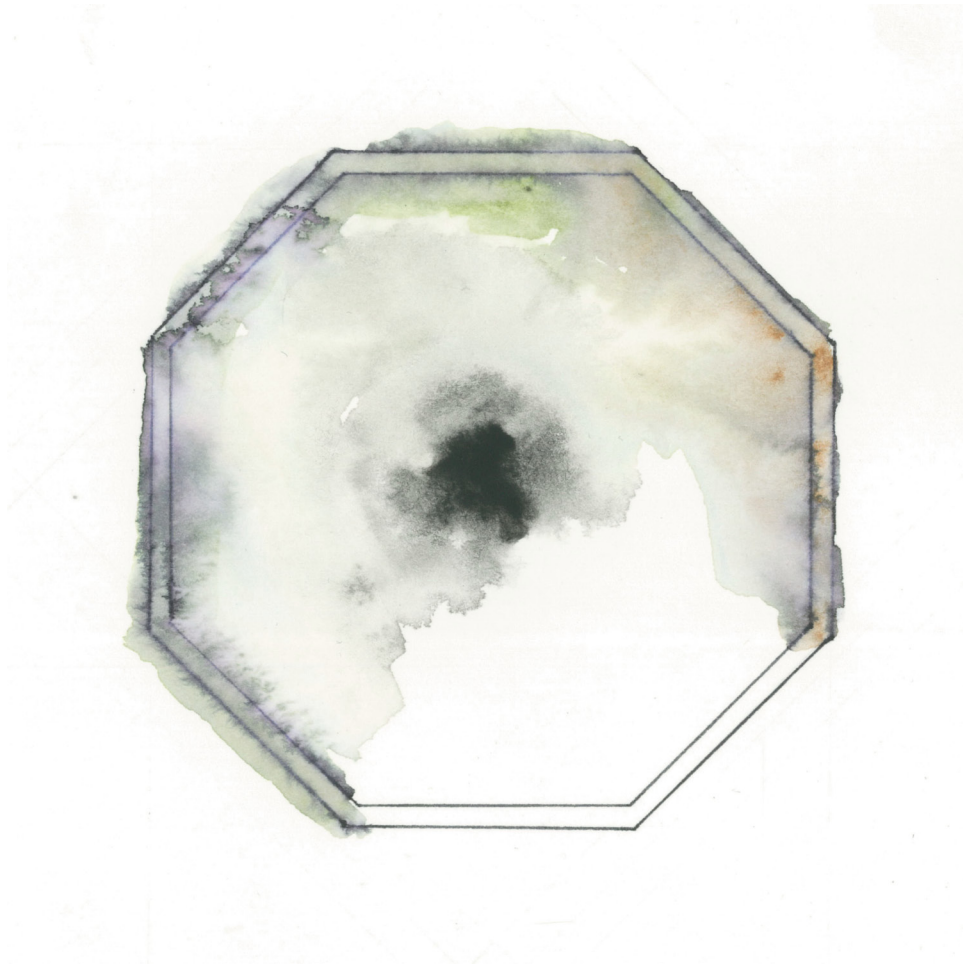


Fig. 3.15. Incense Station

The incense burner is an object which is used throughout the mass. It is a part of the environment which contributes to the sensory experience of the space in various ways - through sight, smell, touch and even sound. This painting highlights an exchange of many types between the object and the occupant: an intimate experience of one another.



Fig. 3.16. Sanctuary

In many examples, the sanctuary is elevated over the rest of the church plan. This is a notable memory concerning levels inside the church, and emphasises the importance and sacredness of the sanctuary's three apses.



Fig. 3.17. Heaven

The dome has historically been a representation of heaven, and the sky in Eastern churches. The dome was lit by windows which were set into it (Stewart, 52).

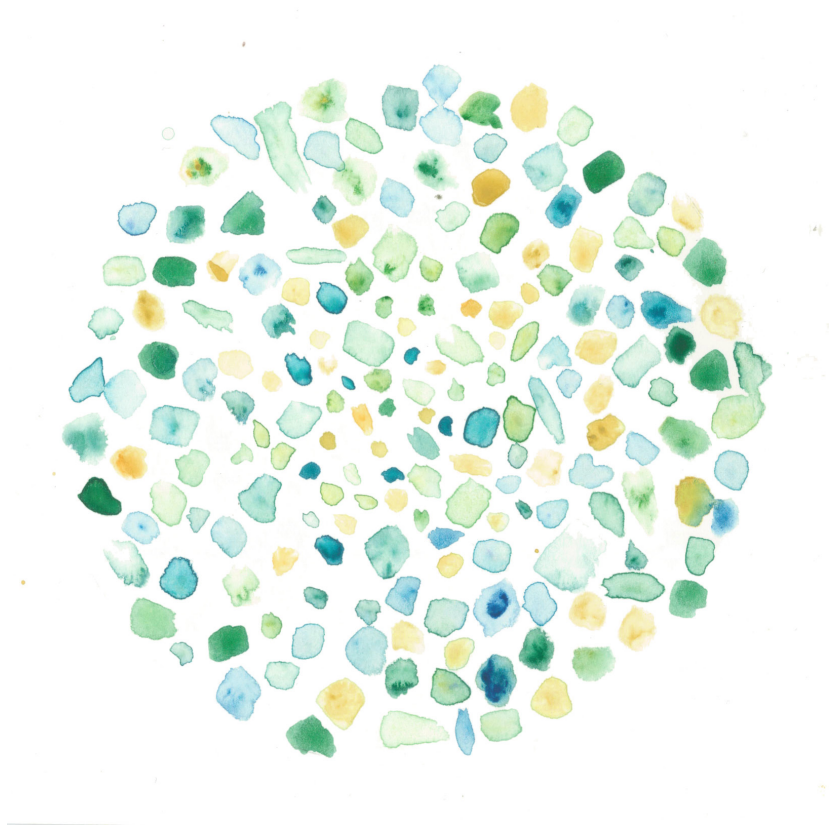


Fig. 3.18. Mosaic

Mosaic is a painting which references the traditional use of mosaic imagery in Byzantine churches particularly in the dome roof, and references colours commonly used in art and architecture of the time.

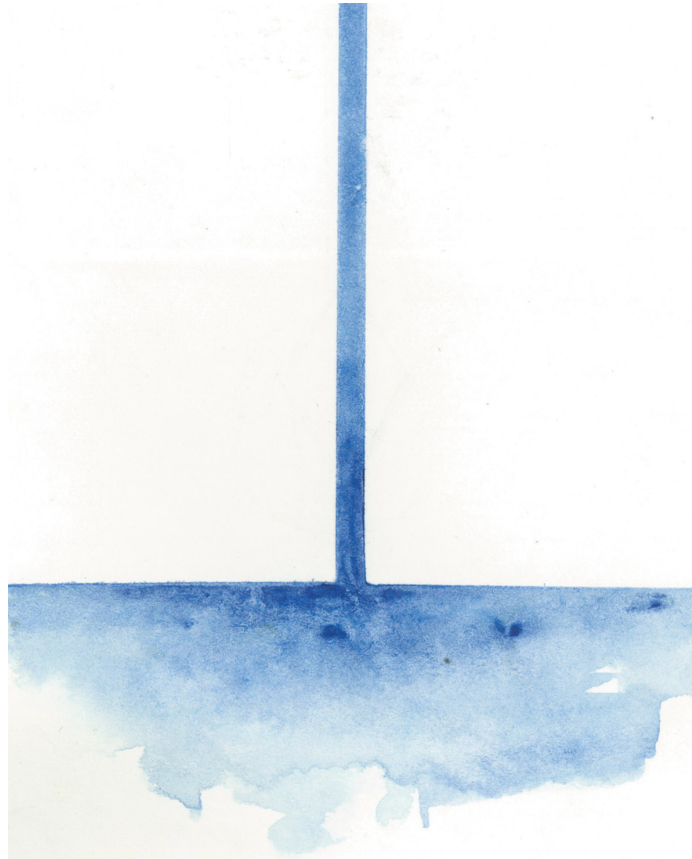


Fig. 3.19. Illuminate

Light, in churches of Byzantine influence, tends to be concentrated - often illuminating the space through a narrow window, or in the form of a candle, or small bulbs in a single chandelier.

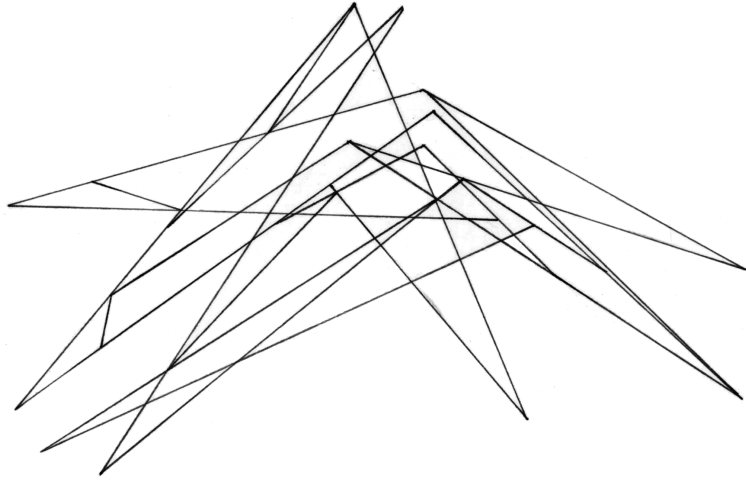


Fig. 3.20. Covered

Women in the Ancient Church of the East cover their heads with a headscarf during the mass. For women, this is a significant part of the ritual of attending church. This sketch is inspired by memories of a woman donning her scarf as I followed her into the church.



Fig. 3.21. Transform

Transform reflects the nature of the interior compared with the exterior of Byzantine churches: the interior being where the focus of splendour lies, in order to inspire the congregation within.

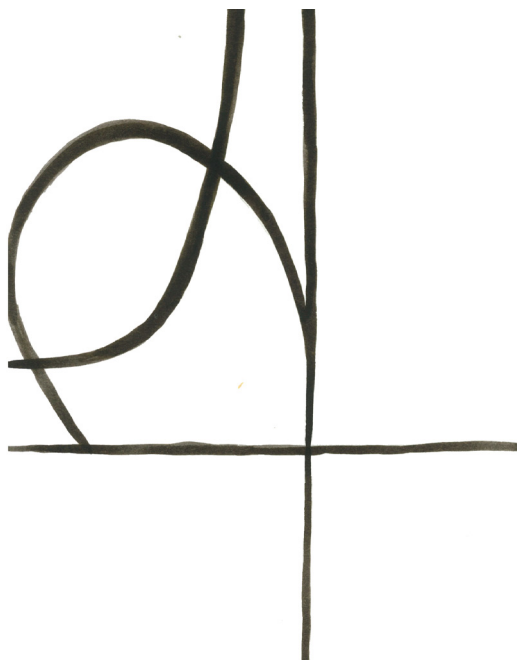


Fig. 3.22. Pray

These lines reflect the instances during the mass when the congregation bow their heads in unison while the priest prays. This is one of the very few parts of the mass where there is motion among the congregation, the reason it is a prominent memory.



Fig. 3.23. Narthex - origins

The narthex traditionally spans across the western end of the church (the back of the church). It was originally a place for penitents and catechumens, and was separated by a solid wall with three doors (Hamilton, 25). It was an area in which occupants could not see into the nave, but could hear parts of the mass.

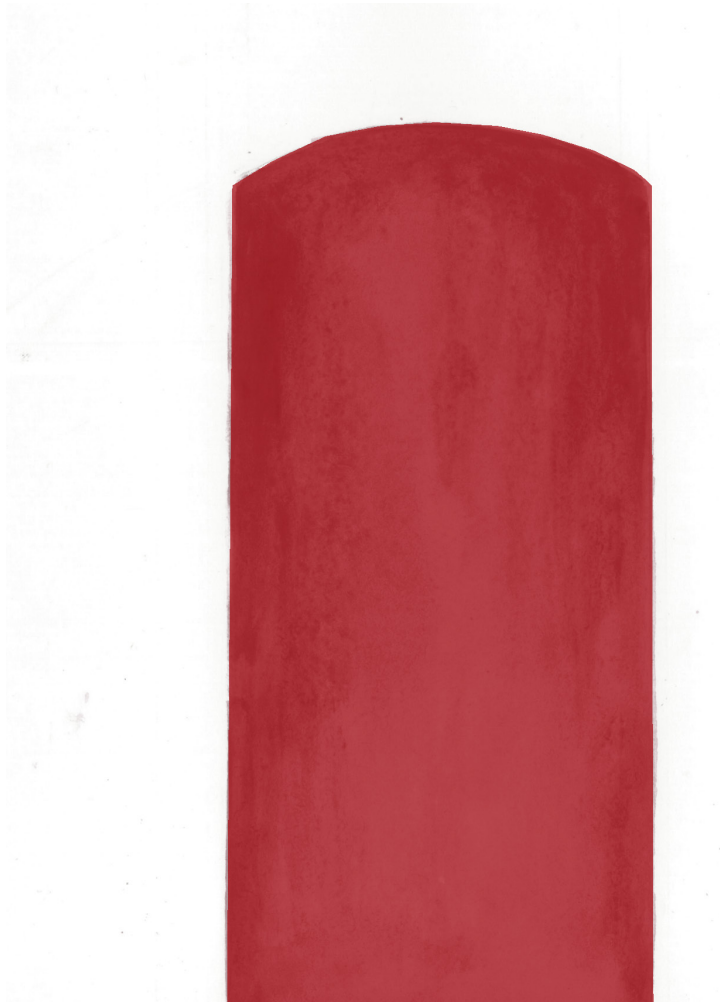


Fig. 3.24. Narthex - memory

Memories of the narthex differ largely to its original purpose. From memory, the narthex is open to the nave, separated only by timber posts rather than doors, and the mass can be seen and heard. The narthex has been repurposed from its original use.

4

Fig. 4.01. Fo Guang Shan Temple, Auckland.

FOUR //

CASE STUDIES AND APPROACH FORMATION

This research portfolio poses a question which architects and designers have certainly been responding to in New Zealand for years. Buildings in New Zealand that refer to a foreign culture, inevitably respond to this question in particular ways. Three buildings were looked at, local and overseas, which vary tremendously in their approaches. Each one represents a point on the scale between retaining all tradition and authenticity, and being influenced more heavily by a new context.

4.1. FO GUANG SHAN TEMPLE, AUCKLAND, NZ

The Fo Guang Shan Buddhist temple in Auckland sits on the retaining tradition side. Even at first glance at its striking exterior form, it sticks out as a structure we would not typically see in Auckland, and we are immediately notified of its Chinese origin.

The temple was opened in Auckland in 2007, after a development period of seven years. It was designed according to the architecture of the Tang Dynasty, and this is reflected in its green roof tiles, deep red stone pillars and vertical slat window frames, “to project magnificence, grandeur, cultivation and strength” (Eventfinda). It is a building which holds true to traditional Buddhist temple architecture in its form, colour, materiality, planning and traditional architectural elements.

Despite sticking strictly to the traditions of Buddhist temple architecture, this temple was strongly intended to be used and benefited from by people of all cultures and religions. This

has been a key message that the Buddhist community who built this temple wish to send out (Fo Guang Shan). The temple is intended to not only serve as a place of worship and a hub for the Buddhist community, but to welcome people of all cultures, so they feel that they belong there (Lawrence). The temple offers courses in Chinese calligraphy, language, martial arts and yoga, and the wider community has begun to become aware that they are open to the public and have different types of facilities (Lawrence). This appears to be an effective way of not only educating others about Chinese culture and Buddhism, but also a way to encourage the integration of the Chinese/Buddhist community with other community groups and people in the area. While at first glance, the temple's architectural design does not speak of a dialogue between its origins and its new context, the community is able to rely on its programmes and courses to create the openness and integration they wish to see occur within the temple.

One of the temple's notable features is a large Buddha made in Thailand (Stuff Limited). There is a connection here to the notion of the artefact, mentioned in chapter three. The Buddha which has come from Thailand carries a certain special quality to the Buddhist users of the temple. This idea is about more than simply recreating the traditional architecture in a new context. It supports the theory that there is a certain value placed on objects which are *real*, and have come from the country of origin. They hold a quality of truthfulness and authenticity.

Misztal writes on recalling the past of countries under oppression, who have had their places of memory destroyed. She mentions in particular the Chinese communist government's aim to destroy all temples and monasteries after the occupation of Tibet in 1951 (Misztal, 387). Having considered this, the Fo Guang Shan temple, so closely resembling a traditional temple of the Tang Dynasty, takes on an important role. It is the reproduction of memories lost. It is the perfect reconstruction of what has been destroyed, and when considered in this light, it is important that it stands true to its history and culture, unchanged by oppression.

This building inspires the first of the three design approaches in this design led research. It places most emphasis on tradition, and aims to closely replicate the original. In this way, it can create a sense of belonging in Chinese migrants who are reminded of the old through architecture, in a building in which they will dwell on a regular basis. While it may not appear to directly respond to its surrounding context formally, it has become integrated into its new context in other ways, such as through the classes which are held at the temple that are open to the public. The building, though quite obviously traditional, integrates into the urban fabric of the exposed corner site through the gardens and café out in front of the temple which welcome guests.



Fig. 4.02. 'No Longer Suppressed' - a collage inspired by Fo Guang Shan.

Fig. 4.03. St Nicholas' Shrine, Ground Zero, New York

4.2. ST NICHOLAS' SHRINE, GROUND ZERO

St Nicholas' Greek Orthodox Church stood at 155 Cedar Street, at Ground Zero in New York City from its construction in 1914, until it was crushed under the falling World Trade Centre towers in the September 11 attacks of 2001 (Lynch). A new shrine to St Nicholas at 130 Liberty St was designed by Santiago Calatrava in 2013, as a “non-denominational spiritual centre” to replace the original church, and is due to be completed in early 2018 (Archdaily).

Fig. 4.04. St Nicholas' Shrine - Interior.

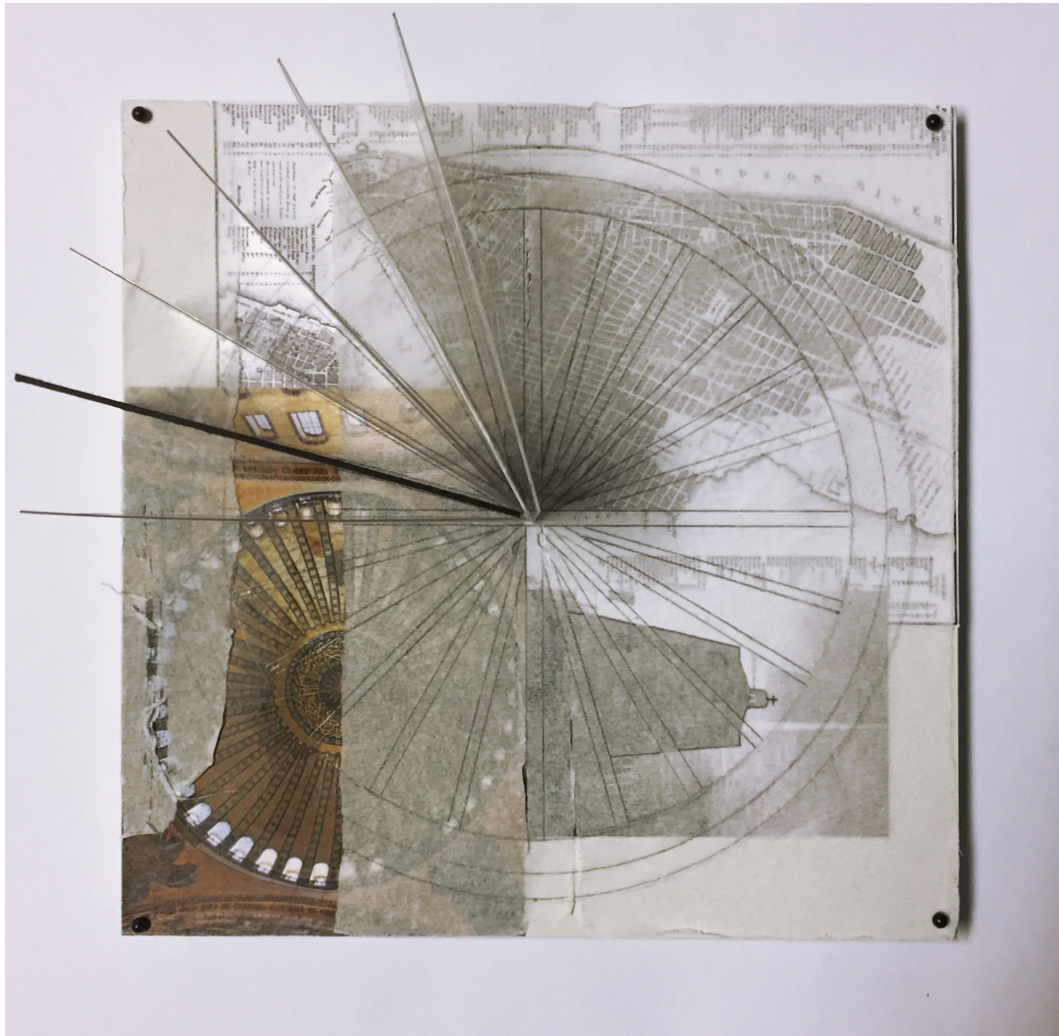


Fig. 4.05. 'Pieces' - A collage inspired by St Nicholas' Shrine.

