The Suitability of Contemporary Church Design for Christian Gatherings and Worship –
A Regional Analysis

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Submitted as fulfilment of the requirements for
Masters of Architecture by Research in the
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As the candidates’ supervisor I have/have not approved this
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DECLARATION

Submitted in fulfilment of the requirements for the degree of Master Of Architecture by Research, in the Post Graduate Programme in Architecture, University of KwaZulu-Natal, Durban, South Africa.

I declare that this dissertation is my own unaided work. All citations, references and Borrowed ideas have been duly acknowledged. It is being submitted for the degree of Masters in Architecture by Research in the College of Humanities, School of the Built Environment and Development Studies, University of KwaZulu-Natal, Durban, South Africa. None of the present work has been submitted previously for any degree or examination In any other University.

Student Name: Walter Hurst Williams

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Student signature

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Date
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I would like to especially thank Prof. Rodney Harber who not only was an inspiration to me since before I started studying Architecture in 1988, but whose warm friendship and encouragement has kept me going when completing this Thesis seemed an insurmountable task.

I would like to thank Magda Cloete whose clear insight has been a great help – especially in understanding my character – and being willing to provide support in the areas I most needed it.

I would like to thank all the Pastors I interviewed, especially Peter Rasmussen – who shares a passion for good church design – and for being willing to share his clear understanding of the needs and challenges involved in Church design.

I would like to thank my family, especially my wife Natasha, who have given me the space I needed to work on this Thesis.

I would like to thank our Heavenly Father who is steadfast and true even when his earthly children are not.
ABSTRACT

The core of this thesis is seeking to find the most appropriate and successful architectural responses which best support the contemporary local church (the term ‘church’ defines a body of believers who meets regularly together for worship).

To be able to put forward advice or direction in this regard the thesis firstly presents a clear brief of what is required for a church to be successful. It looks at such questions as: ‘How does one gauge a successful church biblically?’, and ‘What is a local church called to do?’ The Literature Review section of this thesis attempts to answer the above questions by looking at all relevant Biblical instruction on the subject. It then continues to look at all Biblical comment on design and construction of places of worship, including the Tabernacle and the Temple as described in the Old Testament, and their relevance, if any, to contemporary church design.

The Literature Review then looks at the history of church architecture. It is a vast subject, therefore the review will only focus on the direct ‘ancestors’ of the current churches we have in South Africa and in particular Kwazulu-Natal. Questions that are dealt with are: ‘Why were churches built like this?’, ‘Did they work?’, and ‘Are they still relevant today?’ The Literature Review also touches on Indigenous African, as well as more recent church architectural design, and its appropriateness to the contemporary church.

The primary research for this thesis consists of a case study of ten churches in KwaZulu-Natal from various denominational and cultural backgrounds, looking at the reasons behind the design of each, and which aspects of each design are successful. The findings and observations are based on interviews with pastors or church elders from each of the churches, as well as the author’s own observations from attending church services in each of the ten churches.

Some of the areas that are discussed and grappled with are: The holiness of beautiful architecture, the importance of volume and light in the main worship space (and how the emergence of a strong audio visual element is impacting this), the importance of the building catering for young families, how successful fellowship areas help church attendance, and the ever present problem of acoustics.

Each of the buildings is analysed in terms of its architectural merits and functional successes. Going from large to small scale architecturally, each area of each church is looked at. These results are then analysed together, looking for trends and synergy in the various areas and distilling what emerges as the most important aspects of each area.

The thesis concludes by emphasising the importance of well thought out church architectural planning in a contemporary culture that is fickle and far less denominationally committed than previous generations.
PREFACE

In the past twenty five years I have been involved in design, construction or alteration of over forty church buildings, including several Cathedrals. This stemmed partly from the fact that I took over the Practice of Alwyn J Lubbe and Associates when Alwyn Lubbe retired. Alwyn was a well-known church architect in KwaZulu-Natal and was also involved with Gideon Bible distribution as well as the Christian Businessman Organisation. So a portion of the church commissions we received came from that legacy.

I have also been, and continue to be, very involved in church circles in my own right. I was formerly a Lay Minister and Lay Preacher in the Anglican church (Church of the Province of South Africa), and for the last fifteen years or so have been on the Deacon team of CityHill Church (Formerly Hillcrest Christian Fellowship) which is affiliated to the global New Covenant Ministries International group of churches.

I have a passion for evangelism and met my wife Natasha while on a mission to Russia organised by Campus Crusade for Christ (pursuing my future wife also involved some help from the Vryheid Nederduitse Gereformeerde Kerk!)

My desire to see the church grow – especially in the Western Culture where it has been on the back foot for several decades – has led me to look for what works in achieving church growth. As I am involved in the business of Architecture the natural step is therefore to think about how good church architecture can aid church growth.

As an Evangelical believer I did not want to focus only on how successful, growing churches get it right without looking at the Biblical framework for a good church, and then comparing this to the theological background of the growing churches, to ensure that these align.

I finally hope that this thesis will become a handbook for pastors, church building committees and architects who are about to embark on a church construction project, giving ideas and pointers to be considered in this all-important endeavour.
GLOSSARY

**Basilica** – In Roman architecture, a large rectangular meeting hall.

**Built Environment** – The environment which is constructed by man and includes elements of nature, space and physical structures or buildings.

**Beauty** – In terms of architecture this refers to creating functional spaces as well as building form or space which gives the participant pleasure in either viewing, or being part of that space.

**Bible/Scripture** – The Old and New Testament as accepted by mainline denominations. All references in this thesis are taken from the New International Version, unless otherwise stated.

**Biblical Model** – The various aspects of something, in this case the church, which is defined by Scripture, both directly and indirectly.

**Catechism** – Religious instruction, mostly for children (like Sunday School).

**Chancel** – Eastern end of the church, sometimes reserved for the clergy and choir (Sanctuary).

**Church** – A body or group of Christian Believers who gather together regularly, primarily for worship, but also for other activities. Occasionally the word church will also be used to describe a church building.

**Clerestory** – Upper level of nave wall, pierced by windows.

**Constructivism** – A theory where people construct their own knowledge through observation.

**Critical Theory** – A Neo Marxist school of thought where belief is influenced by society.

**Design** – The cognitive and creative process required to develop a built environment in its context for its intended purpose.

**Diaspora** – The dispersion of the Jews to lands outside of Israel.

**Ecclesia** – The church, or body of faithful people. The ‘called out ones’.

**Ecclesiology** – The study of churches and church buildings.

**Epistemology** – The theory of knowledge, distinction between justified belief and opinion.

**Ethnographic Research** – Research of cultures or people groups through participation.

**Fellowship** – Activities Believers engage in together socially, usually sitting and talking together informally often with food and drink.

**Gothic** – Architectural style in Europe from about 1200 AD – 1500 AD.

**Intersubjective Research** – Between a Positivist and Constructivist paradigm.

**Lancet Window** – Narrow window with a pointed arch.

**Liturgy** – a formwork or service order by which formal Christian worship occurs.

**Menorah** – Seven branched Jewish lamp stand.

**Mikveh** – A bath for ritual purity in Judaism.

**Modernism** – Architectural style and thinking, rejection of the past, glorification of science/machine.

**Nave** – Main middle section of the church where the congregation is seated.

**Numinosity** – a spiritual or religious feeling of the presence of God (see Shekinah).

**Ontology** – the branch of metaphysics dealing with the nature of being.

**Paradigm** – a pattern or model, often a school of thought.

**Phenomenological Research** – a qualitative research method, how humans experience something.

**Positivism** – a philosophical system recognizing only that which can be scientifically verified.

**Qualitative Research** – primarily exploratory research to gain an understanding of underlying reasons.

**Quantitative Research** – a structured way of collecting and analysing data.

**Reverberation** – The echo of a sound in a confined space as it bounces off hard surfaces.

**Role of Architecture** – Designing functional and aesthetic spaces which serve to assist the human beings using those spaces to use them optimally.

**Romanesque** – Architectural style in Europe from about 700 AD – 1200 AD.
Rood Screen – Screen separating the chancel from the nave
Sacrament – A Christian ceremony imparting spiritual grace.
Sacristy - a small room attached to the sanctuary where the clergy change (like a vestry)
Sanctuary – Area around the communion table at the east end of a church (Chancel).
Shekinah – The tangible presence of God (see numinosity).
Standing-wave- Where sound bounces between two parallel hard surfaces
Tanakh – The Jewish term for all the books of the Old Testament.
Vestments – Robes worn by the clergy.
Vestry – a small room attached to the sanctuary where the clergy change.
Worship – Interaction or communion between man and God. In this thesis worship refers largely to believers singing and praying corporately.
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CHAPTER 1

1.0 INTRODUCTION TO THE RESEARCH

1.1 INTRODUCTION

Christianity for the most part is practiced socially. Although the Christian walk is to be lived daily individually in communion with God, the Bible encourages Christians to gather together regularly.

…not giving up meeting together, as some are in the habit of doing, but encouraging one another—and all the more as you see the Day approaching.

Hebrews 10v25

The early church met for the most part in houses, especially during periods when the church was persecuted. However most early believers came from the Jewish faith where communal gathering for worship was common. Jesus himself went to the Jewish temple to worship. So when persecution ended the church began to desire to worship corporately – probably a number of house churches coming together in one place to worship and fellowship – and so the need for a church building was born.

Some early church groups may have met in former synagogues or borrowed the local town hall for their gatherings, however as the church grew in stature and wealth, the desire for groups of believers to have their own building was obviously there. This progressed to the extent that for centuries the largest and most expensive piece of architecture in any given town or city was the local church or cathedral.

From a simple large box to protect the congregation from the elements, church buildings have grown in beauty and grandeur until the pinnacle was reached during the Middle Ages when large cathedrals were built in the Gothic style.

Although these edifices were undeniably large and beautiful, both from without and within, the question arises: ‘Is this what the church, the local body of believers specifically, and Christianity generally, needs?’

The word ‘church’ comes from the Greek word ‘ecclesia’ meaning ‘called out ones’ and usually refers to a local group of believers. However for the sake of expediency, and through common usage, the word ‘church’ in this Thesis may refer to a building in which Christians meet. Where confusion may arise, the author has attempted to add “congregation” or “building” after the word church to clarify the particular word “church” in its context.

1.2 MOTIVATION FOR THE STUDY

Many church buildings are being built in South Africa today which have very little in common with the historical precedent set by their forebears – the churches which have been built in this country over the last 300 years. This heritage comes mainly from a Western European tradition. This Dissertation will seek to look at why this is the case. It will review the generators of the
Western Style of church design to establish their relevance for the contemporary South African church. The research intends to find what the key influences on contemporary church design are. The initial survey and literature review indicates tendencies to return to the earliest forms of church life from biblical times, such as home churches. There also seems to be a change in theological emphasis – from a ‘set apart’ clergy, to the ‘priesthood of all believers’. Other considerations impacting on the design of churches can be found in church congregation life, forms of worship and possibly also an Afro-centric world view.

The traditional church design has been well documented. However the author has struggled to find much published on the success or otherwise of the new architectural styles which are manifesting in many contemporary church buildings. Traditional churches refer to church buildings with an elongated nave and an altar, pulpit and lectern at one end. Contemporary churches are often semi-circular in plan, lack any form of Gothic or Romanesque elements, and may be missing an altar and pulpit altogether. This study intends to fill this gap and will attempt to do so broadly by collating and cross referencing the survey across the Christian denominations.

There seems to be a real need to provide some form of guidance in the area of contemporary church design; providing both the Architect and Pastor with a means to assess and measure the role of architecture in current church life and worship.

The research will not only be looking at how architecture fulfils the needs of a church body biblically and practically, but also aesthetically. Pr. John Saward (1996) writes extensively on the subject of the beauty of holiness and the holiness of beauty in a book by the same name. Architecture went through a very dark patch, in the author’s opinion, when Modernist thinking stated that if something was functional it was automatically beautiful. Modernist thinking may be why there has been little published recently on the aesthetics of contemporary churches. Fortunately that stage is passing. Victor Fiddes (1961: 2) states: “Contemporary architecture, we are told, is moving away from the sterile mechanical forms which, until recently, characterised the ‘continental style’. Architecture is again claiming artistic inspiration for its new organic compositions. The architect... can again become a creative artist.” The importance of beauty in architecture – a beauty that causes one to marvel with wonder just being in and experiencing a special space, will form part of the research of this study.

1.3 THE RESEARCH PROBLEM, AIMS AND OBJECTIVES

1.3.1 The Research Problem

Every pastor wants a functional, beautiful church and one that is not too expensive. However having an understanding of what works architecturally in successful church bodies – and a successful church by biblical standards – is not something that is so easily grasped. So what does work and what doesn’t work? Are there design tricks that can be employed to deal with the all too common Christmas and Easter overflow? What simple guidelines can be agreed at an early stage to assist with the acoustics in the building? And what is a beautiful building – inside and out? What is the contemporary concept of beauty in architecture? These questions have been answered within a South African context generally, and a KwaZulu-Natal context in particular. This could be summed up as follows:
What are the Architectural design strategies that can best assist a church to be successful in a contemporary KwaZulu-Natal context, based on the definition of a successful church in such a context?

1.3.2 Aims

The aim of this dissertation has been to explore the relationship between Christian worship and architecture; to define design guidelines to assist architects and pastors in designing and building churches.

1.3.3 The Research Objectives

This could be broken down into several objectives:

- To gain a solid Biblical and researched model of what a successful church body is, across the Christian denominations.
- To deduce how architecture, in all its various facets, can assist in achieving this successful model.
- To finalise a brief of architectural criterion which should be considered by pastors and architects to assist them in designing a successful contemporary church.

Some questions that were considered in achieving these objectives:

Primary Question: Is there a relationship between successful churches (successful from a biblical perspective) and good (well-planned, functional and aesthetically appealing) church architecture?

Secondary Questions:
- What is the primary task of the church?
- What activities is a church called to do biblically?
- Are there architectural elements, both biblically and historically, that are still relevant today, and should form part of contemporary church design?
- How can a church building, in design or planning, assist a church congregation in its mandate to bring its individual church members to spiritual maturity, and evangelise a lost world?
- What are the architectural elements of a church building that would assist in the worship experience therein?
- Does architectural beauty or aesthetic have a role to play in the church architecture of successful church congregations?

1.4 SETTING OUT THE SCOPE

1.4.1 Delimitation of the Research

The research is primarily contained within the field of architecture but will use peripheral fields, like theology and biblical interpretation, to support church models which are required to define the architectural brief for a generic contemporary church building.
For the context of this thesis when the term ‘church’ refers to church building, the term automatically applies to the entire built environment of a church complex where weekly worship occurs, including halls, offices and surrounding supporting infrastructure like parking. Where other religious buildings are on the same property, for example a Convent or Seminary, these have been precluded from the area of this study.

This thesis covers only ten churches. It cannot cover all Christian denominations and cultures found in KwaZulu-Natal but has attempted to catch a broad cross section. It is believed that the results of the research will be of relevance to most if not all denominations and not limited to the area of KwaZulu-Natal. This thesis has however limited itself the recognised Christian denominations and not looked at any church which mainline Christianity would consider heretical in its fundamental theology.

1.4.2 Theoretical and Conceptual framework

The Theoretical Framework for this thesis is set out in detail in the next chapter. Briefly it is framed within a Constructivist world view. Constructivism has a Relativistic belief system which allows for Subjective and Qualitative forms of research. This Research Framework is far more suited to Architectural Research which focuses on aesthetics and beauty, as opposed to more Objective and Quantitative research method which is more suited to scientific, mathematical or laboratory research.

1.5 RESEARCH METHODOLOGY

1.5.1 Methodology used

As mentioned in 1.4.3 above, the Theoretical Framework for this thesis is a Qualitative one. Within that framework the Methodological process that will be followed will be that of the Phenomenological Paradigm. The theoretical side of this will be expanded more fully in the next chapter but the research strategy set out below is in line with this Research Methodology.

Initially a Literature Review has been done, including biblical comment, to form a historical foundation for the research as well as seeking other contemporary studies to aid this research. An important part of the Literature Review has also been to establish what a successful church is: both biblically and from a contemporary viewpoint. This is crucial as it provides the system with which to analyse what good church design is – the ultimate aim of this thesis.

The focus of the research will be on ten currently functioning church buildings or church complexes. To keep the research within manageable proportions and for focus, the ten churches are situated within the KwaZulu-Natal context. The choice of the churches has been based largely on their architectural merit, and on their success as thriving local parishes, at least by worldly standards. And finally the author attempted to widen the scope to a full range of Christian denominations and cultures. The churches chosen are both Catholic and Protestant, and are from English, Afrikaans and Zulu cultural backgrounds. Because there are a wide range of church gatherings, some of which do not have buildings like home churches or the Zionist...
church gatherings, this thesis will obviously be limited to denominations that do produce buildings. The ten church buildings are:

Nederduitse Gereformeerde Kerk – Durban Wes: Malvern  
St Francis Xavier’s Catholic Church: Bluff  
Living Waters Church: Durban North  
Anglican Cathedral of the Holy Nativity: Pietermaritzburg  
African Congregational Church Cathedral: Clifffdale  
Red Point Church: Pinetown  
CityHill Church: Hillcrest  
St Agnes Anglican Church: Kloof  
Seth Mokitimi Methodist Seminary: Pietermaritzburg  
LinC Church: Ballito

A table with detailed information of each church can be found on the next page.

<table>
<thead>
<tr>
<th>Year</th>
<th>Name of Church</th>
<th>Denomination</th>
<th>Ethnicity &amp; Language</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976</td>
<td>Nederlandse Gereformeerde Kerk</td>
<td>NGK</td>
<td>European: Afrikaans</td>
<td>Malvern</td>
</tr>
<tr>
<td>1978</td>
<td>St Francis Xavier’s Church</td>
<td>Catholic</td>
<td>Coloured: English</td>
<td>Bluff</td>
</tr>
<tr>
<td>1980</td>
<td>Living Waters Church</td>
<td>Free Church (Full Gospel roots)</td>
<td>Indian &amp; European: English</td>
<td>Durban North</td>
</tr>
<tr>
<td>1995</td>
<td>African Congregational Church Cathedral</td>
<td>ACC</td>
<td>African: Zulu</td>
<td>Clifffdale</td>
</tr>
<tr>
<td>1996</td>
<td>Red Point Church (Victory Faith Centre)</td>
<td>Free Church</td>
<td>European: English</td>
<td>Pinetown</td>
</tr>
<tr>
<td>2003</td>
<td>CityHill Church (Hillcrest Christian Fellowship)</td>
<td>Free Church (NCMI)</td>
<td>European: English</td>
<td>Hillcrest</td>
</tr>
<tr>
<td>2007</td>
<td>St Agnes Church</td>
<td>Anglican</td>
<td>European: English</td>
<td>Kloof</td>
</tr>
<tr>
<td>2009</td>
<td>Seth Mokitimi Seminary</td>
<td>Methodist</td>
<td>African: English &amp; Zulu</td>
<td>Pietermaritzburg</td>
</tr>
<tr>
<td>2013</td>
<td>LinC Church</td>
<td>Free Church (Anglican roots)</td>
<td>European: English</td>
<td>Ballito</td>
</tr>
</tbody>
</table>

Fig 01. Table of Churches in the Study. (Williams)

The research of these ten churches will use the below four methods which are in line with the Phenomenological approach:

- Semi-structured Interviews with the pastor or other relevant church leader involved in either the construction or running of the church (hopefully both). Interviews will be with open ended questions. (Open ended questions are ones that do not simply have a yes/no response but seek the interviewee’s personal opinion on various topics.) A copy of the questionnaire is attached as an appendix to this thesis.
- The research will also involve Participant Observation. This will take the form of attending a worship service at each church. Attending the service of each church will
give insight into how the church functions on any given Sunday, and how the various architectural features are used or work.

- In-situ architectural analysis will be done on each building. The specific Thematic Analysis is set out below, however briefly the strategy will be an ‘outward to inward’ and ‘bigger to smaller’ approach. Thus the initial study will be of the external aesthetic and how the building sits within its context. This will progress onto the welcome experience and then the worship space (Nave or Auditorium) and then finally smaller spaces like children’s facilities and a fellowship area. Other related aspects such as the acoustics and lighting will be handled within the relevant area where it occurs.

- Archival Research will be done on each building – finding, collating and analysing the architectural drawings, plans, sections and elevations of each church building along with any other sketches or pictures.

Once the data is collected, personal observations and insights will be compared with those of the pastor to see if they line up with the pastor’s experience of using his own building. Interviewing the pastors will also produce ten individual models of what a practicing pastor feels the architectural features of a well-designed contemporary church should be. These will be cross referenced with each other and the author’s own views, as well as referring back to the Literature Review on what a successful church is, to reach a final model; which will then be tested against the design of each church building and comparing it to the relative success of each.

1.5.2 Thematic Analysis

The analysis of each church in terms of its success will be against the biblical requirements for, or biblical model of, a good church. The basic themes as discussed in the next chapter are:

Baptism, Teaching, Fellowship, Communion, Prayer, Social Outreach, Worship, Evangelism

However these topics are quite diverse and not well structured for using as method of analysing a church’s architecture. The author has therefore chosen an outward to inward, and bigger spaces to smaller spaces approach which he feels is far more logical. And so the breakdown of the areas of the analysis of each church building is set out below:

The External Aesthetic
The Welcome Experience
The Nave/ Auditorium
  Volume
  Finishes and Fittings
  Lighting
  Seating
The Sanctuary/ Stage
  The Altar
  The Pulpit
  The Baptismal Font
  Choir Stalls
The Worship Experience
  Acoustics
  Numinosity
Children’s Facilities
Toilets
Fellowship Area
  The Kitchen
Ancillary Hall
  Youth Facilities
Offices and Other Rooms

Each of the above areas will be looked at with reference to the biblical model, the pastor’s opinions, and the author’s own deductions, to hopefully establish a comprehensive architectural understanding of the merits, successes and challenges of each building. This will be used as mentioned above when cross referenced to produce a working model of a successful contemporary church.

1.6 OUTLINE OF THE THESIS

Chapter 2 will look at the Theoretical framework for the thesis. This will provide the background and validity for the research methodology that will be used.

Chapter 3 will start by looking at Bible verses and other commentaries on what biblical model of a successful church (group of people) should look like. This provides the foundation for what a church body should be striving for, and consequently what is needed architecturally to assist in progressing towards this goal. Also the biblical Instruction for the Jewish Temple will be looked at and how this design influenced, or why it did not influence, later church design.

A brief history of church architecture will follow, and the theological motivators (if any) behind the architecture of each era. This will be followed by a brief history of South African church architecture and local colonial and African influences.

Chapter 4 is the bulk of the information gathered in the research phase, broken down into the ten churches researched.

Chapter 5 will be an in-depth analysis of the material collected, cross referencing and looking for synergy between the architecture and the success of the life of each church.

Chapter 6 will summarise the thesis as well as provide a proposed framework of design guidelines for designing a successful contemporary church.

1.7 CONCLUSION

Church congregations need buildings. There is a long Christian legacy of church design. However contemporary churches – churches built within the last 40 years or so – are turning away from historical designs. This thesis will critically analyse the new style of church architecture by looking at ten churches in KwaZulu-Natal. Biblical, theological and historical standards will be studied for direction towards some form of brief for generic church buildings. Each of the ten chosen church buildings will be studied in terms of architectural functional and
aesthetic value, as well as within the biblical and theological directives previously uncovered. Opinions of the design of each church will be sought through interviews with each pastor, as well as site visits by the author who will also participate in each worship service. The data will then be analysed to look for harmony and pointers towards good contemporary church design. The hoped for outcome will be a document to assist pastors and architects to design successful contemporary churches.

The next chapter will look at the theoretical framework in which the research method sits to provide validity and direction to the research methods that have been used.
CHAPTER 2

2.0 THEORETICAL FRAMEWORK

2.1 INTRODUCTION

Before one embarks on academic research, one needs to choose a method for conducting that research. The methodology chosen needs to be valid and recognised within the framework of all academic research, and with a strong theoretical foundation. This chapter will set out the chosen methodology; by starting with the broad philosophical background to the methodology then narrowing down into the system of enquiry, then school of thought (or paradigm) then looking at the chosen strategies and tactics to be used within the paradigm. This will hopefully give a clear understanding as to why this particular research methodology was chosen, and how it will be implemented.

2.2 CONCEPTUAL FRAMEWORK

The first half of the twentieth century saw a shift in thinking from a Positivism/Postpositivism school of thought to Constructivist one. Positivist thinking went back to the mid eighteenth century and saw truth as being absolute. Any form of research in this school of thought should be clinical and objective, where the researcher was distinct from that being researched, not allowing the researchers personal thoughts or bias to have any impact on the research. Constructivist thinking, which took root after the First World War, rejected the absolute and took a more relativistic stance, whereby the researcher’s frame of reference formed part of the research. It is easy to see how this new perspective on research was an important one for architectural research where much of the material being studied would need to be categorised aesthetically or experientially. This would be very difficult to do solely in terms of a scientific objective truth. This shift in thinking is set out in the below table from Groat and Wang (2013: 76), Architectural Research Methods, and shows the two sides of the spectrum being Objective Research and Subjective Research, with a middle area which has been coined ‘Intersubjective Research’

<table>
<thead>
<tr>
<th>Objective</th>
<th>Subjective</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positivism/Postpositivism</strong></td>
<td><strong>Intersubjective</strong></td>
</tr>
<tr>
<td>Knowner distinct from object of inquiry</td>
<td>Knowing through distance from object</td>
</tr>
<tr>
<td>Assumes objective reality</td>
<td>External reality revealed probabilistically</td>
</tr>
</tbody>
</table>

In terms of the Epistemology of this thesis it is thought that it would sit somewhere in the first Constructivism block: ‘Knowledge co-constructed with participants’ where the author would
be interviewing either the user of the building or the client involved in the construction of the building, or both – when they are the same person. The author would also be experiencing the building himself, and so will co-construct a perspective on the quality of that building. What is of interest is that while the school of philosophical thought was sliding towards a more subjective reality, Architectural study of the mid twentieth century seemed to be stuck on the Objective/Scientific side of the spectrum. Jill M. Franz (1994) in her article entitled “A critical framework for methodological research in architecture” goes through the prevalent research paradigms for architecture from the 1950s onwards:

In the 1950s the research was largely technically orientated. It seems as if the success of the production line in industry was seen as the precursor to this, as ‘procedure’ was the focus. In the 1970s with the emergence of computers, these were incorporated into a still largely technical approach. But it became apparent that although CAD was an excellent tool for technical solutions, it was lacking in the design arena where the problems were ill defined.

