A STUDY OF INDIGENOUS CHURCH ARCHITECTURE OF KERALA STATE

A THESIS

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CANDIDATE'S DECLARATION

I hereby certify that the work, which is being presented in the thesis entitled A **Study of Indigenous Church Architecture of Kerala State** for the fulfilment of the requirement of the award of the Degree of Doctor of Philosophy submitted in the Department of Architecture and Planning of the Indian Institute of Technology Roorkee, Roorkee is an authentic record of my own work carried out during the period from August 2002 to May 2005 under the supervision of Prof. R. Shankar, Professor, and Dr. V. Devadas, Associate Professor.

The matter presented in this thesis has not been submitted by me for the award of any other degree of this or any other Institute.

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Abstract

The present investigation attempts to shed light on a relatively unknown architecture that is the original and indigenous church architecture of Kerala. According to a time honored tradition, St. Thomas, a direct disciple of Jesus Christ brought Christianity to Kerala in the 1st century itself. Over the years, when this community had grown, the need for new churches arose and the local builders built them in the way they had conceived a religious building. As this architecture matured through ages, it assumed a separate and original architectural identity, which was totally ethnic by nature. The Portuguese arrived in Kerala in 1498 and their misunderstanding in differentiating the cultural part from the religious part of Kerala Christians, resulted in an attempt by them to introduce a new and alien style of church architecture there, which eventually succeeded in replacing the vernacular architeoture. The aim of this investigation was to (i) reconstruct the original form of indigenous church architecture of Kerala before it was modified by the European architectural intervention, (ii) to compare the original church architecture to the other religious architecture in the study area and the church architecture of the West, to find out the possible influences that molded the original form and also (iii) to evolve feasible strategies to conserve this architectural heritage.

To achieve this, firstly, the literature on the development of Christianity and church architecture in Kerala, church architecture of the West as well as the temple architecture of other religious buildings in Kerala were reviewed thoroughly and inferences drawn. A list of all church buildings in Kerala built mostly before 16th century was identified based on the literature review and an

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extensive primary survey was conducted in all these churches by using pretested schedules. The schedule was prepared based on the literature survey as well as observation made in the oldest existing churches in Kerala. The survey data were processed and the architectural elements and characteristics, which were commonly present (in more than 60 per cent of the sample churches) in the indigenous churches were deduced. Further, the original form of pre-Portuguese Kerala church was reconstructed by using those deduced architectural elements and characteristics as indicators. To study further about the reconstructed modal, a detailed architectural study, including measure drawing, was conducted on purposely selected sample churches.

A comparative analysis of architectural elements and characteristics of indigenous churches of Kerala, church architecture of the West and the temple (Jain, Buddhist and Hindu) architecture of Kerala was done to understand the possible influences that molded the characteristic features of indigenous church. To undertake the comparative analysis, most important architectural variables have been considered. This comparative analysis made a break-through and revealed that the indigenous church architecture was purely based on vernacular architecture of Kerala, religious as well as secular, to the larger extent. It has been observed from this study that achieving homogenous regional identity between buildings of different religions was the norm of the past and the demarcation line between Hindu, Jain, Buddhist, Muslim or Christian edifices was imperceptible. The study concludes with plausible recommendations to conserve the indigenous church architecture, which is an integral part of the rich cultural heritage of the State.

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May, 2005

Sunil Edward

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CHAPTER 1. THE RESEARCH CONTEXT

1.1 Introduction

According to a time honored local tradition, St. Thomas, a direct disciple of Jesus Christ brought Christianity to Kerala in 52 AD. It is also believed that he built 'seven and a half' church buildings (seven full churches and a small one) there. Over the years, when the size of this Christian community had grown and spread, the need for new churches arose and were built by the local masons, in the way they had conceived a religious building, following the style and form of local religious buildings that prevailed in the land then. As this new church architecture matured through the ages, it assumed a separate and original architectural identity [Photo 1.1], nourishing a tradition of its own, which was totally ethnic in nature.