The new building has been designed with Byzantine influence and reflects traditional Orthodox Christian architecture, differing completely from its predecessor. Prior to the design and construction of this building, the proposal of an Islamic community centre at the site caused furious debate, particularly over placing religious institutions around the World Trade Centre (Dunlap). In this case, the Byzantine influence mentions something of a coming together of people from various religions, as it is a style which not only influenced buildings used for Christian worship, but were also later used for Islamic worship too.

An example is Istanbul's Hagia Sophia which was converted into a mosque, now a museum. In fact, the dome at St Nicholas' will have 40 ribs, just like Hagia Sophia's dome (Lynch).

The new building reflects Byzantine architecture quite explicitly, while responding to its iconic context. From Byzantine architecture it adopts the dome roof supported by pendentives, the arched entrance ways, symmetry in planning and elevations, and takes traditional imagery and bares it on the walls of the interior (fig. 4.04). At the same time, it adapts to its context through its use of local stone sourced in Vermont (Wells & Bressanin), the interior of the building is neutral and minimalist rather than rich in colour and detail, and the monochromatic exterior of the building relates to its neighbours – in particular to Calatrava's Oculus at the World Trade Centre transport station. St Nicholas' church formally both adopts the old and adapts to the new, with what seems to be a balance between the two.

4.3. ISLAMIC CENTRE OF NEWPORT, MELBOURNE, AU

The Islamic Centre of Newport in Melbourne, Australia was completed in 2016 after a ten year construction period. It was designed by Australian architect Glenn Murcutt together with Elevi Plus Architects (NGV). The centre, comprising a mosque and community centre, has been labelled as perhaps, “the first truly contemporary Australian mosque” (NGV). The design of the building recalibrates historical Islamic design traditions for its Australian context, to produce a response to the brief which requested a “modern and Australian building” (NGV). The recalibration of Islamic design conventions make for a strikingly non-traditional Islamic building – but it is one that has carefully considered all of the fundamental requirements of the building to the Islamic community of Melbourne.

The building takes into account the important traditional features, such as orientation towards Mecca, a large central prayer hall, bodies of still water, and separate spaces for men and women (NGV). However, in other ways, the designers have found opportunities to let the centre speak a new language - for example, through the exclusion of the high domed

Fig. 4.06. Roof lanterns at the Islamic Centre of Newport.

roof, and the design of a non-conventional minaret. Murcutt explored and enquired with his clients about the architectural requirements of the new mosque, and found the areas in which he could push boundaries and reinvent (Architecture of Faith). The minaret is traditionally used for the call to prayer, which is unlikely to happen in Australia, and this was an opportunity to reimagine what the minaret could be in modern Australian form (fig. 4.07).

The building addressed religious and social issues and aimed to, through its design, paint a positive image of Islam in Australia, hence its modern and refreshing form. Murcutt and Elevi Plus came up with an outcome which was open and transparent rather than solid, and welcoming rather than exclusive. Hakan Elevi explained that the local Islamic community wanted to “create the first contemporary Australian-influenced mosque” at a tour of the mosque’s construction site during the 2016 Open House Melbourne weekend, which is why Murcutt was approached to design it (Cheng). Murcutt said, “I’m putting forward the idea that, in a society that is anti-Islam, we can produce some work that can actually bring Islam back into our community and become an addition to the culture” (qtd in Cheng). This displays an aim to encourage symbolic and active integration of the Islamic community into a diverse culture, much like the diversity we have in New Zealand.

Fig. 4.07. A new approach to the minaret.



Fig. 4.08. 'Challenged' - A collage inspired by the Islamic Centre of Newport.

4.4. APPROACH FORMATION - *COPY/ADAPT/MERGE*

Each of these precedents responds to the question this research poses in a different way. They each individually show qualities and intentions of integration and potential to enhance sense of belonging for its occupants who are migrants in a new context. While the Fo Guang Shan temple aims not to move away from tradition formally, its accommodation of additional program such as open classes within the temple and a public café and garden area give it an open and welcoming character to people of all cultures and faiths.

St Nicholas' at Ground Zero stands once again at a site of great importance to its host nation, and this in itself is a symbol of empowerment and support to the Greek community in New York. In return, the architecture of the new building reflects some of the strong formal qualities that surround it, but retains some of the strong formal qualities of its origin as well.

The Islamic Centre of Newport tackles social perspectives of the Islamic community through its fresh, non-conventional and modern design. The centre is more than a mosque, it is a facility which houses a collection of programs. The building is designed to serve the community's practical needs as well as being a place of worship. This precedent, in terms of its tangible qualities, is a reflection of the idea that a migrant may integrate with its host society.

The three precedents discussed in this chapter seem to reflect three points on the spectrum mentioned in the introduction. The first adheres to tradition and in this way can retain memory in its migrant users, the second retains tradition and partially integrates with its host society, and the third most indepthly integrates with its host society. Out of these three precedents come the three main approaches to the concept design of the Assyrian Orthodox church in Wellington (fig. 4.09). They are entitled the *copy*, *adapt* and *merge* approaches, and each of their definitions will drive the preliminary design outlined in chapter six.

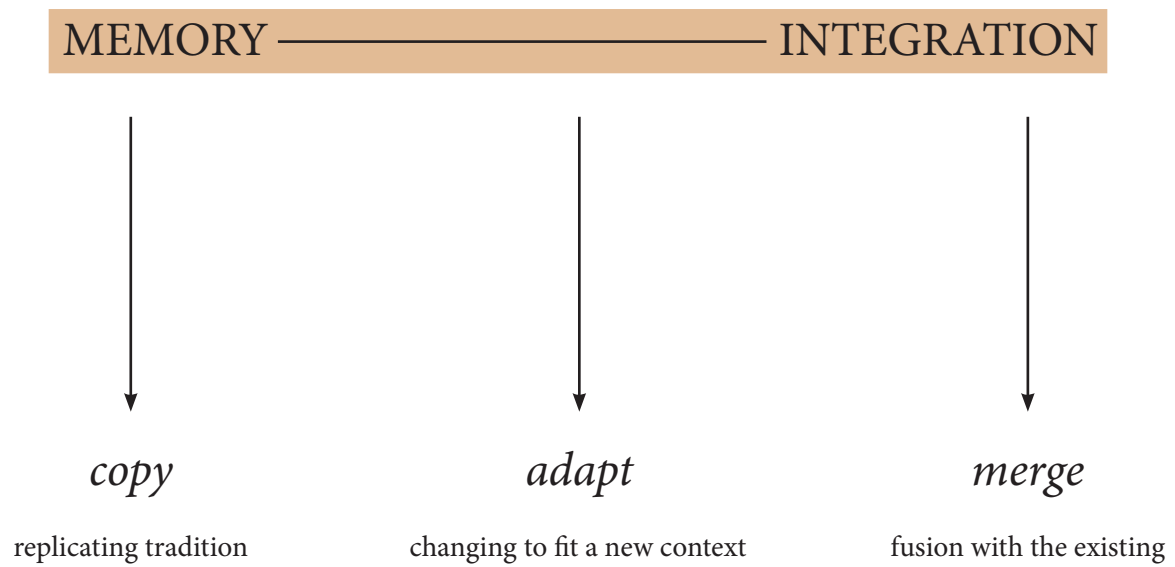


Fig. 4.09. Formation of three approaches: *copy*, *adapt*, *merge*.

5

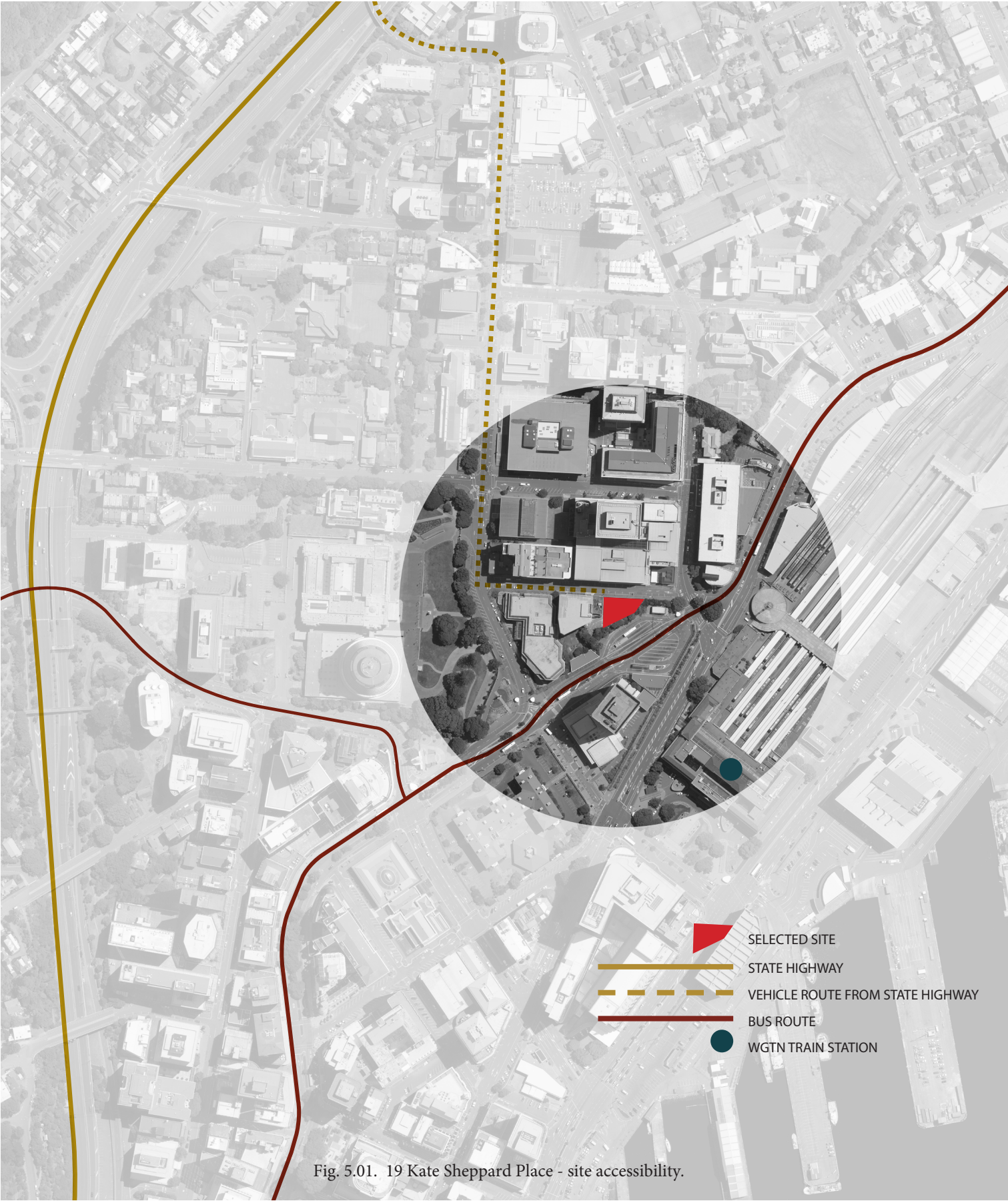


Fig. 5.01. 19 Kate Sheppard Place - site accessibility.

FIVE //

SITE AND PROGRAMME ANALYSIS

5.1. SITE SELECTION

The site at 19 Kate Sheppard Place is located in the northern precinct of the CBD of Wellington, New Zealand's capital city. Just a block over from the site is the Beehive and New Zealand Parliament buildings. Also in close proximity to the site is the Supreme Court building and various embassies. The area is known as home to St Paul's Cathedral, Old St Paul's (category 1 heritage listed), and Sacred Heart Cathedral (fig. 5.04).

Contrasting with the existing Assyrian Orthodox church which is located among a residential area in the eastern suburb of Strathmore, the site was chosen for its symbolism. In response to the aim of the research, which is to create in migrants a sense of belonging through architecture, this site takes the church from the outskirts of Wellington and brings it right into the centre of the city. It stands among other buildings of high regard, and they say that it is part of the city, that it is one of them (fig. 5.03). It also creates a dialogue with the other churches established by early European settlers. While they built their church at the very centre to establish power and take ground, the church for Assyrian migrants is placed at the centre to feel empowered, and included. The findings of this research are intended for revisit for other cultures and contexts, and for this reason, more significant than the analysis of a particular site is the reason for its selection.

Inspiration for the selection of this site comes from St Nicholas' shrine at Ground Zero, in central New York. Halbwachs wrote, "to lose their location in the pocket of a certain street, or in the shadow of some wall or church, would be to lose the support of the tradition that recommends them and gives them their unique reason for existence" (135), and much like the replacement of St Nicholas at the centre of New York, to place the Orthodox church at the centre of Wellington is thought to be an empowering gesture, coming to aid when there has been loss.

The church building at 19 Kate Sheppard Place not only suggests inclusion and empowerment, but is a response to the recently grown Assyrian community living in the northern suburbs of Wellington such as Johnsonville and Newlands (fig. 5.02). The existing church in Strathmore was placed strategically to serve the large portion of the Assyrian community who live in the eastern suburbs of Strathmore, Miramar and Kilbirnie, and is even easily accessible by public transport to those who live in Newtown.



Fig. 5.02. The selected site as the epicentre.

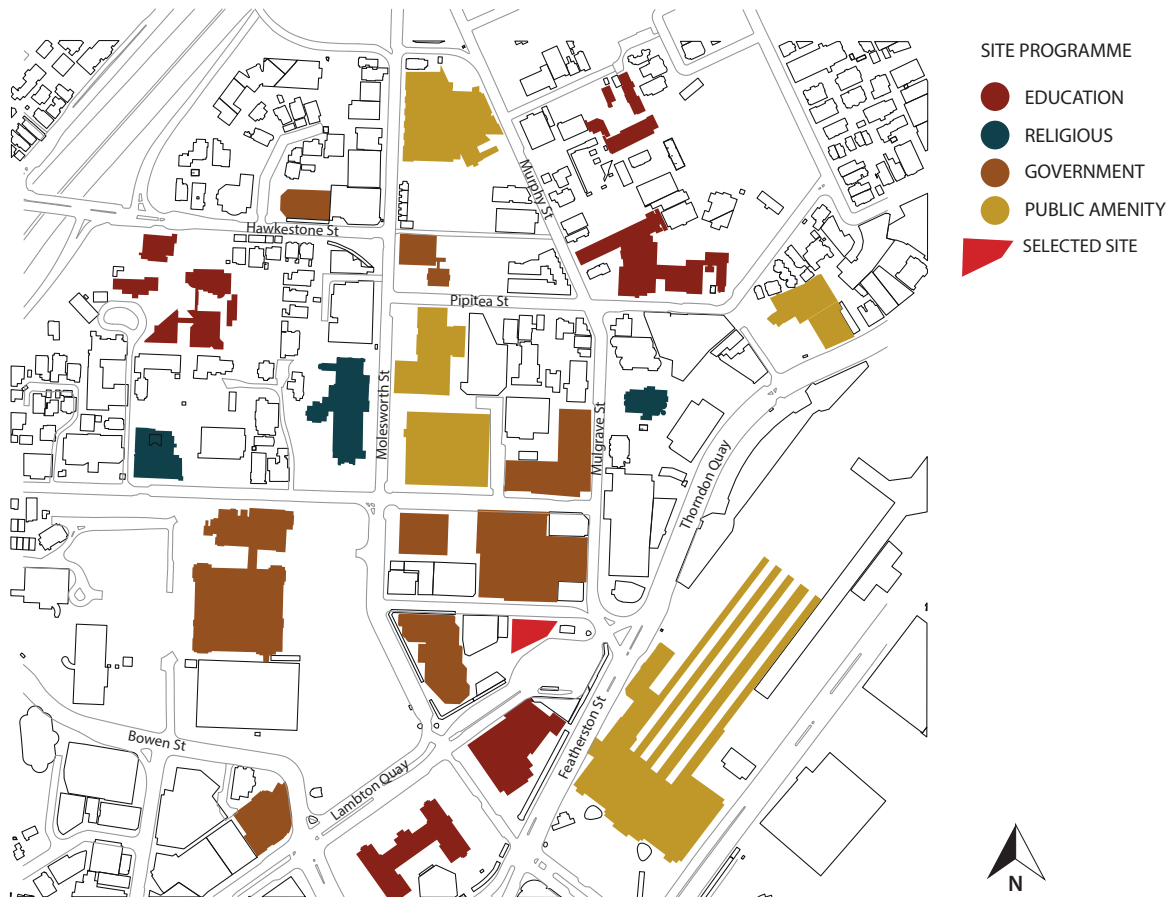


Fig. 5.03. Site context - programme and amenities.

However, for the ones who live in the northern suburbs, particularly the elderly, it is a substantially long journey, particularly for one who wishes to attend nightly prayer services. The site, being conveniently located right next to the train station and the bus station which receives the public transport coming in from the northern suburbs (fig. 5.01) makes for a much easier journey, rather than taking two modes of transport each way.

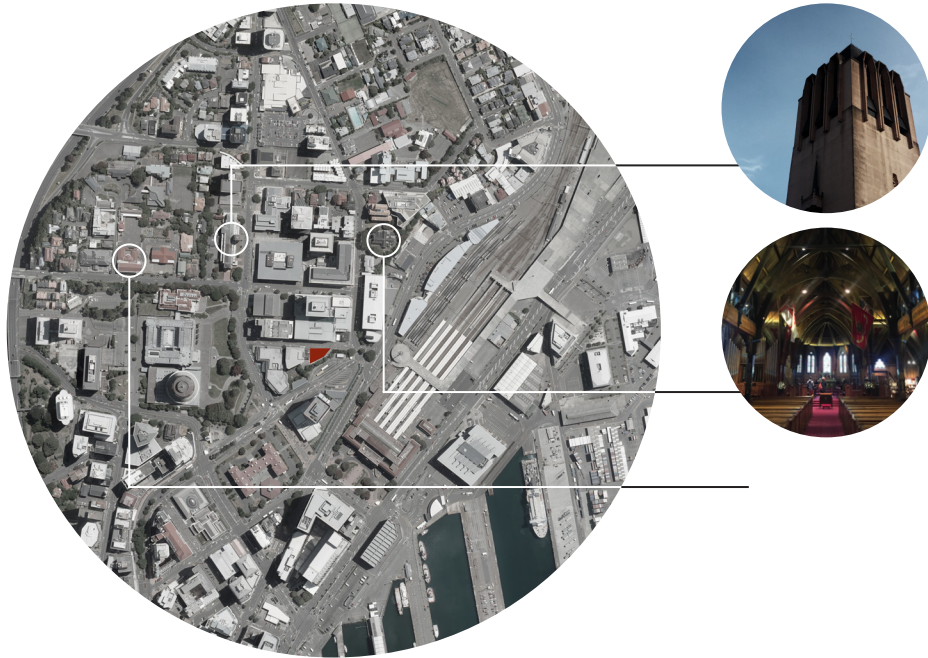


Fig. 5.04. Surrounding cathedrals - St Paul's, Old St Paul's and Sacred Heart.

Fig. 5.05. Sydney Street Substation.

Fig. 5.06. Historic photograph of Sydney Street Substation.



Fig. 5.07. Site section - the adjacent bus station.

5.2. SITE ANALYSIS

The main use of the site is by the people who occupy the surrounding office buildings, aged anywhere between early 20s to 60s. The site is also populated by a mix of primary, secondary school and university students, who pass by the site in their journey to school. The close proximity of the railway station brings a large number of commuters near to the site.