In the 1970s the philosophical thinking of the age finally makes its appearance (some forty years later) and conceptually orientated research emerged with a person-environment frame of reference. Franz states: “One typical dimension is the understanding of collaboration as a method to arrive at an intersubjective understanding of the design situation”. While the word ‘intersubjective’ hints at a Constructivist influence, the ‘collaboration’ is probably influenced by a Critical Theory worldview where reality for an individual is seen as socially constructed (Critical Theory was a paradigm that arose in the 1930s from a Neo Marxist standpoint and emphasised the importance of society/culture).

Finally, architectural theory reaches a subjective/qualitative reality. The architect Clare Cooper Markus did research in the 1970s Markus (1978) focusing on the meaning of place, and in particular how people feel emotionally and spiritually about specific designed settings. The Architect Christian Norberg–Schulz extends this school of thought philosophically by looking at the phenomenology of architectural design. Norberg-Schulz (1980) states in his book: Genius Loci: Towards a Phenomenology of Architecture: “Man dwells when he can orientate himself within and identify himself with an environment, or, in short, when he experiences the environment as meaningful.” As this thesis falls within a phenomenological paradigm, this will be unpacked further below.

One final point before focusing on the research methodology of this thesis is the notion that subjective and experiential research needs to be understood fundamentally within the reference of the standpoint of the author and those interviewed. The following quote is a good example of how one’s experience of a space can be very different from others:

"When moved, Arabs break easily into poetry. I have heard a lad spontaneously describe in verse some grazing which he had just found: he was giving natural expression to his feelings. But while they are very sensible of the beauty of their language, they are curiously blind to natural beauty. The colour of the sands, a sunset, and the moon reflected in the sea: such things leave them unmoved. They are not even noticed. When we returned from Mughshin the year before, and had come out from the void of the desert on to the crest of the Qarra range and looked again on the green trees and grass and the loveliness of the mountains, I turned to one of them and said, 'Isn't that beautiful!' He looked, and looked again, and then said uncomprehending, 'no - it is rotten bad grazing.' Yet their kinsmen in Hadhramaut have evolved an architecture which is simple, harmonious and beautiful. But this architecture is doomed, for the Arabs' taste is easily corrupted. New and hideous buildings, planned by modern Arab architects, are already rising in these ancient cities. My companions when they saw them were deeply impressed. They turned to me and said, 'By God that is a wonderful building!' It was useless to argue".
2.3 SYSTEM OF INQUIRY

The system of inquiry chosen for this thesis is what is termed ‘Qualitative Research’. This will be defined in two ways.

Firstly, qualitative research as opposed to quantitative research. Quantitative research is usually the analysis of data such as in a scientific research paper. It compares data, can produce statistics and is often able to give ‘yes’ or ‘no’ answers. It can fit happily within the Positivist thinking of absolute truth and objective reality. Qualitative research on the other hand is primarily exploratory research which seeks to gain an understanding of the underlying reasons or opinions on something and often involves individual interviews as well as researcher participation and involved observation, as will be the case with this thesis.

<table>
<thead>
<tr>
<th>Question</th>
<th>Quantitative</th>
<th>Qualitative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontology: What is the nature of reality?</td>
<td>Reality is objective and singular, apart from the researcher.</td>
<td>Reality is subjective and multiple as seen by participants in a study.</td>
</tr>
<tr>
<td>Epistemology: What is the relationship of the researcher to that being researched?</td>
<td>Researcher is independent from that being researched.</td>
<td>Researcher interacts with that being researched.</td>
</tr>
<tr>
<td>Methodology: What is the process of research?</td>
<td>Deductive process: cause and effect.</td>
<td>Inductive process: Mutual simultaneous shaping of factors.</td>
</tr>
</tbody>
</table>

Fig. 03 Quantitative and Qualitative Paradigm Assumptions. (Groat and Wang, 2013: 71)

Linda Groat and David Wang (2013: 15), in their book Architectural Research Methods, give six distinct research methods. (See Fig. 04) These methods have similarities with and relate to the ones on either side of it – the last one have in some similarities with the first – and so the methods could be placed in a circular model. The six are:

- Historical
- Qualitative
- Correlational
- Experimental
- Simulation
- Logical/Argumentation

Fig. 04 Six Research Methods
What is of interest here is that the qualitative approach used in this study overlaps to a degree with both the historical and correlational approaches: the historical approach will provide the foundation for the research; the correlational approach will involve the comparison of different buildings studied to gauge their relative successes.

The essence of Qualitative Research would be defined as:

1) **Study in Natural settings:** The researcher goes to the place where the object of study is and studies the object there. This is what will be done in this thesis where the author will attend a church service in each church chosen for this study.

2) **Interpret the object of focus in terms of the meaning it has for the researcher:** The researcher is the main interpreter or measuring device by which the object is judged. In this case the author will be making personal judgments on the success of the architecture of each individual church.

3) **Respondents’ interpretation of their setting:** The researcher interviews people involved with the object. In this case the author will be interviewing pastors or congregants who use the church regularly to get their opinions on the success of the architecture.

4) **A range of information is gathered:** This creates a ‘Collage’ approach to hopefully create a multi perspective view of the object. In this case the research will be limited to the biblical parameters of the activities of a good church – but it will still be multi-facetted.

5) **A personal or informal writing stance:** As qualitative research is less rigid than quantitative research, so is the means of recording it. Although the author will still attempt to formally describe everything that is researched, the end result may not be as formal as most academic papers.

On point five above John Creswell (2007) in his book *Qualitative Inquiry & Research Design: Choosing among Five Approaches* defines an informal writing stance as: “A literary, flexible style that conveys stories… without the formal academic structure of writing”.

Within Qualitative Research there are three paradigms or schools of thought that will be set out below.

**2.4 SCHOOL OF THOUGHT**

The three schools of thought within the Qualitative Approach to research as stated by Groat and Wang (2013) are:

- Ethnographic Research
- Grounded Theory Research
- Phenomenological Research

Their interpretation of the above is as follows:
**Ethnographic Research** seeks to gain an understanding of the point of view of those being studied by entering into and becoming part of the culture of those individuals or that people group. It relies heavily on observation for its primary means of data collection. Although this is through participant observation as previously mentioned.

**Grounded Theory** uses the qualitative research method but enters into the research with no pre-set opinions. It seeks to find or identify a theory from the analytical process. Once a theory is proposed, it then seeks to confirm it through studying similar contexts.

**Phenomenological Research** is about trying to clarify the essential or underlying meaning of an experience – usually by a specific group of people in a specific environment. Thomas Schwandt (1998: 221) identifies Phenomenology as seeking to identify the complex world of lived experience from the point of view of those who live in it. David Seamon (2000) describes phenomenology as “The specific experiences of specific individuals or groups in actual situations or places.”

It is easy to see how Phenomenology is particularly appealing to architects, and indeed will be the primary paradigm for this thesis. Although as the author will immerse himself as a participant in each of the church services, it could be argued that it will also be Ethnographic in execution to a degree. However it will be through the Phenomenological paradigm that the strategies and tactics of this thesis will be planned. The reader must therefore be prepared that much of this thesis will be written from a personal subjective standpoint.

### 2.5 STRATEGIES AND TACTICS

John Creswell (2009) in his article: Research Design: Qualitative, Quantitative, and Mixed Method Approaches gives four aspects to data collection in the Qualitative approach:

**Interviews with open ended questions.** For this thesis the author will attempt to meet face to face with the pastor involved in the design and construction of the church in question. If such a person cannot be found, then an interview with the current pastor or a church elder involved in the leadership of the church. If the interviews cannot be face to face then the author will attempt to do them telephonically.

**Participant Observation.** As stated, the author will attempt to attend a Sunday morning service at each of the ten churches studied to gain an understanding via active participation of the experience of worshiping in each building.

**In Situ Analysis of Building.** For the broader strategy the definition reads analysis of an artefact/ urban context/ landscape or building. In the context of this thesis it will obviously be the church building, or group of buildings, focussed on in this thesis. Not only will the author immerse himself in the worship of the church, but will spend time walking around and experiencing and studying the various parts of the buildings that make up the church complex of each church.

**Archival Documents.** As part of the study of each building, the author will attempt to get a full set of the plans of each church, along with any written articles or documentation about each church and possibly some other sketches, paintings or photographs.
Zina O’ Leary (2014) in her book *The essential guide to your Research Project* states humourously about Qualitative Research: “Raw data may be rich, but it is also messy, and not publishable”. The data collected above will need to be structured in some way.

This will be looked at in this thesis from two angles. The first is through the Biblical guidelines for church activities. However as it is believed that the list will be rather random and unstructured, the thinking is that each building will be evaluated in a linear experiential manner as one arrives at the building and then enters it. So it would start with the external experience, then foyer then large internal spaces and finishing with the smaller internal spaces. As long as in the process of revealing each of the churches’ spaces there is constant reference back the Biblical guidelines on each area where applicable, it is believed a logical order will be achieved.

A final strategy common in Qualitative Research is the extensive use of a variety of graphic material. The author will include the building plans and sections, and numerous pictures of each church studied, to convey the written sentiment expressed in the research.

**2.6 CONCLUSION**

It must be stated that it came as rather a surprise to the author to find a theoretical framework that is so well suited to architectural research. The stereotypical view of research is that it is quantitative and statistical. The strength of the Qualitative method is that it opens up a whole range of approaches to research. The biggest weakness in the author’s opinion being that it is so subjective. As mentioned above in Wilfred Thesiger’s article (1959) different people and people groups have different opinions on things, and any reader of a qualitatively researched article should have some background information on the author and the individuals or groups being studied. That is why the preface of qualitative work, may be more important than that of a quantitative one. The preface of this thesis has attempted to do just that for the reader.
CHAPTER 3

3.0 LITERATURE REVIEW

3.1 INTRODUCTION

The Literature Review is seen as foundational for the research in this thesis. One cannot ask why a church today is designed in a certain way without looking at historical precedent. As Christianity believes in a God who is both personal and present in the lives of individuals and communities, and believes that the Bible is his direct revelation, so God’s comment on church life and building design is equally relevant.

The Literature Review is separated into four sections:

- Biblical Commentaries
- A Brief History of Western Church Design
- A Brief History of South African Church Design
- Contemporary Church Design

The first section, Biblical Commentaries, is further broken up into two parts: firstly research of biblical instruction or advice on the activities successful church communities should be undertaking (thus providing a Brief for a church building); and secondly biblical comment or instruction on architecture for worship.

Biblical Commentaries on Church Activities
J. Oswald Saunders (1985) states in his book *In pursuit of maturity* that the primary goal of the church is not evangelism, but that it should be to present everyone mature in Christ, as stated by Paul in Col 1v28. This section will consider the veracity of this statement. It will also look at all the activities that a church is called to do.

Biblical Commentaries on Architecture for Worship
Thomas F Matthews (1971) in his book *The Early Churches of Constantinople* quotes Durandus, a 13th Century Bishop saying “From the Tabernacle and the Temple doth our material church take its form” giving reference to medieval church Architecture. This section will look at if church design should be based on the architecture of the biblical Jewish tabernacle and temple.

Brief History of Western Church Design
Matthews (1971) states that the Roman Liturgy has undergone several revisions since early Christian times paralleling the succession of artistic styles in Europe, whereas the Eastern Church was spared such change. The research will see if the liturgical revisions equated to architectural changes, and if so, why.

Brief History of South African Church Design
In her thesis on the history of churches in Kwazulu-Natal, Alice Pilkingston (1981) *Anglican Parish Churches in Natal 1824-1910* writes: “In Britain funds were raised for church buildings through acts of Parliament, while in Natal the onus was on the colonists and converted
indigenous population, to provide church buildings for themselves. And this provided a major challenge.” This section will look at the challenges faced in the establishment of the first churches in South Africa, and their corresponding designs.

**Contemporary Church Design**

Changing church theology is discussed by John Alfred Thomas (1994) in his Thesis *Theory, Meaning and Experience in Church Architecture* where he quotes George Fox (1624-91), the founder of the Quaker movement “the Lord showed me clearly that he does not dwell in Temples but in people’s hearts.” This may well be the earliest beginnings of the church architecture we find today. The scriptural backing for this can be found in: Acts 7:48 “The Most High does not live in buildings.” This section will be looking at contemporary church designs and the thinking and theology behind them.

It is hoped the Literature Review will give the reader a solid understanding as to why the church designs to be found in Kwazulu-Natal, both old and new, are the way they are, as well as a biblical brief what they should be. From this basis it is hoped that critical analysis of the ten chosen church buildings will be from an informed perspective.

**3.2 BIBLICAL COMMENTARIES**

(All Bible verses are taken from the New International Version Bible unless stated otherwise)

**3.2.1 Biblical Model of a Successful Church**

In an attempt to uncover the best architecture for church design, this research needs to start by exploring what a church (group of people) is called to do in a church building. What will be studied is what the Bible says a church needs to do and what it says the standards of a successful church are.

This is not a simple task. Although the Tanakh (Old Testament) had very clear instructions for the building of the Tabernacle and the Temple – which we will look at later in this chapter, Jesus was frustratingly vague on the subject for Christian gatherings.

**The Primary Task of the Church as described by Scripture**

Although the church’s primary task is much debated, most scholars now agree that it is discipleship. Two examples of this are Bishop Lindsay Davis in his article “The Primary Task of the church” (2008) and Todd Hiestand’s article (2011) of the same title.

Bible verses quoted for this:

He is the one we proclaim, admonishing and teaching everyone with all wisdom, so that we may present everyone fully mature in Christ.

Colossians 1v28

19 Therefore go and make disciples of all nations, baptizing them in the name of the Father and of the Son and of the Holy Spirit, 20 and teaching them to obey everything I have commanded you. And surely I am with you always, to the very end of the age.

Matthew 28v19-20
So Christ himself gave the apostles, the prophets, the evangelists, the pastors and teachers, to equip his people for works of service, so that the body of Christ may be built up.

Ephesians 4v11-12

And the things you have heard me say in the presence of many witnesses entrust to reliable people who will also be qualified to teach others.

2 Timothy 2v2

The last one is of particular interest – 2 Timothy 2, because if one reads it carefully one sees that there are four levels of discipleship. Some scholars argue that evangelism is the primary role of the church. However converted people will not automatically convert other people. Evangelism is a part of Discipleship. This could be metaphorically explained as the primary purpose of an apple tree is to make other apple trees – not just to make apples.

Secondary Tasks of the Church

The well know Christian Author Rick Warren in his book The Purpose Driven Church (1995) defines the five main tasks of a church as:

Worship, Fellowship, Discipleship, Ministry, Evangelism.

In comparison, the most comprehensive New Testament verse on the subject elaborates the tasks as follows:

41 Those who accepted his message were baptized, and about three thousand were added to their number that day. 42 They devoted themselves to the apostles’ teaching and to fellowship, to the breaking of bread and to prayer. 43 Everyone was filled with awe at the many wonders and signs performed by the apostles. 44 All the believers were together and had everything in common. 45 They sold property and possessions to give to anyone who had need. 46 Every day they continued to meet together in the temple courts. They broke bread in their homes and ate together with glad and sincere hearts, praising God and enjoying the favour of all the people. And the Lord added to their number daily those who were being saved.

Acts 2v41-47

The following seems to have happened at Christian gatherings: Baptisms, Teaching, Fellowship, Communion, Prayer, Miracles, Sharing Property, Public Worship, Ate Together. It seems as if ‘Breaking of Bread’ which we now call the sacrament of ‘Communion’ was done as part of a meal together and not separately in a public gathering. Also I have interpreted ‘meeting in the Temple Courts’ to mean ‘Public Worship’.

Pastor Daryl Evans (2013) in his article “Bible Verses about Church: 17 Top Scripture Quotes” states that we should be aware that there are two types of scripture about church: Descriptive (telling us what happened at early Christian gatherings) and Prescriptive (telling what we should do as Christians when we gather). There is actually not much of the latter, which is why creating a definitive list of activities is difficult. The following are the prescriptive verses:

24 And let us consider how we may spur one another on toward love and good deeds, not giving up meeting together, as some are in the habit of doing, but encouraging one another—and all the more as you see the Day approaching.

26
Hebrews 10v24-25

Have confidence in your leaders and submit to their authority, because they keep watch over you as those who must give an account. Do this so that their work will be a joy, not a burden, for that would be of no benefit to you.

Hebrews 13v17

From the above we conclude that church members are instructed to meet regularly together and encourage each other. The second verse instructs church members to submit to their leaders – which implies that there were leaders that oversaw Christian gatherings.

Referring back to Acts 2, the list can be explored further:

Believers were baptised: There should be a place in or near to the church building where this can happen. It is not vitally necessary as some congregations gather by a dam or sea and do baptisms there.

They devoted themselves to the Apostles teaching: As there seem to be a lot of people becoming believers, and all of them probably would want to hear the Apostles teach, a large public gathering space would be preferable – and possibly a raised area so that everyone could see the Apostle who was teaching at time.

12 The apostles performed many signs and wonders among the people. And all the believers used to meet together in Solomon’s Colonnade.

Solomon’s Colonnade was built by King Herod on the side of the Jewish temple and was a large covered porch area were a large number of people could gather publically and be protected from the sun and rain.

They devoted themselves to fellowship: Fellowship is not something that is necessarily structured, and usually a pleasurable activity, so sometimes this is overlooked when thinking about church building design. But it seems that more recently the importance of fellowship has been rediscovered and churches are designing large social gathering areas or Coffee Shops attached to the church building. In his team training video for the well know Alpha Course Nicky Gumbel (2003) states that unless a new believer makes six significant friends in the church, they are likely to slip back into their secular friendship circles with secular behavioural patterns following.

They devoted themselves to the breaking of bread: It seems there is uncertainty as to whether the believers ate together and followed Jesus’s command in the gospels to remember his broken body and spilled blood in their meal, or whether it was a separate sacrament of bread and wine as performed by most denominational churches today. Either way this was something that was done when the believers gathered.

They devoted themselves to prayer: The activity of prayer does not require any specific architectural assistance save that the believers are gathered together.

Signs and wonders were performed by the Apostles: The Apostles must have moved amongst the believers and prayed for individuals, so some space would have been needed for this.

They sold their possessions and gave to everyone who had need: This would have required some storage areas for food and clothing if it was done on anything but a small scale.

Praising God and enjoying the favour of all the people: It seems like worship happened communally and publically (as opposed to quietly in homes), so this was part of the gathering of believers’ experience.

27
The following table compares the two lists:

<table>
<thead>
<tr>
<th>ACTS 2</th>
<th>RICK WARREN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baptism</td>
<td>Discipleship</td>
</tr>
<tr>
<td>Teaching</td>
<td>Fellowship</td>
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<tr>
<td>Fellowship</td>
<td>Fellowship</td>
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<tr>
<td>Communion</td>
<td>Ministry</td>
</tr>
<tr>
<td>Prayer</td>
<td>Worship</td>
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<tr>
<td>Social Outreach</td>
<td></td>
</tr>
<tr>
<td>Worship</td>
<td>Evangelism</td>
</tr>
<tr>
<td>Evangelism</td>
<td></td>
</tr>
</tbody>
</table>

Fig. 05 List of Church Activities (Williams)

Discipleship can be seen as teaching of the church members, and ministry is a form of prayer, so these four have been equated. Warren includes social outreach in his evangelism so these are also covered in both. The two items not covered by Warren, baptism and communion, are sacraments which Jesus commands Christians to do.

For the purposes of this research, this could be seen as a comprehensive list of church activities to be referenced against when analysing church architecture, as it covers all the activities that are required biblically.

**Elements of a Successful Church**

If a church is doing all of the above activities correctly there should be a corresponding growth in church membership numbers. There is debate as to whether church growth is the definitive yardstick to success (please note: church growth not church size). The author believes it is, but with the following provisos:

1) Some churches, for example the Living Waters Church (see comment below), have a charismatic leader and gather a large following, but when the leader dies or moves away the church shrinks. Discipleship needs to happen as part of church growth so new leaders are raised up so that no leader is indispensable.

2) Some churches are in areas where evangelism is very hard, such as churches the author is aware of in France. Just because they do not see large church growth does not mean the church is not a success in what it is doing with the believers it does have.

With the above two points in mind, the author still feels that a good indicator of a successful church is one that is growing numerically. This however has to be coupled with discipleship
or the spiritual maturity of its members – which is essentially the same thing – so that the church growth would be maintained after a change in leadership, as well as the church multiplying itself by planting other churches. Along with this, and probably intrinsic to it, are the elements mentioned above that are required as part of the life of a church, namely baptism, teaching, fellowship, communion, prayer, social outreach, worship, and evangelism.

A good example to look at in this regard is Living Waters Church which is one of the ten chosen churches in this thesis, and probably the flagship one in terms of the new architectural style. Under its formative leader, George Dillman, the church did everything mentioned above and did it well. It experienced unprecedented growth for a period. The one thing that George Dillman did not do was disciple leaders to replace him. As we shall see, good potential leaders got disillusioned and left to form their own churches. When George did step down due to illness, his son took over and felt very ill equipped for the role. The church has never regained the same levels of growth.

### 3.2.2 Biblical Models of Places of Worship

**Introduction**

After looking at biblical comment on how a church organisation should be run, and what needs to happen in a church building, we now turn our attention to biblical comment on places of worship. The preceding part of this chapter has material sourced only from the New Testament. This is because the church as a group of Christian believers was formed during this time, and the worship was different in content from the Jewish worship that preceded it. However the New Testament does not give any instruction on worship architecture save for Jesus’ comment “My house shall be called a house of prayer” found in Matt 21v13 and Mark 11v17. The Old Testament or Tanakh, as the Jews call it, on the other hand, gives detailed accounts of architectural requirements for Jewish worship. As Christianity has its roots in Judaism, it is fitting to research these accounts to see if any part of this instruction should be carried through to contemporary church design.

The Tanakh provides detailed instructions for construction of the Tabernacle and about the construction of the Temple (the plans of which were revealed to King David). The Tabernacle instructions were given to a Jewish nation that was moving through the desert at the time – and so the design was a movable tent structure, while the Temple plans were given once the Jews had conquered Palestine and were permanently settled.

**The Tabernacle**

The instruction to build the Tabernacle was given to a Jewish nation that had escaped from Egypt and had received the Ten Commandments, around 1445 BC, but still had not conquered the Promised Land. God provides instruction on a place for worship during this transient period. In fact it was used for several hundred years after the conquest of Palestine until Solomon built the first temple.

In Exodus 26-31 and 35-40 there are very specific details given by Moses about how to construct the tabernacle (see the picture below). Essentially it had the Holy of Holies which housed the Ark of the Covenant which itself housed the stone tables of the Ten Commandments. Then outside that, and separated by a veil was the Holy Place which housed an Altar of Incense, a Lampstand (Menorah) and a table containing Shewbread. This was again separated from the outside by the Outer Veil. Outside was a courtyard with a bronze Altar for
sacrifices, and a Bronze Laver or basin where the priests were to wash. The courtyard was to be East-West in orientation and be about 50m by 25m in size surrounded by a curtain wall.

The Temple

The Temple was not built immediately after the Hebrews settled in the Promised Land. The reason why is unclear and not the subject of focus for this thesis. Perhaps it was due to in-fighting in between the tribes. All that is certain is that the Ark was kept at Shiloh during this time (about fifty kilometres north of Jerusalem) – presumably in a tabernacle structure - 1 Sam 1v3. However once King David had united the tribes under his leadership (about 400 years later) he expressed a desire to build the temple around 1000 BC.

The Bible states that the Temple design was revealed to King David in 1 Chronicles 28v11-18, then records Solomon’s construction of the Temple in 2 Chronicles 2-4 as well as 1 Kings 5-6.

It performs the same function as the tabernacle housing the Ark of the Covenant in the Most Holy Place connected through a curtain with the Holy Place containing tables with Bread of the Presence and the gold Menorah lampstands. Outside the temple is the Alter for burning sacrifices as well as the bronze ‘Sea’ for other water containers for priestly washing.
What the Tabernacle and Temple Represent

Why did God go to so much trouble setting out the specifications for a place of worship, and should Christians use the same design – or at least draw from the design?

There are two rabbinic schools of thought on the first question. In his book *The Guide for the Perplexed* Moses Maimonides (1120-1190) (Translated Pines (1963)) states that as God gave the instructions directly after the Gold Calf incident at the foot of Mount Sinai that God realised that the Hebrews needed something physical to focus their worship on. God’s direct presence in the column of cloud would not always be with them and so the Tabernacle and later the Temple would serve this purpose. Rabbi Moses ben Nahman Girond (Nachmanides) (1194-1270) (Translated Chavel (1974)) disagrees with this and states that he believes God wanted to show the Hebrews his closeness to them (separated only by a curtain). It being the critical housing place of the Ark is refuted as for periods of time the Ark was not present in the Temple. Either way the Most Holy Place was seen as a place where God resides – or at least where his presence is manifest. Solomon – in his dedication of the Temple admits that no manmade building could house God. Priests would only go into the Most Holy Place once a year, and it was such a hazardous event that apparently another Priest would spend the night before with him to ensure he did nothing to make himself ‘unholy’ and when entering the Most Holy Place.
a rope was tied to the Priest’s leg in case the Holy Presence of God killed him, then he could be pulled out without the danger of another priest risking his life to retrieve his friend!

**Why does the Church no longer worship at a Temple?**

There are two reasons why the Temple is no longer seen as necessary to Christians:

Firstly the Temple was a place of animal sacrifice or ‘Korban’, especially at Yom Kippur when a Bull and a goat were sacrificed for the sin of the people, and also the evening before Passover where a lamb is sacrificed as a reminder of the blood of the lambs on the doorposts of the Hebrews in Egypt to save them from the Angel of death. Christians believe that Jesus was the sacrificial lamb (John 1v29) and that no further animal sacrifices are necessary.

Secondly Christians believe that God has moved his place of residence from the Most Holy Place to the hearts of believers. The Curtain separating God from man in the temple was torn in two when Jesus died (Matthew 27v51) removing the separation of God from man. As God now dwells in the hearts of men. Several verses mention this but St. Paul in his letter to the Corinthians states:

> 16 Don’t you know that you yourselves are God’s temple and that God’s Spirit dwells in your midst?

1Cor 3v16

As the believer and the body of believers is the Temple of God they therefore no longer need a Temple building in which God should dwell.

**Aspects of the Jewish Temple in Christian Churches**

**Orientation**

The orientation of early churches was not important. However it seems that after the legalization of Christianity in the Roman Empire around 400 AD some churches were built with the same orientation as the Temple. It differed between churches in the east and the west, however most had the Sanctuary Area (equivalent to the Most Holy Place) on the East side of churches. The reason for this is unclear. Possibly it had to do with the fact that for most of the Roman Empire Jerusalem was to the East, or due to the fact that Jesus said his return would be from the East. Matthew 24v27. Either way – the east/west orientation is something which many churches have in common with the Temple

**A progression in Holiness**

Both the Tabernacle and the Temple have areas of increasing sanctity – from the Court of Gentiles as the widest enclosed area to the Court of Israel, to the Court of Men of Israel, to the Court of Priests, to the Nave and then the Holy of Holies.
Although most churches do not have layers of outer courts, the linear progression from nave to sanctuary in churches for many centuries was an echo of the Jewish temple. In late medieval church architecture this was taken to such an extreme that a Rood Screen was placed between the Chancel and Nave, almost like the curtain that separated the Nave from the Holy of Holies.

These were generally removed in Catholic Churches during the Counter Reformation as they were seen to be inconsistent with the Council of Trent.

**An Altar of Sacrifice**

As the Original Tabernacle and Temple had an altar on which sacrifices were made for the atonement of sins, so many churches have an altar on which the Communion ceremony is
performed, symbolising Christ’s death as the one perfect sacrifice for the sin of mankind. The position of the altar: either attached to the back wall or separate or movable, the material either stone or wood, and the presence of relics under the altar, all differed between denominations and ages. However the altar in the sanctuary area was very widespread until post reformation times when some denominations have only a communion table, or nothing at all – referring to Romans 12v1-2 which says we should offer our bodies as living sacrifices; thus doing away with the need for an altar to insinuate that the sacrifice happens elsewhere. In fact, until about the fifth century the table was not called an altar at all, but simply a ‘holy table’. Paul and Tessa Clowney in their book Exploring Churches (1982) state that the tension between the idea of a church building being a ‘temple’ to re-enact the sacrifice of Jesus, or simply as a ‘meeting place’, has remained with the Christian church from early days.

3.2.3 Conclusions

Although the Bible is very specific on the design of the Tabernacle and Temple there is almost nothing in the New Testament on building design. There are a couple of instructions on what the church should do, and there is quite a lot of information, especially in the book of Acts, on what the church did.

One thing is clear from the New Testament is that the Jewish Style of worship, involving animal sacrifice and the Jewish Temple, was no longer necessary. So all that remains is for church buildings to provide for the activities of church life. Even the instructions as to what had to happen in church life are few and so we are left with looking at what the early church did, as well as finding out from the Bible what the aims of a church body should be. Using these two pointers are the best we can get from the Bible as to what good church architecture needs to be, that is:

a) A building which can encourage discipleship and church growth.

b) A building which can accommodate the following activities: baptisms, teaching, fellowship, communion, prayer, miracles, sharing of property, public worship and eating together.

Although some church architecture has drawn from the Old Testament buildings, none of the elements are in any way prescribed by the Bible. This leaves us with the points above as the most important generators for the correct church architecture as deduced biblically.

3.3 A HISTORY OF WESTERN CHURCH DESIGN

As this is a topic that has been well researched and documented, the purpose of the following chapters is to give the reader a brief summary of the changing style of church architecture; mainly that architecture which South African church architecture is largely derived from. The primary purpose of this research is to explore the theological and cultural backgrounds of this church architecture. The research has drawn heavily from two books for the following chapters: “The Architectural Requirements of Protestant Worship” (1961) by Victor Fiddes and “Exploring Churches” (1982) by Paul and Tessa Clowney.
3.3.1 The Early and Roman Church

There is little doubt that the first church gatherings happened in homes. The early church was quickly persecuted and so the public meetings in the temple courts as mentioned in Acts 2v46 probably stopped as the believers started meeting secretly in houses. The houses in Palestine at the time had the large room – the dining room – on the top floor of a house that was two or three storeys, and that was why the ‘upper room’ was mentioned in Mark 14v15 as well as the incident in Acts where Peter was preaching and a young man fell asleep and fell out of the window to his death. However as Romans became followers of Christ their houses too could have been used for meetings.

By the mid third century the church had grown to such a degree that a desire for larger corporate gatherings was inevitable. This coincided with a political climate that was a little more favourable towards the church. From the reign of Gallienus to the middle of Diocletian’s reign (260 – 303 AD) the church enjoyed an almost unbroken peace and so public gatherings in larger buildings probably took place. The two buildings available would have been the Jewish Synagogue and the Roman Basilica.

The Roman Basilica was a rectangular public building about twice as long as it was wide, with a colonnade down each side. This split the roof into a pitched roof in the middle with lean-to roofs on either side. Not only did this help with the need for long span trusses, but above the columns clerestory windows could be put above the lean-to roof allowing for more light into the structure. Although used by the Romans as public buildings and court houses, they were adapted easily by the early Christian church as venues for public gatherings and worship, and when new churches were built they invariably took this style. An apse was often added to the far end (the East end) from where the service was conducted.

As many of the early Christians were converted Jews, the influence of the Synagogue architecture on the Basilica was an obvious outcome. Apart from it also having a colonnade, there were several elements from the synagogue that were transposed: the ‘Bema’ was a raised area where the speaker or reader of the Torah would stand; the ‘Moses Seat’ was sometimes placed in churches as a Bishops seat; a niche for the ‘Ark of the scrolls’ became the church apse; and the ‘Table of the Scrolls became the churches communion table.
It is relevant to note that synagogues also had a ‘Mikveh’ for full immersion in water for purity which was where many Jews were baptised when they became Christians.

Fig. 10 Cut away Axonometric Plan and Section of a typical Roman Basilica

3.3.2 The Medieval and Gothic Church

In 313 AD two Roman emperors’, Licinius and Constantine, granted Christians full liberty and freedom of religion. After this, the church started changing. It continued to grow in size, but now it was also growing in power and influence.

The church began slowly adapting itself to a culture which loved pageantry and display. This is not necessarily a bad thing. (Through the centuries the church has had to deal with the challenge of making itself relevant to a current culture without compromising its nature.) While this dramatization of worship occurred what was more concerning was the tendency to exalt the priest and set him apart. Communion was mystified and worship was left more and more to the ‘professionals’. It was during this period that the Rood Screen appeared. Harold W. Turner (1979) quotes the late Professor William Malcolm Macgregor “As often as I worship in a Greek Cathedral and watch the service being carried through afar off, and but dimly heard, always what occurs to me is this, ‘So the veil of the temple has been stitched together again’.” (Contemporary Orthodox Greek services still have most of the worship performed by the Priesthood).

The Romanesque church buildings that appeared were a natural adaption from the basilicas as the name implies, but also carried in their architecture the strength and austerity that was the Roman Empire – a power now bestowed on the priesthood. After the year 1000 AD when many people thought the world would end, there was a renewed energy in church construction, and the pomp and ceremony and power that the church now embodied continued to manifest in its architecture and the Gothic style was born. During this period the church was often more powerful and wealthy than the city rulers. Cities around Europe started trying to outdo each other in the size and magnificence of their cathedrals, and the money was available.
Starting in France, and spreading throughout Europe, the Gothic style was one of order, awe and light. This period has left us with many of the beautiful cathedrals still in existence today. It is ironic therefore, that such amazing structures were built when Christianity was arguably at a very low ebb.

### 3.3.3 The Early Protestant Church

The invention of the printing press and consequently the availability of the Bible meant that the church lost its power as the only source of true knowledge. Pressure was put on the church to adapt but it moved too slowly and this brought about a split, and the creation of what we now call Protestantism. This was led by reformers such as Martin Luther (1483-1546) and John Calvin (1509 – 1564).

While Martin Luther retained in public worship many practices of Medieval Catholicism which he felt were not contrary to New Testament teaching, John Calvin was more radical. Calvin was not against paintings and sculpture as works of art, but he felt they had no place in a church. This led to much destruction of church art works and stained glass throughout Europe. Calvin wanted the whole congregation to be part of worship and believed in the ‘priesthood of all believers’ – (Based on 1 Peter 2v9). All worship was to be strictly in accordance with scripture, and churches reverted back to largely how they had been over a thousand years before (this was not intentional – as the church at that stage had no easy record of early church architecture).

In the Protestant denominations there were different degrees of starkness to the architecture. While most of the Anglican and Methodist churches in the United Kingdom retained much of the Catholic feel, Presbyterian, Congregational, Baptist and other ‘Free’ churches were very plain and sometimes no more than ‘meeting houses’.

Although the Gothic Church building was a place of mystery, it was acoustically dreadful for audible speech. As congregants had to hear the message, pulpits were brought into the nave and gained in prominence. Altars were also brought closer to the congregation. From the mid sixteenth century hardly any further Gothic Churches were built for the next two hundred years until the rise of Gothic Revival architecture in the eighteenth century. Catholic Churches during this Renaissance period were smaller in proportion, more neo-classical in character and – unlike the stark protestant churches – highly ornamented.

The Great Fire of London in 1666 destroyed many churches. The architect Sir Christopher Wren was commissioned to redesign over 50 protestant churches and introduced a neo-classical style of architecture. One of his primary concerns was to build ‘auditory’ churches where everyone could hear the preacher.

One church built during this period (1660s) was in the hamlet of Cote, near Bampton in Oxfordshire where the author’s family – the Williams’s – are from and where his ancestors are buried. It is mentioned only as it is singled out by Victor Fiddes in his book quoted above as the loveliest and most remarkable of all examples of Puritan Architecture in Great Britain.
After two hundred years the pendulum had reached its zenith and started to swing back. In the mid-19th Century the Protestant Congregations especially wanted to create something new and different to an architecture that they saw as rather bland (which it was). What they found is that they had no other architectural heritage to draw from than the Gothic or Classical architecture of the past.

The supportive theology was that the Christian faith was now seen as both revelation and mystery, and while the current architecture had provided for a revealed faith, it lacked anything that appealed to the emotional requirements of the worshipper.

Victor Fiddes (1961: 53) quotes Ralph Adams Cramm, an American church builder:

Not in the barren and ugly meeting house of the Puritans, with its whitewashed walls, three-decker pulpit and box pews, were men most easily lifted out of themselves into spiritual communion with God, - not there did they come most clearly to know the charity and sweetness of Christianity and the exalting solemnity of divine worship, but where they were surrounded by dim shadows of mysterious aisles, where lofty piers of stone softened high overhead into sweeping arches and shadowy vaults, …where was always the faint odour of old incense, the still atmosphere of prayer and praise.
Fiddes goes on to state that he feels the Christians are not supposed to be “easily lifted out of themselves into spiritual communion with God”, but that on the contrary men and women are called to a vital faith relationship which establishes community with their fellows through the action of Jesus Christ in their midst.

This is a relevant point and one that will be looked at in some depth in chapter 6 of this thesis. Without debating the theology, the reality was that Neo-gothic revival happened throughout Western Europe, and was supported by a wealthy Europe – especially Great Britain which was growing its global empire - and continued until the twentieth century when the pendulum started to swing back again.

3.4 HISTORY OF SOUTH AFRICAN CHURCH DESIGN

Shortly after the split in the church and the beginnings of Protestantism, West European powers began stretching their trade routes globally and by the end of the 17th Century small colonies started appearing to support those trade routes. South Africa was not an exception, and the wealthy Dutch East India Company established a station at the Cape formally in 1652. The early Dutch and later British settlers needed places of worship and the Colonial Church in Southern Africa was born. The oldest record of these being the Dutch Reformed Church’s ‘Groot Kerk’ in Adderley Street Cape Town, established in 1704. When the British annexed the Cape in 1806 the privileged position of the Dutch Church was maintained. The only religious activities held by the British were with the garrison within the castle. Later an agreement was made with the Dutch Church whereby Anglican services were held in their building. This lasted until 1834. The First Anglican church was built in Simonstown in 1814.

3.4.1 Early Churches of KwaZulu-Natal

A comprehensive thesis on the history of (mostly Anglican) church buildings in South Africa, and KwaZulu-Natal in particular has been written by Alice Pilkington (1981) in Anglican Parish Churches in Natal 1824-1910, which will be drawn on for this section.

The area of this research, KwaZulu-Natal, was first settled by Europeans in 1824 when Lieutenant James King opened a trading company at port Natal Bay to trade with Shaka. One Henry Francis Fynn befriended Shaka who granted him a 25 mile stretch of coast around the bay, extending 100 miles inland. By 1835 there were 35 (mainly English) Europeans living at the settlement when it was called Durban (or D ’urban) for the first time. Afrikaner Voortrekkers arrived in the area in 1837, and established the Republic of Natalia in 1839, with Pietermaritzburg as the capital. However most left again when the area was officially annexed by the British in 1843.

The first religious building in Durban was built by the Captain Gardener in 1835. It was of Wattle and Daub construction. The position of this is uncertain but it is believed to be in the area of the old St. Thomas’s church on the Berea. The Methodist Minister Rev. James Archbell built a similar Wattle and Daub structure near the bay in 1843. It was a turbulent time and it seems as if Captain Gardiner’s structure did not last – as Rev. Archbell’s building was recorded as the only religious building in Durban at the time.
Pietermaritzburg seems to have had far more Europeans, mostly Afrikaans Voortrekkers. They built their first church building ‘Die Geloftekerkie’ in 1840. When the British annexed the province they sent a garrison to Pietermaritzburg and at Fort Napier a Garrison chapel was built in 1846. As this would have used the ‘Book of Common Prayer’ for services, it is recorded as the first formal Anglican church in KwaZulu-Natal.

Between 1849 and 1851 over 4000 settlers arrived in Durban and several churches were built. In 1852 the first Catholic church – St. Josephs – was built (Before that they had been having services in the Methodist building). In 1853 St. Paul’s Anglican Church was built by Rev. Green.

3.4.2 Colonial Church Architecture

As can be imagined the first missionaries and settlers used whatever means they had available to them. It is recorded that Captain Gardiner had his first religious gathering “…under the trees at Mr. Berkin’s house on the 13th March 1835.” Captain Gardiner’s first building was recorded by an American Missionary Rev. Grout as being “…the building intended by Capt. Gardiner as a Chapel is in the course of erection. It is long, with a virandah [sic] around and is capable of holding 300 hearers. The end for the pulpit is concave for the purpose of ease to the missionary in preaching…” This must have been quite an ambitious undertaking by Captain Gardiner as there certainly were not 300 Europeans in Durban at the time (although he was focussing his missionary endeavours on the local Zulu populace). The shape of it (being long) would be in line with the long Gothic Revival architecture being built in Britain at the time. It seems at this early stage some thought has been given to acoustics due to the concave back wall! This would have been a Wattle and Daub thatch construction. There is no record of its completion or demise, but by 1843 it was no longer standing. The Methodist church building and the Nederduitse Gereformeerde Kerk (NGK) building in Pietermaritzburg were Wattle and Daub as there are various references to them as such. These would have been seen as a temporary solution until a more permanent structure could be erected.

Finances as always was the main generator. The brick chapel at Fort Napier came from donations by the 200 soldiers. It seems that Pietermaritzburg was a wealthier town, because it is recorded that a Methodist ‘Red Brick Gothic Style’ Chapel was built there in 1849. It was only after the influx of settlers to Durban do the records mention the construction of brick churches.

It is interesting to note that the other option suggested was the importation of a complete cast and corrugated iron building as was attempted by the St Thomas parish for the Berea (Captain Gardiner’s church plant):

As a result the first St Thomas’s Church, a corrugated iron structure, was completed in 1864. The prefabricated building had previously been made in England, and was sent to South Africa by a Mrs Danby Harcourt of Yorkshire as a gift to the parish of Congella. The parish was unable to afford the 200 GBP cost of transporting the church from the harbour and erecting it on its site, but an enterprising missionary, Revd. E Rivett, collected the money necessary from local inhabitants and had the church built in Ridge Road on the Berea.

St. Thomas Church website [http://www.stthomasberea.org.za/?page_id=112](http://www.stthomasberea.org.za/?page_id=112)
Later churches built in South Africa tended to follow their European counterparts – being Neo-Gothic or Neo-Classical in design and aesthetic.

It is heart-warming to read that in every instance where a church was built, its owners were willing to share the building with other religious denominations - even English/Afrikaans and Catholic/Protestant at a time when relations among communities may not have been as close as they are today.

A final comment is that colonial churches were also anchors - reminders of a far-away culture. They were landmarks around which a community could rally, socialise and do business. Missionary John Mackenzie (1971: 18) remarked upon this in 1859 while travelling around Southern Africa:

> The colonial villages or towns - as some of them may now be properly termed - have usually grown up round the Dutch Church as a nucleus; and it has been remarked that these church or town sites had been chosen with great skill by the Dutch colonists. I have come into contact with those who had seen the growth of considerable villages from the solitary farm-house of the first owner. As soon as the church is built, there is no doubt as to a certain amount of business being done where it stands.

This is in line with Norberg Schulz’s (1980) comment in chapter 2 about man’s need to identify with and orientate himself by his environment.

### 3.4.3 Indigenous Churches

An African Indigenous Church is described as a church that has its roots and early leaders of African descent rather than being from a mission of an established denomination from anywhere outside of Africa. South Africa has two main Denominations like this: the Zionist Church and the Nazareth Baptist Church (or Shembe Church). It is notable that both of these denominations came out of the Apostolic Faith Mission which was brought to South Africa by John Alexander Dowie. However very early on the church was run by a Pieter Louis Le Roux and Daniel Nkonyane. Daniel Nkonyane included the propitiation of Ancestors into his theology and split ways with the AFM in 1910 taking most of his congregation with him. This led to the formation of the Zionist Church.

The other large indigenous church in South Africa, the Nazareth Baptist Church was started by Isaiah Shembe who was a member of the Apostolic Faith Mission and after learning from them, started his own congregation following the Zionist principle. The distinct difference theologically between the two was that Shembe insisted that he was a prophet sent directly from God to the Zulu nation.

Architecturally there is not much of interest to come out of these denominations other than the Zionists have overcome the challenge of meeting in an expensive building by gathering in an area which has been set aside by whitewashing a stone circle. These can be found throughout KwaZulu-Natal wherever Zionists gather to worship.

Besides that, it would seem that the desire for a ‘churchy’ looking building that gripped the Western churches since the mid-19th Century has affected African church leaders too. The author’s experience with church design for Indigenous congregations is that they want the architectural elements that say ‘church’ like neoclassical arched windows and a church spire.
3.5 CONTEMPORARY CHURCH DESIGN

3.5.1 Contemporary Theology

The Reformation and the rise of Protestantism had brought about the demise of the Clergy as being ‘set apart’ and revered in spiritual awe. Because of the desire for the congregants to participate, the long thin church plan design made less sense than a shorter wider one. This had two immediate advantages – the congregation was visually closer to the activity of the clergy during the service, and especially communion, so they felt more part of it; and secondly, in an era without audio enhancement, the closeness made listening to the sermon easier. Although the less conservative denominations like the Quakers and Anabaptists early on embraced a squarer more inclusive church plan, most mainline denominations kept the long thin nave, often with the much loved cruciform shaped church plan. Ironically, the second Vatican Council of the Catholic Church in December 1963 ratified active participation of the laity in the service and led the way to a new architectural style appearing in Catholic churches before less conservative denominations. And so the altar was now moved closer to the congregation, the priest turned around to face the people, and the rood screen was removed.

3.5.2 Contemporary Church Design

What precipitated the first real semi-circular church design was the start of what we call today Mega-churches (a church of 2000 seats or more). With improved transportation one did not necessarily walk to church and so did not always go to the closest church. The first of these was the Metropolitan Tabernacle in London. The church was formed in 1850 but numbers started to grow when the well-known theologian Charles Spurgeon took over as the pastor. For a while they moved into the Surrey Gardens Music Hall, but the new 5000 seater auditorium was completed in 1861 by architect William Wilmer Pocock.

The first large church in America was the Angelus Temple in Echo Park near Los Angeles, California, completed in 1923 by architect Brook Hawkins. The Pastor was a woman called Aimee Semple McPherson who embraced modern media (the radio) to attract a large following. The use of microphones also allowed for bigger congregations. The first microphone was used in opera in 1910 and must have followed shortly into churches.
The first European church of interest was a Catholic church at Le Raincy, near Paris by architect Auguste Perret. And also the Catholic Chapel at Schloss Rothenfels-am-Main in Germany remodelled in 1928 by Rudolph Schwartz. Both buildings were early Modernist Architecture and had a total lack of adornment, with the latter one being circular in plan with the altar in the middle.

As was mentioned, the second Vatican Council of the Catholic Church ratified active participation of the laity in the service and the semi-circular design in Catholic church architecture followed with buildings like the Cathedral for Liverpool in 1967 by architect Sir Frederick Gibberd and the Abbey Church of St. Procopius in Lisle, near Chicago in 1971 (architect unknown).

Most of the large American churches had their rapid growth in the 1970s. One of the earliest churches of this design in this thesis is Living Waters in Durban North which was completed in 1980. The then pastor George Dillman often took trips to America and had links with the Metropolitan Church of God in Fort Washington MD, and Mount Paran Church of God in Atlanta Georgia. Pastor Dillman’s ideas for his semi – circular plan almost certainly came out of these trips to America. And Living Waters Church became a forerunner of that style of church in KwaZulu-Natal.
3.6 CONCLUSION

The Literature Review sought to answer several secondary research questions as set out in the introduction, as well as containing a historical research component. As mentioned in Chapter two, this research is a Qualitative system of inquiry. However this method of inquiry sometimes overlaps with the Historical and Correlational systems of inquiry. In this case the Literature Review has crossed the line into a Historical system of inquiry but is still in line with the theoretical framework as set out in the previous chapter. This chapter has attempted to answer the following questions:

- What is the primary task of the church?
- What activities is a church called to do biblically?
- Are there architectural elements, both biblically and historically, that are still relevant today, and should form part of contemporary church design?

The Primary Task of the Church

It has been shown that the primary task of the church is discipleship, to bring believers to maturity. Not just to be mature Christians, but to be Christians who are able to take over the roles and positions of current church leaders to perpetuate the life of the church. This does not have a major direct impact on church architecture, but gives a framework in which to look at the second question.

The Activities the Church is called to do

As deduced by research, the main activities the church is called to do are: Baptism, Teaching (preaching/discipleship), Fellowship, Communion, Prayer (Ministry), Social Outreach, Worship, Evangelism.

Certain activities like Social Outreach occur away from the church building, however most others require some architectural assistance:

Baptism requires either a font for denominations that practice christening, or a pool for denominations that practice full immersion baptism. Some churches baptise in local rivers or pools, so this is not essential, but a nice-to-have.

Teaching, Prayer and Worship require a hall of some description to protect the congregation from the elements.

A fellowship area as part of the church is a good idea, as it helps build community.

Communion may or may not need an altar, depending on the denomination. However to some denominations it is important and a focal point.

Evangelism is also something that may or may not occur in the church building. However if the design of the building allows the church to host evangelistic events like The Alpha Course, or plays like Heavens Gates, Hells Flames then the architecture can assist the church with this function.
Biblical and Historical Architectural Elements still influencing Current Church Architecture

Early church buildings (that were civic buildings not merely large homes) were Roman basilicas. These had a similar rectangular shape to the Jewish temple. Although the detail of the temple was not carried through to church architecture what did come through was a ‘progression in holiness’ that is found in the tabernacle and temple designs, with a focus on an altar at one end. The elongated plan assisted with this and the ‘priesthood of all believers’ reverted back to an ordained priestly role as per the Jewish form of worship with the separation of laity and clergy. This also became entrenched in the architecture with the appearance of a rood screen behind which laity were not supposed to enter. What was discovered during this time however was the effect volume and light had on the architectural experience, and the Gothic cathedrals were created. Later church buildings tried to emulate the medieval cathedrals, often with simply the decoration of Gothic elements like the lancet window, where actually light and volume were the key to the beauty and internal experience. In the 20th century the resurgence of the ‘priesthood of all believers’ saw the removal of the rood screen. The elongated church plan had less relevance and along with other technological factors like transport and sound amplification, saw the emergence of semi-circular church plan to accommodate a larger congregation. In some church architecture elements from the High Gothic and Classical architectural periods have been carried through; while other churches became very plain and unadorned.

The Historical Research Component

Apart from the items mentioned above, the early church in South Africa is briefly looked at. It was evident that there was a lack of money and other challenges, and so early colonial churches tended to be very basic with not much permanent architecture. Dutch settlers managed to get a successfully working model for village churches within farming communities, however much of their architecture was a copy their European counterparts being Neo-Gothic or Neo-Classical. Indigenous churches were not immune to this ‘churchification’ of their buildings.

As we shall see in the following chapters, the new styles of church architecture that appeared in Europe and America in the early 20th century, soon found their way to South African shores.
CHAPTER 4

4.0 CASE STUDIES

INTRODUCTION

Choice of Churches
As mentioned in the Introduction, the choice of the ten churches was based on the following:

- Within the KwaZulu-Natal province.
- Churches less than fifty years old.
- Churches with architectural merit.
- Churches that are operating successfully.
- A broad spectrum in terms of denomination and culture.

Research Methodology
The Methodology for the research aspect of this thesis is set out in Chapter 1. This was done within a Theoretical Framework as set out in Chapter 2.

To recap the methodology was as follows:

- Semi structured Interviews
- Participant Observation
- In Situ Analysis
- Archival Research

For each of the ten churches, the author attended a worship service in which points two and three above were covered. An interview with each pastor occurred where the first point was covered and occasionally some archival material was obtained. Other archival material was obtained from library and internet searches, covering the fourth point.

The Literature Review in Chapter 3 highlighted the following aspect of church life as being important: baptism, teaching, fellowship, communion, prayer, social outreach, worship, and evangelism. These will be looked at as part of the Thematic Analysis of each building as explained in Chapter 1 and recorded as part of the Author’s personal observations.

Personal Observations
While visiting each church and participating in a worship service, the author evaluated each building architecturally. This Thematic Analysis is under the following headings:

The External Aesthetic
This will be viewing the church in its surroundings – whether it is it bold or retiring, sophisticated or simple.

The Welcome Experience
This looks at the primary experiences upon entering a building. It will look at how easy the entrance is to find and if the feeling on entering the building is welcoming.
The Nave/Auditorium
Both the above words have been chosen as the more traditional churches will want this space called a Nave, while the more free churches usually refer to it their auditorium. There are many things that will be looked at here: natural and artificial lighting, volume, finishes and features, seating etc. The worship experience will be analysed under a separate topic.

The Sanctuary/Stage
As above, two words have been used for this area. The various elements of the sanctuary will be looked at: the altar, the pulpit, the baptismal font and the choir stalls.

The Worship Experience
Acoustics will be analysed here, as well as the numinosity of the space, or how it assists the congregants to experience God in a spiritual way.

Children’s facilities
How children are cared for during the service is an important factor for several reasons.

Toilets
The lack of sufficient number of toilets is a common problem in church design.

Fellowship Area
This would be an area set aside for fellowship after the service, as well an ancillary kitchen, if any.

Ancillary Hall
A rather useful, if expensive, extra to a church complex. Where do the Youth meet?

Offices and other Rooms
What other facilities does the church have?