The periods of high activity at the site are currently Monday to Friday, before and after work and school hours or at midday, as the main reason for travelling through the site being for work or education related purposes. Bringing the Assyrian church to the site will activate it in the evenings, introduce more children and elderly to the site, and add to the minor activity around the surrounding churches on a Sunday morning.



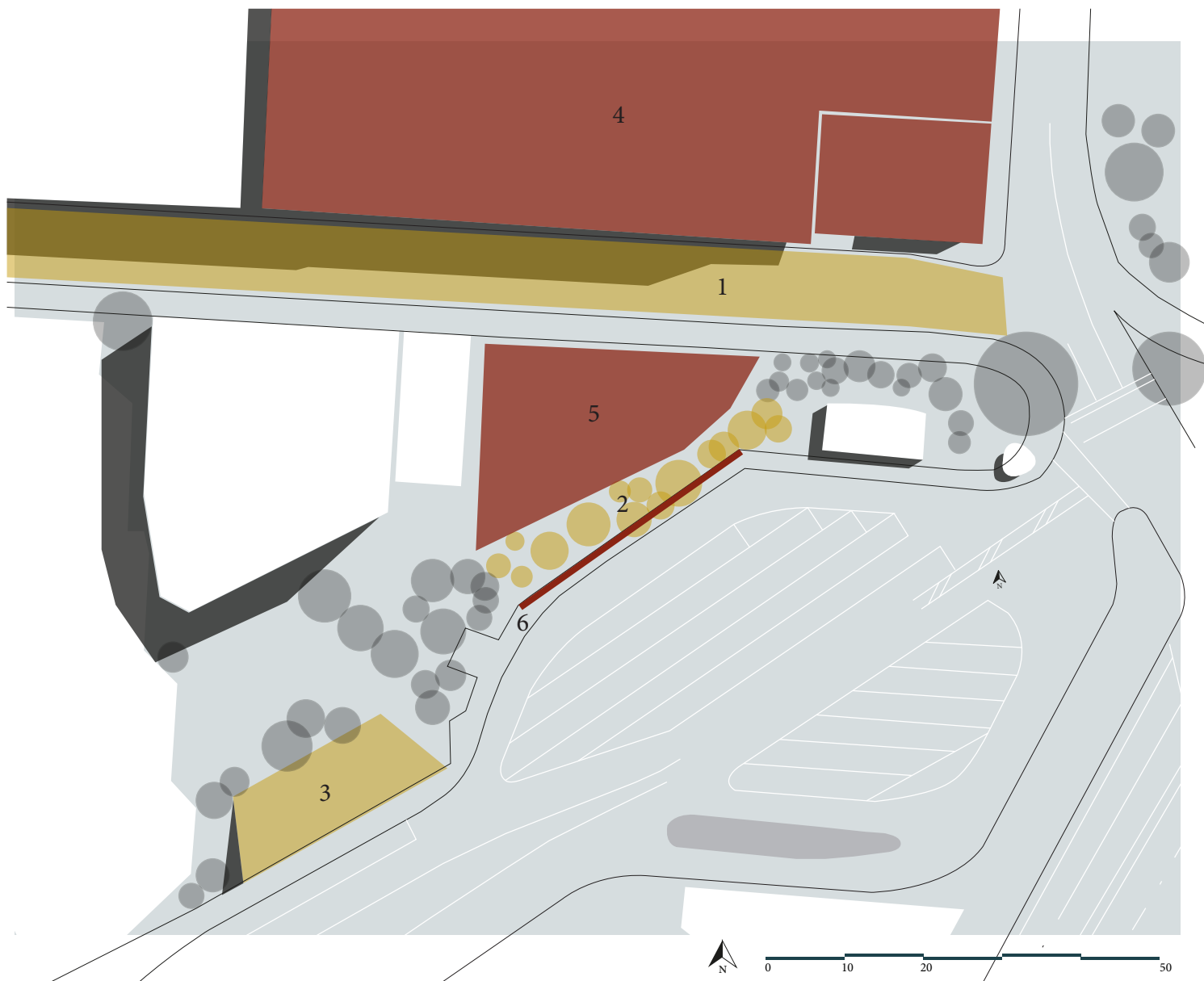


Fig. 5.08. Immediate site analysis - strengths and weaknesses.

STRENGTHS / WEAKNESSES

1. Kate Sheppard Place

The street which gives access to the site is a one way street which is less active than most other streets which surround the site. This gives the site a certain privacy and brings a user of the site a step up in the level of intimacy with the site as they approach it.

2. Tree Buffer

Trees which line the southern side of the site are successful in acting as a visual buffer against the busy bus stop, whilst not disrupting the openness that the site gains from being elevated above the level of the end of Lambton Quay below (fig. 5.07).

3. Transport Hub

In close proximity to the site is a transport hub, which contains a bus stop and enables underground access to the railway station across the main street.

4. Justice Centre Building

This 6 storey office building is located directly north of the chosen site, and casts shade over the site, particularly over the facade facing the street.

5. Site Shape

The small site takes a triangular shape, which could prove to be difficult to work with, considering the symmetrical nature of traditional Orthodox architecture.

6. Retaining Wall Barrier

The retaining wall which is directly adjacent to the site does not obstruct the view facing south from the site, but disallows access to the site from the main street, forcing pedestrians to walk around and up Kate Sheppard Place (fig. 5.07).

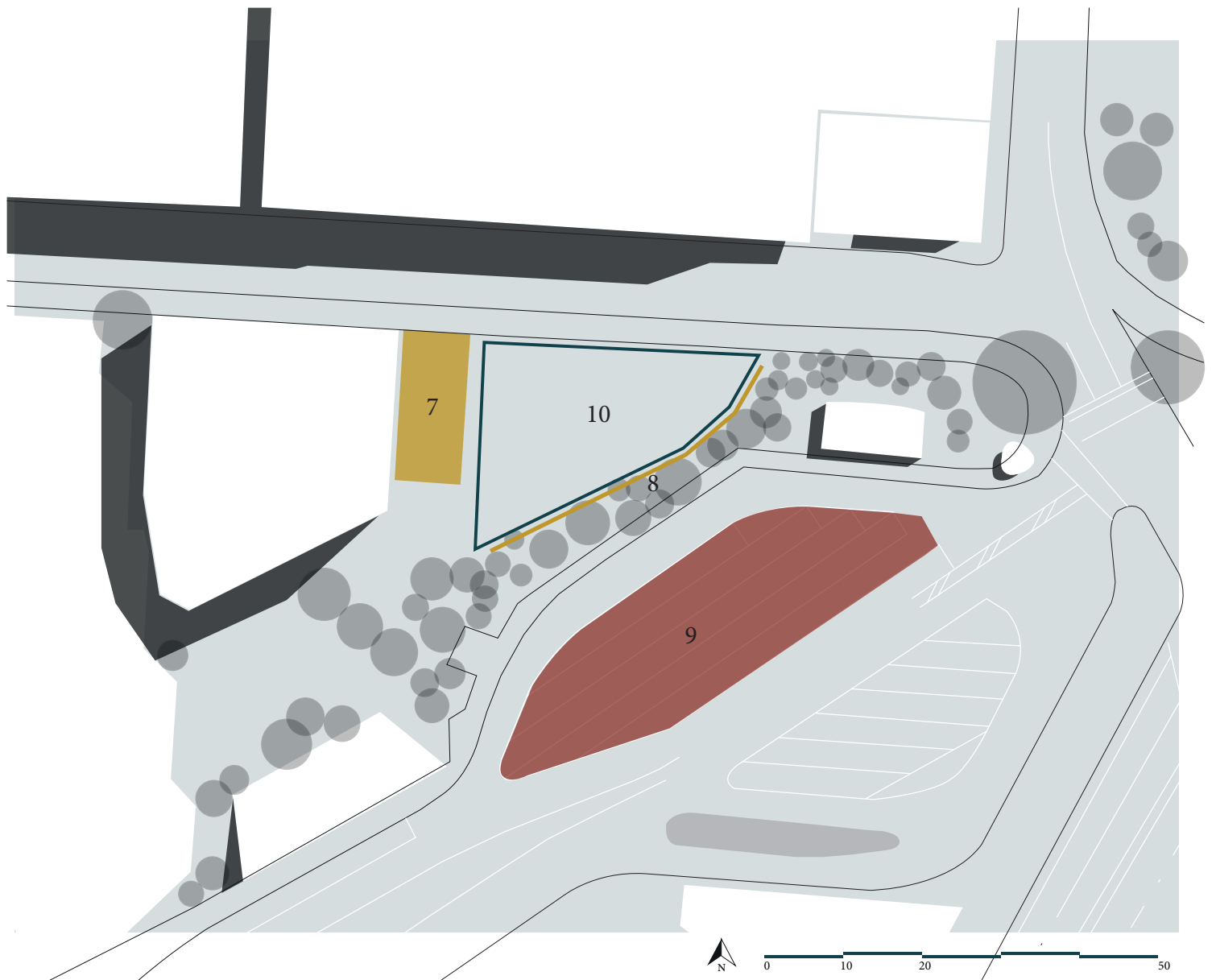


Fig. 5.09. Immediate site analysis - opportunities and threats.

OPPORTUNITIES / THREATS

7. Sydney Street Substation

Directly west of the site is the former Sydney Street substation (fig. 5.05, 5.06), a 1920s category 2 heritage listed building. Its unique architectural style gives it its heritage value, as well as it being representative of a growth in demand for electricity in New Zealand (Heritage New Zealand).

8. Exposed Southern End

While the trees act as a buffer against any noise from the road below and provide some privacy, any facade on the southern end of the site is still exposed visually to the road below. There is the opportunity to make an architectural statement through the consideration of this facade (fig. 5.07).

9. Bus Station

A potential threat to the project is the bus station located directly below the site, facing its southern side. The buses, while not being overly noisy, are a visual distraction and can seem obtrusive to the view of the city looking out. The trees which line the southern side of the site help mitigate this by creating a subtle visual barrier.

10. Limited Area

The site has an area of approximately 800 square metres, which may pose issues if the building is to be developed beyond a single use, incorporating other program.

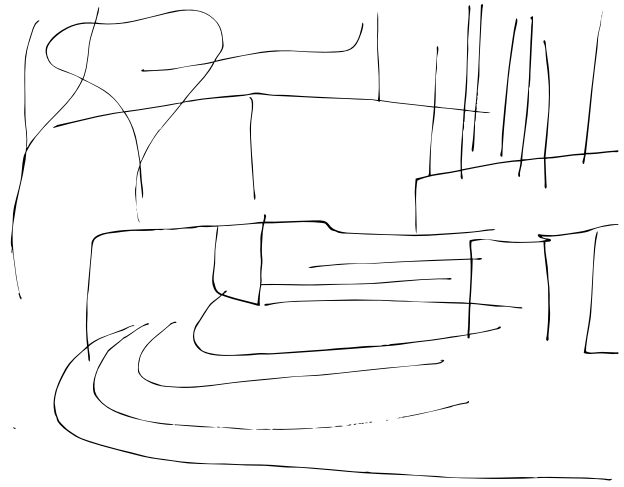
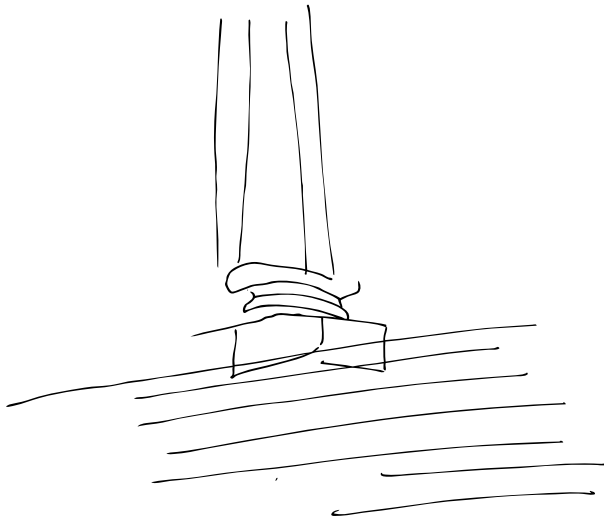


Fig. 5.10. Site blind series - part one.

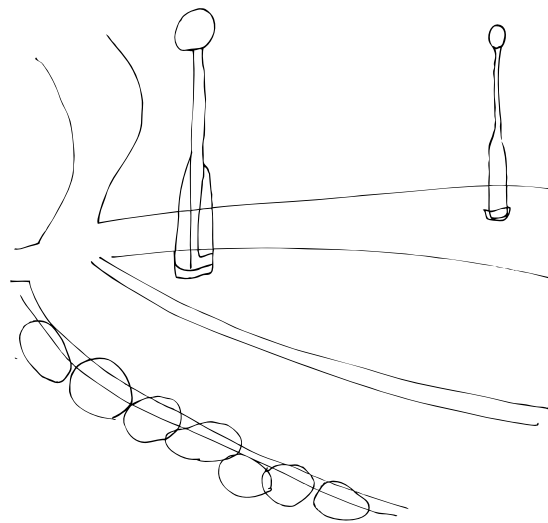
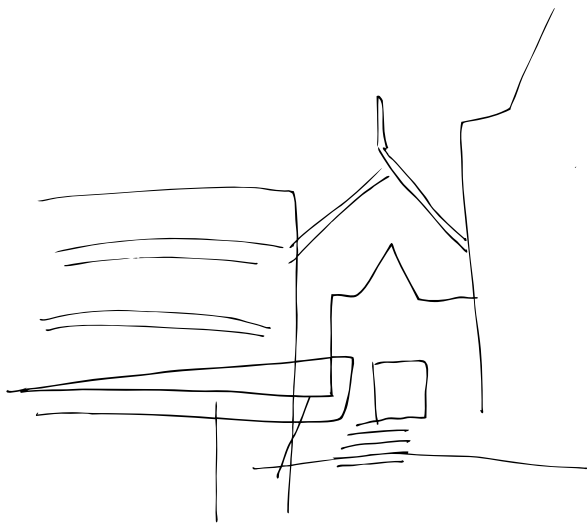


Fig. 5.11. Site blind series - part two.



Fig. 5.12. A comfortable enclosure (fabric installation).



Fig. 5.13. A comfortable enclosure (maquette).



Fig. 5.14. A comfortable enclosure (second maquette).

Figures 5.10 - 5.14 illustrate exercises conducted very early in the research process. The outcome included a series of blind drawings, maquettes, and a fabric installation. They were intended to express ideas about the proposed site, which was, at that stage, to be within the surrounding vicinity of Parliament grounds. The blind drawings were completed at Parliament grounds, and in response to these, the maquettes and the fabric installation explore qualities of a soft, comfortable enclosure. This introduces the idea of openness and transparency in the architecture around the site which is later explored in the preliminary design phase.

5.3. PROGRAMME ANALYSIS

The programme of a church building is chosen in direct response to the research findings about collective memory and identity. Churches are places where communities gather regularly, and through their association with ritual and routine, have large potential for recollection of memory within the building, and for connections to be made between the people who occupy it, thus enabling the creation of a new collective identity. The church is not only a place for religious practice, but a place of social gathering. Misztal argues that memory is social, because “memory exists through its relation with what has been shared with others: language, symbols, events and social and cultural contexts” (381). Designing for the programme of a place where a community gathers, rather than for that of an individual or family home, creates a much greater opportunity to engage with memory in order to create sense of belonging by incorporating the evidently important social aspect.

Activities which take place at the existing Assyrian Orthodox church include: Sunday mass, nightly prayer services, baptism services, marriage ceremonies, midnight mass services at Christmas and Easter, bible studies and Assyrian (language) school. Other programme related requirements include a kitchen, a hall space, an office with storage, and general storage space.

The building at this site, being the epicentre of two areas where large portions of the Assyrian community live, serves mainly the members of the northern suburbs. The occupancy of the building will remain relatively low during Sunday morning mass and nightly prayer services, hosting a maximum of 80 people. This adequately accommodates a recently decreased Assyrian population in Wellington. Therefore, it can be used for nightly prayer services, baptism services, marriage ceremonies, bible studies and Assyrian school. It will be able to accommodate for the population from the Northern suburbs gathering for a Sunday morning service. At Christmas, Easter and feast day celebrations, where more of the church gathers at one time, the existing church in Strathmore will be used as it was designed to accommodate the entire Assyrian community in Wellington.

The site's low capacity is one of its limitations, and this is uncovered in the following chapter discussing preliminary design. The concept which is selected to develop from preliminary design is selected based on the potential it holds in answering questions on sense of belonging through design. At the same time, the capacity of the building is compromised. The ritual space eventually decreases to hold a maximum of approximately 40-50 at one

time. This means that the space may not be used for events where there are many people gathering at once, such as for larger marriage ceremonies or baptism services. The building still may be used for prayer services and masses, and by individuals who wish to visit alone outside of service times. The selection of the concept somewhat dictated the use of this building, but the details about use are less relevant to this research than what the selected brings in answers to its aims and objectives.

6

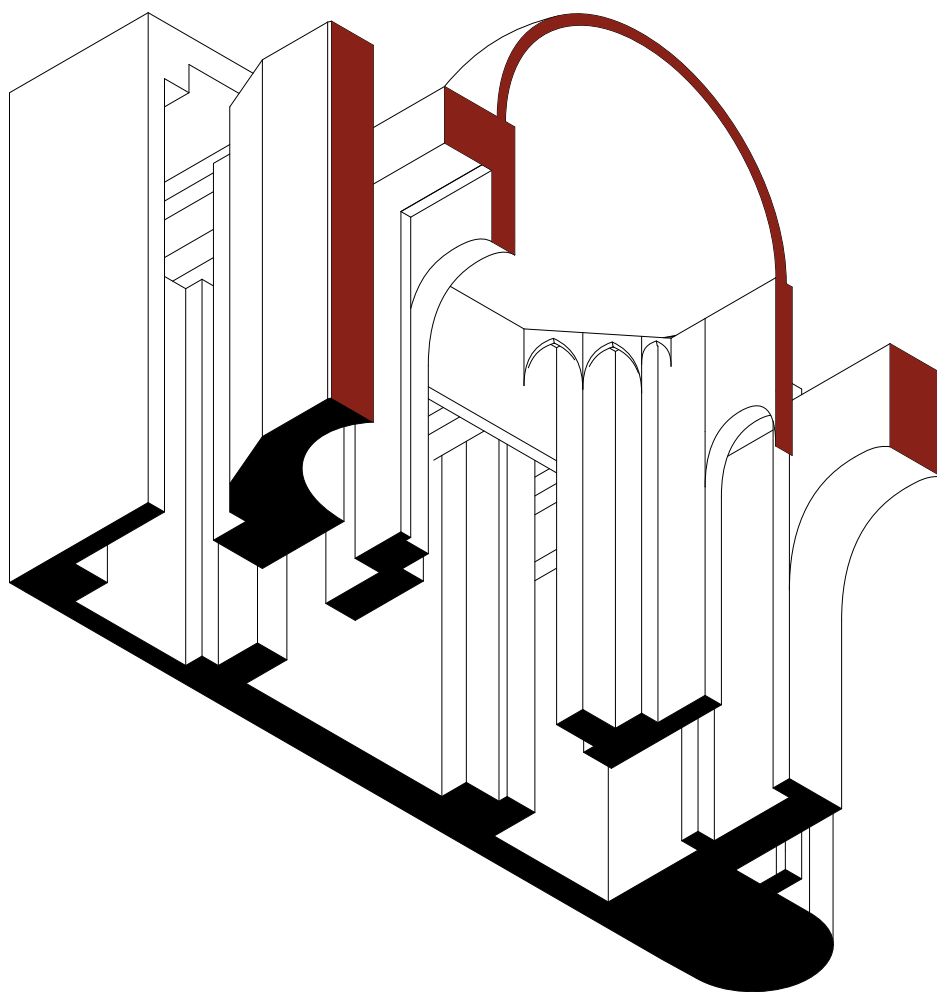


Fig. 6.01. 3D section through the *copy* concept.

SIX //

PRELIMINARY DESIGN

6.1. THE COPY APPROACH

REPLICATING TRADITION

In the preliminary design phase, each approach of *copy*, *adapt* or *merge* is tested in the form of concept design. The first of the preliminary design concepts comes through the *copy* approach. It aims to replicate an existing typology of building for the Assyrian church in Wellington. Through recreating a historic design as accurately as possible, it can evoke the collective memories in migrants of their home country.