Interviews
Although the Author had set a questionnaire for each interview which can be found in Appendix 2 of this document, each interview was reasonably unstructured. The author has therefore attempted to capture the salient points that each pastor found was important about his church and highlight these areas in the recording of each meeting.

In conclusion the author will consider the salient aspects of each particular church. A comparison of the ten churches will then be done in the following chapter.

Challenges
On the whole meeting with the Pastors or Elders and attending their churches has been a very enjoyable experience. The only church that was a little challenging was the African Congregational Church. Part of the reason for this was that the author’s clients on this project, the former Bishop and Treasurer, had both passed away. The church also does not meet regularly and does not have a lot of information on the internet. However the current pastor’s contact details was finally obtained by going directly to the Bishop’s house, adjacent to the cathedral. Besides the ACC cathedral, finding information and meeting with the pastors of other churches has been a relatively easy task.
Fig. 17 View of the Church (Williams)

Fig. 18 Plan of the Church (Church archives)

Date Completed: 1976
Architects: Geoffrey Le Sueur of Stauch Vorster & Partners
7 Jo Naude Rd, Queensburgh, 4055
Current Dominie: Franna Herselman, Dr Samuel Marx
4.1.1 Introduction

The church is in the suburb or Queensburgh/ Malvern which is south west of Durban. Taking the N2 south out of Durban one quickly turns off onto the M7 and heads inland. At the top of the steep hill one takes the Queensburgh turnoff and gets onto the main road going parallel to the M7 going west. At the main Town Centre intersection turn left into Ridley Park road and then third left into Jo Naude. The setting is an entirely suburban one, and the church is surrounded by middle income residences.
In the 1960s there was a large influx of Afrikaans speakers to Durban to work on a railway expansion programme for the Durban Harbour. The old churches of Durban Wes at Seaview and Hillary were too small. The Seaview church used an old bakery building that could seat 300 but at one stage held services of over 1000 members. The Church Synod made a decision to build a new church. The primary requirements were for a building to house services of this size. The sanctuary area had to accommodate seating for the Church Elders and Deacons (around 60 people).

4.1.2 Personal Observations

The External Aesthetic
The Building follows NGK tradition in being a focal point for the surrounding community. The steeple can be seen from a way off. Aesthetically the church has a strong solid feeling about it, although the condition of the building currently is not good and the presence of Cellular Aerials on the steeple detract from the beauty and hint at the financial challenges the church may be experiencing.

The parking lot is ample however the architecture does not inform one where the entrance to the church is. There is an accentuated entrance – but that is to the offices, and this could lead a newcomer to be a little confused as to where to go.

The Welcome Experience
The reason why there is no celebrated entrance is because there is no entrance area or foyer. On arriving one goes straight from the outside into the nave area through what seem to be the fire escape doors. As the Architects were a well-respected firm, it leaves one wondering why this design was chosen.

The Nave/ Auditorium
The space internally is quite pleasant. There is a high ceiling with an even higher volume over the Pulpit. Although the finishes are dated and stoic, the volume and light colour ceiling, together with the lighting produce a happy uplifting ambiance.

The planning is still in the traditional long thin nave (this is the oldest of the buildings in this thesis so this is to be expected.) As the congregation is smaller than it was only the front of the area is being used.
The Sanctuary/ Stage
This area is typical of NGK churches, with a large high pulpit – a focus on the sanctity of the word. There is seating for the church leadership off to the left. There is no altar and the author did not notice a baptismal font. It is assumed that the area to the right would be for a choir if there was one. There is a very large organ displayed prominently behind the pulpit.

The Worship Experience
The worship was led by a small worship group with the use of an overhead projector linked to a computer. The person in charge of the computer was seated close to the music group for ease of communication. The author enjoyed the worship although style and form of the worship described above did not sit easily in the architecture, which is far more suited to a large choir and rousing organ music. This sad dichotomy between form and function is not unusual for traditional church buildings where the congregation are trying to ‘move with the times’ in an architecture for another worship style, and is part of the reason why the new church architectural styles have arisen.

Children’s Facilities
The church was designed with two mother’s rooms – one on either side of the sanctuary. Although only one is now in use. This the author feels was bold forward thinking by someone in the design process. There are also separate rooms available for Sunday school which seem to work well. There are no facilities for children to play on after the service however.

Toilets
The toilets seem more than ample for the short service (one hour fifteen minutes).

Fellowship Area
The back of the nave butts against the ancillary hall, with an attached kitchen. This works well for fellowship after the service. The only down side being no area for small children as mentioned above.

Ancillary Hall
As mentioned above, the ancillary hall is behind the nave. It can be closed off or added to the nave with sliding folding doors. This works well for the Christmas Easter overflow and as a fellowship area.

Offices and Rooms
The church has ample offices and store rooms for the running of the church.
4.1.3 Interview
Interview with: Jan Wessels (Church Elder)

Jan Wessels has been involved with the church for over twenty years. He says the church is declining in number at a rate of about 4% a year – this is due to the Afrikaans families leaving the area. The church is managing the decline.

He believes building works well in terms of space – the back of the church hall (nave area) being used to serve coffee after the service but could equally be used to extend the seats for large services like Christmas and Easter so can seat between 150 and 1000 people. There is a large parking area which he says is often used for community fetes and flea markets. On the other side is a large garden area which the church can spill onto where the children can play.

Jan felt that the carpet was maybe not the wisest decision for the floor as the church is used for a lot of functions and the carpet gets dirty.

Jan said the style of worship is traditional with once or twice a quarter a puppet show for the children.

Jan said that the church was designed with two mothers’ rooms – one on either side of the sanctuary area. However as the congregation has shrunk the one has been turned into a vestry. He says there is a children’s church hall upstairs in the office area behind the sanctuary. There is a youth group that meets in the main church area on Friday evenings.

Jan feels the building works well in terms of massing as its large presence makes a statement to the surrounding community. He also likes the volume internally.
Jan says the Acoustics are not so good. The spoken voice is not good if not using the microphone. The church does not have a sound desk, but rather someone on a laptop computer sitting close to the worship team.

Visitors are invited to join the congregation for tea after the service at the back of the hall. There is no separate Visitors Lounge.

Jan believes that the church can indirectly encourage good worship and church growth by providing the best possible facilities and environment for services to take place. He believes that a church should excite or inspire one to worship.

As far as the church being a Sacred Space he believes that there has been a change in thinking and nowadays the church building is seen more as a tool and is often used for secular social events. But traditionally the structure was designed to encourage reverence – with the cross and the pulpit being the main focuses.

Jan said he has sometimes experienced the presence of God in services.
4.1.4 Conclusions

The church was well designed for the era, worship style and congregation size at the time. The only puzzling thing is the lack of any formal foyer or reception area. The other lack is a children’s play area outside the hall.

The one aspect noted by the author is there seems to be no attempt at evangelism or church growth. The author wasn’t greeted and there was no attempt to get him to join or become integrated in the community. A foyer area would help with this, but there was ample fellowship after the service. The church seems to have accepted its decline which is sad. One wonders what the future of this building will eventually be.

Fig. 23 Architect’s rendering of the church
(Picture is hanging in the church offices)
4.2 ST FRANCIS XAVIER CATHOLIC CHURCH – BLUFF

Date Completed: 1977
Architects: Hallen Theron & Partners
21 Sormany Rd, Durban, 4052
Current Father: Michael Foley
4.2.1 Introduction

The church is part of a much larger Catholic property, with several buildings, on the Bluff south of Durban. Getting to the site is quite onerous – taking the M4 South out of Durban, one takes the Bluff turnoff on Solomon Mahlangu Drive or M7. Follow the M7 over Bluff road all the way to Marine Drive. Turn left into Marine Drive and just over a kilometre later turn left into Sormany Road. It is on the right. The setting is suburban with sea views (St. Xavier was the first Christian missionary to land in Goa). Congregants come largely from the lower income Wentworth area.

There were three separate properties that the Catholic Church owned on the Bluff, with mass being held at two of them. As all three properties were run down and constantly needing repair it was agreed that a new building would be built to service all three sites. After looking at proposed population growth in the area it was decided to develop the site at Brighton Beach. The architects were Hallen Theron & Partners and the building was opened on the 19th May 1977 and formally dedicated by Archbishop Denis Hurley on the 6th December 1981.

4.2.2 Personal Observations

The External Aesthetic

The building is small and unimposing and one comes upon it almost by surprise while driving up the small road. Once noticed however, it is striking. In the author’s opinion the aesthetic has a pleasing mix of modernism with a slight Italian flavour. This being consistent both within the era it was built as well as the Italian connections to the Roman Catholic Church. The bell tower and cantilevering beam make a bold sculptural statement and the entrance is inviting and
clear to see from the parking area. In the planning the brick lines on the external paved area radiate out from the focal cross – which is also situated outside the building – but on the other side of the church, visible internally because of a glass back wall.

**The Welcome Experience**

Upon entering one is greeted by friendly faces in a designated entrance area with information about the service and church life readily available. One is then immediately struck by the magnificent sea views through the glass wall behind the sanctuary.

**The Nave/ Auditorium**

The Nave has an unusual shape - widening out in almost conical fashion. The entire roof structure is held up by two concrete beams with exposed steel cross girders. This gives the inside a Brutalist feel about it, however with that comes an unadorned honesty – which works aesthetically. Seating is fixed natural timber pews on, for the most part, exposed concrete floors. All in line with the natural honest look.

**The Sanctuary/ Stage**

The sanctuary separated from the nave by three steps in semi-circular fashion very similar to much later Free Church designs. It is rather small however given the fact that it accommodates a very large solid granite altar along with two lecterns, baptismal font, priest’s chair, and various other pieces of furniture. Two structural columns frame it but also impede on the space. To the left and right there is additional seating – presumably for a choir. Although busy, one cannot help but be seduced by the view, with the focal cross being outside the building. The solid altar also contracts pleasingly with the glass wall behind.

**The Worship Experience**

The church uses the traditional Catholic form of worship with the focus being on the Liturgy and the Sacraments rather than on Praise and Worship like more modern church styles. The size of the church just accommodates the current congregation and Sunday services are full. The author enjoyed the service and was surprised at how much was packed into the short service (just over an hour). Acoustics was not the best for audible speech and the author struggled to hear some of the readings.
Children’s Facilities
The author did notice a mother’s room to the right of the church, which was used. There did not seem to be any external play area, although there are external classrooms for catechism.

Toilets
The toilets are outside the building, and there are not many. Although given the short service they seemed ample.

Fellowship Area
This seemed to be lacking save for the oven courtyard space outside the entrance. Being open to the elements and the parking area the author felt this was an area that was lacking in the design.

Ancillary Hall
There is a complete lack of ancillary hall, although given the number of buildings present on the property, there may be one somewhere that the author is not aware of. Given the church’s current capacity, Christmas and Easter services must be a challenge.

Offices and Rooms
The church has nearby offices and sufficient other rooms for the staff for the property.

4.2.3 Interview
Interview with: Fr. Michael Foley (Current Priest)

Father Michael enjoys the architecture of his church, although he says he gets annoyed when troops of monkeys come past behind him during his sermon and distract the congregation! He felt that the church was a nice place to pray and meditate. It is very peaceful and on a busy day one can come in and sit and look out to sea. Fr. Michael felt that the sanctuary was too cluttered with the large granite altar and he is looking at moving the Lectern out and creating a second one for notices.

Fr. Michael said that although requesting a ‘nautical theme’ the architects were pretty much given free-reign on the design. Theological influences in the design include the fact that at the
Second Vatican Council it was decided to reform mass and turn the Altar around, so that the Priest stood on the other side of it and faced the people. The other important point that needed to be considered was that the sanctuary needed to include these three items: The Chair of the Priest, the Lectern/Pulpit and the Altar. The Liturgy is an activity where congregants leave ordinary space and become involved in a supernatural event – a mystery beyond oneself – and the architecture of the church is to help create that mystery.

Fr. Michael says the mothers cry room needs of better sound protection. It is also distracting if a mother needs to go to a toilet during the service, as one was not designed as part of the mother’s room, and there is no external door. There is not a very big youth group, but the building does cater for Sunday school with Catechism rooms being used.

He feels the Acoustics are not too bad in the church. There is a sound control desk in the Sacristy (vestry) but it is not manned during services.

Fr. Michael is happy with the massing of the building. He feels that an ugly building would not inspire one to go into it and pray or meditate – this is not such a building. He likes the simplicity of the design and the focus of the Cross, although he did feel that the screen at the back of the church in the foyer area for notices was a bit irreligious.

He says there is sometimes a bit of socialising after the service with tea, but this is uncovered so does not happen during inclement weather. Fr. Michael feels this is an architectural shortcoming.

The church would only be consecrated once it was fully paid for – this is done by the Bishop anointing the walls with oil.

In terms of the architecture helping the congregation to worship Fr. Ian feels that the focus of the Priest’s chair is very important as during mass the Priest becomes ‘in persona Christi’ or a symbol of the living Christ to the congregation. The Liturgy itself is a drama for God, not
the people. The congregation comes into the presence of God and so the Liturgy is sacred. The church housing this is a sacred space – not a place to chat to your neighbours. God is mystery and the architecture of a church must respect and promote that.

Fig. 30 Long Section through Church (Church archives)

**4.2.4 Conclusion**

Although this church was designed just a year after the previous one, it still seems perfectly suited for the task. This may be that the Roman Catholic service has not changed very much, but it is the author’s opinion that it is also due to progressive architectural design. The only real shortcoming of the design is the lack of the decent covered fellowship area. However the church does seem to have a very active congregation with good social cohesion and the congregation numbers do not seem to be affected by this flaw. However even Fr. Michael agrees that this is something the church needs. How to incorporate it into the current design is another matter entirely.
4.3 LIVING WATERS CHURCH – DURBAN NORTH

Fig. 31 View of the church (Church Facebook page)

Fig. 32 Plan of the church (Williams Associate Architects archives)

Date Completed: 1980
Architects: Alwyn J. Lubbe & Associates
45 Prospect Hall Rd, Durban North, 4051;
Current Pastor: Pastor Christian Kisten
4.3.1 Introduction

Living Waters church is situated just north of Durban off the M4 and behind the large Hypermarket. One would take the off-ramp from the M4 just south of the Hypermarket, follow parallel with the M4 then turn left into Pembroke Road. The setting is suburban in a middle to upper income area.

Living Waters church started as a church plant from the Full Gospel Tabernacle church (below Musgrave Road) in 1955 into the Redhill area. It was a Coloured area but had more European than Coloured people attending. The church steadily grew until its ‘heyday’ around 1978 when the church was experiencing about 30 salvations a week under its pastor George Dillman. The land for the new building was purchased in 1980 and the church was opened in 1983.

4.3.2 Personal Observations

The External Aesthetic
The building externally has an eclectic feel with various unusual forms. The Calci-bricks have not weathered well. The tower holding the cross has a 1960s feel about it. It is not an architecture that would really draw people except perhaps out of curiosity. Interestingly the church used to have a stylised angel motif on the walls which is actually derived from the plan view of the church. The parking is curved to match the church, and the entrance is clearly visible.
The Welcome experience

The church has a foyer and there are church members to welcome newcomers and give them information about the church. Visible from the foyer is the large fellowship area which has a welcoming feel.

The Nave/ Auditorium

Going into the main auditorium again the feeling would be described interesting. The space is unusual with the ceiling sloping down towards the stage. Large laminated beams make a striking statement. There are big circular windows which are now having curtains put on them for the audio visual. The auditorium houses 750 seats. There is a sound desk at the back of the auditorium where it should be. Calci-bricks are exposed internally with unsightly efflorescence.

Fig. 34 Inside the Auditorium (church Facebook page)

The Sanctuary/ Stage

The Stage is circular and protrudes into the auditorium. There is a recessed circular area, which protrudes out in an unusual shaped structure to pick up the bottom end of the laminated beams. To the left of the stage is a baptistery pool which is kept permanently filled and is aesthetically quite attractive.

The Worship Experience

Worship in the church is enjoyable, with the usual problem of inadequate sound and poor spoken word acoustics. The mix of ethnicity is pleasing, although it is mainly Indian and European.

Children’s facilities

There is a mother’s room behind the gallery which is well used. There are smaller hall/ large classroom spaces where the church has their Sunday school. There is no play area near the coffee shop however. The youth apparently meets in the coffee shop area.

Fig. 35 The Stage (Williams)

Toilets

The toilets seem satisfactory, however mobile toilets are brought in for large events.

Fellowship Area

The fellowship area is a real asset to the church. It has been tastefully decorated. The double volume space has mezzanines on both sides. One to house the youth and the other has a church library, which the church are also planning to turn into a visitor’s lounge. There are a large
number of tables and chairs which are well used after the service. There is also a stage at the back of the space which is used for nativity plays etc.

**Ancillary Hall**
There is no ancillary hall as such, as the designed hall has been annexed by the fellowship area. However the Sunday school classroom is quite large and there is a cosy chapel hidden below the church which has 70 fixed seats.

**Offices and Rooms**
The offices are well positioned and airy, and the church now has a crèche that is attached to the church architecturally although is separately run.

### 4.3.3 Interview
Interview with: Lindsay Dillman (Previous Pastor)

Lindsay said the semi-circular plan was his father’s idea – he wanted the congregation to be close to the stage so people could easily witness the miracles that were happening and could easily come up to make a commitment after an ‘altar call’. George had taken six trips to the USA and was influenced in his design by churches he visited in the city of Atlanta. It was the first semi-circular church in Durban. The church was designed to house 1100 seats (including a gallery) with an attached hall that was separated by sliding folding doors so that for Christmas and Easter it could accommodate another 900 seats bringing the total up to 2000.

Due to George Dillman’s strong personality he had no problem getting the whole congregation behind the new building venture. The primary requirements are mentioned above with eye contact to the stage from every seat being important. The design did not change but the choice of using Calci-bricks was a poor one, as they are very porous. A serious discussion was held at some stage about the possibility of suing the supplier, as the building leaked through the walls in several places.

The raked seating to get good eye contact with the stage works well as well as the semi-circular shape, however the coffee lounge soon spread out into the overflow hall. George said “behind the coffee machine is my second pulpit”

However Lindsay feels that in the prestige of the new building detracted the church leaders from their primary focus of discipleship and the church seemed to stop growing after it moved into the new building. He also feels that for a new church plant in the 21st century the personal wealth of the founders is the key to a successful plant. Lindsay’s dad held closely to the leadership of the church which forced other up and coming leaders to leave; such as Fred
Roberts (founder of Durban Christian Centre) and Theo Wolmarans (who now runs a very large successful church in the States, and is married to a distant cousin of the author’s). The church is working well now though. It has always had a contemporary style of worship.

The church does have a mother’s room with a glass window into the auditorium as well as its own separate toilet. A big drawback though is that it is upstairs, which is a problem if the mother has a pram. The church does not have a decent children’s play area outside which Lindsay feels is a mistake.

Lindsay does not like the ceiling that dips down towards the stage. It was made this way for acoustic reasons, but didn’t work. The Acoustics have always been poor in the church. The sound desk at the back of the church was initially placed upstairs – which was a mistake. It has now been moved downstairs. The large windows into the church have been a problem in the new age of audio visual, and are in the process of getting heavy curtains. The lighting in the church has also always been poor – as it was done cheaply at the end of the contract, and was never rectified. They also tried a bookshop, which Lindsay said didn’t work. Otherwise he likes the aesthetics of the church which drew from the ‘crown of thorns’ for its round theme.

Service lengths are two hours and there are sufficient toilets – except if the church has large conferences. First time visitors are given a voucher for a free cappuccino.

As stated previously the church stopped growing when they moved into the new building. The main reason being this ‘seduction of the building’ mentioned earlier (although Lindsay did say that another possible reason for this is that his dad developed the first signs of Alzheimer’s disease at about this time). However because of this Lindsay says he is wary of ‘grand’ architecture, and that any feelings or emotions it may evoke as being fleeting or sensationalist. He feels that as long as the building is able to house the congregation, it is what happens on the inside that is important. He has felt the ‘shekinah’ presence of God in various services in various buildings. Lindsay went on to say that the building also locked the congregation into a
certain mentality – he feels that when he stood up to preach people saw not him but his dad. Lindsay feels that a church should be a simple ‘shed’ which through adornment can change its culture into that of the contemporary culture that it is reaching.

4.3.4 Conclusion

Living Waters church for all its unusual architecture has certainly been an iconic church in Christian circles in Durban in the last forty years. Although the church came out of the offices of architect Alwyn Lubbe (an architect the author worked for in his early years and whose practice he eventually purchased) the actual architect was a young Frenchman that Alwyn had employed at the time. They say that imitation is the sincerest form of flattery, and the fact that the clients for the African Congregational Church wanted ‘a church just like Living Waters’ says a lot for its prestige and architectural influence in the Durban Christian community.
4.4 CATHEDRAL OF THE HOLY NATIVITY – PIETERMARITZBURG

Fig. 39 View of the Cathedral (Darby, 1982)

Fig. 40 Plan of the Cathedral (Church archives)

Date Completed: 1982
Architects: N Rosendal & H Kammeyer / G Carter-Brown
169 Langalibalele St, Pietermaritzburg, 3201
Current Bishop: Dino Gabriel
4.4.1 Introduction

The Anglican Cathedral is in central Pietermaritzburg about three blocks down from the City Hall. When coming into Pietermaritzburg from Durban on Chief Albert Luthuli Street, one turns left at Langalibalele Street and it will be on the right hand side a few blocks down. The setting is urban. Although there is some on-site parking, this could become a problem for large services. The congregation seem to come largely from inner city lower income communities.

Due to the split that had occurred in the Anglican Church caused by the controversial Bishop Colenso, there were two cathedrals in Pietermaritzburg, St. Xavier and St. Peter. However the rifts were mended and as the St. Peters property had lots of land around it, it was decided that a new unified Cathedral would be built here, and St. Xavier was demolished. Interestingly the St. Peters property had been purchased in Bishop Colenso’s personal name. The overriding theme was to be one of unity, and the name was chosen after the name of the province – Natal (which was named by the Portuguese after arriving at the Port of Durban on Christmas Day).

There was overwhelming support for the new cathedral from both congregations, although the funding was a bit of a concern. The requirements were the accommodation of 1000 seats, to have good vestries, sufficient toilets, and children’s facilities. The office component was to be phase 2. Defined as ‘a room to worship’ it was to be deliberately Non-Monumental in scale. The project went out as a Competition and was won by architects N Rozendal & H Kammeyer in association with G Carter-Brown.
4.4.2 Personal Observations

The External Aesthetic
The building has achieved its ‘non-monumental’ brief with only the flying wing walls signifying the importance of something with-in. However as a first time visitor one is confused as to where the entrance to the cathedral is, as there are several office buildings on the site and the entrance is not accentuated in any way. In fact the orientation is such that one has to wander around between the buildings to find the front door. The author is uncertain why this is the case, perhaps due to orientation. Besides the lack of entrance focus, the style of the architecture is somewhat Brutalist, with exposed concrete and facebrick. The author failed to find any beauty or aesthetic externally to seduce him. If the design intent was to completely break with any form of Traditional Gothic Cathedral it has at least achieved that aim.

The Welcome Experience
Once one has found the entrance, the bold Brutalist theme continues with a giant pivot door. This now works, in the author’s opinion, as something befitting a cathedral. There is only really a nod at a foyer, with the baptismal font, a candle and a table for notices. There was no one to welcome the author.

The Nave/ Auditorium
Once inside the church the real beauty of the architecture is revealed. Looking up one sees one is in a huge cylinder topped with a square concrete ceiling. Natural light enters the space through the segments from clerestory windows. However wrapping around the seating area is very organic amorphous wall. To the author this immediately spoke of a god of order and power interacting with very messy humans.

The overall aesthetic is unusual but certainly befitting the austerity of a cathedral. Circular lighting gondolas enhance the strong geometry.

The Sanctuary/ Stage
The sanctuary is demarcated by a single step and the communion rail. Even though the priests are still in their priestly vestments, there is a sense that the rood screen is gone for good and the sanctuary certainly feels part of the nave. It has the usual altar, pulpit/ lectern, and other furniture, as well as choir stalls to the left, which were still in use.
The Worship Experience
Although the author grew up in the Anglican church and is familiar with the liturgy, the three hour service was trying even for him. There was a mix of English and Zulu, although the author was the only European in the congregation. Acoustics was again a problem, with rich singing but poor spoken word.

Children’s Facilities
The author did not notice any children’s facilities. However, apparently the cathedral does accommodate a Mothers Room which had a live feed so that people could listen to the service. There is an external play area for children and the premises has a crèche. They also have an active youth ministry which meets in a separate hall.

Toilets
The toilets are adequate for the usual Sunday services – even longer ones. When conferences are held then mobile toilets are apparently brought in.

Fellowship Area
The author did not see any fellowship area nor was he approached or welcomed by anyone. Apparently these is a fellowship area in the hall below after the service where tea is served. There is no dedicated visitors lounge however visitors are supposed to be welcomed and encouraged to write their names in a book so that follow-up can be done. The last two points indicate clearly the role architecture can play in assisting a possibly shy server to get new members in engage in socialising with the existing parishioners.

Ancillary Hall
The cathedral does have several ancillary halls which are well used. However they cannot be used for overflow for Christmas or Easter services.

Offices and Rooms
Being a regional centre, there are many offices that are all well used. Access is via external stairs however, which is not conducive to inclement weather.

Fig. 44 Cross Section (Church archives)
4.4.3 Interview
Interview with: Canon Ian Darby (church archivist)

Being the church archivist, Ian was a mine of information. He stated that the round shape of the main Nave area was intended to be a symbol for unity and reconciliation, as well as a symbol for the gathering of the saints around the Lord’s Table. It also meant that a sense of intimacy was maintained for smaller gatherings like weddings and funerals. Ian believes that was accomplished and he likes the fact that the preacher is able to have good eye contact with the congregants. The one thing that has not worked so well in the main church was putting the vestries on the first floor which does not lend itself to easy access. Also some walkways are exposed allowing people to get wet when moving in between buildings on the property (something the author already noted). The buildings also do not lend themselves to an easy security arrangement.

Ian said that worship styles vary with the early 7am service being more traditional, the 8:30am being a bit more informal, and the evening service being quite free and more spontaneous.

Ian likes both the internal and external massing. Externally the building was kept deliberately low as mentioned in the introduction. However to ensure that the building wasn’t lost completely amongst the surrounding architecture, two long flying beams or ‘arms’ stretch out to the public roads on both boundaries to ‘gather people in’. Ian likes how the strong Euclidian Geometry contracts strongly with the free flowing wall around the Nave area.

Ian said that the Brutalist architecture was strongly criticized by many as being ugly but acclaimed architecturally as a strong break from the old traditional neo-classical or gothic styles. The use of the orange Pietermaritzburg facebrick is also a binding link to the architecture of the city.