The design of the Assyrian church as a *copy* will take the plan of the Church of the Virgin at Khakh, in Mesopotamia (fig. 3.08), and graft it onto the site at Kate Sheppard Place in Wellington, New Zealand. The Mesopotamian precedent reflects the adaptation of the Byzantine church as it arrived to Mesopotamia, where Assyrians identify their geographical origins. The traditional plan interestingly closely resembles the plan drawn from my personal memory of my experience as a child of the Assyrian church in Wellington (fig. 6.02). Particularly notable is the similarity between the two in the transverse nave - the way that the nave, in both my memory drawing and the Church of the Virgin, is wider than it is long, comparing with most gothic cathedrals which have a long nave with aisles.

The *copy* concept was initially intended to replicate as much as possible from the original building. Information on the Mesopotamian church at Khakh is limited. Fortunately, the layout plan, which could be the most crucial element to reflecting ritual, is available. Hamilton covers this building but only briefly describes its brick and stone materiality and the eastern orientation. What is left to do, then, is to fill in the gaps through a careful design process, which is described in the following paragraph and through figures 6.03 - 6.07.

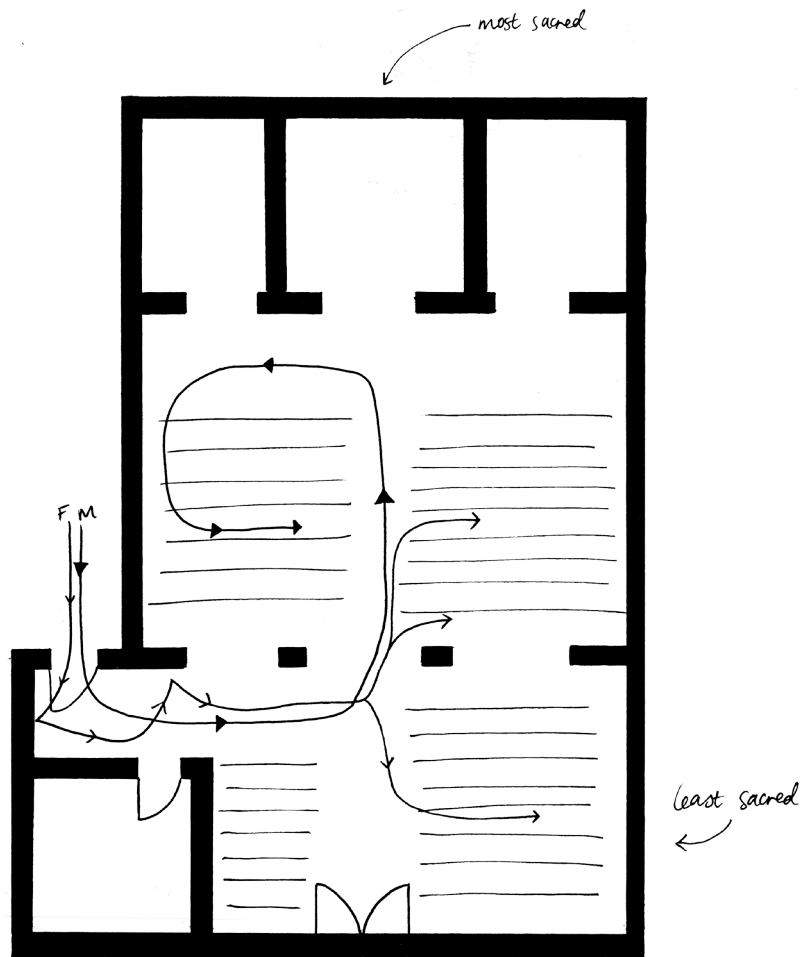


Fig. 6.02. Memory drawing - Assyrian Church in Wellington.

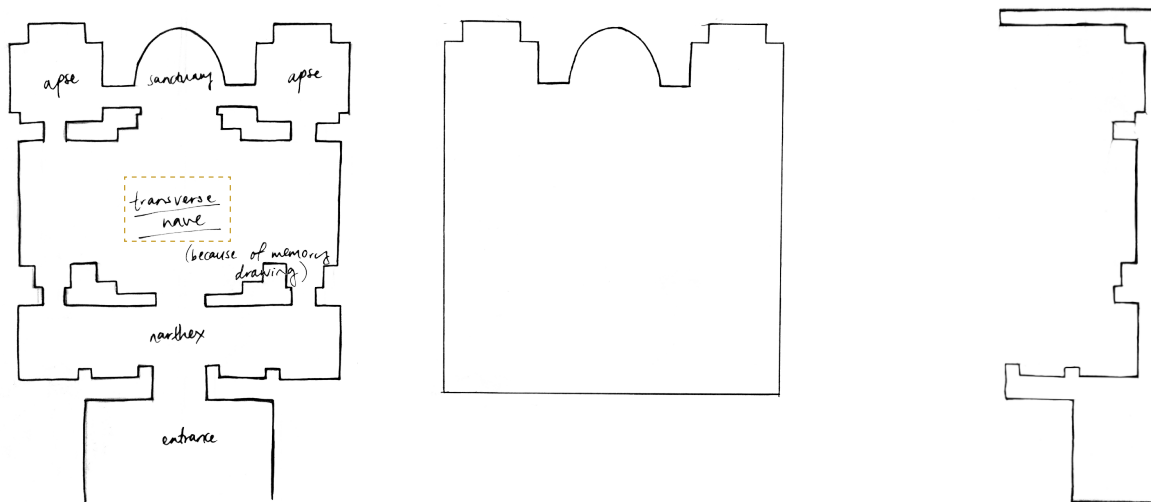


Fig. 6.03. Extracting elevation and section from the plan of the Church of the Virgin at Khakh.

A notable characteristic of Byzantine churches is the way that the plan and elevation strongly resemble one another, geometrically. So to push the design of the copy concept, sections and elevations are extracted from the plans. First, this was imagined through a sketch physical model (figure 6.04) and then taken into a digital model and further refined (fig. 6.05).



Fig. 6.04. The assembly of the *copy* through the lines of the plan (sketch model).

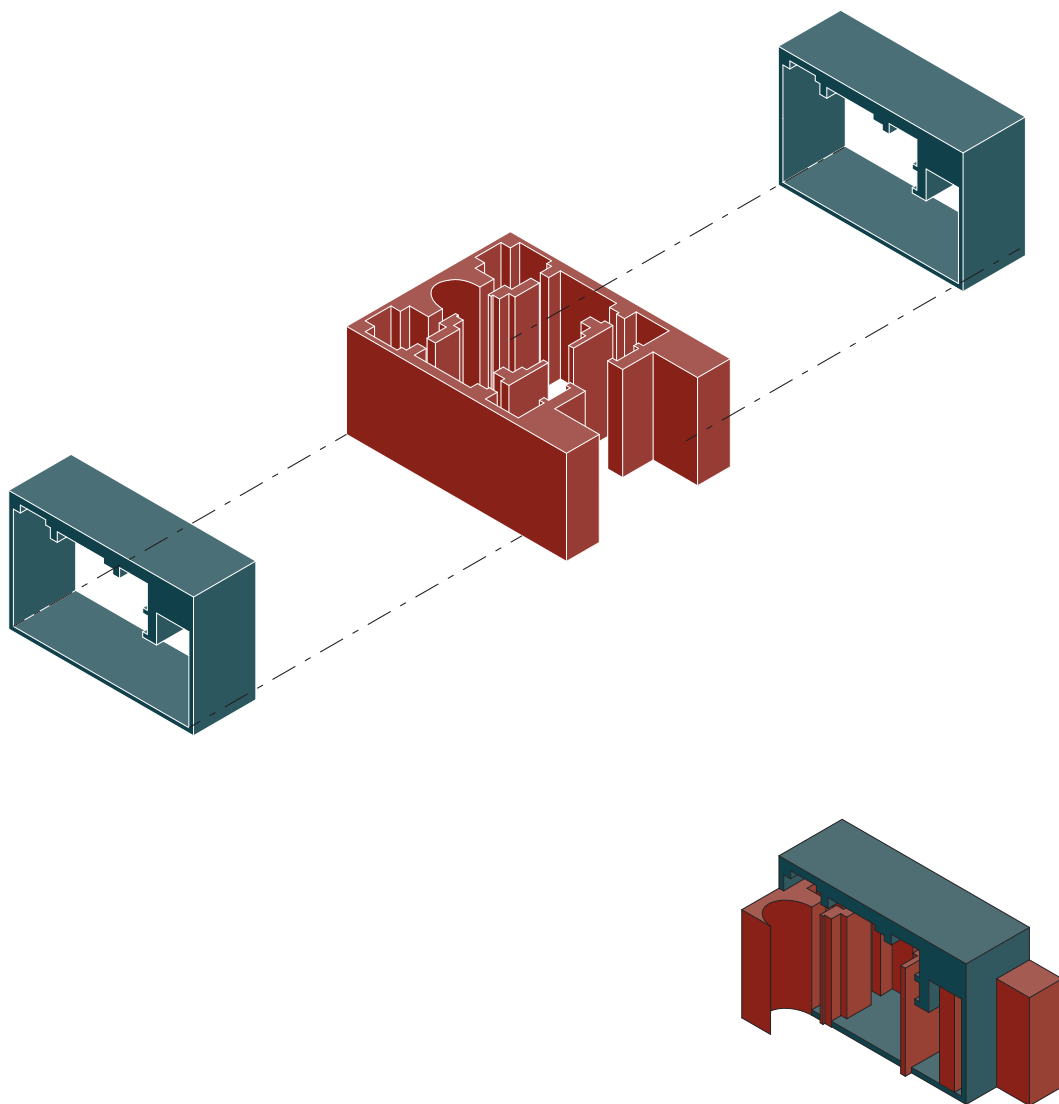


Fig. 6.05. The assembly of the *copy* through the lines of the plan (digital model).

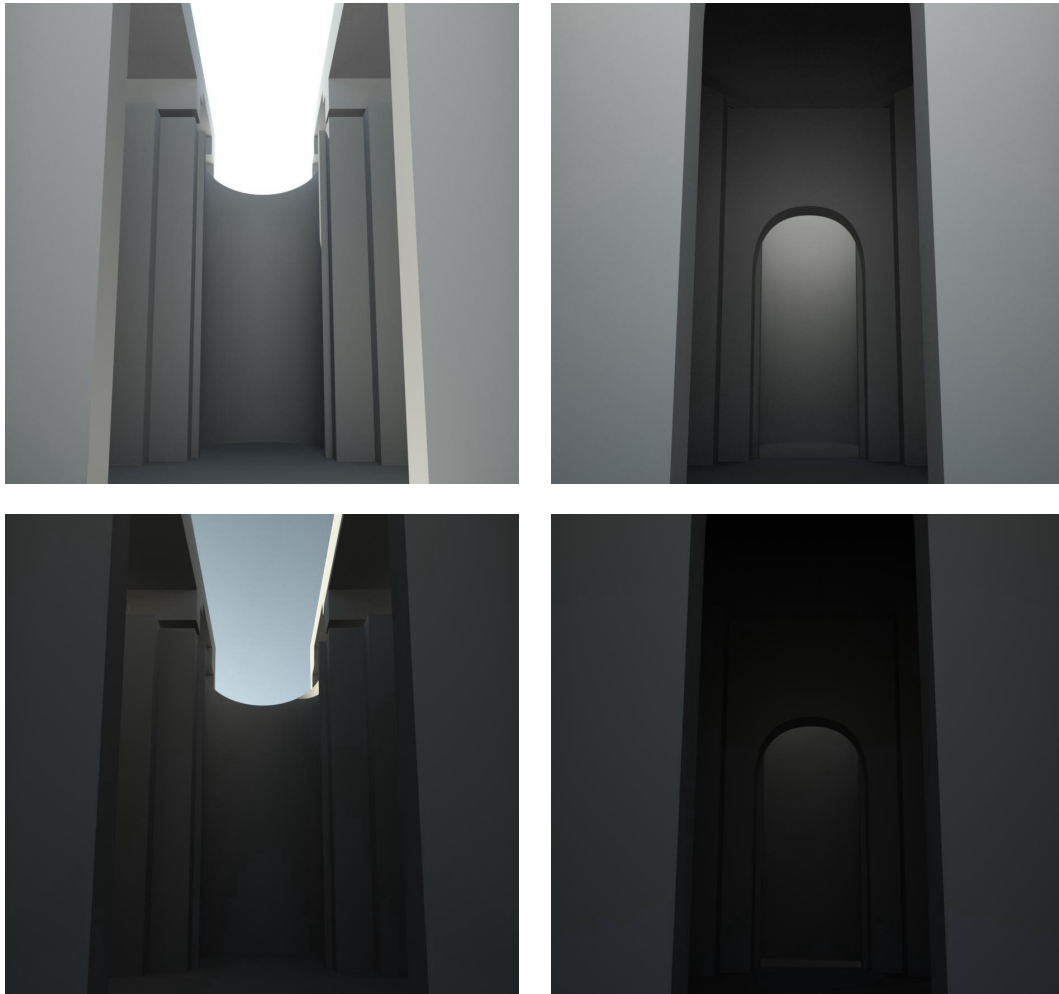


Fig. 6.06. Lighting experiment - open and closed.

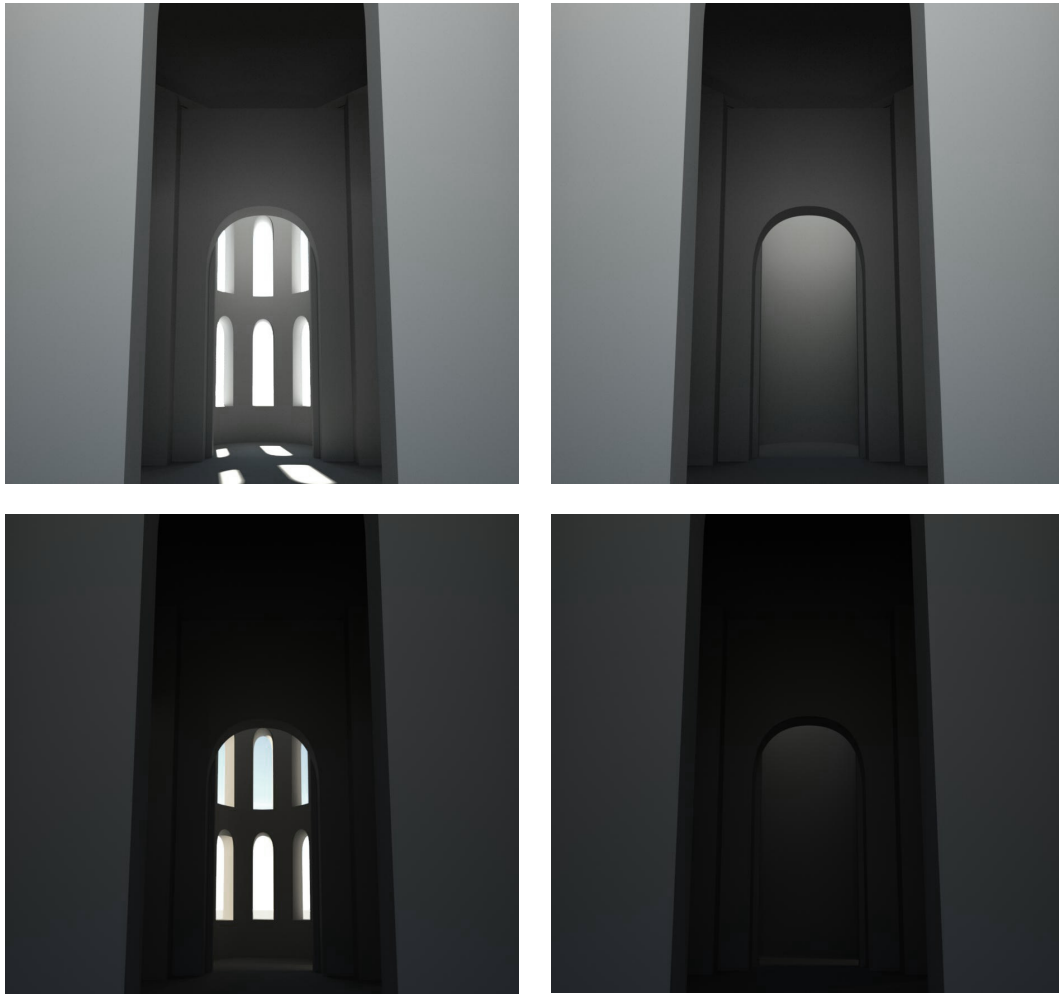


Fig. 6.07. Lighting experiment - windows and skylight.

While developing the form of the *copy* concept, these lighting study images were produced with each experimentation, showing the natural lighting qualities inside the nave, looking towards the sanctuary. This is explored bearing in mind the intention of Byzantine church architecture, to draw focus towards the altar.

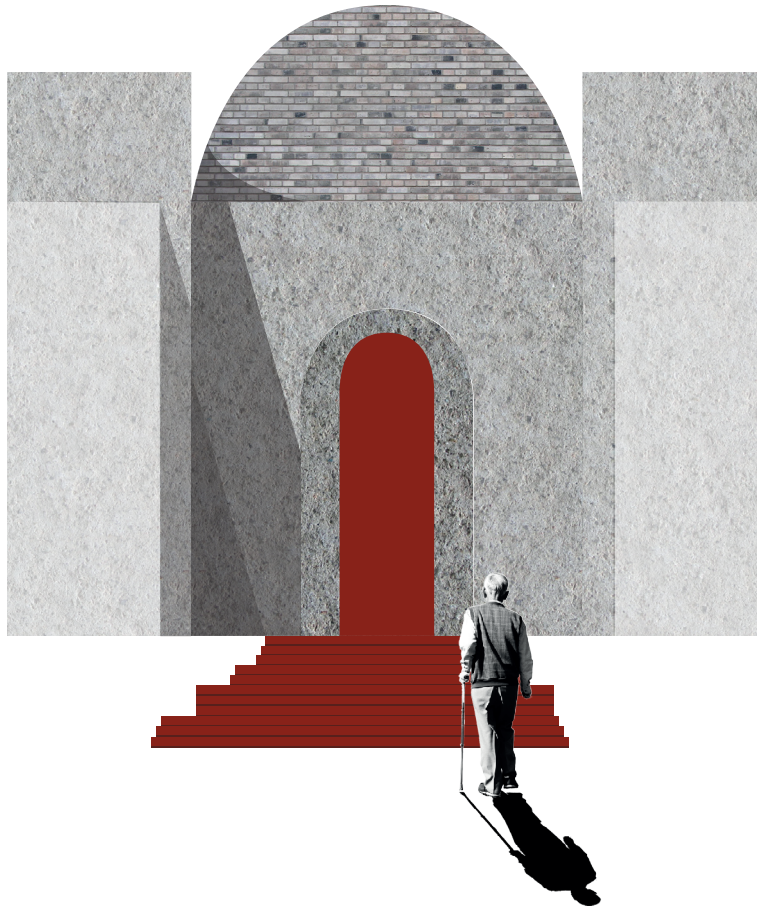


Fig. 6.08. The *copy* concept - elevation.

The copy concept design will be the least developed of all the preliminary design concepts, due to the restrictions and limited creative freedom which comes with the nature of copying. In fact, to copy an ancient typology proved to be difficult from the outset, when with a limited availability of information about the selected precedent. For this reason the extraction of the plan in section and elevation is developed and by doing so, it introduced an interpretation process rather than a simple act of *copy*.