Service times range from just over an hour to the late morning one that can go on a bit, as the author discovered!

Ian feels that the building grows on one. Often people who are used to being inspired by gothic style church architecture are put off initially, but the building has its own beauty which is eventually people fall in love with.

Ian said the acoustics are poor for the spoken voice but excellent for music (i.e. there is a long reverberation time) There have been four separate attempts to improve the acoustics for speaking but none have been particularly successful. Amplification is not necessary for most services. There is no dedicated area controlling the sound – it is all pre-set up before each service.

The church numbers are pretty static although there is a changing cultural mix, which may be part of the reason why the numbers are not growing. The church is embracing the changing cultural mix of the city, but it also brings more diverse faiths and styles of worship.
Ian believes that if a building serves a congregation well on a practical level it will encourage good worship. He also believes that the aesthetic is important, but if the functionality is not there then the aesthetic will not help. Ian believes that a church grows primarily through good preaching and teaching, and secondarily through good worship. If the architecture can functionally aid in these two areas then it will assist in church growth. Ian personally feels uplifted by the building when he enters it.

Ian feels that buildings are sacred spaces, but he explained that they are seldom consecrated anymore because the church does not allow any consecrated buildings to be mortgaged or bonded, which limits making this form of finance available for other church ventures. But he does feel that a church is ‘a place set apart’.

4.4.4 Conclusion

The cathedral works very well internally producing the strength and grandeur befitting a cathedral, but in a very different form to the gothic cathedrals of old. The biggest lack the author believes is in the external areas and circulation. The entrance is difficult to find, and one cannot leave the cathedral and enter any other space without being rained on. The lack of children’s facilities is a concern as is the lack of natural flow to a fellowship area. Still an interesting and controversial building.
Date Completed: 1995
Architects: Bill Williams of Leach & Van Der Walt Architects
75 Capital Hill Dr, Clifftdale, 3610
Current Pastor: Rev. Majola
4.5.1 Introduction

The ACC Cathedral is on the side of the N3 about thirty minutes outside of Durban. After going over Key Ridge one descends into Peacevale/Cliffdale and takes the glide off near the bottom of the hill. At the T junction turn left and the Cathedral is in front of you. The setting is a semi-rural one, an unusual place for a cathedral. Normal Sunday services do not happen regularly at the Cathedral, but when they do there are only about 300 local people in attendance.

The African Congregational Church has an annual national event which is their July Conference. Leaders of all the churches nationally gather each year and the leadership wanted a building to house this event. The Cathedral is also used for important funerals and other events.

4.5.2 Personal Observation

It must be noted in this case the author is the architect of the building. Although working for the company Leach & van der Walt at the time, he was in charge of the Durban branch of this firm where the church was designed.

The External Aesthetic

The design was influenced by the semi-circular Living Waters church design that the church elders liked. They also requested that the roof match the bishop’s house which had a steep pitched slate roof.

The large area to be covered would be difficult with steep pitched slate, so an external steep pitched slate roof surrounds the outer edge of the building hiding the low pitched steel sheeting.
behind. There is a glass block sun screen element running below this that is held in place with concrete curved columns that have echoes of the old cathedral flying buttresses. The whole building carries through the curved or circular theme. The only external element the author still finds jarring is the connection of the bell tower to the building. The bell tower was an afterthought, and although the aesthetic matches that of the church, author feels he could have done a better job with the junction of the connecting bridge from the bell tower where it meets the building.

The Welcome Experience
The cathedral has both a porch area as well as an ample foyer. So there is a progression from external, to semi enclosed, to enclosed, before one enters the large internal volume. The foyer was designed with a tea kitchen on the one side and a book shop on the other.

The Nave/ Auditorium
Although following the Living Waters design, the author in designing the space felt that volume and light were critical. So instead of the ceiling descending towards the sanctuary like in Living Waters, the ceiling ascends, and culminates in a skylight. The author had to fight the Quantity Surveyor on this as the price of the skylight was exorbitant. A gallery wraps around the back of the cathedral and this works well. The author designed a sound desk at the back of the church although it does not seem to be in use. Circular stained glass windows are placed at regular intervals around the curved wall of the gallery depicting biblical scenes. The ceiling is under purlin insulation board, with exposed trusses. On the whole the volume works well.

The Sanctuary/ Stage
The sanctuary is circular in plan with one half protruding into the nave. As with the previous cathedral, there is only one step and a removable communion rail between the sanctuary and the nave. There is a pulpit and baptismal font on the right and a lectern and standing area for a choir on the left. There is a strong language in the furniture as the author was fortunate enough to design it all. The only element he is unhappy with is the pulpit where he feels a more elegant design could have been accomplished with a bit more design input.
The Worship Experience
The Author enjoyed the service he participated in, although it was all in Zulu. It was pleasing to see the choir making use of the stairs designed for them. The author feels the space works well for the intended purpose of worshiping God.

Children’s Facilities
The cathedral has a mother’s room attached to the nave with a large glass window. The author was concerned that as it is upstairs it would not be used – as pushing prams upstairs is not easy. However most African mothers do not use prams, and the mother’s room is apparently well used.
There are no external play areas for children, but there is an area below the hall for Sunday school.

Toilets
The toilets designed were woefully insufficient. The author feels personally responsible for this mistake – coming from an Anglican background where services were short he was used to not many toilets being needed. Where there are long services of large numbers of people, toilets have heavy pressure put on them. An additional block of toilets was later built behind the cathedral.

Fellowship Area
There was a double fellowship area designed. For smaller services, the congregants could get a tea or juice and a biscuit from the smaller kitchen. For larger services the hall can be used for fellowshipping in as it has its own larger kitchen. The challenge is that there are now two kitchens. This arrangement seems to be working. There is just no accommodation for small children during this time.

Ancillary Hall
The author feels the ancillary hall works well. It is connected to the main nave area with sliding folding doors, so can be used for overflow for larger services. It also has a large kitchen attached as mentioned to be able to cater for functions.

Offices and Rooms
The book room next to the foyer has not worked. Although some very offices were designed behind the sanctuary these were not used during the time directly after construction as the then Bishop preferred to use the office in his house. It is unsure if the offices are being used now.
4.5.3 Interview

Interview with: Reverend Majola (current Pastor)

The bishop that was the author’s client has passed away, and Reverend Majola is the current Reverend of the Cathedral.

Reverend Majola said he liked the fact that the building is unique and different from any other church that he knows. He says it works well in housing all the attendees of their July conference, although they feel that the gallery could have been made bigger. The reverend also feels the kitchen for the hall could have been bigger.

The church uses a more traditional Protestant form of worship.

The cathedral has a mothers’ room for breast feeding moms which the Reverend says is well used. They also use the hall under the main hall for Sunday school and they have place for children to play in the garden. They feel it would be good to have a formal play area with jungle gym etc. and they are going to look at putting one in—but there are not a lot of children present on a normal Sunday.

The Reverend likes the internal volume which he feels is beautiful, but it has made installing an overhead projector difficult.

The average service is two hours long and the toilet facilities were a challenge as previously mentioned until additional ones were built.

The acoustics in the cathedral are not so good— the spoken voice being a problem. There is a sound desk at the back of the church, but it is only used when the cathedral is full for the conference.

The church does not have a specific visitors lounge. There is no structured socialising after a service on a normal Sunday. During the conference the members will all go and eat together.
Church numbers are growing. The Reverend feels this is due to the fact that the church takes care of its members, and when other people see this they are drawn in.

The Reverend feels that the beauty of the Cathedral is helpful in encouraging church growth—everyone wants to go see a beautiful building! It also encourages people to worship. As far as the architecture helping individual spiritual growth the Reverend feels that good architecture provides a place which can facilitate the church to teach and help their members to grow.

The Reverend feels that the cathedral is an exciting building, but it is also a Sacred Space and should be respected as such. Entering a church is quite different from entering a normal home.

4.5.4 Conclusion

Easily the biggest flaw with this building is the serious lack of toilets. The other area that hasn’t worked is the book room, with the large sound desk also seeming superfluous. The fact that the offices are not being properly used is a bit sad. Besides that the author feels internally and externally the sizes and volumes work well, and he is pleased with natural light in the auditorium. He feels very blessed to have been able to be involved in such a project at a young age, and enjoyed every aspect of the project even down to detailing of the communion rail and stained glass windows.
Fig. 53 View of the church (Red Point Church Website)

Fig. 54 Plan of the church (Church archives)

Date Completed: 1996
Architects: Myles, Pugh, Sherlock, Murray
90 7th Ave, Pinetown, 3610
Current Pastor: Nick Hardy
Redemption Point Church is situated on the edge of the N3 freeway in Pinetown about fifteen minutes’ drive from Durban. Access is achieved by taking the Richmond Road off-ramp and turning left and left again. The site is a large well maintained park set in a middle income suburb.

Originally called Victory Faith Centre, the church has been in existence for 38 years and outgrew their former premises. The congregation were unanimously behind the build. Their focus was on being a community church and when they found the current property they liked it because with its 17 Acres of land it had a park like feel which lent itself to being used for community functions and activities. The church building has won an architectural award.

4.6.2 Personal Observations

The External Aesthetic
The Building is hidden away amongst the trees and is difficult to see from any angle. As such the external architecture could be said to be demure. As one parks under the trees, the entrance is quite clearly stated however as a stone wall jutting out. An entrance canopy is currently missing but the steel structure remains. This feature needs to be repaired, as its aesthetic draws one into the building. The stone wall is a strong architectural element ringing down the length of the building like a spine on which other architectural elements are attached.
The Welcome Experience
The foyer area is high ceilinged with clerestory lighting giving a light and airy feel. It is also a central node to the church with all other areas branching off it. It is a very busy and bustling place but large enough to accommodate this. There is a welcome desk where newcomers can be orientated.

The Nave/ Auditorium
The auditorium has been extended. Originally rectangular, this has been widened. This broad space, together with large windows looking out onto the garden give a relaxed feeling to the space. The ceiling is reasonably low with a row of acoustic panels running around the back of the church below it.

The Sanctuary/ Stage
The stage is quite high with five steps with big risers. It sits within the auditorium space with a music group and pulpit. It is otherwise unassuming.

The Worship Experience
The author enjoyed worship at the church. Once again the sound quality was good but the spoken word was only adequate. What really impressed the author was the side windows out onto the garden. Even with them the area around the stage was still dark enough so that the audio visual screens could be clearly seen. These large windows, together with the large leafy garden, is really one of the churches great assets.
**Children’s Facilities**
The church is well kitted out for children. It has a mother’s room with a large glass window, it has a hall used for Sunday School and a large play are next to the fellowship area.

**Toilets**
The toilets are adequate now, but apparently have had a large expansion when the auditorium was expanded, as the originally designed toilets were insufficient.

**Fellowship Area**
The church has a fellowship area which is external but undercover and works well in the Durban climate. On the day the author was there he struggled to find a seat after the service. It is set in the garden, and with a large jungle gym nearby works well for families.

![Fig. 58 Fellowship Area (Williams)](image)

**Ancillary Hall**
The church has a large ancillary hall which is well used for Sunday school, Youth, Alpha courses etc. The only thing it cannot do is increase the size of the auditorium. However as the auditorium has recently been extended, it can accommodate larger services, so this was not a problem at present.

**Offices and Rooms**
The church has ample offices which connect well into the foyer area.

**4.6.3 Interview**
Interview with: Mike Mills (church elder)

Mike said the church building has recently been expanded (the square plan is no more) and it can now seat 1200 when full but has around 750 people attending most Sundays. The church was pleased with the original design (which was designed with expansion in mind – an important point), and the changes to the original design have been the auditorium expansion with the church growth, as well as the building of a large under cover verandah for their Coffee Shop, which is well used after services. They have doubled the number of offices as well as making the foyer and kitchen bigger.

When doing the expansion they did not realise how the Coffee Shop would take off and now wish they had made an even bigger kitchen.
There was no specific theological influence other than the church should feel light warm and airy, with lots of glass. This request was successfully achieved by the Architects, but the current trend of an emphasis on Audio Visual element during worship has led to some challenges understandably.

Mike felt that the architecture had a timeless feel and he loved the light spacious feel of the building, which has been maintained in the expansion. When asked what they would have done differently, he did mention discussion about doubling the services on a Sunday morning instead of doing the building expansions, but he said this went against their sense of community and ‘Coffee Culture’.

Their worship style is a ‘free church’ or charismatic style of worship.

They do have a Mother’s room but they lost a second toddlers room in the expansion which was unfortunate. They have a good children’s play area next to the coffee shop verandah for after the service. They have an active youth ministry and a large Youth Hall at the back of the church.

Mike felt that the building had a bit of a ‘spaceship’ feel internally which he liked, as well as the fact that he felt that everything was very connected.

The service is an hour and a half from 9 to 10:30 but there is a lot of socialising after the service and many people only leave around 1pm. When the extensions were done the number of female toilets were doubled as there were insufficient, with a few more for the men also added.

The Acoustics have been a challenge and they have added a row of large acoustic panels all around the back of the church. The sound desk is in the middle back of the seating area.
The church has a volunteer group called the ‘Velcro Team’ (all wearing black caps) that try to link up with new members and invite them to coffee shop after the service for free coffee. They do not have a separate Visitors Lounge.

![Fig. 60 Section through Offices (Church archives)](image)

The church is growing in number at the moment. This is attributed to their Social Interaction: through Social Media, Men’s Breakfasts, Markets, regular Alpha Courses. How the architecture of the building assists church growth: The large coffee shop can accommodate the men’s breakfasts, their large garden area is where the market takes place and the Alpha Courses are held in the large Youth Hall. The venue is also used during the week for kid’s parties, business training and other social interaction, such as a regular gathering of all the security companies working in the area. They also have a preschool on the property and the number of children have increased by 25 for last year. The church tries hard to be a ‘blessing to the community’ and often does not charge for use of its facilities. It likes to see itself as just a larger version of home churches mentioned in the Book of Acts.

In terms of the building encouraging good worship, it was felt that the light airy feel with good views and interaction with the garden led to a peaceful feel which in turn encouraged worship. Although he did not feel it was necessarily a sacred space, the elder said he had felt the Shekinah presence of God here.

4.6.4 Conclusion

The Author feels this is really a church that has ‘ticked all the boxes’ and is functioning like a church should with the architecture to support it. Although the expansion meant that the ordered geometry of the auditorium was lost, the much wider space was worth the sacrifice. One thing the church has really got right is the mix of audio visual and windows in the auditorium. So often churches just blank out their windows to control light for audio visual, to the detriment of the aesthetics of the space.
Fig. 62 View of the church (Church audio visual team)

Fig. 63 Plan of the church (Williams Associate Architects archives)

Date Completed: 2003
Architects: Andrew Swiatek, Rougier, Swiatek & Associates
9 Greenmeadow Lane, Hillcrest, 3610
Current Pastor: Steve Wimble
4.7.1 Introduction

CityHill church is situated on Inanda Road just over a kilometre outside the main Hillcrest intersection of Inanda and Old Main Roads. Hillcrest is about thirty minutes’ drive from Durban just off the N3 on the way to Pietermaritzburg. The setting is suburban in a rapidly growing middle to upper income area. Inanda road has recently been widened to double lane in both directions.

Hillcrest Christian Fellowship was started by Eric and Jill Tocknell. Eric is the man who brought Wimpy to South Africa, so was a wealthy and influential businessman when he started the church. It started from humble beginnings meeting in the Hillcrest High School Hall. It
seemed to appeal and grew to the stage where the old Mushroom Farm on Inanda road was purchased to be used for the church. Jokes about Christians being kept in the dark and fed manure aside, this facility with several large buildings housed the church and offices for many years, and then also a Primary School – Hillcrest Christian Academy – started by the church.

4.7.2 Personal Observations

CityHill is the church where the author and his family currently fellowship.

The External Aesthetic
The author was initially uncertain about the positioning of the church. The feeling was that maybe if it was closer to the busy Inanda Road it would have more presence. However the position seems to have worked, with the front area being flattened and used as playing fields for the attached school. The building is big enough to still command a presence even from behind the fields. The Architecture is not remarkable but for a massive form it has an understated elegance. The main entrance is clearly visible, however the main parking area is to the side of the church – so the entrance does not face the parking – however as the fields are used for overflow parking – especially for busy services, this could be argued.

The Welcome Experience
The church has multiple entrances. Although the main front entrance does have a large foyer area with a large reception desk the truth is that the foyer area is a double volume area that runs around the entire front of the church. Because of the multiple entrances there are multiple visitor stations. This foyer space has plenty of glass, and together with the high volume makes for a spacious ambiance. The zig zag external wall also creates the opportunity for socialising nooks.

The Nave/ Auditorium
The auditorium is spacious – housing 4000 seats – with a high ceiling. The ceiling was an afterthought, but helps with acoustics and sound attenuation when rain hits the steel roof. The floor is carpeted and sloping with loose seats – so the hall can be used for sit down around a table functions. The space has got darker through the years as the audio visual becoming more prominent, which is unfortunate, however there is still currently sufficient residual light for the volume to be enjoyed.

The Sanctuary/ Stage
The stage is a little high – at six steps but is large enough for bands and productions. To the right is a full immersion baptismal pool which is only filled for the occasion. Otherwise it is covered over. There is space out to the right and the left of the stage for props or any other function. The floor is sprung timber which allows for power and music points in it.
The Worship Experience
The sound system has recently been completely overhauled at great expense. Sound has never been very good in the auditorium with ‘dead spots’ and ‘loud spots’. The new system was aimed at fixing this. The glass balustrade was removed and replaced with steel cables to reduce the reflective area. Even the new system is incomplete with additional speakers still to be added for the two sides of the space. Over the years the author has had some memorable and some ordinary worship experiences in the space, so it is more difficult to be objective. Comparing the space to other churches the focal skylight of the ACC cathedral and the natural light and views of nature are something that this building lacks, but would be very hard to retrofit. Otherwise a great venue where professional bands have played.

Children’s Facilities
In this endeavour CityHill church is unsurpassed. They have three Mother’s Rooms for different aged children, they have an amazing Children’s church with lots of rooms and spaces, and fun décor, as well as a million rand play area which is enclosed and where children can play after the service, while their parents socialise. The play area has also been an evangelistic tool as once children see it, they generally badger their parents to come to this church!

Toilets
The toilets are sufficient for about 1500 people, but when gatherings are larger, the church has to hire additional toilets. The author is currently designing additional toilet facilities for the church.

**Fellowship Area**
The church has two large fellowship areas or coffee shops on either side of the church, however the wrap around foyer is also used for socialising in after the service, and so this works very well. There is seating next to the children’s play area for young parents.

**Ancillary Hall**
The church has added accommodation to the left and right of the main church which the author was involved with. There are several large spaces but the biggest being the whole top floor on the left side called the EverSkye Lounge. Although it is a space with sweeping views over the fields, the one issue the author is not happy with is that the access is essentially via a fire escape stair in the corner. The thinking was that there would be an expansion at some stage and in this area there would be proper stairs all the way up – however this is unlikely to happen any time soon. The youth also meet in this hall.

**Offices and Rooms**
The church has a three storey office block which is now also too small for the number of functions and organisations that house the space, so the author is busy designing additional offices behind the building. An interesting note here is that the offices were originally designed open plan – however due to the sensitive nature of much discussion and counselling, these were enclosed with dry-walling.

4.7.3 Interview

Interview with: Peter Rasmussen (Previous Pastor)

In around 1995 – when they were still housed in the old mushroom farm - Peter said he felt a need to build a new church. The numbers were sitting at around 700 at the time and the original thinking was to build a building of around 1800 seats. However the leadership fasted and prayed for 2 days and the word they received was “This (the 1800 seater) you can do – I want you to design a church that only I can build.” And so the figure of a 5000 seater auditorium came about, the final figure being around 4500 seats. It must be remembered that at the time the property was on the edge of Hillcrest with miles of sugar cane fields off to the one side. These fields are all full of residential developments today. In fact there were only about 5000 people recorded as living in Hillcrest at the time.
Peter Rasmussen said that he saw the inside of the church in a dream, and when he woke up he quickly sketched it out – it had the half-moon design with a balcony with ancillary rooms underneath the balcony. Before the dream the idea was for a quarter round seating arrangement, but afterwards the half round.

The stepped façade was created as the Hillcrest Elevation Committee did not like the round look that it initially had. Peter did not have any theological drivers for his design per-se but did state later in the interview that because of the strong emphasis on friendship and community he wanted people entering the church to be forced to go through a coffee shop area or atmosphere first, before entering the church auditorium itself. Aesthetically he did not want the design to be a basic barn, nor something too fancy – but something in-between. He did want the feeling inside the building to be one of ‘lifting people up’. He was a bit concerned that the Council’s prediction that it would become a ‘white elephant’ may become a reality.

The upside of the semi-circular shape was that there was an intimate feeling to the building, but one that could accommodate far more people. In fact the back wall of the ground floor of the church was only 5m further away from the pulpit than it had been in the old building. Another advantage of the semi-circular design was that it allowed for great people flow with a large wrap around foyer where people could sit and have coffee and meet friends before and after the service.
The worship style of the church would be considered to be that of a charismatic or Free Church style.

Early on in the life of the church there had been a prophetic word over it that it had to focus on two areas – **good worship, and handling of children**. The new building therefore had two mothers’ rooms. One for breast feeding moms, and one for slightly older children. Later a third room was added and the age groups split into three. These all have large one way glass windows looking into the auditorium with speakers, to allow the parents to feel part of the service.

Peter has always liked volume – and the auditorium is voluminous internally which besides its aesthetic value also has benefits acoustically. He is also very happy with, and proud of, the aesthetics of the building. He also commented on the fact that the church was not only a theatre, but a place where people engaged each other. He mentioned that the Willow Creek Church in America – one which his church gets a lot of resources from – was only a theatre, and that community did not happen there.

The service is one and a half hours long, but there are insufficient toilets when the church is used to capacity – especially for the ladies.

Peter feels the internal volume helps to inspire the congregation to worship.

The churches numbers are growing, and Peter admitted to fiddling with the seating layout to get the best feel for each service. He believes this is due to people feeling cared for, and their children feeling cared for. Also good people flow and sufficient parking. He felt that if one or two of these areas were not working well it would hurt church growth. He believes good architecture can definitely help encourage worship and church growth as mentioned above.

Peter believe the church is not a sacred space, but rather a tool for a task. Buildings weren’t dedicated in the Bible, but Psalm 127 instead talks about growing people. He believes we should be Iconoclasts – we should destroy all icons, but that sitting in a beautiful space will aid God speaking to us.

Peter said he has experienced the Shekinah presence of God in a building but this had more to do with expectant hearts. If people line themselves up in the will of God – as mentioned in the Lord’s Prayer – rather than striving for his presence, and there is a common expectation, then the room can become saturated and pressurised with the presence of God, and a spark can happen.

Peter’s final comments were that a building should speak to people – it should embody the values of the people and not betray them. The building must be designed to allow the people in it to do what they want to do – to meet, to chat, to fellowship. The building should be designed to encourage connecting with each other in community before they connect with God.
4.7.4 Conclusion

CityHill has really understood the importance of catering for young families, and to that end they have reaped the rewards of a very healthy, growing church. The importance of fellowship is fully understood and catered for. It also has good quality worship facilities. The size and volume give the auditorium space presence without losing intimacy. The only concern is the progressive darkening of the auditorium due to a greater audio visual presence. It is hoped that it does not get any darker than it now is.
4.8 **ST AGNES ANGLICAN CHURCH – KLOOF**

Fig. 69 View of the church (Williams)

Fig. 70 Plan of the church (Church archives)

Date Completed: 2007  
Architects: Ian Bell of Paton Taylor Architects Inc.  
53 Abelia Rd, Durban, 3610  
Current Pastor: Peter Houston
4.8.1 Introduction

St. Agnes Church is situated in Kloof – about twenty minutes’ drive outside Durban on the N3 then M13. One reaches the site from the M13 by driving most of the way around the Kloof Shopping Centre, then up and over the railway bridge and doubling back on oneself. It is on
the corner of Church and Abelia Roads. The setting is suburban in an upper income area. However the property is flanked on two sides by busy roads and a third by a railway line.

The church had already been extended a few years back and now was full again. Nigel, the then Pastor, said that there is an 80% rule whereby once the building reaches 80% capacity during a service it will stop growing. They were unable to demolish the old building due to it being listed with AMAFA – the Architectural Heritage body – in 1993; and so a new large worship hall complex was planned around the existing church.

4.8.2 Personal Observation

The External Aesthetic
The church is quite prominently positioned, with roads on two sides, and a railway and road on the third, so external aesthetic is quite important. The old building sits on the corner of the two roads, and the new church complex could not overshadow this. It was therefore built with a mono-pitched roof with the low side, and the wide verandah, nearest the old building. This works particularly well. The higher side faces the railway line where the bold curved shape is proudly visible. As the church wanted passers-by to see in, the side facing the road has plenty of glass. The author believes the external aesthetic has been handled particularly well with difficult constraints.

Fig. 72 Site Plan showing Old church and surround (Church archives)

Fig. 73 Cross Section through the Auditorium (Church archives)
The Welcome Experience

Entrance into the new auditorium is a little confusing. There is no formal foyer area. The back of the auditorium has just been converted into a foyer space. The current pastor is aware of this shortcoming and wants to section it off with dry-walling. Besides that, the deep verandah one passes through to get into the auditorium is pleasing and social space on sunny days.

The Nave/ Auditorium

The plan is a most unusual shape, with a circular form being attached to a truncated one. What is interesting is that one does not get the impression one is in a circular building. The non-parallel walls are good to stop a standing-wave acoustically. The acoustic ceiling spreads out like ocean waves from the stage. The atmosphere in the auditorium is a relaxed and pleasant one. Similar to Red Point church, there is a lot of glass around the back of the space, while the front has less windows (just thin lines of glass blocks) to give sufficient darkness for the audio visual screens.

The Sanctuary/ Stage

The stage is quite high, which the current pastor feels is a bit disconnected from the congregation, and so the preaching pulpit is often brought down in front of the stairs. Besides that the stage space is wide and unpretentious – with sufficient connection points of the band’s musical instruments.

The Worship Experience

The Author enjoyed worshiping there. The bright relaxed atmosphere put one at ease and helped one to focus on the worship with no external interferences. The ceiling could have been a little higher and some may argue that the stage aesthetic is maybe a little too simple. But these are minor criticisms in what the author feels is a successful piece of architecture.
Children’s Facilities
Initially the design had a small mothers’ room next to the auditorium with a televised live feed. However the importance of a large glass window for parents to feel ‘connected’ with the service was realised, and one has been incorporated in the recent extensions. There are facilities for Sunday School and Youth, and a children’s play area outside next to the Fellowship Area.