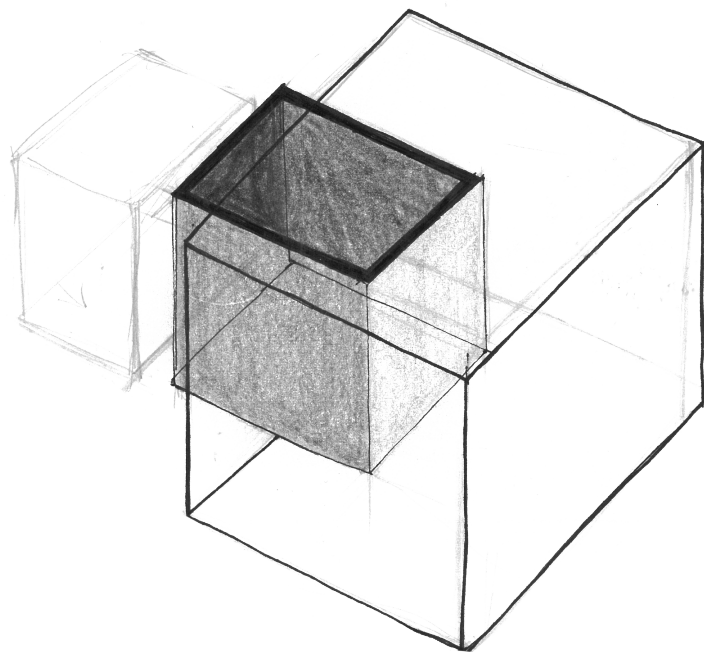


Fig. 6.09. The *adapt* concept diagram - a transparent addition.

6.2. THE ADAPT APPROACH

CHANGING TO FIT A NEW CONTEXT

The adapt approach takes the original building, and adapts it to its new context. In this case, taking the building from the *copy* concept and adapting it to the site in Wellington. One could argue that the concept of an architecture adapted to its context reflects the notion of a migrant community adapting to its new society's framework. The architecture then becomes a symbol of this, an integrated migrant society.

The factors which this concept adapts to are:

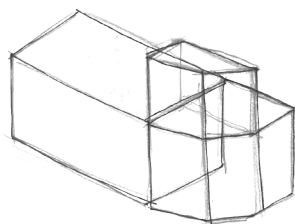
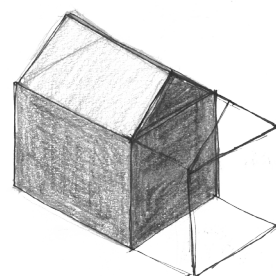
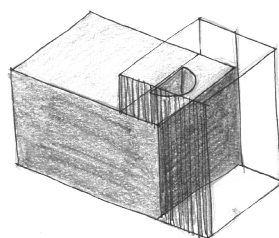
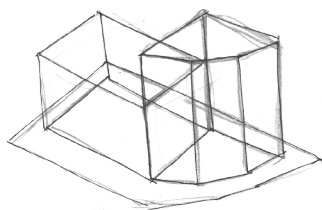
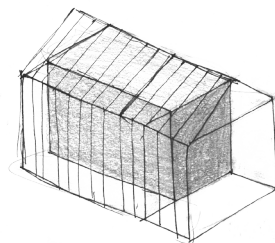
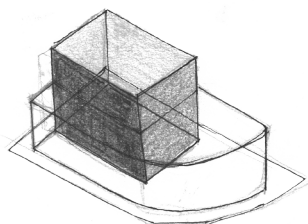
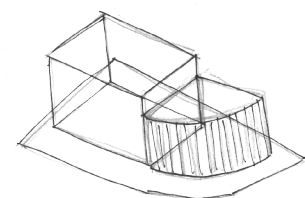
Climate: A new climate will determine the new orientation of the building, its envelope, openings for light and ventilation, and other considerations regarding comfort within the building.

Materials: The building adapts to the new context in its use of New Zealand materials; those which are readily available and commonly sourced.

Architectural surroundings: The selected site is in close proximity to three other large churches built in the 20th century, differing in size, architectural style and materiality. It is also amongst buildings of much greater height than that of the copy concept building.

New community needs: The traditional church does not accommodate for the other needs of the church community, such as a space for functions, meetings and events. The *adapt* approach will incorporate a church hall and other spaces to meet the needs of the church community in Wellington.

The following sketches address the final of the four factors which this concept adapts to: the new community needs. They explore ways to add to the solid volume that is the *copy* concept, in the form of a transparent volume.



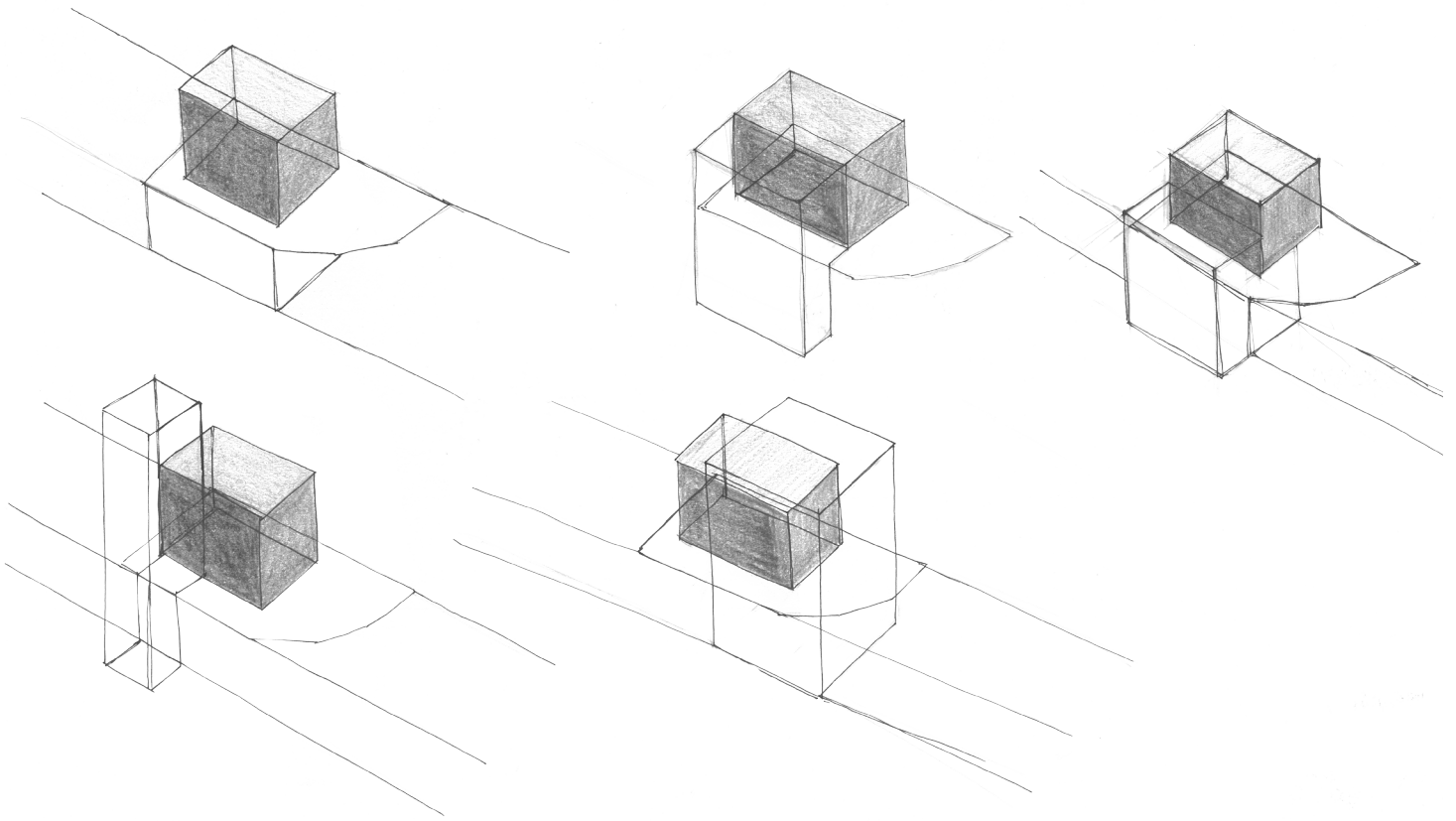


Fig. 6.10. (shown page 88 - 89) The *adapt* approach - sketch additions.

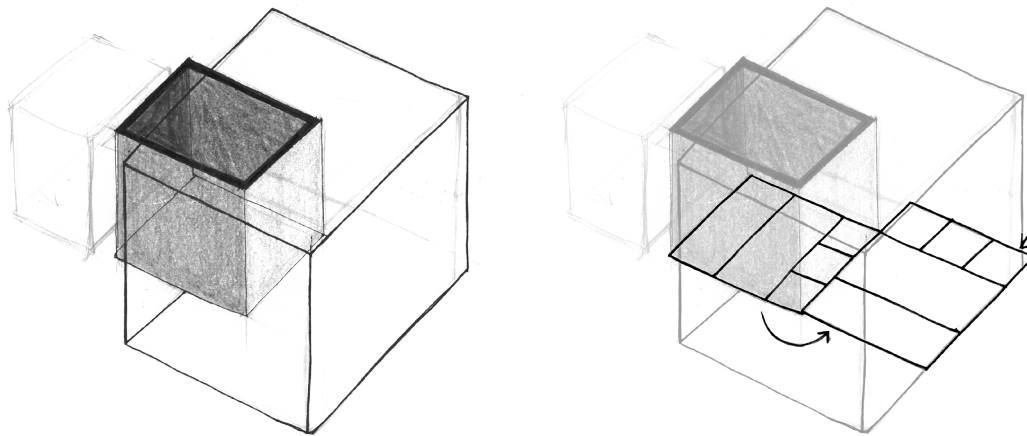


Fig. 6.11. Adapt to program/social. Swapping program to relocate ritual space.

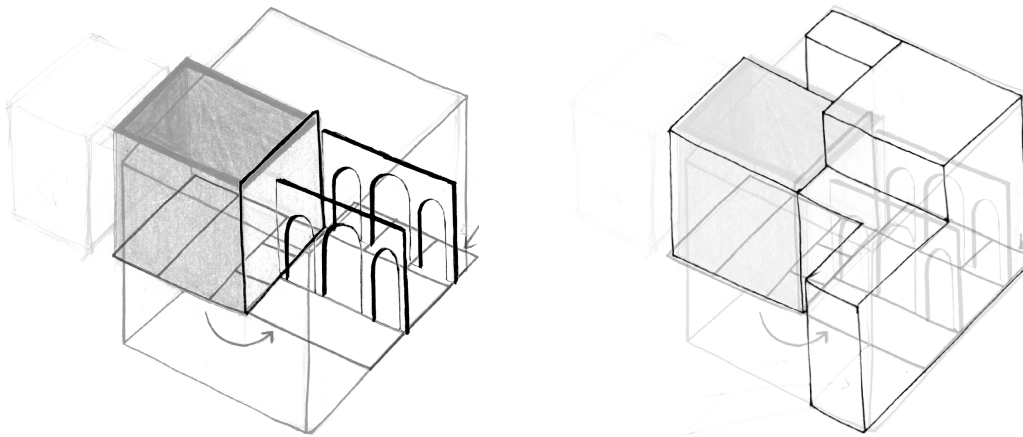


Fig. 6.12. Adapt to program/social. Inserting traditional interior to facilitate ritual.

A development on this particular iteration brings the ritual out of the *copy* and into the transparent addition, adapting to the open and welcoming culture of its new context (fig. 6.11). The traditional interior is then inserted into the new space and the *copy* is gutted and becomes the community hall (fig. 6.12).

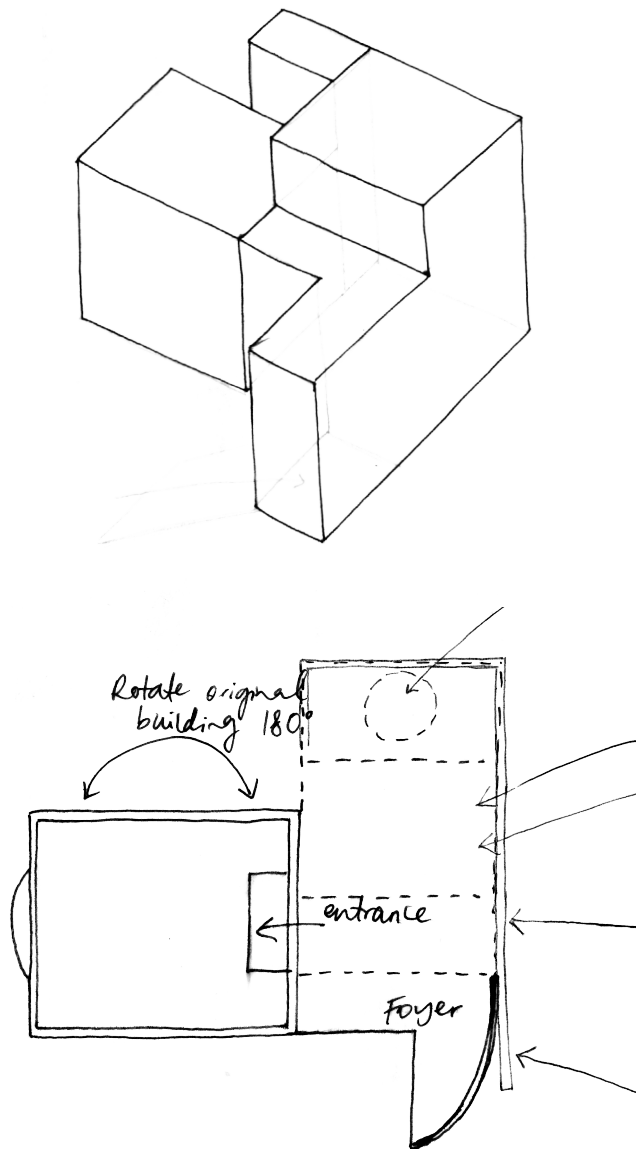


Fig. 6.13. Adapt to climate. Natural light and heat.

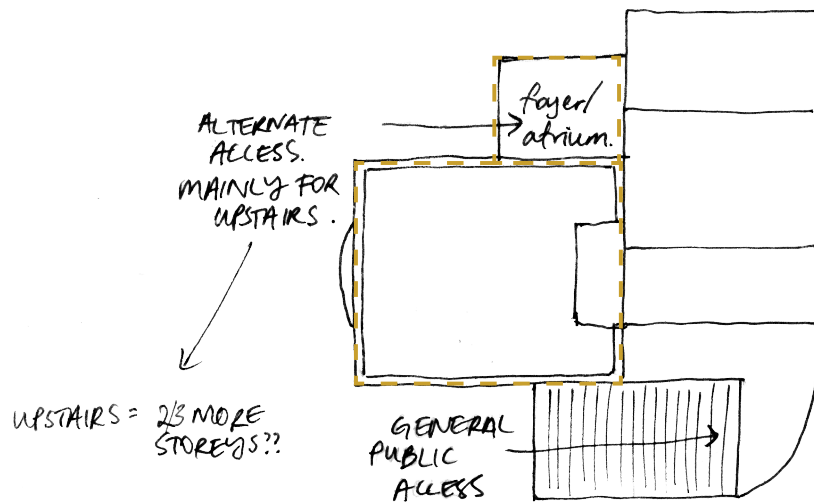


Fig. 6.14. Adapt to building heights. Adding upper levels to give height and facilitate other program.

Adding to the top of the community hall was adapting to height as well as creating more space for other program (fig. 6.14), and a foyer on the Kate Sheppard Place side is an alternative access.

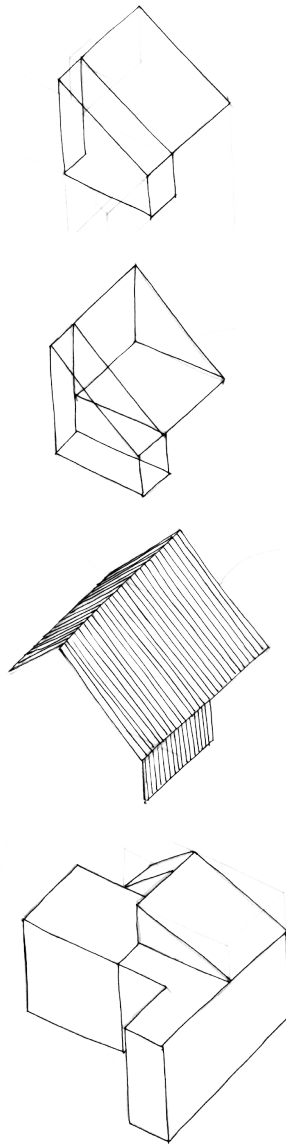


Fig. 6.15. Adapt to climate. Roof form and rain fall.

These sketches explore adapting to climate through the roof form. This idea was not carried thorough in this concept because of the importance found in the roof shape through those initial blind drawings. Therefore the roof form retains its flat appearance, while obviously adapting to climate by having a concealed slope.

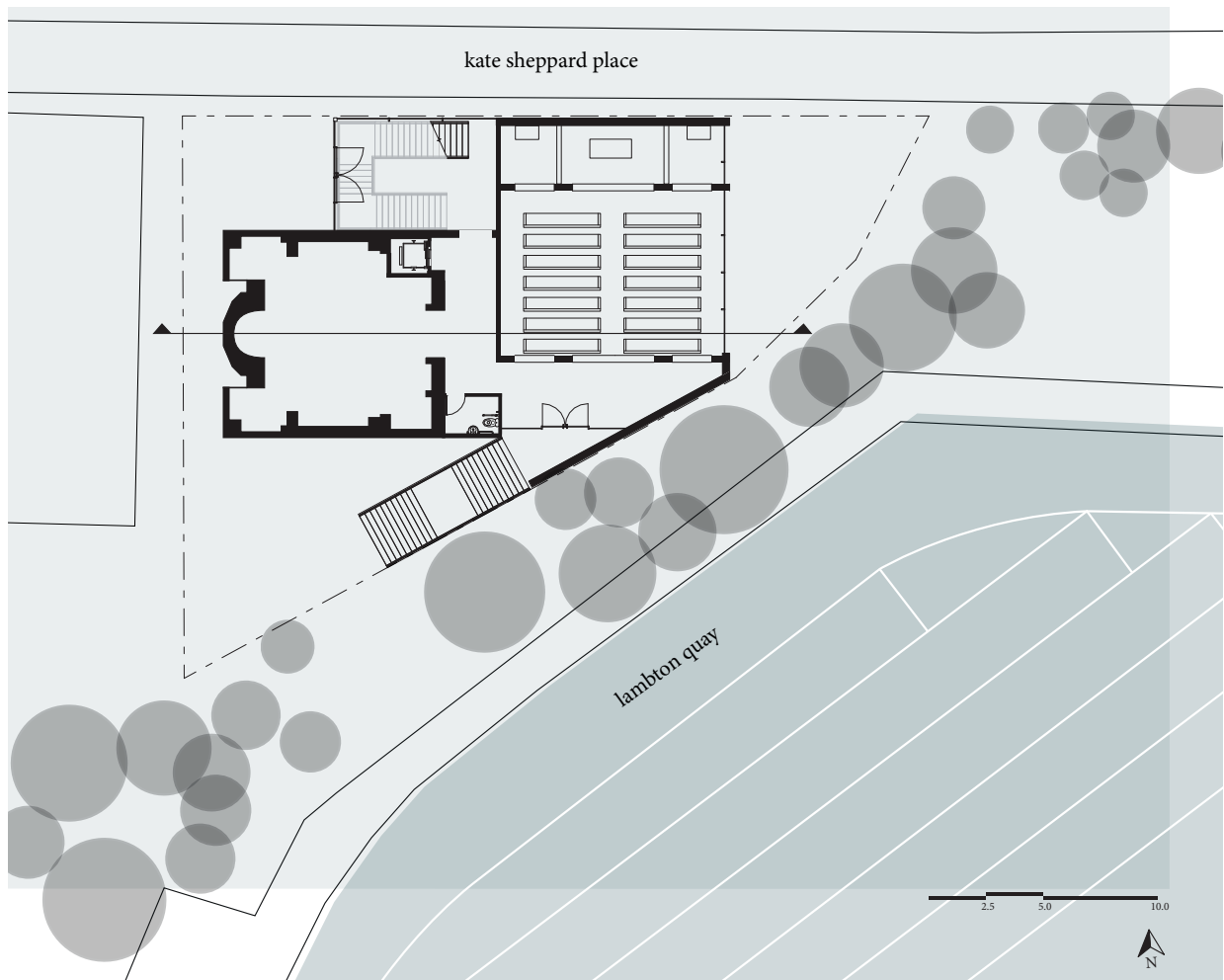


Fig. 6.16. *Adapt* concept ground floor plan/site.