Toilets
The toilets are neat and modern and seem to be sufficient for the task.

Fellowship Area
The church has a fellowship area under the wide verandah. Although verandah architecture is appropriate for Durban, Kloof at 600 meters above sea level, can be a little misty and chilly, and so a large portion of the verandah has been enclosed in glass, which helps on cold days. It also eliminated a wind funnel that was caused between the Auditorium and the Hall when the South West wind blew. There is a decent sized kitchen which can service both the fellowship area and the hall for functions.

Ancillary Hall
The ancillary hall works well aesthetically with double volume ceilings and mezzanine level of offices. The glass wall at the far end brings in plenty of light. Some congregation’s members felt that the glass was not a good idea for a children’s area and no ball sports could be played. The flat roof section also leaks apparently. Being separate it is unable to accommodate overflow of the auditorium for large services. Otherwise it functions well for the intended purpose.

Offices and Rooms
St Agnes has an old Rectory on the property which has been turned into offices. However some additional offices were added on a mezzanine level of the hall as mentioned, mainly for the youth pastor and youth activities.

4.8.3 Interview
Interview with: Rev. Nigel Juckes (Previous Pastor)
As Nigel is currently residing in the UK and this interview was conducted via Skype.
Nigel said he and the Parish Council had good support for the new church project from the congregation as they had done a lot of homework on it, and had good financial backing. It
actually wasn’t a bigger financial stretch than the previous extension, although much larger in area.

The primary requirement was for a worship venue as well as a secondary hall. It took some time to agree on the size of the auditorium, but after a prophetic word it was agreed that it should accommodate 1000 seats. Another requirement was that the new building would not dominate the existing church. This was achieved by the building having a gently sloping roof with the low side facing the old church. There was also a request for large verandas as well as lots of glass. The requirements did not change, and the Architect managed to tick all these boxes.

The Theological thinking behind the building was that it should be missional. That it should feel freely accessible to everyone – that they would be able to ‘look in before they came in’. As the property has a very busy road on three sides this was possible and easy to achieve. The idea was that the building should be used for community activities such as market days or visiting choirs, and have an indoor and outdoor ‘campus’ feel which would encourage lots of people to come onto the site. This would be so that they could be exposed to church even if they were not doing church activates.

What Nigel liked about the design was that he felt that the linking of the two building with a common roof works well, as well as the worship auditorium being big enough to handle conferences and banquets such as The Feast of Tabernacles. One of the mistakes of the design was that the gap between the two buildings faces South West and produces a ‘wind tunnel’ effect when cold fronts come through. This has been rectified in a recent addition. Nigel felt that the lack of a foyer at the back of the church was probably a mistake. The lack of a proper Mothers Room was also something that was rectified with the recent extensions.

Although it is an Anglican church, the worship is quite free and ‘charismatic’. Nigel said that when they moved to the new building he felt he was able to abandon the old robes, and adopt a more contemporary dress code. Only one family (that Nigel knew of) left the church because they felt they could not worship in the new auditorium as it was not a ‘church’ building. They did not like the ‘warehouse’.

The service is an hour and a half but the Architect made allowance for generous toilet facilities which Nigel said has really helped.

Nigel felt that the auditorium should be a space where one could “engage with God, have an encounter with Him” and this would inspire worship.

A Sound Engineer was used from the beginning of the project and the building works really well acoustically – they have had compliments in this regard. There is a sound desk at the back of the auditorium.

There is lots of fellowship after the service with a sizable kitchen serving tea and coffee to seating in the wide verandas. There are also couches at the back of the auditorium as well as a
nearby play area for children. There is a designated area at the back of the auditorium for first time visitors and they have special coffee made for them.

The church has not grown as much numerically as was hoped after moving to the new venue. Although the church’s presence in the community, and impact on it, has definitely increased. Nigel believes the church needs to stay missional in focus, and then it will grow. The new Auditorium has been great for hosting the evangelistic Alpha Courses.

Nigel felt that poorly designed architecture could definitely detract from worship, but that with good quality architectural design, the worshiper should not even be aware of the building. He felt strongly that the look-in/look-out transparency of the church was important. If the architecture encourages social interaction with the community, he felt that this would translate into church growth. He also believes that the perception of the church running ‘a professional operation’ - with new modern architecture – would benefit or encourage church growth. In terms of individual spiritual growth Nigel felt that individual chairs (rather than pews) certainly were better for training sessions, break away groups, praying for people and giving words of knowledge etc. during or after services. Also having rooms available for counselling or prayer after the service were beneficial.

Nigel said he was often pleased when he came into the new venue and saw the range of activities it was being used for.

Nigel feels that a space gains a sacredness with the activities which go on in that space – as if the space holds a memory of the events it houses. Nigel said he has often felt the Shekinah presence of God in the worship at St Agnes.

4.8.4 Conclusion

The new church facilities are successful on many levels, especially in regard to their surroundings.

The auditorium has a very pleasant feel. The weaknesses of the initial design being the lack of a mothers’ room with a large window, and an enclosed fellowship area, have been rectified in the recent renovations and the author feels the only item now lacking is a better defined foyer area.
Fig. 76 View of the Chapel (Church archives)

Fig. 77 Plan of the church (Church archives)

Date Completed: 2009
Architects: Leon Witbooi of Boogertman& Partners
115 Golf Rd, Pietermaritzburg, 3201
Current Pastor: Rev Prof S'manga Kumalo
4.9.1 Introduction

The Seth Mokitimi Seminary is situated about five kilometres outside of Pietermaritzburg in a South East direction, near the N3 in the Scottsville Extension/Epworth Suburbs. From central Scottsville one would take King Edward Avenue South and then left into Golf Road. It is about one and a half kilometres along Golf road on the right hand side. The setting is a pleasant one, suburban but still with some open farmland or horse estates in the vicinity.

The Methodist Church of South Africa had two seminaries, one in Pietermaritzburg, and one at Rhodes University in Grahamstown. Both of these closed down and a temporary one was set up in Pretoria while the new premises were developed in Pietermaritzburg. Construction for this started in 2005. The designer was a young African Architect in his 20’s called Leon Witbooi. The seminary has won an international architectural award.
4.9.2 Personal Observations

The External Aesthetic
The building complex that make up the seminary are slightly set back from the road and a little sunken below road level, so it is easy to miss this architectural masterpiece. As this is essentially a chapel for a seminary and not a local church, the author was uncertain if it should be included in one of the churches chosen. However he was seduced by the beauty of this collection of buildings and so felt that it had to be included.

The entrance to the seminary is bold and grand and draws one in. Once inside the spaces continue to impress. The central open area is a sculpted space onto which the entrance wall of the chapel is used as one of the defining elements. This use of gabion baskets as walls as well as timber screening elements enhance the design.

The Welcome Experience
The ‘front door’ of the Chapel is actually a five meter double door the entire width of the back wall, and so there is a small entrance door to the side for everyday use. Although hidden, the author did not have much difficulty finding it. It leads one into a small reception area which is fine for the size chapel it serves. It contains a desk with the usual pamphlets.
The Nave/ Auditorium
The Chapel space is a well-proportioned box with a quite high acoustic ceiling. What is remarkable though is that the back wall is entirely glass covered by a thin gabion basket layer which produces diffused light. The floor is flat and carpeted, with loose seating so the space can be multi-functional. There is a small gallery or choir stall up on the right hand side of the space. Overall the space is a good example of the beauty of mathematical order and proportion.

Fig. 81 The Chapel Nave (Church archives)

The Sanctuary/ Stage
The sanctuary is just one step up from the main floor level, with the separation being a removable communion rail. The whole area is simple and uncluttered elegance, with all the timber elements (altar, lectern, etc.) in matching Kiaat timber, with the exception of the top of the baptismal font, which is of a darker wood and has the resemblance of a calabash – an overtly African link. As the seminary has young students who like more contemporary worship, the removable communion rails are a good idea.

Fig. 82 The Sanctuary area (Church archives)

The Worship Experience
The worship was an interesting mix of Zulu and English, although the author was the only European present. It was vacation time and the students were away, but the chapel was still surprisingly full. Although the service was a formal liturgy, the feeling and form of the worship was surprisingly relaxed. There did not seem to be any acoustic problems.

Children’s Facilities
No children’s facilities were evident.
Toilets
The Toilets are tucked under the gallery, which the author felt was cleverly designed. They are ample for the size of the chapel.

Fellowship Area
There is a cafeteria in the seminary which would normally be used, however on the occasion of the author’s visit it was closed due to the vacation. It is a pleasant space, with high slatted timber screening.

Ancillary Hall
No ancillary hall was evident, although there must be other meeting areas in the seminary. For large services the back doors could be opened and the congregation spill onto the flat grassed central space.

Offices and Rooms
There were plenty of other offices and rooms in the seminary, as is to be expected, as well as a fair sized library.

Fig. 83 Central grassed area (Church archives)

4.9.3 Interview
Interview with: Rev. Peter Story (Previous Pastor)

The Reverend Peter Story was involved in the design and construction of the Seminary.

Peter said the major theme for the Seminary and attached Chapel was ‘Open and Welcoming’ to the World. The bible verse is the well-known John 3v16 “For God so loved the world…” (Italics added) This openness was taken to such a degree in the Chapel that the back (entrance) wall is missing completely – comprising solely of two very large doors. In fact the largest doors in South Africa. It was hoped that the Chapel would be used not only by the Seminary Students, but also the wider community. This is only happening to a limited degree.
The second major theme of the Seminary is Servanthood. This was because of a concern that some students may be wishing to become Pastors because of the status in society the role holds. When one enters the Chapel one walks over the words: “I am among you as one who serves…” Luke 22v27. The architecture of the buildings that make up the Seminary is deliberately low scale and of humble profile.

These two themes were successfully pushed through into the completed buildings. Now that the project is complete Peter is very happy with the use of the buildings and their sense of ‘Secret Space’ – quite un-gothic in nature. He loves the Calabash Font which has both a contemporary as well as an African feel. He also feels that the removable communion rail works well, as well as the choir loft.

He is however unhappy with the large screen that has been erected in the front which he feels spoils the aspect. Also with frequent use by the students the furniture often gets pushed around and keeping the original simple lines is not always easy. The large doors are very heavy and the mechanism that drives them is prone to break. The vestry being upstairs is not ideal and not easy to use.

The size of the Chapel is perfect as it comfortably seats the 110 seminarians which are studying at the seminary at any one time. The style of the worship is deliberately varied – from High Church to Free Worship to more Cultural Worship (although the length of these is limited).

No mother’s room was designed and Peter feels that this was a mistake, even when catering mostly for unmarried students. There are sufficient toilets.

Peter feels that the internal and external massing is magnificent, and definitely do inspire the Congregation to worship.

The acoustics are adequate. There are acoustic panels down the left and right walls and there are supposed to be large banners also hanging from the left hand wall. There is a sound desk at the back to control lighting and sound. Due to the continued changing of users the settings are not always correct, however the tools are all there.
There is a large refectory area in the campus opposite the entrance to the chapel where fellowship happens after the service. There is also the enclosed lawn area where children can play, which is the focus of all the buildings in the Seminary.

Peter felt that good architecture will absolutely encourage good worship, however the focus of this Chapel is to grow Seminarians spiritually and not grow the congregation numerically. Peter felt that Chapel and Seminary successfully assist in teaching the students these four lessons:

- They are to tell the gospel to the world.
- They are to serve Jesus by serving the world.
- They are to teach the life that Jesus taught us.
- They are to demonstrate Koinonia (Christian community and fellowship)

When questioned about whether spaces were sacred, Peter felt that every space is sacred, however not every space reminds us of who we are. Peter felt that beauty is an integral part of holiness: “Worship the beauty of holiness and the holiness of beauty” Saward (1996), as well as the Persian proverb: ‘If you have two loaves of bread, sell one and by a hyacinth (flower)’ so creating beautiful architecture is to create holy architecture.

Other art and symbolism that draws your thoughts towards God is helpful as long as it is not overdone. The other thing architecture can do is remind us….faith is about memory; whether it is a symbol of the first communion between Christ and his disciples, of a plaque with a list of the first martyrs. The Jewish faith has a strong emphasis on remembering the past events of the faith, and as Christians we should do the same, and architecture can help with this.

### 4.9.4 Conclusion

In today’s society one does not always associate controlled order with aesthetic beauty. The flamboyant artist does not seem to have anything in common with the mathematician. However here we see what the author considers one of the most seductive pieces of architecture in the province, yet the overall feeling is of order and understated functionality. A rectangular box can be far from boring. The buildings work architecturally from a large massing scale, down to the small details. It is difficult to criticize such a building, and to do it in terms of the requirements of a local community church seem unfair. Children’s facilities are the one area where there is lack, but if the chapel is to cater for young students there should be no need for this. The author feels the team that designed and built the seminary well deserve the award that they received.
4.10  LINC CHURCH – BALLITO

Fig. 85 View of the church (Grant Pitcher Photography)

Fig. 86 Plan of the church (Church archives)

Date Completed: 2013
Architects: Union 3
Ezulwini Estate, Foxhill, 4391
Current Pastor: Dylan Jahnig
4.10.1 Introduction

Linc Church is situated a few kilometres north of Ballito just off the N2. Ballito is about half an hour’s drive North of Durban. Access is via a small road that runs off of the main Salt Rock – N2 connection road opposite the Shopping Centre and behind the Petrol Garage. The setting is a developing area: farmed land but with new light industrial/commercial buildings in the vicinity.

The church was birthed out of the evening Youth Service of the local Anglican church – All Souls - in Umhlali. The evening service and the morning service were so completely different in character that the Youth Leaders in charge of the evening service had a meeting with the then pastor of All Souls, Rob Jobling. Rob went away and prayed about it and three weeks later surprisingly gave a green light for the church plant. But a plant not of another Anglican church, but a Free Church.

The church managed to find a very small 60m2 hall in a local nursery/coffee shop called The Lychee Orchard and with financial contributions from several sources set up the new church under the pastorship of Dylan Jahnig. Dylan comes from a wealthy local farming family who, along with others, helped purchase land and build the church structure they now have, which includes a 700 seater auditorium, a coffee shop, private offices and a gym.
4.10.2 Personal Observation

The External Aesthetic
Externally the building certainly is an enigma. At first glance one thinks it is maybe a car motor showroom, or offices, but certainly not a church. However the architect has managed to make something stylish out of what is essentially a steel frame box. Although the building is visible from the N2 freeway there is no attempt at using this fact for evangelism or even a cross, which the author feels is a refreshing change. Finding the building is a bit of a challenge for the first time visitor, however there are signposts along the way.

![Fig 88 Section through the Church (Church archives)](image)

The Welcome Experience
Once the challenge of finding the church has been overcome, the next challenge is finding an entrance. There actually isn’t one – just a large glass double volume area with several entrances. There did not seem to be a formal welcoming team. Once inside the large foyer though, the area is impressive. The light and high volume create a pleasant space where people mingle and rooms lead off in several directions. There is a coffee shop at one end and a mezzanine walkway around it.

![Fig. 89 The Large Foyer Area (Williams)](image)

The Nave/ Auditorium
The Auditorium area was a cinema like black box. One had to allow one’s eyes to adjust before finding a seat. The ceiling was reasonably high, and the seats were loose on a carpet floor. One assumes that the lights can be turned on, so that the space can be used for other functions like an Alpha dinner.
The Sanctuary/ Stage
The stage is quite high above the floor area and one does tend to feel like one is coming to see a concert. There seems to be adequate power and sound points for the music team. The overall impression is that of a slick technical performance.

The Worship Experience
Worship was in the usual Free Church style. The one niggling thing was that as it was a performance those on stage were not quite as part of the congregation as other churches – but more professionals. There was almost an echo back to the Catholic service of St. Xavier’s which is intentionally seen as a performance. But on the up side everything did work very well and the acoustics were good.

Children’s Facilities
The church does have a mom’s/parents room with a window into the auditorium. The coffee shop also has an outside kids play area as previously mentioned. They have an active youth ministry with a Youth Pastor which meets on a Friday night where the teenagers ‘hang out’. It is called ‘Tribal Wars’.

Toilets
The services are short at one hour fifteen minutes. Due to this and the fact that toilets have been provided for the other amenities in the building, there are sufficient on site toilets.
Fellowship Area
Fellowship and socialising occur around the Coffee shop after the service – seating flows down the foyer area and spills outside on sunny days. There is a nearby children’s play area as previously mentioned. At present there is a tented visitor’s area on the terrace which is not very satisfactory. A proper visitors lounge is apparently planned in future extensions. There is quite a large kitchen behind the coffee shop for functions.

Ancillary Hall
The church does not have an ancillary hall, although there is an active independent gym on the first floor.

Offices and Rooms
It seems that there are a number of offices that are rented out to secular enterprises, this together with the gym keeps the facility busy on weekdays. The author thinks this is a good idea, however he is not sure if the government tax exemption for churches is affected.

Fig. 92 Coffee Shop (Williams)

4.10.3 Interview
Interview with: Dubs Heydenrych (church elder)

Dubs said the primary requirement for the new church they wanted, was that it should feel as ‘unchurchy’ as possible: ‘Street wise but Spirit Led’ – a church for the unchurched. A place where people who didn’t like church could come in an unthreatening environment to seek God. This is still the primary theme of the church. The theological basis for this approach is that Jesus came not for the religious people but for the sick, the prostitutes and the sinners. The coffee shop and the gym that are open every day. Dubs said that bringing businesses onto the premises was not just for financial reasons, but strategically evangelistic. He stated that they had over 40 salvations from members of the gym who had then been exposed to the church.
All finances made from renting out the premises are ploughed back into the church or into other Kingdom ventures. As a Free Church they have aligned themselves with some other Free Church leaders in Durban such as Rory Dyer and Phil Duly who provide Apostolic input and mentoring.

Dubs feels that the auditorium setup works well in terms of lighting and production (it has a cinema feel about it – a black box). The foyer and coffee shop area work well with lots of glass, and have a great indoor outdoor feel with a kids play area next to the coffee shop. Currently they have two morning services with around 300 people in each and an evening service of about 150 which Dubs feels is a bit small for the space and they ‘rattle around in it a bit’, but otherwise they are happy with the size of the auditorium.

Dubs really likes the look and feel of the building – which has quite a contemporary office feel about it with lots of glass – a place to relax, have coffee with friends and let your kids play out from under your feet.

Dubs feels that the auditorium is a creative environment allowing for free use of Audio Visual which helps to create a Faith Filled environment. The acoustics seem to have been well handled as Dubs does not know of any problems in that area. The sound is managed from a sound desk at the back of the auditorium at ground level, but upstairs looking into the auditorium is a Full Production Audio Visual room.

Dubs says that the church is growing; and that this is caused by friendship evangelism and a church building like theirs that allows friendships to develop. The auditorium has movable chairs so courses like the Alpha Course can be run in it. But Dubs had an interesting point to make about ‘amazing’ worship experiences – he felt that these could be a bit intimidating to the unchurched – and reminded me of their primary aim of making their church an ‘unchurch’. The fact that the auditorium is so dark was discussed. Dubs said that they had had some negative comments about it, but that it could create a ‘faith filled’ atmosphere while at the same time providing a space where the unchurched could feel like they were not being watched.

Dubs felt that the church was sacred, but that all of God’s Creation was sacred – and no place more than any other.

4.10.4 Conclusion

The very dark auditorium is a debatable point and the author is not convinced that it is the correct approach, however the church was birthed from a youth group and perhaps the focus on the audio visual will appeal to a techno-savvy youth. Besides this the other interesting aspect to this church is mix of business into the church environment. This really seems to be working well and should be a model that is explored more by other churches in the future. Besides that the church does well on the fellowship and children’s facilities like most contemporary churches. It will be interesting to see how this church develops in the years to come.
CHAPTER 5

5.0 ANALYSIS AND DISCUSSION

5.1 INTRODUCTION

Before analysing the data captured above, let us be reminded of the questions we set out to answer by doing this research:

Primary Question: Is there a relationship between successful churches and good church architecture?

Secondary Questions:
- What is the primary task of the church?
- What activities is a church called to do biblically?
- Are there architectural elements, both biblically and historically, that are still relevant today, and should form part of contemporary church design?
- How can a church building, in design or planning, assist a church congregation in its mandate to bring its individual church members to spiritual maturity, and evangelise a lost world?
- What are the architectural elements of a church building that would assist in the worship experience therein?
- Does architectural beauty or aesthetic have a role to play in the church architecture of successful church congregations?

The Literature Review undertook to answer the first three of the secondary questions above, and in doing so have given us direction in terms of the research.

The Literature Review discovered the primary task of the church is to bring its members to spiritual maturity through discipleship. This is not easy to quantify directly into something that needs architectural assistance. Discipleship happens when Christians meet together and do the activities the church is called to do.

The Literature Review deduced that the activities the church is called to do are the following: Baptism, Teaching (preaching/discipleship), Fellowship, Communion, Prayer (Ministry), Social Outreach, Worship, Evangelism. This chapter will analyse how the different churches perform each of these activities, and the best architectural solutions to support each of these activities.

There were a number of elements raised in answer to the third question:
Biblically the ‘progression in holiness’ was the one element that the Christian church has taken from the Tabernacle and Temple designs. As this tended to support an elevated clergy however, it has largely been abandoned by contemporary church designs which are based on the theology of the ‘priesthood of all believers’. The early church buildings were just large civic halls, and so the elements that are carried through to modern times are the nave/ auditorium and possibly the sanctuary/ stage. Another point highlighted was that historically synagogues were a place of socialising after a service, and the early church probably followed suite. Later church designs culminated in the Gothic cathedral architecture, which has been heavily influential on churches ever since. Unfortunately the essential elements of light and volume which the Gothic cathedrals used so well, were often overlooked whereas the ornamentation such as lancet
windows were often kept. Historical influences on the ten churches in this study will be compared and analysed.

Question four is about how church architecture can assist a church with the task of discipleship and evangelism. This will be looked at from the angle of the church nave/auditorium space and the ancillary hall (if any) and how these spaces can be used to assist with activities associated with discipleship and evangelism.

Question five will be answered in terms of the different worship experiences in each church, and how they compare. Important elements of the worship space will be highlighted.

Question six: the influence of the aesthetic beauty of architectural design on a congregation, will also be discussed, with comparisons made between churches.

In this chapter the churches will be compared under the same headings as the Thematic Analysis was done in the previous one, with the above topics being focused on more specifically in the conclusion.

5.2 ANALYSIS BY AREA

5.2.1 THE EXTERNAL AESTHETIC

Most of the churches chosen for this thesis were chosen partly because they were acknowledged as having architectural merit and so naturally should have a street presence. However the importance of a street presence as identified by the pastors or elders of the different churches studied varies considerably. Is there any biblical reason to have a prominent church? The only verse that springs to mind is:

Whoever acknowledges me before others, I will also acknowledge before my Father in heaven.  

Matthew 10v32
Communities want to publicly acknowledge their faith to the world, and not be ashamed of it. There is merit in this. The church with the greatest public presence is probably the ACC cathedral – which is clearly visible from the N3 highway. As the building is also the church’s national headquarters, the Bishop wanted it to make a bold statement. The roof needed to have a large span and yet the client said he wanted the cathedral to match his adjacent house roof which was a steep pitched slate roof. This has been achieved with a steep pitched slate surround to the building hiding the IBR roof behind. It also has a bell tower out in front facing the freeway. Another interesting feature is the concrete posts holding up a glass block screening element which are a modern interpretation of a flying buttress.

Another of the churches where street presence is very important is the St. Agnes church in Kloof – however, with a very different motive. Unlike the ACC cathedral which was designed to impress, the St Agnes congregation wanted passers-by to be able to look inside their building and, seeing all the activity happening there, be drawn in. This does work to a degree – however the building with a glass façade onto the road is the ancillary hall and not the main auditorium, so the idea only works partially. The strategy of being visually open thus inviting is an unusual one and an interesting evangelistic strategy.

The NGK building with its cross tower is doing what Afrikaans churches have done historically throughout South Africa – namely to raise a banner in declaration of the presence of a Christian community. As mentioned in the Literature Review, this has been done very successfully by Afrikaans communities. The author feels there is merit in this as long as the world outside is seen as needing God’s message of love and not something to be shunned.
Linc Church, on the other hand, in trying to be an ‘un-church’ have succeeded in their façade. The author was unaware that it was a church until being told – he thought it was a new office block or car showroom.

The other churches are pretty ambivalent to their external aesthetic. The only other one worth a mention is the Pietermaritzburg Cathedral which actively tried not to seem like an imposing building but wanted to be a welcoming one - so instead of height and statue, was kept low, but then had sideways protrusions into the street to symbolise ‘welcoming arms’. The author is yet to be convinced of the argument for an unimposing cathedral. Cities need landmarks, and cathedrals have been doing this successfully for centuries. It enriches a city skyline.

An important point that requires further discussion is the importance of a considered external aesthetic. Reverend Story of the Methodist Seminary quoted the title of Pr. John Saward’s book (1996) *The Beauty of Holiness and the Holiness of Beauty*, and the Seminary is a wonderful example of the blessing beautiful architecture can be. God is a God of order and beauty – and a community church is an opportunity to create something of beauty that will bless any passing viewer. Being an architect the author is obviously biased in this matter, however he agrees with the Reverend Story that beautiful architecture is more than just a ‘nice to have’ addition to a functional building. Its impact is less directly measurable, but will almost certainly have a positive impact on the life of the church. Good architecture aesthetically never goes out of fashion.

One element of the External Aesthetic that has not been covered in this research is that of external lighting. Although with the rising costs of electricity this needs to be done carefully, the author still believes one or two carefully positioned spot lights can enhance the presence of the church in its community at night (see adjacent photo of St. Thomas’ Church in Berea, Durban).

![Fig. 95 External Lighting to St. Thomas Church Berea (Williams)](image)

### 5.2.2 THE WELCOME EXPERIENCE

First impressions can have an important impact, especially on a newcomer to a church. Therefore the architectural success of a church entrance has importance in its ability to assist the church evangelistically in making new members feeling welcome and ultimately encouraging them to return.

The pastor of CityHill Church was probably the most vocal about this as he insists that before a newcomer enters into the church auditorium they should pass through a
socialising area (like a coffee shop) and witness community happening before becoming part of the worship service. One of the benefits of this is that there is a chance he may meet someone he knows – and then he could well end up sitting with a friend in the service, and not alone. This friendship evangelism plays an important part of church life. As was mentioned in the Literature Review by Nicky Gumbell (2003) who noted the importance of making five or six significant friends in a church. This will be discussed further in the section on the coffee shop, or after service socialising.

The importance of this initial experience with community is found mainly in the free churches like CityHill, Linc and Redemption Point Church – which have light airy foyer areas with seating and a nearby coffee station. However Anglican churches like the new facility at St. Agnes are embracing the value of this also.

Having a reception desk, or welcome station of some description at the entrance is important to identify and welcome newcomers. Interestingly, the Red Point Church Welcome Team call themselves ‘the Velcro Team’! Churches sometimes give a free cappuccino voucher to newcomers, or give them a large bag with church information, so that other church members can see that they are new (by the big bag) and greet them. All these ploys however, need a carefully designed entrance and greeting area.

Ironically the author’s experience with the Anglican Cathedral in Pietermaritzburg (with its welcoming arms) was that once he was on the premises, the entrance to the church was not clear at all, and the chance of getting lost was great.

The Father of St Xavier’s Catholic Church acknowledges the lack of a foyer or gathering area at the entrance to his church. There was a small area at the entrance for pamphlets and notices. Fr. Michael did not like it especially as he felt it was a bit irreverent.

5.2.3 THE NAVE/ AUDITORIUM

This is really the heart of the church – where the main worship occurs as well as the hearing of the word – or sermon. We will look at the various elements influencing the experience of this space.

Natural Light

There isn’t any congregation or denomination that does not admire the beauty of the Gothic Cathedrals with their lofty ceilings, large windows and stained glass. The use of glazing to allow light into a worship area therefore plays an important part of most of the church buildings studied. The one exception is Linc Church that have made their auditorium very dark inside – almost like a cinema. The challenge with contemporary churches is lure of audio visual media (that has been called the stained glass windows of the 21st century). The music from the worship
team can now be enhanced with visual large screen video and this is diluted if there is too much light in the auditorium. Linc Church have done away with light completely in favour of large audio visual displays. One argument they have for this is that new members who may be a bit self-conscious can hide ‘in the shadows’ and not be seen.

The light vs audio visual problem is one that many of the churches are facing. CityHill church is leaning towards a darker auditorium, and have 3 large screens in front and have blanked out all their windows, natural light only entering via the glass fire escape doors. When the author discussed this problem with Peter Rasmussen from CityHill, he mentioned that Willow Creek Church in the USA (a church that has mentored CityHill Church) uses electronic blinds – so they have big windows, but can blank them out for worship.

One of the aspects of Red Point Church in Pinetown that the author found worked well was the ability to see out into nature at either side of their auditorium – similar to the above picture. St. Xavier’s likewise have the entire back wall of their church in glass with views out over the sea. St. Agnes has been purposefully built with lots of windows around the back of the auditorium but almost none in the front half where the audio visual screens are. The Methodist seminary have a back wall of a very thin gabion basket which lets through diffused light. Rev Peter Story whom I interviewed felt that the large screen that had recently been put up detracted from this feature.

The general feeling seems to be that older congregations are resisting the audio-visual option while congregations that wish to be more relevant to a younger generation are embracing it. This challenge is not a new one in churches. The question of either embracing the changing culture in order to impact it, or aspiring to be ‘set-apart’ as a holy church has been around long before the audio visual dilemma came along.

Volume
Architecturally any space that is large in plan needs to have a higher ceiling or risk the space feeling oppressive. The author feels extra volume in a worship space is important as (like the old Gothic cathedrals) it enhances the space and encourages one to worship. The ACC cathedral was designed so that the area above the sanctuary was to be the highest point of the ceiling. A large sky light was also added at that point. Although the church was based on the Living Waters design, this was the one fundamental element that was changed. The ceiling slopes down towards the stage in the Living Waters church. This was supposedly for acoustic reasons. Pastor Lindsay Dillman from that church said that it didn’t work. A similar design was done
for St Agnes church with very specifically angled acoustic panels. These apparently do work – but the trade-off is the loss of volume. The author’s personal opinion here is that volume is more important. Churches that have embraced volume like the Cathedral in Pietermaritzburg (which has clerestory lighting) and CityHill Church, have a much better feel about the space than churches that have gone the acoustic route with lower ceilings.

Fig. 98 Sketch showing the different approach to volume in The Living Waters Church and ACC Cathedral auditoriums.

**Finishes and Features**

Most church buildings studied in this thesis have decided on carpeted auditoriums, and the author feels this is the correct route. Apart from assisting with acoustics it gives a warm welcoming feel to the space. The only one of the churches that is completely slate floored is the Anglican cathedral in Pietermaritzburg. Due to it being an austere cathedral the dark slate floor does not detract from the overall design and actually works – although the acoustics for the spoken word are problematic. The ACC cathedral and St Zavier’s have both gone with a mix of carpet and grano floor. This was to help with costs in the cathedral, and probably likewise for St Xavier’s – although it does also assist with cleaning. The author however still feels that a carpeted church is the best option.
Ceilings are often put in to help with acoustics, as well as noise control – both in terms of limiting the impact of sound on the neighbours, as well as limiting the interference of the sound of rain on the roof with the worship within. The ACC cathedral used Structaboard (now called Lamdaboard) as a ceiling. It was fixed directly under the purlins and acted as both a ceiling and as an insulation layer. It left the trusses exposed and gave a raked ceiling. Although this ceiling option worked, and was cost effective, a suspended ceiling would probably have been a better option. As mentioned earlier, CityHill church retrofitted one – hiding all the expensive tubular steel trusses – but it has worked well.

In terms of wall finish and cladding, flat smooth walls reverberate sound, and so often churches have hangings to cover them – which also gives opportunity for decorating with tapestries much beloved by many of the more traditional churches. Tapestries do seem dated, and although the Anglican Cathedral had some – and ones almost like modern art (dyed red leather strips signifying fire) – most new churches have steered away from them. Churches like the Methodist chapel purposefully have an unadorned modern look (and struggle with acoustics). Red Point church have put up large acoustic panels with no other aesthetic value. Acoustic adornment is very helpful, but it can also double as contemporary artwork to enhance a space aesthetically.

![Fig. 99 Fire Tapestry, PMB Cathedral](image)

Lighting
The lighting levels required in a church are pretty low, between 100 and 200 lux. This is made even less necessary by audio visual support, where Bible texts and the words of songs are put up on a screen, meaning pew Bibles and hymn books are no longer necessary. However due to the high ceilings in many churches, lighting with a decent throw should be specified. Often Hi-bay lights are used – however ugly they may be. The Anglican Cathedral have made a feature of their lighting and have hung big steel circles from the ceiling on which the lighting is attached. The Methodist Seminary chapel, and St Agnes church, have both inserted purpose made lighting into their acoustic ceilings – and this works well.

Even if the lighting for services does not need to be strong, often the church auditorium is used for other functions like an Alpha Course dinner or a Christmas Fair, and so the possibility of being able to produce at least 300 Lux in a church auditorium is a good idea.
The sanctuary/stage area often has spot lights on it, and sometimes other feature lighting around it, to be used to create effects. This is all part of the debate of natural lighting as opposed to controlled lighting mentioned earlier.

There are all sorts of exciting things that can be done with lighting. One example is the Saarinen Chapel at MIT which has what appears to be a waterfall of light coming down from a sky-light. Two Swedish architects Ingor and Johannes Exner (1996) put a tubular light tree in their Norrelands Church. The author has long wanted to experiment with a spot light shining through a small pool of water that had air bubbles blown through it. The effect created by this is like that of flames of light dancing on the wall.

Seating
The decision to go with fixed seating as opposed to stackable individual chairs is often based on whether the nave/auditorium is to be seen as a multipurpose venue. The two cathedrals in this thesis have separate halls and so both have fixed seating – the Anglican one having wooden pews, as does St. Xavier’s Catholic Church. Most of the other churches all have stackable seating. Red Point Church is one example, but a large part of their church auditorium has a stepped floor which does limit the use when setting out round dinner tables. CityHill Church have raked their floor – however raked just enough so as to help see the stage, but not so that it cannot be cleared of seats for tables and chairs for an Alpha Course or Christmas Party. This solution is a good one. Due to the steeper sight angles, galleries almost invariably end up stepped however.

Peter Rasmussen said that once a church reaches 80% capacity it stops growing. He admitted to experimenting with different numbers and seating layouts, but said his fiddling was inconclusive. The service the author attended at St Xavier’s church was 100% full and it seems that was the weekly occurrence, so he is unconvinced about this 80% theory.

In the larger auditorium churches, another challenge is having a smaller service in it (where the use of the stage and audio visual was still required as opposed to moving the service to another hall). The challenge is making the space intimate. CityHill have overcome this by stringing steel wire across either side of the main seating area, and draping black curtains off of the steel. This works but is not very satisfactory, and anyone designing a new church may want to consider alternative solutions to this solution. With a church with a high ceiling it is not very easy.

Another challenge with seating is the cost. This is because increasing the cost of one chair by R100 is multiplied by the number of chairs so a 500 seater church adds R50 000 to the cost. Architecturally it is also wise to consider a chair store attached to the Auditorium to stack away all the chairs if necessary.
5.2.4 THE SANCTUARY/STAGE

This is the one area that differs greatly between denominations. The more traditional churches like the Anglican and ACC cathedrals, as well as St. Xavier’s Catholic Church all have the traditional central altar, with pulpit and lectern off to the sides. The Methodist Seminary and St Agnes Anglican Church have relaxed this somewhat with a movable altar and only one lectern. The NG Church has as its focus a central pulpit, and the other Free Churches have only a movable lectern with the bulk of the stage for a music group.

The Catholic, and possibly High Anglican, idea that the Eucharist or Mass is a holy ceremony to be performed with dignity and awe, lends itself to the importance of the Sanctuary area. Fr. Michael expressed this. He was concerned that his sanctuary was a bit small for all the functions of the Communion service, which also included the priest’s chair. Many of these more formal churches also have a communion rail, where the congregation can come up and kneel to assist them in taking Holy Communion. The Methodist Seminary also has a Kiaat communion rail and matching altar.

Most sanctuary/stage areas are raised. This helps in several ways. Most importantly it makes it easier for the congregation to look at the activities on the stage, and see the communion service and preacher. If there are only one or two steps with the communion rail on top then it helps in kneeling before the rail. In the Free Churches with a band on stage the raised platform can allow for a sprung floor in which cables for the music equipment can be run, otherwise these areas can become cluttered with cables.

The one down-side of a raised stage area is that the preacher can feel a bit disconnected from the congregation. Often a preacher will take the lectern down the stairs and place it at the base of them, if he is preaching to a smaller audience.

The Altar

As mentioned above, for denominations like the Catholic and Anglican Churches (and in this thesis, also the African Congregational Church) the communion or mass is the focal point and highlight of the service and so too the altar. Traditionally Catholic churches have a stone altar, but this is not a hard and fast rule. St. Xavier’s has as their altar a big lump of granite which has a wonderful presence. The ACC Cathedral has a large timber altar made out of rosewood. The curved under surface, and ring of thorns motif, carry through the curved language of the building. Some more contemporary churches have an altar on wheels, so that it can be moved off the sanctuary, when the area is used for a worship group, or dramatic play, or some similar activity.
The Pulpit
The NG Church has as its focus ‘the word’, that is the Bible and the sermon, and so the pulpit is large, raised and central. Some traditional churches have a raised area off to the side, like the ACC Cathedral. When this is the case, there is usually a separate lectern on the opposite side of the sanctuary for Bible Readings. However most churches now have a movable timber lectern, which has several advantages. It can be moved away for performances on the stage, or brought forward as mentioned above, to better connect with a small audience.

Fig. 102 High Focal Pulpit. NG Kerk Durban Wes. (Williams)

The Baptismal Font
As baptism is a Biblical instruction, it is performed by most denominations, and most have a baptismal font of some description. It is traditional in many Anglican churches to have the font in the entrance area of a church, as a symbol that baptism is an entrance into Christianity. For the most part though, these are found in the sanctuary area. Again, with some imagination an architect can create something beautiful here. Probably the most unique example from the ten churches is the font at the Methodist Seminary which has the colour and shape of a large African calabash (See Fig. 82).

Those denominations that prefer full immersion baptism often have a large pool area somewhere on the stage. When not in use these are covered over with thick plywood boards which sit in a slot that runs around the edge of the sunken area so that when they are on, the floor above is completely smooth. CityHill Church has a good example of this. There are five or six stairs leading down into the font area on one side for access, and the whole area is waterproofed. There also needs to be a drainage hole at the bottom as well as a water supply pipe (sometimes heated) as most full immersion fonts do not have the water permanently in them. The exception to this is Living Waters Church which has a permanent water feature as can be seen in the opposite picture (Fig. 103).

Fig. 103 Living Waters Baptism Pool (Williams)

Choir Stalls
Most of the traditional churches still use choirs from time to time and choir stalls can assist with this. The Anglican Cathedral has a large choir stall. St. Xavier’s has two small areas each side of the sanctuary, and the ACC cathedral has been designed with standing area steps for a choir. As most of the freer forms of worship involve a music group instead of a choir, there are
no choir stalls in these churches. Large organs also seem to be losing their appeal, and of the
ten churches studied in this thesis, only the Anglican Cathedral and NG church had one.

5.2.5 THE WORSHIP EXPERIENCE

The decision was made to do a separate chapter on the worship experience – even though it is
not an architectural feature per-se. However the architecture, acoustics and internal ambiance
all work together to create a worship experience in any church nave or auditorium.

Acoustics
It is a good idea to employ an Acoustic Engineer at the early stage of a design to assist in this
area. However in the author’s experience there is much that can be done with some basic
understanding of the principles.

One of the biggest challenges in church acoustics is the reverberation time. That is the time it
takes for a sound to dissipate (stop echoing) around a room. The worst scenario is when there
are hard smooth surfaces directly opposite each other where the sound bounces back and forth.
By just clapping and listening one can hear how long the sound takes to dissipate. Even with
the acoustic ceiling, the reverberation at the back of St Agnes church is still bad due to all the
large glass panes. Reverberation however is not all bad – it is great for music as it gives the
music a richness and depth, but to the spoken voice it can be disastrous. As the preacher
continues talking his words are being interfered with by the previous words he has spoken still
echoing. The easiest way to stop this is to deal with the reflective surfaces – covering them
with carpet or tapestries or other sound absorbent material. Ceilings do have the option of
specific acoustic ceiling tiles. However having too many sound deadening surfaces can make
the music rather dead also. Having surfaces that break up the sound can be another solution –
this is often seen in Theatres where what is seen as ornamentation on walls are actually acoustic
panels breaking up the sound. In one cathedral the author was involved in they installed fake
engaged ‘columns’ down each side of the auditorium. These were simply pieces of Masonite
which were curved and slotted into timber panels which were fixed to the wall and had two
vertical grooves for the Masonite to slot into. This produced a ‘drum’ to absorb long wave
sound, as well as curved surfaces to radiate the sound.

Another problem in acoustics is lag. None of the churches studied had this problem noticeably,
but it is common in churches. There are two common issues here. The one is where speakers
send sound to the congregation but at the same time the sound hits the ceiling and bounces
back down – hitting the congregation half a second after the first spoken words, thus garbling
the message. The second problem occurs in churches with a long nave where speakers are set
further down the building, away from the preacher, but without a time delay. The speaker will
instantly relay what the preacher has said, but his original voice, magnified by speakers near
him, then hits the congregation half a second after the first speakers sound did – with the same
mushing of words. Solutions to the first problem may be to raise the speakers higher and point
them down, and at the same time providing sound absorption or multi-facett reflective panels
on the ceiling or rear wall. The solution to the second problem is to put time delays into the
speakers.

Another problem - especially with semi-circular shaped church plan designs, is spots of loud
and dead sound. The solution to this is to deal with the back wall as mentioned above. One of
the challenges that CityHill faced was the solid glass balustrade that goes around the base of
the gallery, which provides exactly the hard smooth surface that is not required. This was resolved by replacing the glass balustrade with one made from thin steel posts.

The best place for speakers is hanging directly above the stage in a cluster arrangement radiating outwards. The size and angles would be to specialist design, but it is quite common for speakers to be stacked on top of each other. This has been done to a recent upgrade to the CityHill sound system, but the author has seen it done elsewhere. What one does not want is speakers that are behind the preacher – as sound coming out of the speakers gets caught by his microphone, and the result is feedback.

The best place for a sound desk is apparently on the ground floor about three quarters of the way back from the stage. Putting the sound desk up on the gallery is tempting but it never seems to work. CityHill church had it on the gallery and eventually moved it downstairs (the video crew stayed upstairs). The reason for it being downstairs, is that to control the sound effectively the sound engineer needs to hear what the congregation is hearing. Most churches which have a working sound engineer during a service have the sound desk at the back of the church on the ground floor, which seems to work reasonably well. Several of the churches researched in this thesis did not use a manned sound desk – they simply set the system up for the service and let it run. While this may be acceptable for smaller churches, larger congregations really should have a manned desk. Not only can sound engineers raise or lower sound volumes (if there is a sudden interference like a rain downpour on a steel roof) but the person manning the desk can put up the works for songs on the screens, as well as Bible verses during the sermon.

It is hoped that these basic pointers will assist church acoustic considerations.

Numinosity
The word ‘numinosity’ means ‘arousing spiritual or religious emotion’ and is a far more subjective topic to discuss than the previous scientific one. If there is such a thing as numinosity, should churches have it? If so, how can the architecture be used to achieve it?

The first point to be made is that the author feels that every space is imbued with a feeling, be it the feeling of holiness, or the presence of God, or any other (even negative) feeling, by the activities that occur in that space. This, of course, is impossible to prove except by personal experience. A good example it occurs in a scene in the Christian Film War Room where a pastor and his wife are looking to buy a house from a woman. That woman had a room in which she did a lot of praying, and, although all evidence had been removed, when the Pastor walks into that room he immediately gets a sense of something, a numinous feeling. Therefore it could be argued that the architecture makes no difference at all – the building is simply a box to keep out the elements and the numinosity of the space will occur because of the religious activities that occur in that space. Although the author agrees that what happens in a space changes the feeling of a space, he still feels that the architecture of the space can assist in creating a desired
feeling. For example it would be easier to worship God in a beautiful wooded glade than in a rubbish dump. The words of Rev. Peter Story, the person interviewed from the Methodist Seminary ring true: “Worship the beauty of holiness and the holiness of beauty” Saward (1996). There is also a Persian proverb: ‘If you have two loaves of bread, sell one and by a hyacinth (flower)’. Therefore to create beautiful architecture is to create holy architecture. If we believe this to be true then it is of value to discuss the internal aesthetic of each of the ten churches studied in terms of this. All ten buildings have had some form of architectural acclaim, so that is a starting point. However to take it further the reader needs to be reminded that the author’s approach has to be an entirely phenomenological one, and the points raised are from his subjective point of view.

Working from least successful to most successful church in the author’s opinion, here are comments about each of them:

Linc Church has a great building with lots of glass and a modern aesthetic. However the Auditorium space itself is a complete ‘black box’ and any attempt to create a sense of worship comes from the audio-visual aspect alone. In the author’s opinion, if the architecture is not visible, it cannot be helpful.

Although the NG Church has a light source above the sanctuary area, as well as clerestory lighting, the overall impression of the internal space is austere.

CityHill church seems to be moving the way of Linc Church in terms of its reliance on Audio-Visual for worship. Although the space here is much larger with higher ceilings and light sneaking in from various places. Chiefly because of the volume, this church has a feeling of presence when one is worshiping in it.

The Living Waters church lacks the height of CityHill church but make up for it with large windows and interesting architecture. The supports that hold up the gallery, and the laminated beams that radiate out from the sanctuary help with this.

St. Agnes church in Kloof is another example of quite interesting architecture in the building complex as a whole, while the auditorium area – especially where one faces – is a bit of a disappointment. An attempt to create interest in the sanctuary has been made through the use of glass blocks in the back wall forming the shape of a cross, as well as other horizontal strips. The ceiling is unusual due to its wavy nature to assist with acoustics, but that is all.

The African Congregational Church Cathedral in Clifdale – designed on the Living Waters model has similar interesting supports for the gallery. The improvement is the much higher
volume and the skylight above the sanctuary area. It also has some stained glass detailing around the building.

Redemption Point Church in Pinetown is another with well-designed building complex. The auditorium space in this instance is not a disappointment. The feeling of the auditorium is light and airy with big side windows looking out into nature. The ceiling is not very high but is not oppressive.

St Xavier’s Catholic Church on the Bluff is another piece of award winning architecture. Although ones initial response upon entering is the experience of a building built in the Brutalist style (exposed concrete, heavy elements), the large windows behind the sanctuary and on either side of it with their wonderful sea views do tend to seduce one, and a sense of peace is felt in the space.

The Anglican Cathedral of the Holy Nativity in Pietermaritzburg differs from the ones above in that the author feels the complex externally has not been handled well aesthetically. However when one enters the nave there is immediately a sense of awe. This is achieved through a very strong geometry and clerestory lighting. It almost reminds one of the boldness of Roman Triumphal architecture, and conveys both the importance of a provincial cathedral, as well as the almightiness of a great God. This is strongly contrasted by a very fluid wall which runs around the bottom enclosing the space. The author sees this wall as is a symbol of a changeable and fickle humanity interacting with an unchanging omnipotent God.

The Seth Mokitimi Methodist Seminary is another complex with an almost seductive character. The author was uncertain about choosing this church as it did not entirely fit the mould of a community church. However upon experiencing the buildings he felt it had to form part of this thesis. The Chapel in this instance does not disappoint. It is a clean minimalist style but with very clever use of natural lighting and ancillary volumes which stop the building feeling like a box. The idea of using a thin gabion against the glass wall behind the sanctuary is a subtle solution and creates diffuse light in the space.

In conclusion, the author feels that the architects who designed Gothic Cathedrals understood that the elements of light and volume are the most important ones in creating a space of beauty where the presence of God can be experienced. It is sad to see the audio-visual invasion negatively impacting these spaces, and imaginative solutions need to be explored, like the use of electronic louvres mentioned in the Willow Creek Church, to deal with the need for darkened spaces for audio-visual. The high internal volumes are still possible though and should be seriously considered in any new church design.

### 5.2.6 CHILDREN’S FACILITIES

After the previous chapter, this topic may seem a little superfluous. However the author believes children’s facilities are one of the most important features in a contemporary church, and are vital to the life of a church, for the following reasons:

The modern western society is a very fluid one, with people often moving to different areas and suburbs, and this can have an effect on a local church. What the author has come to realise is that the parents of school going children – from about the age of six – are far less likely to move out of a suburb, as they do not want to have their child move schools. Now church
congregations age with time. What is meant by this is that there is a regular core of members that are committed to the church, but as the years go by they all get older. There has to be a feed in point for new members. The children of parents in a church are there until they leave school, after which they often move away to attend tertiary education, and may well settle elsewhere. However the married couples who have pre-school going aged children are often moving around looking for a good school and suburb in which to settle. It is therefore this age group that the church should focus on in terms of evangelism and meeting their needs. Another benefit of capturing people of this age is that for the next twelve years or so the parents will hopefully be entering into what usually is a stable part of their career with the financial stability to go with it.

This exact thing happened to the author as his family moved suburbs when his eldest daughter was three and youngest not born yet. As he came from an Anglican background the natural choice for the family would have been St Agnes church (the one in this thesis) as it was in their new neighbourhood. However they had not yet built their new facility, and the author found himself spending the entire service sitting closed off in the vestry with his three year old. When they attended CityHill church (then Hillcrest Christian Fellowship) it was also in their old venue. However here there was a children’s room at the back of the church with a big glass window so that one felt part of the service, and a speaker feed so that one could hear the sermon. (In actual fact the reason the author joined CityHill was out of obedience for where he felt God wanted his family to go, not because of the Children’s room –but it certainly helped).

The main aspect to attract young parents is the Mothers Room as described above. This needs to be attached to the main auditorium with a big glass window so that parents can feel part of the service, as well as hear a sound feed. But there is another aspect, and that is the providing of a safe children’s play area for after the service. This is where children can play while their parents are sitting having coffee and chatting to friends – while still able to keep in visual contact with their children. Both these facilities can greatly enhance a church service for parents of small children.

One of the hypotheses the author had going into this thesis was that there is a direct correlation between how a church looked after their young parents, and how a church grew. This is what was found:

The two churches where a comparison cannot be made are the ACC cathedral and the Methodist Seminary. The former because it is not used regularly as a local church but was rather designed to be used for special events and national gatherings. A mothers’ room was
designed for the cathedral and Reverend Majola confirmed that the room is used. (The room is on the first floor which is a challenge to mothers with prams. It also does not have a toilet and basin, which helps when nappy changes are needed.) The other church which is not a local church is the Methodist Seminary. Most of the Sunday congregants are students and therefore not married. However Reverend Peter Story did admit that the lack of a mother’s room in the design was a mistake.

The only other church of the ten studied that does not have a mothers room is the Anglican Cathedral in Pietermaritzburg. There is only a children’s play area outside the church. This church does function as a local church and so can be analysed as such. The demographic has changed since it was built. The author was the only European member of the congregation, when he attended a service there. However parents of all cultures struggle to cope with small children and the church would have benefitted greatly from having a mothers room. Canon Ian Derby said that the numbers were pretty constant, however when the author attended the service there, concern was mentioned over falling tithing figures, and the author wondered if the church had failed to capture the high income generating parent population into their congregation.

The one church that is declining in attendance is the NG Church in Queensburgh. This church does has a mother’s room, in fact it was designed with two mom’s rooms – one on either side of the Sanctuary area – but now one has been turned into a store room due to lack of use. The church does not have an external play area close to where their parents drink coffee however, so at least a part of the parents support facilities is missing. Jan, the church elder interviewed, felt that declining attendance had more to do with demographics. The Afrikaans community swelled in the 1970s when there was a lot of work in the Railyards around Durban harbour. Jan said he felt that 80-90% of the congregation who had come down from the Transvaal have returned there, thus causing attendance to drop.

Living Waters church also has a mother’s room on the first floor without a toilet – and so has similar problems to the ACC cathedral. There is no external children’s play area connected to the coffee area. Pastor Les Dillman said that the church stopped growing once they moved into the new building. It would be interesting to know how these two functions worked in the old building the church inhabited.

Once the new hall at St Agnes church was complete, they did have a side room for small children, but it was not linked to the church with a glass window. As I used this room once with one of my children when they were small I can attest to the fact that it didn’t work. St Agnes have since corrected this with another room being built with a glass window. The second part of the equation they got right was a children’s play area in view of the coffee fellowship area. St Agnes did not experience the growth they expected once they moved into the new hall (as their old building had reached the 80% capacity mentioned earlier, they thought a bigger hall would allow the church to grow unrestricted of that barrier, but its growth was slow. Maybe the badly designed mother’s room played a part?

St Xavier’s church is an interesting one because although there is a mother’s room, it is poorly designed. Father Michael admitted the sound proofing wasn’t very good when there was a crying child. Also if the mother needed to take their child to the bathroom during the service it was a bit disruptive – as there is no toilet in the facility. There is no play area outside next to the socialising area either. And yet the church seems to be doing well, with the same
congregants having to stand because all the seats were taken during the service when the author attended – on a very ordinary Sunday.