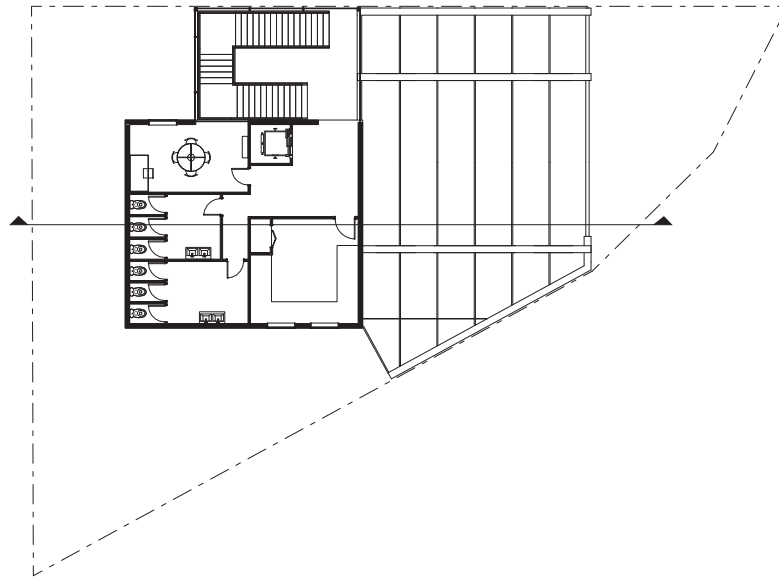


Fig. 6.17. *Adapt* concept level one plan.

The outcome of the adapt concept approach has access from both Lambton Quay and Kate Sheppard Place. The sacred space of ritual is at right angles with the old footprint, while and upstairs other facilities are available. The newfound leniency in this approach offers an opportunity to adapt to other programmatic requirements of the Assyrian community in Wellington, along with offering the opportunity to be more creative and explore different options.

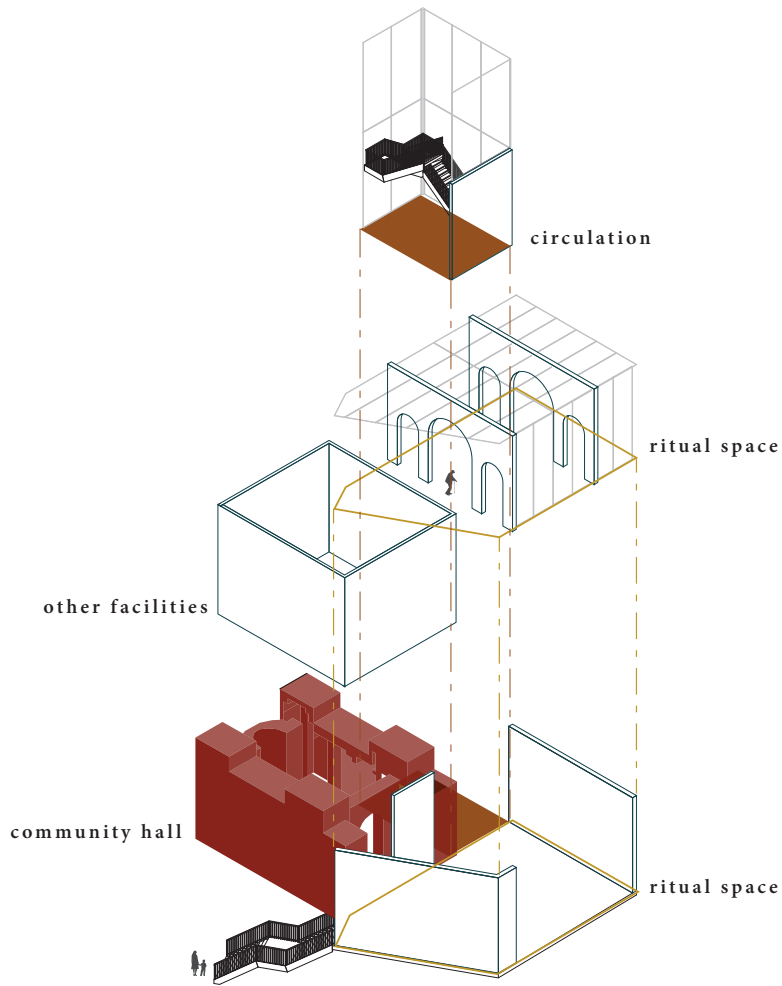


Fig. 6.18. *Adapt* concept programmatic diagram.

This concept not only takes on the new programmatic requirements of the church in Wellington. It adapts to the special open and transparent nature of the surrounding built environment noted in the site analysis chapter, particularly through the blind drawings. This concept alters the traditional Assyrian church building by challenging its historically enclosed, private design and exposing the ritual by bringing various design elements of the interior to the building's transparent addition.

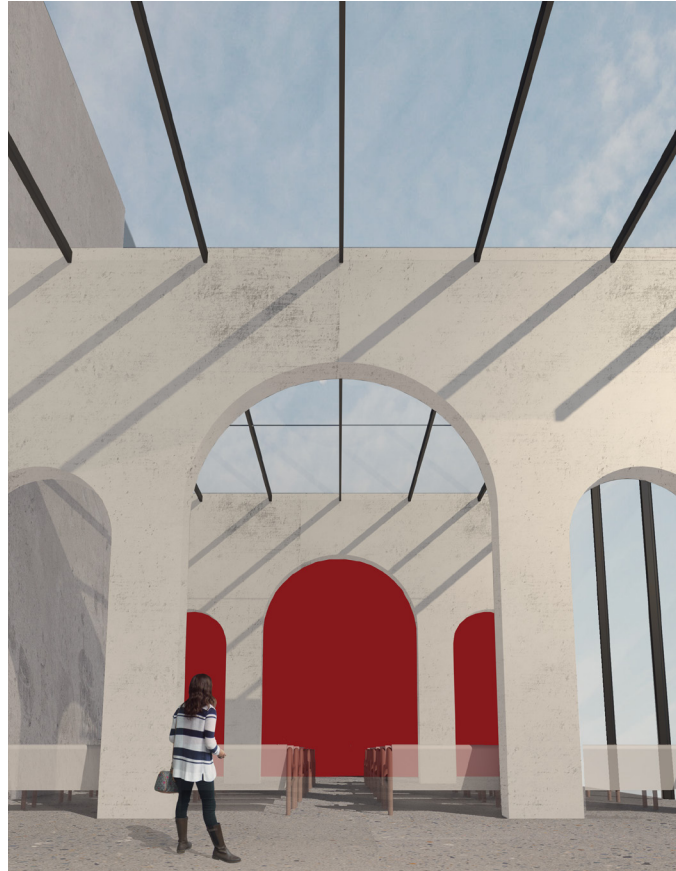


Fig. 6.19. *Adapt* concept - the transparent ritual space.

The design concept centres on this idea – of the ritual and happenings of what is inside the church being somewhat exposed to the outside (fig. 6.19). In this way, it is adapting to its context. This, however, drastically affects the interior qualities of traditional Byzantine church architecture in terms of light and even sound, and thus gives a completely different sensory experience inside the ritual space (refer chapter three images). Because memory and ritual connect so closely with sense of belonging, it is important that the ritual space actually focus on the sensory qualities of the traditional/old ritual space.



Fig. 6.20. St Paul's Cathedral, Wellington.

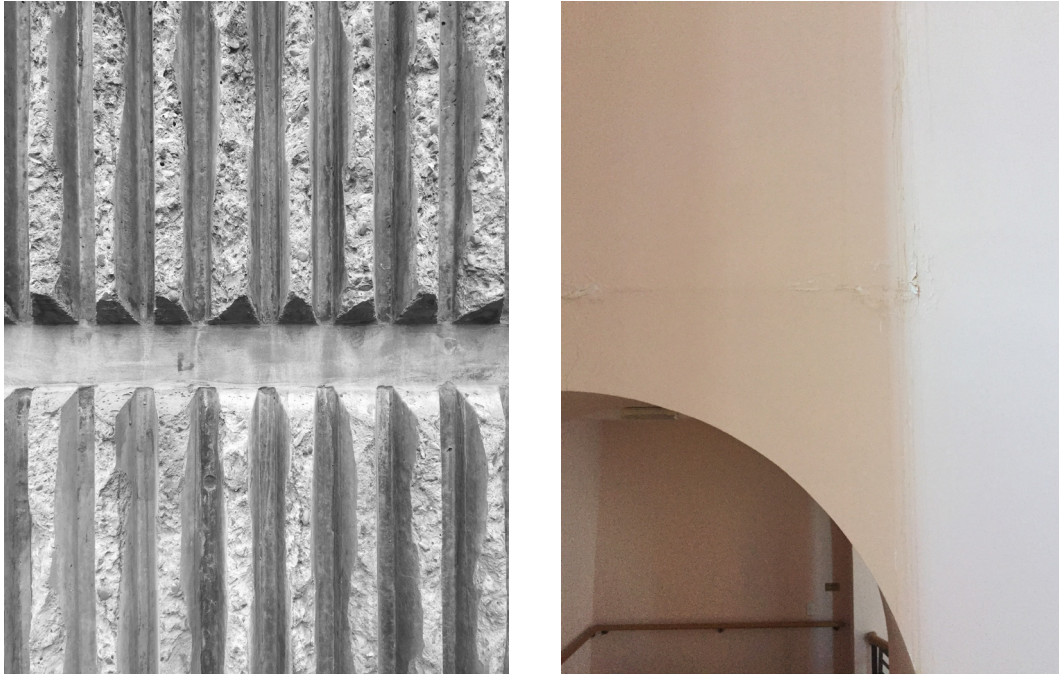


Fig. 6.21. Existing surfaces - rough and smooth.

6.3 THE MERGE APPROACH

FUSION WITH THE EXISTING

The *merge* approach, rather than adapting to site conditions, takes direct influence from buildings that exist around the site. This is to enable the emergence of the new architecture into its context to reflect or symbolise the merging of its users to the host society. This approach produced two concepts, and both influencing buildings address the notion of separating private and public in different manners.

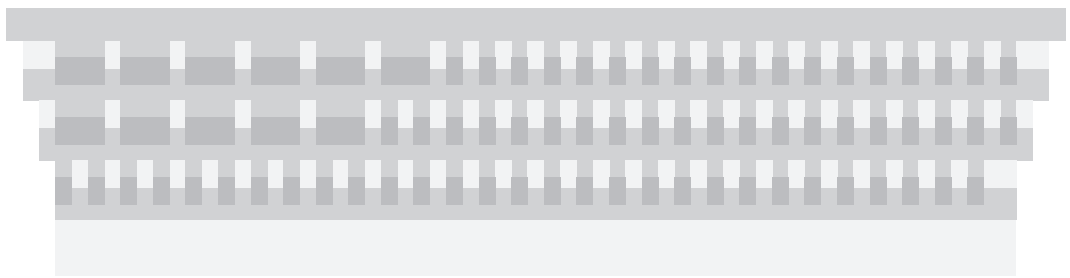


Fig. 6.22. The National Library elevation abstraction.



Fig. 6.23. The National Library, Wellington.

The first concept is influenced by the National Library on Mulgrave Street (fig. 6.23). It shows a dramatic contrast between its ground and upper stories, in the contrast between transparency and solidity (fig. 6.22).

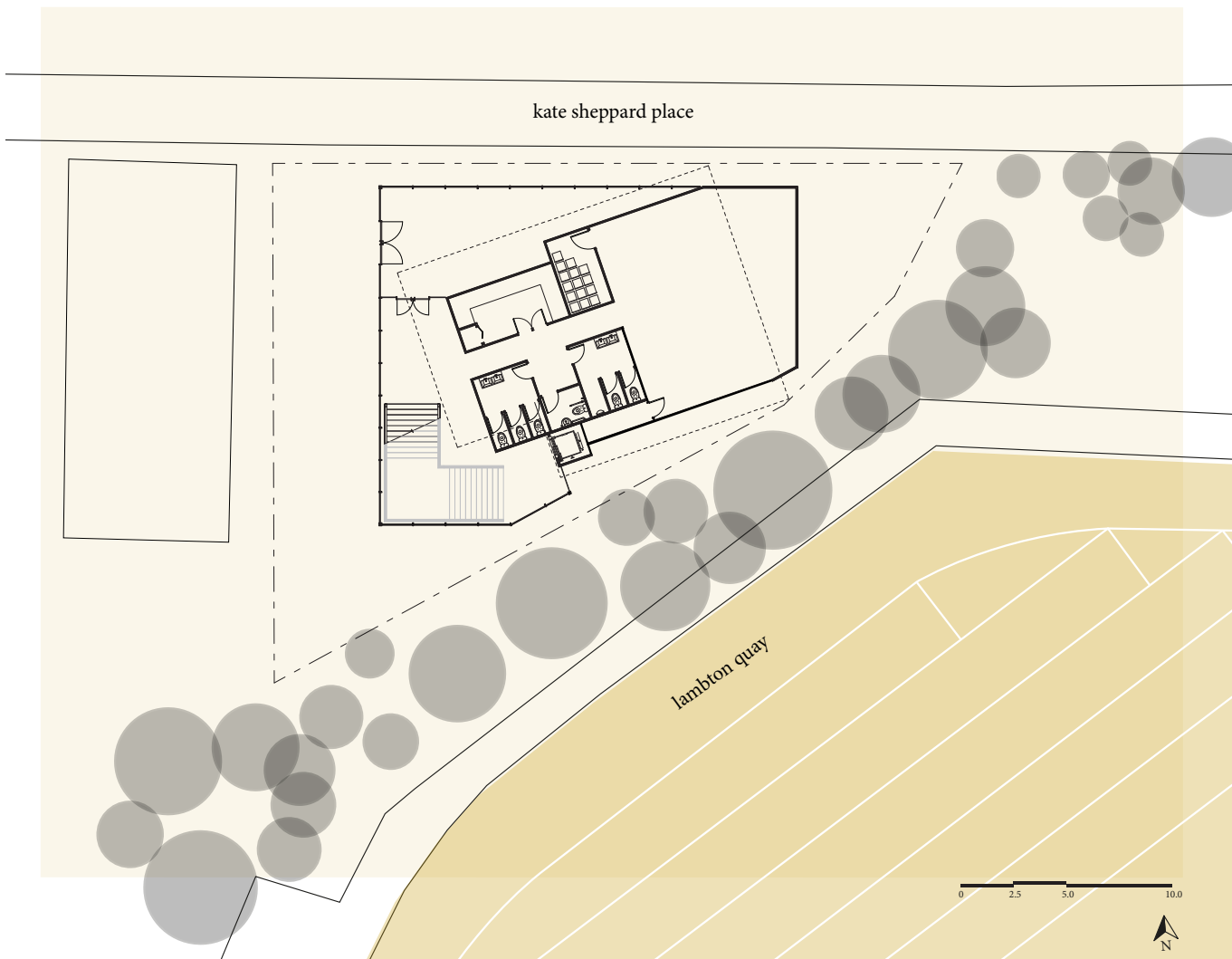


Fig. 6.24. Merge concept ground floor plan/site.

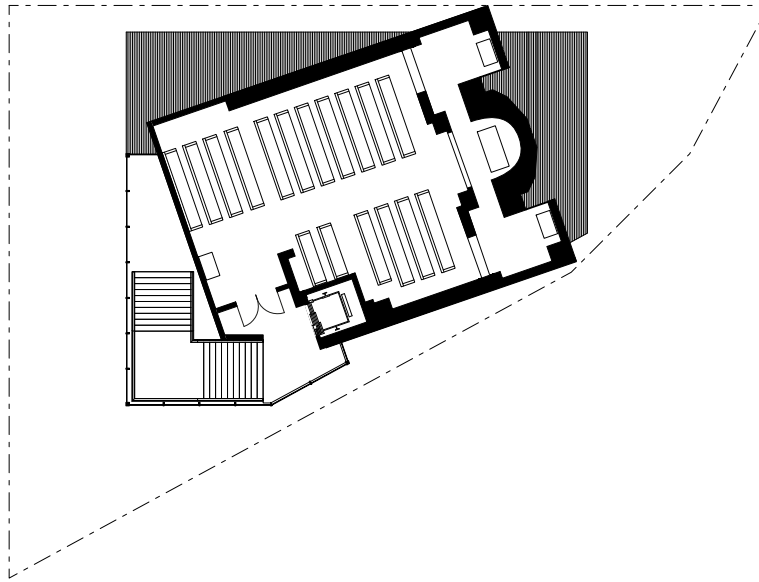


Fig. 6.25. *Merge* concept level one plan.

The main concept informed the way the different spaces were organised in the new Assyrian church. The building takes the occupant on a journey through the building, meeting several threshold points before making the entrance into the sacred ritual space on the upper level (fig. 6.26). It houses the community hall, kitchen and storage facilities downstairs. These are the parts of the building program which would not traditionally require as much privacy and protection as the ritual space, which is in the upper level.

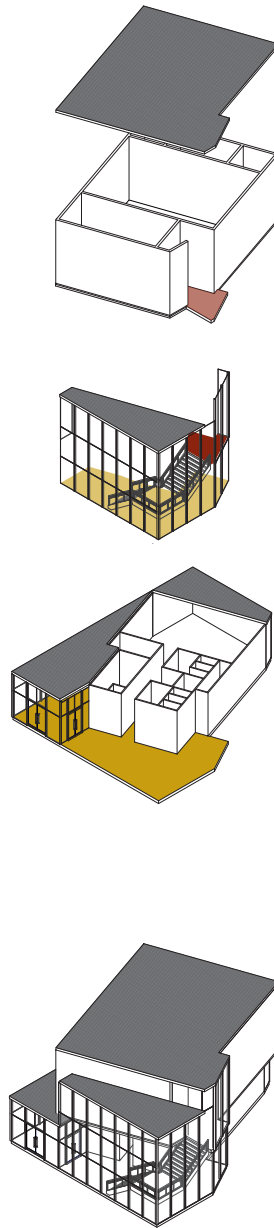


Fig. 6.26. The thresholds and the journey.

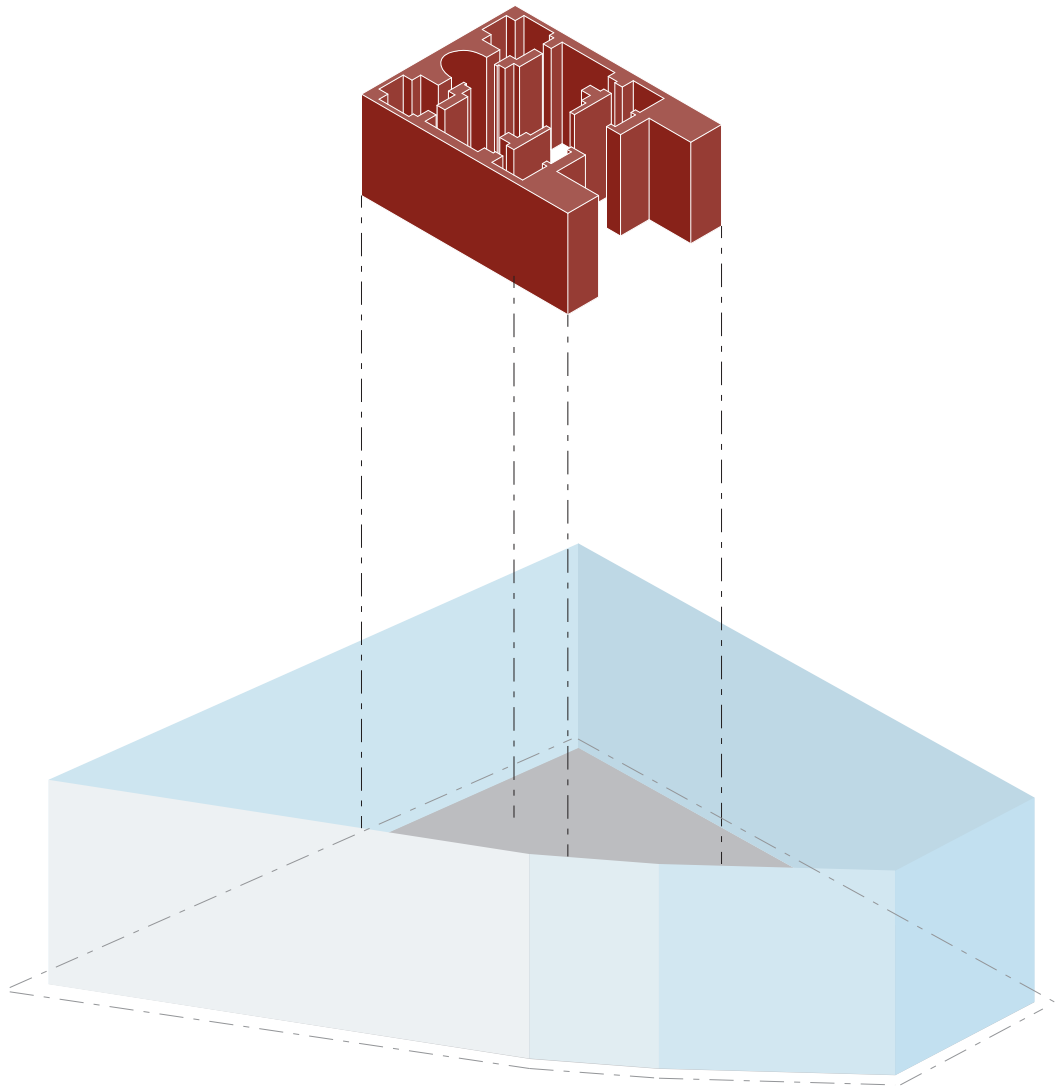


Fig. 6.27. *Merge 2.0* concept diagram.

Fig. 6.28. *Merge 2.0* concept influence - The Supreme Court.

6.4. THE MERGE APPROACH (2.0)

FUSION WITH THE EXISTING

The second *merge* concept is influenced by the Supreme Court Building on Lambton Quay. Much like the National Library, its ground floor is completely transparent and open, but what is high security is encased, or protected, in the middle of the plan - also at ground level. This is an appropriate precedent for the *merge* approach, because it reflects the open nature of the buildings around the site, but it also maintains security for what is private.

kate sheppard place

lambton quay

0 2.5 5.0 10.0



Fig. 6.29. Merge 2.0 concept ground floor plan/site.

This concept design contains the inner surfaces of the building from the copy approach, at the centre of a glass envelope derived from the shape of the site. By taking the lines of the inner surface of the copy approach plan, emphasis is placed on retaining the ritual space shapes and surfaces. The focus is placed on retaining the memory of ritual, which occurs inside the sacred space. The way that the shell/envelope takes the shape of the site not only maximises the use of the small site, but also reflects the idea of merging, or integrating with its new ground.

Two concrete walls in the north-east corner provide privacy for the community gathering space and protect the space from too much sun. The western end of the site holds the other facilities such as kitchen, storage and bathrooms. Upstairs in the western wing holds a classroom and office. On the south side of the site, there is an element of permeability and/or transparency between the ritual space and the breakout space between the sacred and the shell. This breakout space is a place to dwell during, after or before a mass with a view of the city. In a way, it is inspired by the traditional purpose of the narthex, an area where the mass could be heard but not seen. While you are outside the ritual space here, one can still hear and be part of the happenings of what is inside.

This concept is the one that is carried through to developed design. While each iteration is separate and was designed as part of a different approach, it is evident that they became more informed and free as the process went along. Designing the copy and adapt concepts meant sticking to a rigid and defined process, allowing little freedom and intuitive designing. By the time it came to the second merge concept, ideas were flowing more freely and the merge concept began to incorporate some of the adapt approach principles too. The second merge concept – while it began with the idea extracted from the Supreme Court building – became much less about following the definition of an approach. It became more about the application of what was learnt through the design iterations up until that point.



Fig. 6.30. *Merge 2.0* building entrance perspective.

7

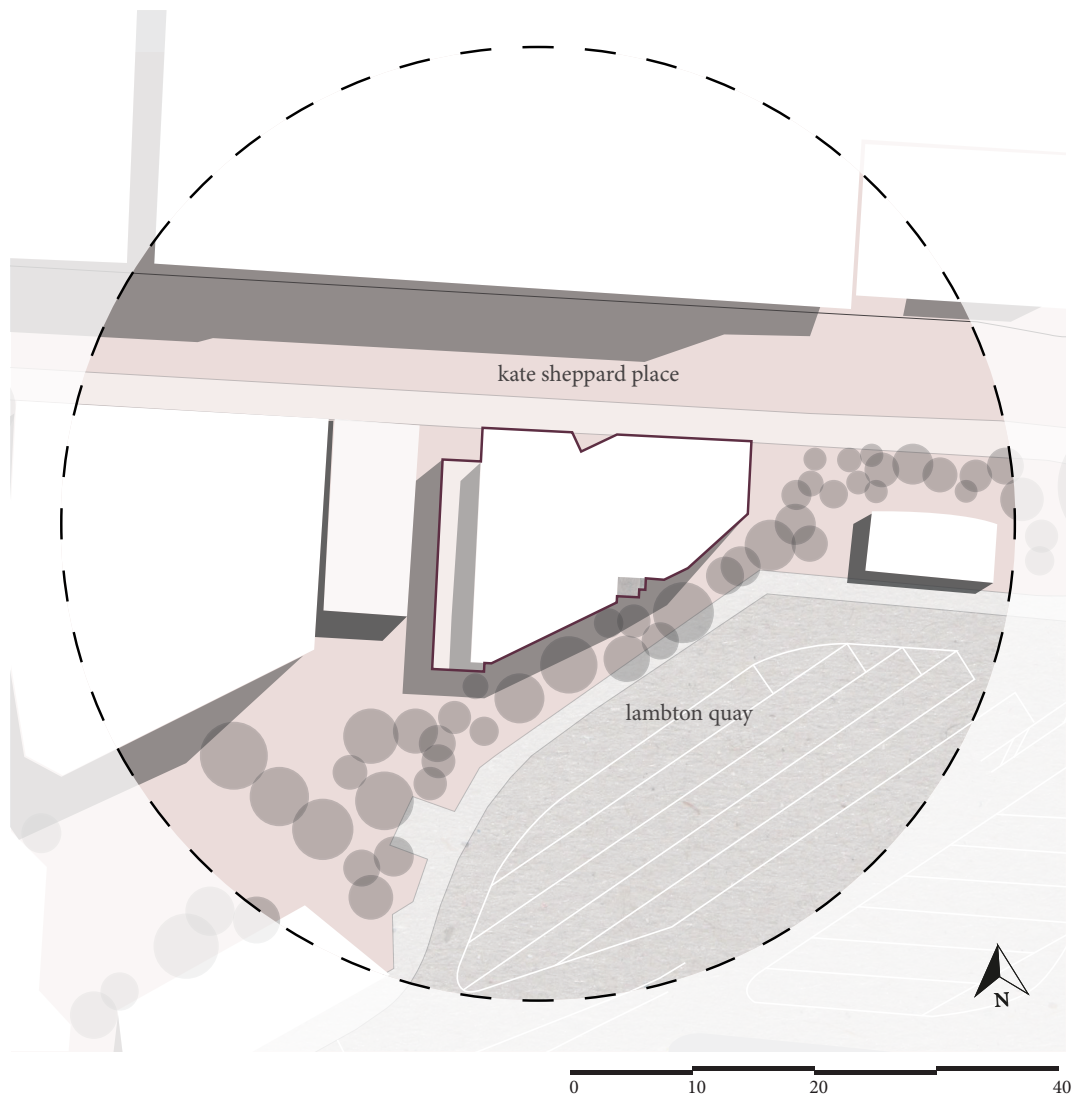


Fig. 7.01. Site plan.

SEVEN //

DEVELOPED DESIGN

In this last stage of design, the architecture will be developed to engage more directly with the importance of considering memory as a trigger to create sense of belonging. In the process, a focus on the interior qualities of the spaces becomes paramount. In fact, through the development of the intuitive paintings previously done on Byzantine architecture, it becomes clear that the most memorable attributes of the space are the ones which are internal and sensory based, less about the formal exterior qualities or the general merge concept, hence the development of the interior architecture.

In this part of the design process the building was refined according to various factors. The new entrance cuts out of the building footprint in order to more clearly define the point of entry, the door facing towards the route up from the two public transport stations. This entrance also directs people towards the main destination of the building, pointing them in the right direction from the outset of the journey through the building. The inner building faces east, as it does historically, which juxtaposes with the entrance to the shell, and its relationship to the street.



Fig. 7.02. Exterior perspective.

This issue is taken as an opportunity to create the threshold points which the adapt concept portrayed. These thresholds are emphasized and marked with a ramp which the user must travel up, finally making it to the entrance of the ritual space (fig. 7.13).

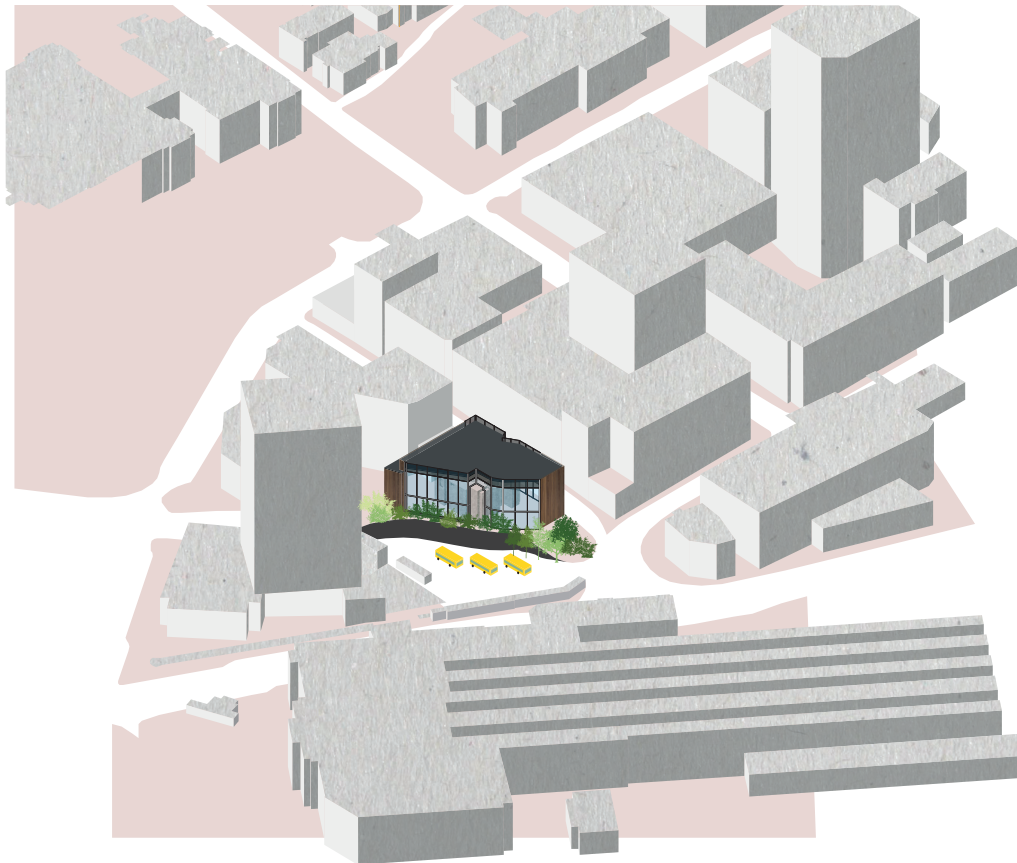


Fig. 7.03. Site axonometric diagram.

The western wing for other programme is offset from the rest of the building (the main shell) at the street edge, to main the glass shell and what's encased the main focus (fig. 7.04). Because of the change made to the entrance, the inner building was required to shift south in order to create plenty of space inside the entrance doors and open up that space. This meant that the south east corner of the inner building meets the edge of the site boundary/ the surface of the envelope. The way this is treated, exposing the inner building slightly, is to allow a glimpse of what is inside to the occupants of Lambton Quay (fig. 7.03), and to definitively separate the crush space and community gathering space.

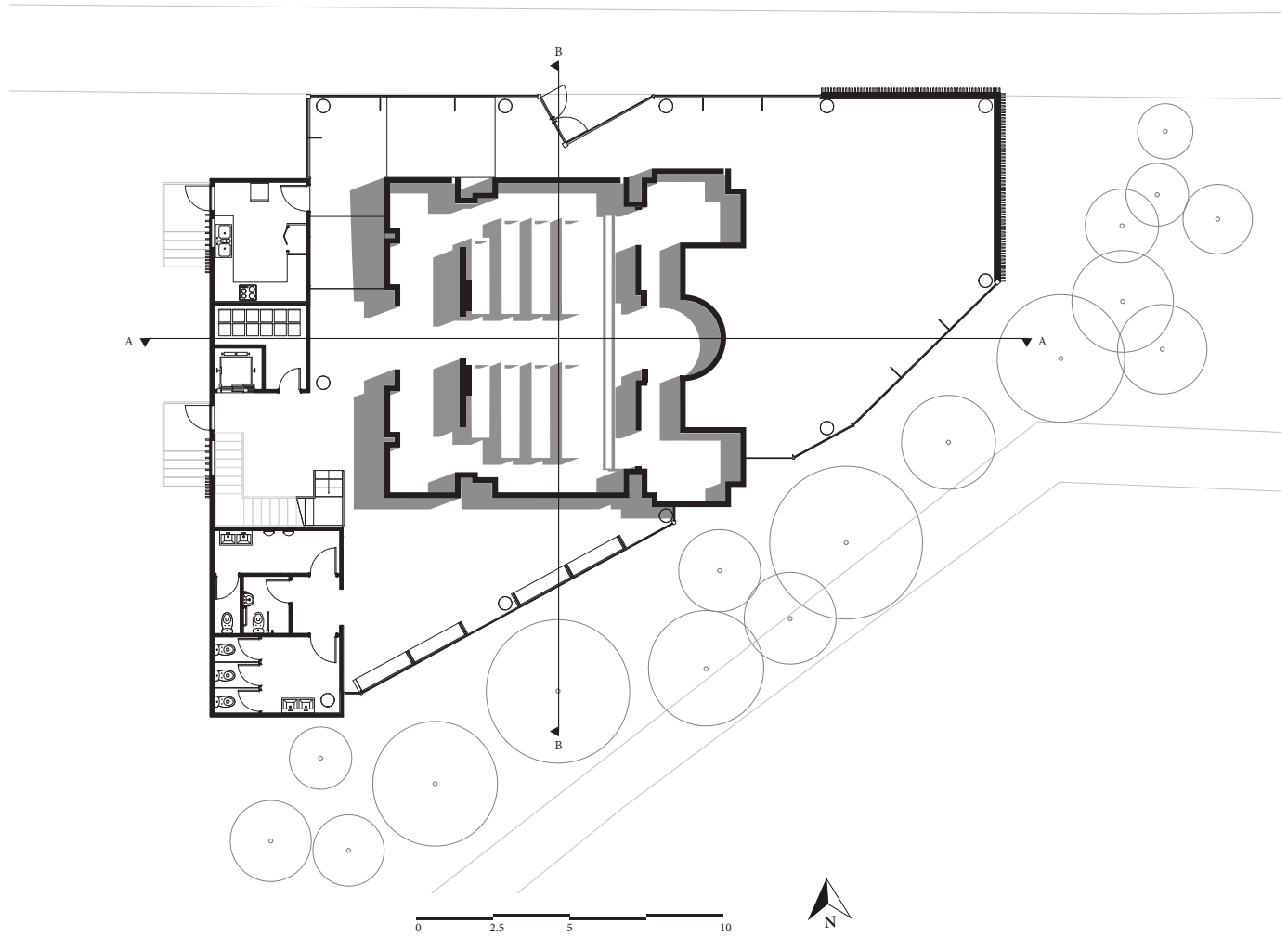


Fig. 7.04. Ground floor plan.



Fig. 7.05. Section B-B.

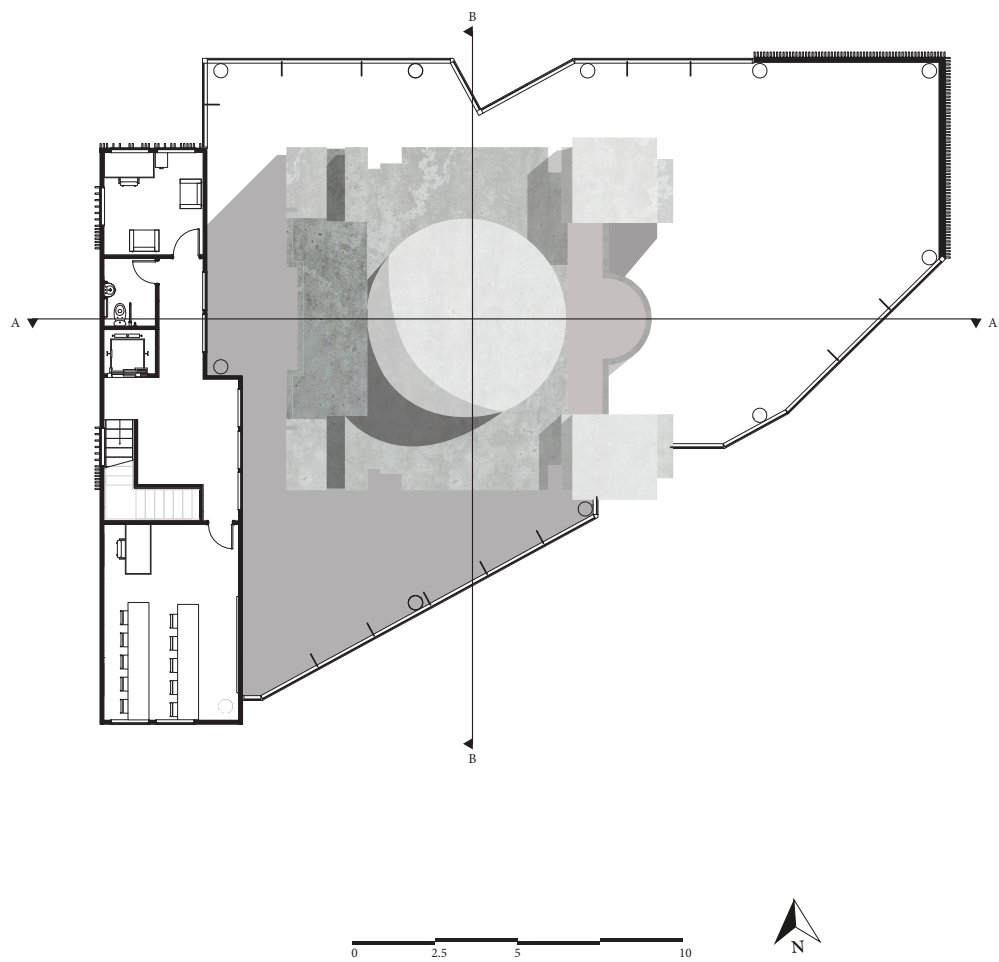


Fig. 7.06. Level one plan.



Fig. 7.07. Section A-A.



Fig. 7.08. Cross facade from approaching perspective.



Fig. 7.09. Northern elevation - a layered facade.

The facade design of the north and east facing walls draws upon the layered design of the National Library (fig. 6.22). It is designed so that it displays a cross to the viewer as they approach the building coming up from Lambton Quay, or down Mulgrave street.



Fig. 7.10. Lighting study - permeable southern wall.

These images reflect a lighting study conducted to explore the effect of rendering the southern wall of the inner building more permeable and transparent (fig. 7.08) . This was in response to one of the issues that arose in the concept design phase was at the Adapt approach, where the concept of opening up ritual to the outside compromised the traditional lighting qualities of the ritual space. The developed design closes the wall up again, in order



Fig. 7.11. Lighting study - reinstating the southern wall.

to achieve the lighting over the altar in the sanctuary space (fig. 7.09), drawing the eye towards the altar, informed by 'Altar' (fig. 3.14). Allowing free movement between the ritual space and the crush space would also be a non-traditional movement and does not reflect the ritualistic circulation of the space, as it is remembered.



Fig. 7.12. The notched entrance.



Fig. 7.13. Narthex entrance - a new threshold.



Fig. 7.14. The nave - informed by 'Illuminate'.



Fig. 7.15. Towards the altar - the copied and the adapted.



Fig. 7.16. The interior that inspires.