Red Point Church in Pinetown had two mother’s rooms designed in the original plan, one of which was lost during the recent expansion of the auditorium which Mike Mills, the Elder that was interviewed, said that the church regretted. They still have one however, and a children’s play area next to the coffee fellowship area and – as the church recently expanded their building – seem to be doing well numerically.

The last two churches not yet mentioned – Linc Church and CityHill Church - both have good mother’s rooms and good play areas near the fellowship areas. CityHill church actually now has three mothers rooms for different ages, as well as an expensive designer outside play area complete with Pirate Ship and Space Rocket. This was constructed under the new pastor, Steve Wimble. Steve says that is it one of the most powerful evangelistic tools they have invested in, as any child who sees the play area immediately wants to come to the church, and invariably end up dragging their parents along with them.

Although the results of the author’s hypothesis are a little inconclusive, with other variables coming in to play, he still believes strongly in the evangelistic focus of this area, and for the most part the experiences of churches studied support this hypothesis.

5.2.7 TOILETS

This is another area of church design that architect can get badly wrong, and the author talks here from personal experience. In his instance he was a member of an Anglican church at the time where the services were about an hour and a half long. The church was relatively large, with several hundred seats, but had only one toilet for males and one for females. What he did not realise was that if a service is three hours long (which African services often are) it is a very different situation. The toilets he designed for the ACC Cathedral were hopelessly inadequate, with long queues and blocked pipes being the result. The church ended up building a separate toilet block next to the cathedral to deal with 1200 members coming out after a three hour service.

Unfortunately the South African National Building Regulations are not helpful here as their requirements for churches tend to follow the author’s initial thinking. What must be looked at is the figures for Sport Stadia Peak Demand. The author has found other churches also lacking in this area. CityHill church has to hire mobile toilets for large events, and the author is currently designing more toilets for them. The challenge is almost always on the ladies side. Red Point Church also admitted that they had under designed in this area, and had doubled the number of ladies toilets in their recent expansion. So a caution must be made in this area, although other pastors interviewed did say they had sufficient toilets.

One final interesting point. When the author was visiting Glenridge Christian Fellowship several years ago (not a church that forms part of this thesis), he went into the men’s toilet and saw a large painting of a WW2 Lancaster Bomber. Not a picture you would normally find hanging in a church, but in the men’s toilet it spoke to him of manliness and purpose. It could be that pictures in the toilets provide an opportunity to speak into the lives of the congregants.
5.2.8 FELLOWSHIP AREA

For centuries in the Western Christian World the church was the centre of the community of a society. Likewise the Synagogue was where everyone gathered weekly to chat and share news. Guia Rusari (1999: 26) states: “Bassari refers to the Synagogue not only as a place of worship but also as a meeting place where people socialise.” As was mentioned in the Literature Review, in small Afrikaans towns in South Africa the surrounding farmers and their families all came into town for ‘Nagmaal’ or a Communion Service, and took the opportunity to catch up with all their neighbours on other outlying farms. Christianity was the culture. The West is largely in a Post Christian era where the role of a church as the centre of cultural activities has been lost. As mentioned in the Literature Review Nicky Gumbel of the Alpha Course mentioned that research confirmed the fact that to get a new member of a church to stay, they had to gain six reasonably good friends in that congregation.

It has been the author’s experience that one of the most important aspects of growing churches is a ‘coffee culture’ or a focus on fellowship. Pastor Lindsay Dillman said that after the service his father, who was the then current pastor, would go and serve coffee in the fellowship area. In fact he called the coffee machine his ‘second pulpit’. Almost every church pastor interviewed said that they had made some attempt to get the church to socialise after a service. So how can architecture help to promote church fellowship?

The most important aspect is a covered area with sufficient tables and seating. KwaZulu-Natal has a warm climate but lots of rain, so a wide covered verandah works well. St. Xavier’s Catholic Church don’t have this, and Father Michael says socialising is impacted negatively every time it rains. He wished the architects had designed a covered socialising area. Both Red Point Church and St. Agnes Church have wide verandas that are well used after the service. CityHill Church has two large indoor areas as well as some outdoor seating. As this church is in Hillcrest, it can get quite chilly in bad weather and the indoor areas work well. Some churches have dedicated coffee shops that work daily. Linc Church has one that is well used during the week for business meetings etc. Other churches like Living Waters Church and the ACC cathedral use their ancillary hall as a fellowship area after the service, and these work equally well.

The Kitchen

As most churches have functions, events, weddings and courses like the Alpha Course which require catering, a reasonably sized kitchen is very important. It is more important that it is attached to the ancillary hall rather than the fellowship area, but the best position would be to have it close to both those areas as well as the main church, if it has a flat enough floor to be used for events. The Fellowship area can get away with being served by a coffee station and perhaps a small snacks counter. It should be noted that the Zulu culture does not generally drink a hot beverage after breakfast, and so the option of juice or similar soft drinks should also be available. The kitchen should have all the requirements of a small industrial kitchen. The one
item useful when serving in a church kitchen is a movable large drying rack for crockery – which allows for stacking of large numbers of cups and plates simultaneously. This should be investigated for any fair sized church kitchen. Having external caterers or using in-house volunteers is a complicated affair and one beyond the scope of this thesis.

Some other points to remember about the fellowship area is that if it is indoors, it can get very noisy – so acoustics need to be considered to absorb the sound. And, as stated under the chapter on children’s facilities, there should be a children’s play area nearby and within view of at least some of the seats in the fellowship area, so that parents of young children can socialise without worry. This play area also has to be safe from moving vehicles and so preferably fenced off so no children can escape!

5.2.9 ANCILLARY HALL

The Ancillary hall is a very useful piece of architecture for a church to have. As a young architect the author was in the employ of a Mr. Alwyn Lubbe, himself a church architect of renown (He was the architect for the Living Waters Church – part of this thesis). His favourite layout was to have a thin long reception lobby which had the church auditorium on one side and the hall on the other. The connection to both being large sliding folding doors. The idea was for Christmas and Easter, and the occasional large wedding or funeral, the sliding folding doors could be opened and the ancillary hall used as overflow area. It does work successfully and the layout can be seen in the Living Waters design. The ACC cathedral has a similar layout – in this instance attaching the hall directly to main auditorium - and works equally well for overflow during large services. In the 1960s it seems church halls were a favourite place for badminton clubs to use – and so many of them had very high ceilings. Other sports like aerobics, karate or fencing also often use a church hall. When a church holds a wedding and wishes to have the reception on the property, the hall could obviously be used for this. That is why a kitchen should be attached to the hall, preferably with a wide serving hatch. Smaller church gatherings like leadership training or prayer meetings can also happen in the hall.

Fig. 107 Ancillary Hall – St. Agnes Church, Kloof (Williams)

Youth Facilities
Being able to provide an alternative evening social activity to teenagers other than clubs or parties where alcohol may be present, is the wish of every church pastor. However youth are fickle, and usually the youth group with the most exciting youth pastor will get all the teenagers
from all the churches in the neighbourhood, which is not particularly a bad thing. How can architecture help a youth group? Often youth groups do meet in an ancillary hall, but it is not really ideal as youth generally prefer a more intimate environment (being able to dim the lights is helpful). The author has seen pool tables and skate board ramps being put in youth venues. Couches and bean bags are also not out of place. However, a youth pastor who is charismatic will still draw more teens than the best architectural facilities.

5.2.10 SHOPS, OFFICES AND OTHER ROOMS

It is often the case that a church wants to have a small Christian Bookshop as part of its facilities. This should be cautioned against as they simply do not work, even in relatively large churches. CityHill church, which has the largest weekly congregation of the churches in this thesis has tried several times during the period the author has been there to run a bookshop, but all attempts have failed. A bookshop room was designed off the foyer for the ACC Cathedral, but it has never been used as one. The only commercial shop found in the ten churches studied in this thesis, was a small souvenir shop next to the coffee shop in Linc Church. Linc Church is rather unique in that they have intentionally made part of their building lettable, with a successful gym as well as other lettable business offices. With these spaces being used constantly on weekdays, the coffee shop as well as this small shop get spin-off trade and may succeed – but this is an unusual setup. Linc Church have done this commercial aspect intentionally to make the church feel like an ‘un-church’ and it seems to be working. Dubs the Elder that was interviewed said that they had had over forty salvations in the gym alone.

Most churches have offices for the pastor or pastors and secretary or secretaries. There may be a church caretaker that needs an office, as well as a tool shed. Once a church gets bigger they may need a bookkeeper as well as a boardroom, and possibly counselling rooms. Dealing with the collection can be sensitive in a country with a high crime rate. CityHill Church have a security team that lock the external doors just for a few minutes during collection. The author has designed a ‘secret’ passage in other churches where the collection can be safely taken back to a walk-in safe or similar secure area. A place is also needed to count the collection after it has been taken.

Store rooms are always useful, however the author is a firm believer in the adage that ‘junk expands to fill the space available’ and one often finds the palm trees from last year’s nativity play or a giant Noah’s ark stored for some unlikely future event. Chair stores are useful – especially if the church floor is flat enough for other activities that require the chairs to be moved away. The only other storage that could be needed is if the church has outreach programmes that distribute food and clothes, and a space is needed to temporarily store these.
5.2 CONCLUSION

The one thing that really stood out after interviewing the pastors from all ten churches is how strong a theme so many of them had, and how well those themes were carried out. It was surprising how diverse the themes were and yet each one was intrinsically biblical and appropriate to context. An example is the Seth Mokitimi Methodist Seminary where those teaching the students were concerned that some may have joined their programme because of the status bestowed upon a pastor in a community, and so the theme of the chapel was one of servanthood. The theme is certainly Christ centred and yet still unique.

A final point which does not really fit into any of the above areas, is that as church complexes have many rooms and as a consequence many keys. The advantages of a Master Key system for a church complex should be seriously considered.
CHAPTER 6

6.0 CONCLUSION

6.1 SUMMARY

Chapter one of this thesis set out the reasons for the need for the research in the chosen area of contemporary church design. It stated the aims and objectives of the thesis and explained how the research would be undertaken, and the process it would follow. It also introduced the ten churches to be studied.

Chapter two set out the theoretical framework through which the research would be undertaken, giving both direction to the chosen method of research, as well as validity to the process.

Chapter three was the Literature Review which looked at biblical comment on what a successful church is, as well as a brief of what the church’s mandate is. It also considered the relevance of biblical instruction on places of worship for contemporary church designs. Further, a brief history of church buildings specific to churches found in the South African context was given and the origins of the contemporary shift in church design was explained.

Chapter four focused on the case studies providing information on each of the ten churches from on-site inspection as well as participation in the worship of each church. Interviews with the pastors or elders of each church is recorded, along with plans, sections, photos and other archival material uncovered on each church.

Chapter five then analysed and compared the designs of the ten churches, drawing out important features from the various aspects of each church studied.

This chapter will summarise the findings made and bring the thesis to conclusion.

6.2 AREAS OF FOCUS

In the Literature Review it was concluded that the following activities were those which the Bible calls a church to do: baptism, teaching, fellowship, communion, prayer, social outreach, worship and evangelism. As was explained, the author believed that the Thematic Analysis should not be organised under these headings, but rather under the headings of the physical areas in the church complexes. Chapter 5 also did comparisons of churches using the same headings. It seemed fitting therefore, to summarise and compare the findings again under the biblical headings in the conclusion. To avoid unnecessary repetition, the following headings are simply a brief summary of the conclusions of the previous chapter, but grouped biblically rather than architecturally:

Baptism
Baptist fonts are not necessary in a church as baptisms can be done anywhere there is sufficient water. However most churches like to include this practice on their premises. The more conservative churches which practice infant baptism usually have a font - in the form of a raised bowl of water – somewhere in the sanctuary. Anglican churches traditionally have the font by the entrance to the church. More contemporary churches have a pool for full immersion baptism, also on the stage somewhere. There is scope for architectural expression here – such
as the Calabash font in the Methodist Seminary, as well as the Living Waters permanent water feature.

Teaching
Teaching and preaching is something that is focal to all the churches studied. Carefully designed spaces can produce low reverberation times acoustically which are important for clarity of the spoken word. A semi-circular church plan brings the congregation closer to the preacher for better interaction. The position of the pulpit varied from being the main focus as in the NG church, to a mere lectern in other churches. The impact of the preacher’s interaction with the congregation needs to be considered when deciding on the height of the sanctuary/ stage area.

Fellowship
The importance of fellowship, and the architectural areas to assist this, have been covered in the research. The closeness to a kitchen or similar coffee station is helpful, as well as a nearby safe children’s play area within eye contact of seated parents. The importance of going through a fellowship area when entering and leaving a church was also raised.

Communion
Those denominations that use an altar for communion give another opportunity for architectural expression, such as the granite altar at St Xavier’s church. It can also be a focal point for circular planning such as in the ACC cathedral.

Prayer
Prayer happens as part of the worship service in the main nave/ auditorium. It is rare these days to have a separate side chapel for prayer, however there is one in the Living Waters church, which is useful. Some church spaces lend themselves more to someone coming into them during the week for some quiet prayer and reflection. Here the numinosity of the space plays an important part. Churches like St. Xavier’s and the Methodist Seminary chapel create a space for private prayer to take place outside of normal church hours.

Social Outreach
As social outreach is chiefly an event that happens outside of the church grounds, there is not much that has been said on this point besides possibly the need for storage space for materials such as food and clothing for outreach programmes the church is involved in.

Worship
The whole worship experience was covered extensively. The importance of volume and natural light was discussed for the nave/ sanctuary area. The challenges of acoustics was covered, along with the challenges and opportunities that the addition of audio visual assistance to the worship experience has created.

Evangelism
As newcomers to the church form part of a church’s evangelistic programme, the various ways a building can assist with the welcome experience were discussed. An easy-to-find entrance with a welcoming foyer and reception desk, or a place for ushers to stand, with printed material about the church was noted as important. Likewise the ability of the church architecturally to host evangelistic functions like the play ‘Heavens Gates Hells Flames’ or ‘The Alpha Course’
was discussed. This would either be in the form of an ancillary hall, or by having removable stairs in the auditorium and a flat enough floor to facilitate a tables and chairs arrangement.

The author feels that the research and analysis have successfully covered these eight areas highlighted by the Literature Review.

6.3 SUMMARY OF ANSWERS TO THE RESEARCH QUESTIONS

To answer the secondary questions first:

- **Question 1**: What is the primary task of the church?

  The primary task of the church is to bring all people to spiritual maturity through evangelism and discipleship.

- **Question 2**: What activities is a church called to do biblically?

  The activities a church is called to do are: baptism, teaching, fellowship, communion, prayer, social outreach, worship and evangelism.

- **Question 3**: Are there architectural elements, both biblically and historically, that are still relevant today, and should form part of contemporary church design?

  Biblically from the Tabernacle and Temple designs, the progression in holiness (with an altar at one end) was the only aspect carried through into Christian churches. This progression has largely fallen away in contemporary church designs.

  Historically, early church buildings were simply a box (a basilica or large room in a house) in which Christians gathered, so only the need for a nave/ auditorium and possibly a sanctuary/ stage area are early historical precedent. These elements are still found in current church designs. Also, pre-Christian synagogues had a tradition of socialising after a service and this probably carried on in the early church. The importance of a socialising or fellowshipping area as part of the church complex has been rediscovered. The influence of later church architecture, especially the Gothic style, was discussed. The conclusions were that contemporary churches could benefit from the elements of natural light and a high nave volume found in Gothic architecture.

- **Question 4**: How can a church building, in design or planning, assist a church congregation in its mandate to bring its individual church members to spiritual maturity, and evangelise a lost world?

  This question was answered in terms of how architecture assists the activities associated with discipleship and evangelism. As regular preaching forms part of this, architectural solutions to assist the acoustics for human speech was discussed. The position of the pulpit was discussed. The usefulness of an ancillary hall was discussed, not only for teaching of smaller church groups, but also to host evangelistic plays or events. Movable chairs and a flat floor in the auditorium also formed part of this. Architecture to assist the evangelistic focus of young families was also highlighted.
• **Question 5:** What are the architectural elements of a church building that would assist in the worship experience therein?

Architecture has a big role to play in the acoustics of a space, and good acoustics helps to produce good worship. Also, the main architectural elements to help create a numinous or ‘specialness’ to an internal space are volume and natural light.

• **Question 6:** Does architectural beauty or aesthetic have a role to play in the church architecture of successful church congregations?

The role of aesthetics and architectural beauty was seen as important. This was firstly to be a blessing to all those worshipping in the church, and secondly that the external aesthetic could be seen as a potential evangelistic tool. The spiritual side to this was discussed and beauty was aquatinted with holiness, and an expression of a holy God.

**Primary Question:** Is there a relationship between successful churches (successful from a biblical perspective) and good (well-planned, functional and aesthetically appealing) church architecture?

The assumption at the start of this thesis was that there was a correlation between good church architecture and successful churches. There are several reasons why a church may be successful. Reasons such as a charismatic preacher, a good evangelism programme, great worship, lively fellowship after a service, and caring for young families. However many of these reasons do require architectural assistance. The author feels that this thesis has shown through several examples how this correlation exists; and by deduction, what architectural elements are important for a church to have, or to be considered in a new church design.

### 6.4 ACHIEVING AIMS AND OBJECTIVES

The aim of this dissertation was to explore the relationship between Christian worship and architecture to define design guidelines to assist architects and pastors in designing and building churches. The author feels this has been done successfully.

The research objectives were:

- To gain a solid Biblical and researched model of what a successful church is, across the Christian denominations.
- To deduce how good architecture, in all its various facets, can assist in achieving this successful model.
- To finalise a brief of architectural criterion which should be considered by pastors and architects to assist them in designing a successful contemporary church.

The author feels these areas have been covered extensively. A summary of brief design guidelines is as follows:
6.5 *A FRAMEWORK OF DESIGN GUIDELINES*

Below are some bullet points to consider for every area of church design as discussed in detail in this thesis:

**The External Aesthetic**
Beautiful and Contemporary Architecture will improve the churches image in the community.
Allow for adequate parking.
The church entrance should be clearly visible.

**Foyer or Entrance Area**
An area to welcome newcomers is important.
The opportunity for a newcomer to see fellowship happening before the service is a good idea.

**The Nave/Auditorium**
A semi-circular plan offers a sense of community and closeness to the stage – but acoustic challenges
Deal with acoustic design challenges as soon as possible, preferably in the design stage.
Have a manned sound desk.
A gently raking floor with removable chairs offer more options for use of the space.
Bigger volumes with suspended ceilings help.
Natural light will help the ambiance, but hinder the audio visual. Creative solutions are needed.
A high wear carpeted floor is probably better.
Dimmable lighting is an advantage.

**The Sanctuary/Stage**
Movable elements (altar, lectern etc.) are a good idea
A raised stage has advantages, but too high can create a sense of disconnection with the congregation
A sprung floor with recessed sound and electrical points helps worship groups

**Mothers’ Rooms**
Mothers’ rooms are a vital if young families are to be encouraged to attend the church.
A large Glass window into the church is very important for the parent to feel part of the service.
Have a nappy changing booth and a toilet and basin in the mothers’ room.

**Toilets**
You will probably need more toilets than you think, especially for the ladies.

**Fellowship Area**
This is a vital part of the church to promote community and attract new members
Have an external children’s play area close by for parents with small children
Covered verandas work well in a Durban climate

**Ancillary Hall**
Should be designed to accommodate overflow of the auditorium for large services.
Can be used for smaller meetings and youth gatherings, as well as wedding receptions.
Nearby kitchen is a great help

**Shops and Offices**
Christian book shops don’t work
Store rooms are helpful but get cluttered
Master Key your building
6.6 AREAS FOR FURTHER RESEARCH

There was not a specifically Indian community church represented in the ten churches chosen (although Living Waters has about a 50% Indian congregation). The author’s experience is that most of the Indian churches match their European counterparts in form and flavour for whatever denomination they are part of. However further research could be done to verify this.

The African Congregational Church being the only African community church was a poor choice because it does not function as a local church every Sunday. If another church was added to the ten chosen it would have been another weekly functioning African community church. Having said this the author was the only European present at both the Anglican Cathedral in Pietermaritzburg as well as the Methodist Seminary. There may still be scope for further research in this area though.

Interviews were taken with Pastors and Church Elders only. If the research is to be taken further then more interviews could be taken with ordinary church members to get a broader perspective of the success of the church buildings studied by those using them.

6.7 FINAL COMMENTS

We are living in an information age, where different biblical interpretations are freely available. This has helped to drop the Christian denominational barriers. The reasons why different denominations would need different church buildings is also diminishing, and although this thesis has shown that there is still a different focus or flavour in the different denominations studied, most of the important elements that have been discussed in this thesis are important to most denominations.

Another result of this is that people are starting to attend the most ‘successful’ church in town, and not the one that they or their parents where historically aligned with. A perception the author has had of the large successful free churches is that they try hard to be ‘cool’ or ‘hip’. While this is irritating, it does seem to work, and those churches that seem popular draw larger crowds. If this is seen as an evangelistic tool to reach more people, then the architecture should follow suite – and be contemporary and stylish. If we add the theological idea that beauty is holy, then there is even more reason to create beautiful church buildings. As for the functional aspects, they need to work; and the people attending need to be comfortable and happy, if they are to return the following week.

In conclusion good design, both aesthetically and functionally, is very important to the functioning of a local church. Pursuing well designed church buildings will give glory to God and be a blessing to his people, the church.
APPENDIX 1

Pastor Questionnaire

1) What gave rise to the need for a new church?
2) Did you get unanimous support from your congregation and regional authority?
3) What were your primary requirements?
4) Did these change?
5) Do you believe there is any specific Theological influence in the design?
6) Now that you are using the building, what are some of the good aspects?
7) What would you have done differently?
8) Are you happy with the size?
9) What styles of worship do you use?
10) How do you handle breastfeeding moms/younger and older children?
11) How do you feel about your internal and external volumes/massing?
12) How do you feel about the internal and external aesthetic?
13) Do you have an active youth ministry?
14) How long is your service?
15) Do you have enough toilets?
16) Do you feel the building inspires the congregation to worship?
17) How are the acoustics?
18) How is control of acoustics and audio visual done?
19) Is there fellowship and socialising after the service?
20) Does the Church have a Children’s play area?
21) How do you handle first time visitors to your church?
22) Do you use a visitor’s lounge?
23) Is your church growing in number, static or declining?
24) What do you think influences this?
25) Do you think good architecture can encourage good worship?
26) Do you think good architecture can encourage church growth?
27) Do you think good architecture can encourage individual spiritual growth?
28) Does your building excite you/uplift you when you think about or enter it?
29) Do you believe your Church Building is a Sacred Space?
30) Have you ever experienced the Shekinah presence of God in your Worship?
APPENDIX 2

CHURCH CONTACT DETAILS
(At time of writing)

1) Nedelandse Gereformeerde Kerk: Malvern

Date Completed: 1976
Architect: Geoffrey Le Sueur of Stauch Vorster & Partners
Address: 7 Jo Naude Rd, Queensburgh, 4055
Phone: 031 464 3383
Email: duurbanwesngkerk@gmail.com
Current Dominie: Franna Herselman, Dr Samuel Marx (Jan Wessels – Care Taker)

2) St Francis Xavier’s Catholic Church: Bluff

Date Completed: 1978
Architect: Hallen Theron & Partners
http://stfrancisxavier.org.za/
Address: 21 Sormany Rd, Durban, 4052
Phone: 031 467 0524
Email: sfx@telkomza.net
Current Father: Michael Foley

3) Living Waters Church: Durban North

Date Completed: 1980
Architect: Alwyn J. Lubbe & Associates
http://living-waters-church.co.za/
Address: 45 Prospect Hall Rd, Durban North, 4051;
Phone: +27 31 563 5227;
Email: info@livingwaterschurch.co.za
Current Pastor: Pastor Christian and Cynthia Kisten

4) Anglican Cathedral of the Holy Nativity: Pietermaritzburg

Date Completed: 1982
Architect: N Rosendal & H Kammeyer / G Carter-Brown
Address: 169 Langalibalele St, Pietermaritzburg, 3201
Phone: 033 394 1567
Email: cathedral@dionatal.org.za (ken@dionatal.org.za)
Current Bishop: Dino Gabriel (archivist: Fr. Ian Derby)
5) African Congregational Church Cathedral: Cliffdale

Date Completed: 1995
Architect: Bill Williams of Leach & Van Der Walt Architects
https://www.facebook.com/pages/African-Congregational-Church-Cliffdale/955497207845752
Address: 75 Capital Hill Dr, Pinetown, 3610
Phone: 031 736 2264
Email: lwavuso@gmail.com
Current Pastor: Rev Majola

6) Red Point Church: Pinetown (Formerly Victory Faith Centre)

Date Completed: 1996
Architect: Myles, Pugh, Sherlock, Murray
http://www.redpointchurch.com/
Address: 90 7th Ave, Pinetown, 3610
Phone: 031 700 5505
Email: admin@redpointchurch.org
Current Pastor: Nick & Katie Hardy

7) CityHill Church: Hillcrest (Formerly Hillcrest Christian Fellowship)

Date Completed: 2003
Architect: Andrew Swiatek, Rougier, Swiatek & Associates
http://cityhillchurch.co.za/
Address: 9 Greenmeadow Lane, Hillcrest, 3610
Phone: 086 112 2331
Email: stevw@cityhill.co.za
Current Pastor: Steve & Jackie Wimble

8) St Agnes Anglican Church: Kloof

Date Completed: 2007
Architect: Ian Bell of Paton Taylor Architects Inc.
http://stagnes.org.za/home/
Address: 53 Abelia Rd, Durban, 3610
Phone: 031 764 2037
Email: events@stagnes.org.za
Current Pastor: Peter Houston

9) Seth Mokitimi Methodist Seminary Pietermaritzburg

Date Completed: 2009
Architect: Boogertman& Partners
http://www.smms.ac.za/
Address: 115 Golf Rd, Pietermaritzburg, 3201
Phone: 033 846 8600
Email: office@smms.co.za
Current Pastor: Rev Prof S'manga Kumalo

10) Linc Church: Ballito

Date Completed: 2013
Architect: Union 3
http://lincchurch.com/
Address: Ezulwini Estate, Foxhill, 4391
Phone: 076 182 3541
Email: info@lincchurch.com
Current Pastor: Dylan Jahnig
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Fig. 105 Sketch of Linc Church showing visual link between play area and fellowship area.
Fig. 106 Sign above St. Agnes Church Fellowship Area (Williams)
Fig. 107 Ancillary Hall – St. Agnes Church, Kloof (Williams)
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