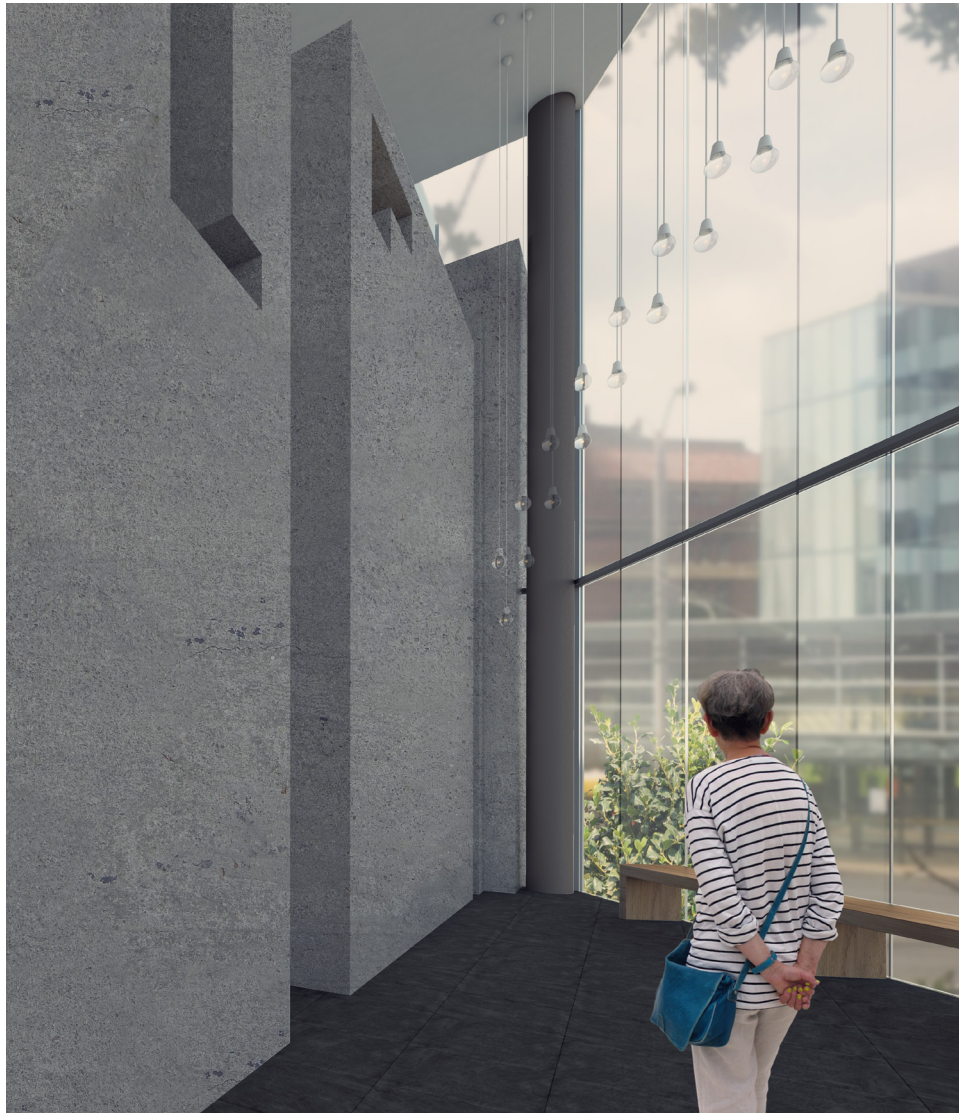


Fig. 7.17. The exterior that contrasts.

Though they are presented in chapter four as part of the study on Byzantine Architecture, the intuitive paintings were developed as part of the design process, when it came to the refinement of the interior spaces. It is noted that the interior carries the most weight when it comes to triggering memory, because the interior of the building creates the sensory experience. The intuitive nature of the paintings helped to bring out the memorable features of the traditional building - ones which were experiential and once connected with by users, can help create in them a sense of belonging.

The narthex has been repurposed as an additional threshold area; it is now a space that separates the sacred from the outside. The way that natural light enters the building (fig. 7.14) reflects the historic nature of interior lighting in Byzantine churches; it is an adaptation of the traditionally concentrated lighting, which appears in small bursts through candles or chandeliers. The dome roof in Byzantine architecture reflects heaven, or the sky. Here it lights up the interior, touching on the ideas of *Illuminate* again (fig 7.15). The dome is an adaptation of this idea. The curtains, pulpit and cover have not been adapted, but stayed true to their colour and texture. The contrast between the inside of the ritual space and the areas outside it (fig. 7.16 - 7.17) reflect the idea described in the 'Transform' intuitive painting, that the delight and beauty is found *inside* the ritual space, intended to inspire the congregation.

THE SEPARATE ROLES OF *COPY/ADAPT/MERGE*

At the concept stage, Merge 2.0 had the potential to integrate with the existing urban fabric of the city. The purpose of its outer shell was to reflect the site's surrounding architecture, and respond to the one end of the spectrum described in the aims and objectives of this research: creating sense of belonging through the building's formal integration with the new context. It was not until the developed design stage that to explore the moments inside the building which would call upon memory became possible. Up until this point, the concept had only engaged with the importance of memory and ritual through the retention of the plan. I discovered that the idea of memory creating sense of belonging is a notion which is more naturally applied at the stage of designing the interior of the building.

The intuitive paintings on traditional Byzantine architectural language and memory drawings of the existing Assyrian church drive the decisions of the interior. Almost each painting correlates to a specific design intention whether it regards lighting, surface materiality, colour or occupation of space. Importantly, the translation between the painting and the interior design involved a decision around whether the spatial quality described was to be directly replicated in the new building, or whether it was going to adapt or merge in some way. For this reason, while the merge concept was selected, further along in the process there were some copy, adapt, merge decisions to be made once again.

Deciding on how qualities extracted from the intuitive paintings would inform the interior was very much an intuitive process as well. Some qualities stood out as ones which were important to keep in their original form, while others felt more appropriate to change, or create in a different fashion. Analysis of this process, and identifying which qualities felt right to keep as the original and which felt like they were allowed to be adapted, illustrated a pattern which led to a discovery in answering the aims and objectives of this research. This research asks, where on the spectrum should the building lie between retaining memory, and integrating with the new, in order to create sense of belonging? After going through this research process, it is evident that the idea of a spectrum is perhaps too linear for the complexity of the question, and the complexity of a building and all its attributes. Rather, there are two *facets* to the design, both contributing to creating sense of belonging. The first being in relation to memory, and the second, in relation to the surroundings, exploring the notion of integration.

8



Fig. 8.01. Heaven - the dome roof.

EIGHT //

CONCLUSIONS AND REFLECTION

In the current situation of a growing migrant population in New Zealand, this research poses the question about architecture's role in providing the new residents a sense of belonging to the host society. Through the review of theorists, it has been established that architectural discipline does play a part in creating this sense through the design of buildings, particularly the ones which gather community groups. What the research endeavoured to further discover, was the way in which these buildings can be designed to most effectively enhance this sense of belonging.

The previous chapter touches on discoveries made particularly towards the end of this design led research process, in relation to the intuitive paintings of Byzantine architecture and the ways in which these were applied to the experience of the building. Throughout the developed design stage, scale of interventions became the most revealing aspect to consider.

What I discovered was in fact, that the smaller the scale of the architectural element, and the closer it was to the body, the more important it was to retain as original, or to copy. This is due to the fact that it was these elements of the old architecture which directly interacted with the senses of the occupant, and, when closely resembling the original, are most able to trigger those collective memories of the past, and instill feelings of belonging. It is the sound of the choir's song echoing against the marble interior. It is the smell of incense burning, and being circulated through the pews. It is the sight of a striking red curtain which shields the most sacred sanctuary.

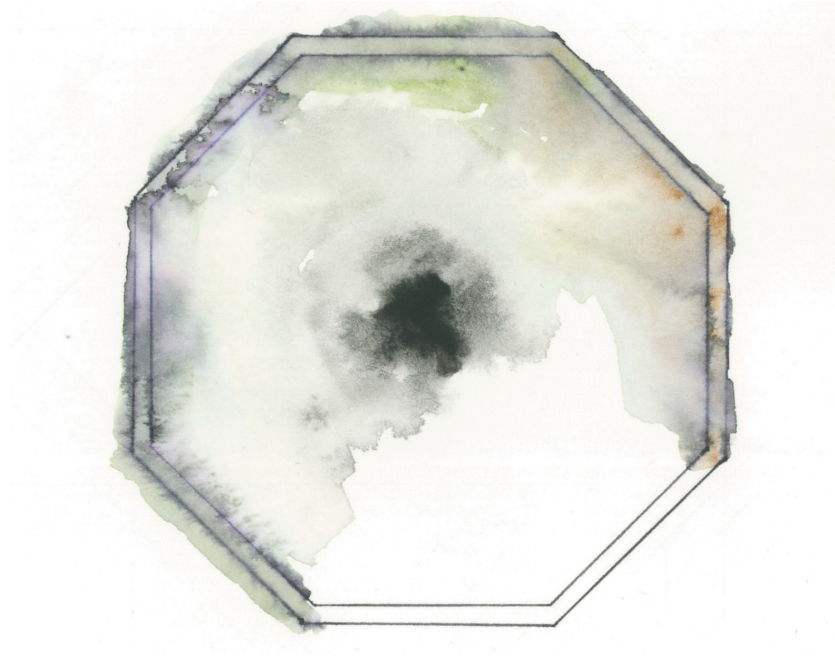


Fig. 8.02. Incense Station - a sensory experience.

Moving further from the body we find what is appropriate to adapt. It is the soft, unimposing illumination of the ritual space, created by speckles of light - whether it is daylight, a candle or artificial. It is the contrast between the interior and exterior of the ritual space - at this scale it is not necessary to copy the detail of the old, but can adapt it to still reflect the old concept.

What is designed at a larger scale is what is allowed to be merged. This was essentially done at the decision of which concept to carry through to developed design. Being the merge concept, this decision awakened a realisation that the old, or the copy, needed to be integrated in more ways than just through retaining the plan of the ritual space, if the building was to engage with collective memory. This brought on the intuitive paintings process. The building merges at a large scale with the surrounding architecture through not only the concept which it follows, borrowed from the Supreme Court, but more obviously through its exterior materiality.

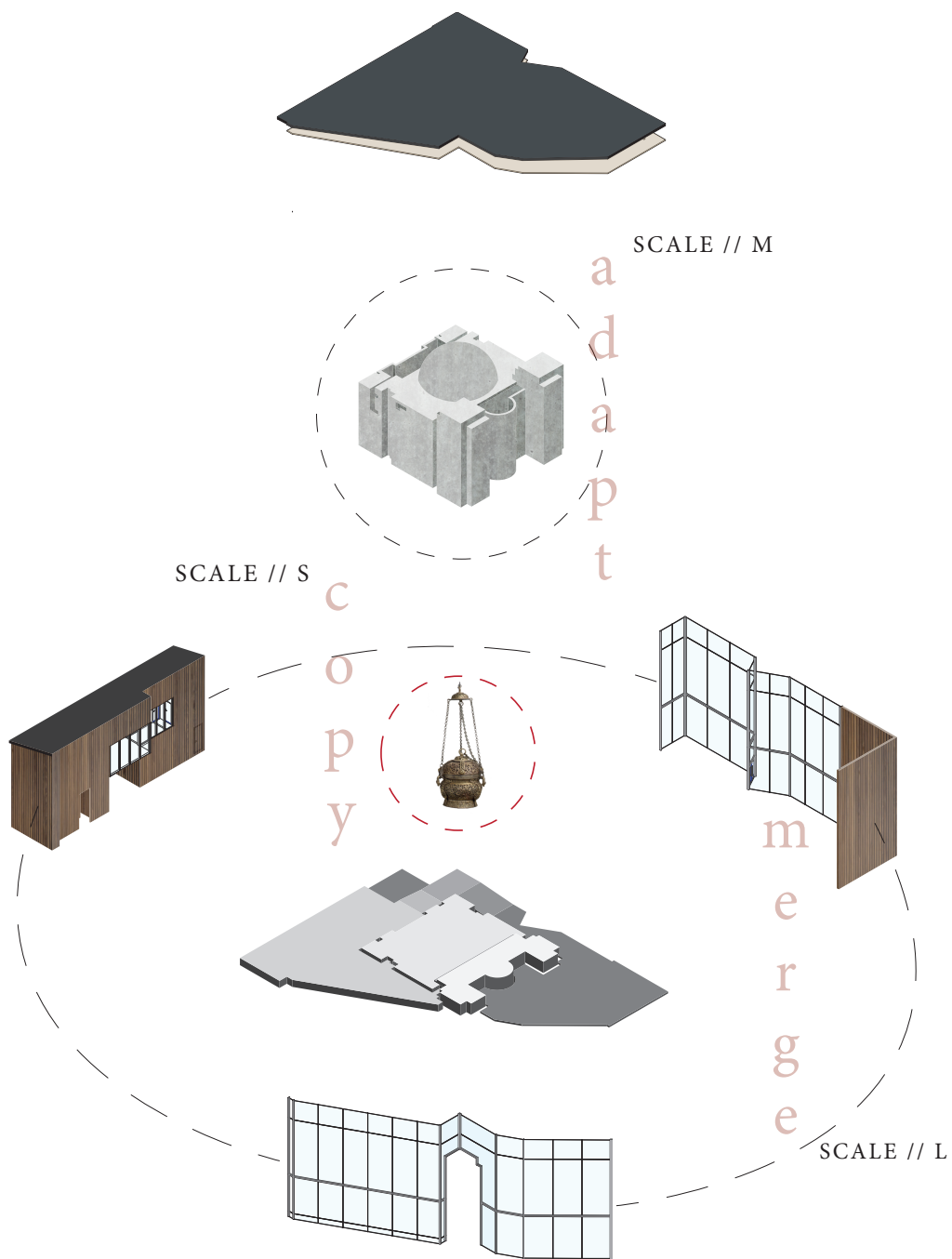


Fig. 8.03. Copy, adapt or merge - a question of scale.



Fig. 8.04. The apse.

A limitation of this research, and in particular its methodology, is that the intuitive drawings were not only done partly from personal memories of the church, but were also applied in an intuitive fashion. The decisions made about each element presented through painting - about whether they should be directly copied or are allowed to be adapted - were made on an intuitive basis, and this is how the pattern regarding scale formed. While this could be seen as too subjective, the flip side to this recognises the incredible uniformity among the memories of people who come from the same place, and experience the same things. This notion is highlighted in the writing of theorists on collective memory, and forms the entire basis of collective identity.

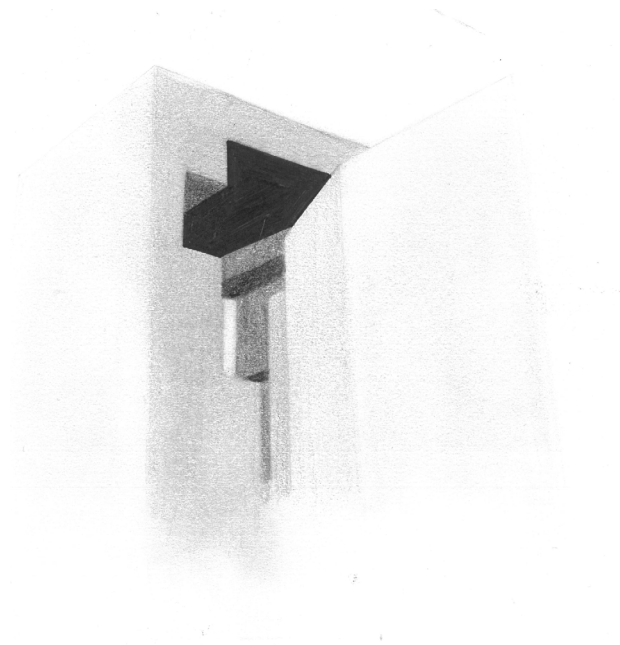


Fig. 8.05. Lighting the apse.

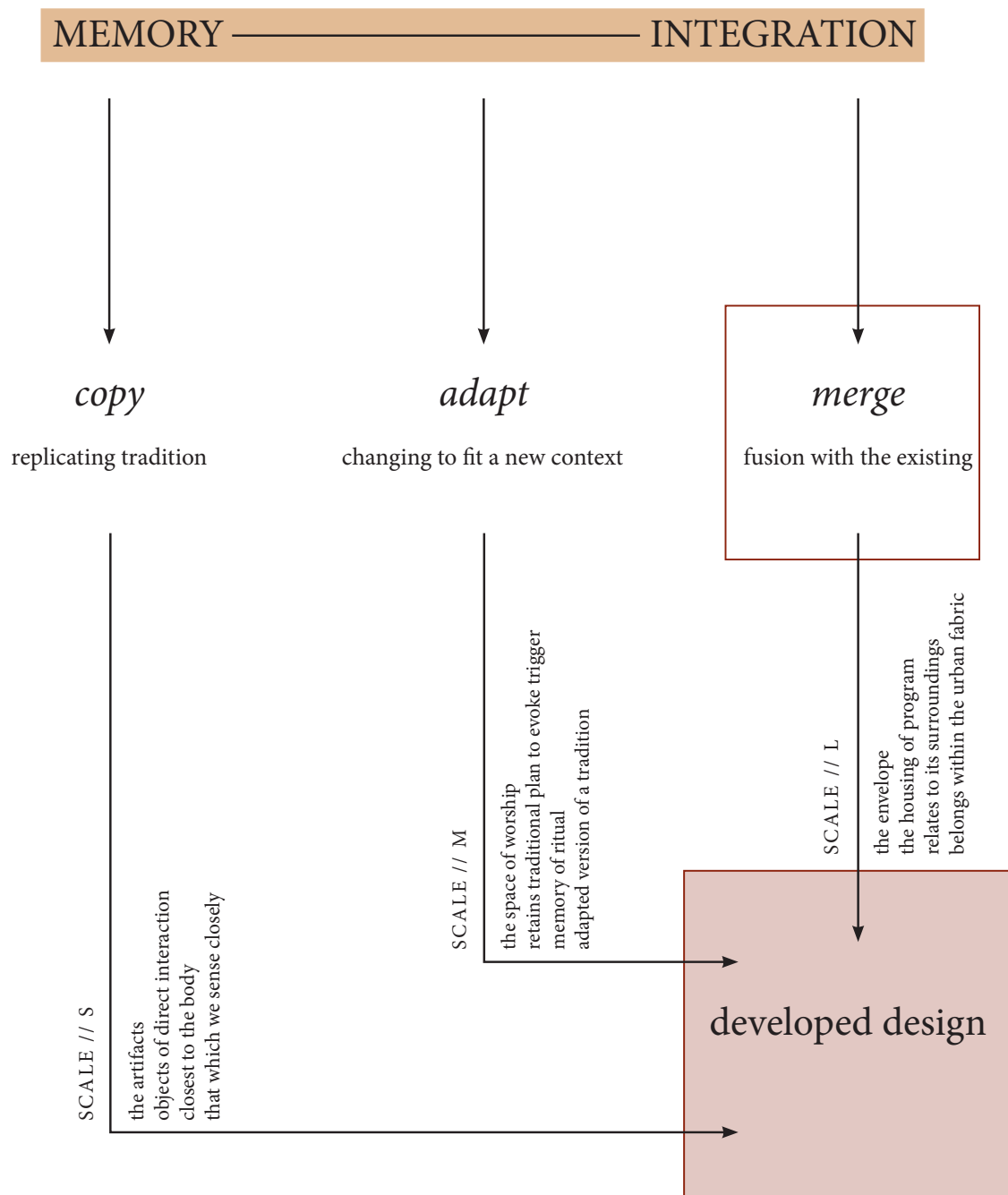


Fig. 8.06. Copy, adapt or merge - the conclusion.

The focus of this research was primarily to make a discovery about architecture and sense of belonging, which can be applied across other contexts and cultures as well as the one used to experiment in this thesis. The author proposes that the discoveries made about the correlation between scale and authenticity are not unique to the Assyrian Orthodox church migrating to Wellington, but can be applied across other cultures in foreign contexts. In fact, further investigation might test this discovery against another migrant community in another part of the world. Through working with the members of the community through the design process, it would apply the memories that those people have of their old home to the research, using the methodology suggested by the findings of this research (fig. 8.06). Further investigation may involve interviews with members of the community or drawing workshops, to extract the most potent memories the group has. This would undoubtedly refine the research discoveries and add new layers to it.

The research aims and objectives set out to discover one thing, but what was found came in an unexpected form. It turns out that the answers this research seeks are not about how *much* we integrate or how much we keep to memory, as if they are two forces tugging in opposite directions. It is rather about where we choose to take each of these approaches, and why. Therefore, rather than the answer being a choice between the three approaches of *copy*, *adapt* and *merge*, all three approaches were taken in one design, using the design led research process to discern what happens where.

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APPENDICES

APPENDIX A: DEVELOPED DESIGN PHYSICAL MODEL