Right from its inception, up to the advent of the Portuguese in 1498, Kerala maintained this church architectural style in all its originality, probably due to its geographical isolation from other Christian centers of the world. For example, in the old church at Thiruvithamcode, the erstwhile capital city of Travancore, (presently near Thackalai, in Tamilnadu State) there was a confusion, at one stage, because of the characteristic features of the building, about whether it was a Hindu temple or a Christian church building [Photo 1.2]. In fact, some of the surviving churches, built partly or fully before 16th century, had many typical elements of Kerala temple in them, like '*Mukha-mandapam*' or open entrance porch [Photo 1.3], '*Deepa-stambham*' or stand for oil lamp [Photo 1.4], 'Kodi-maram' or flag post [Photo 1.5], not only in the built form but even at the

planning and layout level, like huge compound walls enclosing both complexes with their entries defined by 'padi-pura' or entrance towers [Photo 1.6], located at cardinal points. It seems that Kerala has maintained this indigenous church architecture in all its originality, which was based on the local religious architecture that prevailed, with out much outside influence on its form and character, for a very long time.

During the 16th century, when the European ecumenists came, they constituted a conscious attempt to alter the religious practices, including church architecture of Kerala Christians by declaring that it was heretic and Hindu by nature. This intervention caused an irreparable break in the system, and in architecture it introduced a totally new and alien style over the traditional church buildings, especially in its character, form and scale, resulting in the gradual disappearance and replacement of the traditional church architecture of Kerala.

1.2 Statement of the Problem

In this present investigation, an attempt has been made to understand the architectural characteristics of the original and indigenous church buildings of Kerala, and also to look into the possible influences in moulding that architectural character. To understand the indigenous architectural characteristics of the original church buildings of Kerala, at the outset, the Investigator had to deduce the 'original form' of indigenous church building of Kerala State, which existed before the foreign intervention, because no church building of that period exists today in its original form. Subsequently, a comparative analysis has been attempted between architectural styles of the deduced original form of



Photo 1.1 Indigenous church at Kallooppara, Kerala



Photo 1.2 Indigenous church at Thiruvithamcode



Photo 1.3 *Mukha Mandapam* (entrance porch) of Kadamattom church, Kerala



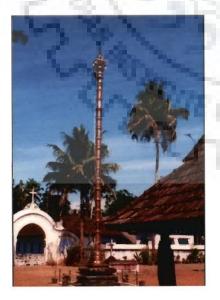


Photo 1.5 Traditional style flag post at Kallooppara church.

Photo 1.4 Traditional granite oil lamp at Kottakkavu church



Photo 1.6 *Padi-ppura* (gateway) at Chenganoor church

church architecture in Kerala, the contemporary church architecture of the West and the temple architecture (Jain, Buddhist and Hindu) of Kerala, to understand the similarities and dissimilarities.

1.2.1 Need for the Study

It is clear that the indigenous church architecture of Kerala is older than the so called 'Early Christian' architecture or Byzantine architecture, and certainly more than 400 years older than that of Britain, but still a serious study on this architecture is in its infant stage. The near absence of unaltered architectural remains of pre-European, original and indigenous, church buildings has been the main reason for the lack of in depth investigation and even what little studies have been carried out so far need more detailed exploration.

Secondly, due to the earthquake and tremors that occurred in December 2000 in central region of Kerala, where this indigenous architecture is concentrated, four ancient churches sustained serious structural damages and some are closed since then. It is quite possible that these precious and original architectural monuments may be lost forever, in the event of another such natural calamity.

Thirdly, and most importantly, in recent years, as the number of people in parishes increases, there is a new trend of demolishing old churches to pave the way for bigger and 'modern' buildings. If this heritage of indigenous church architecture is not studied, to understand its value, and steps taken to conserve them, it may be lost forever in the near future. The present investigation is motivated by a conscious realization of imminent loss of this valuable heritage.

1.3 Study Area at a Glance

This investigation, as stated earlier, is pertaining to the South Indian State of Kerala. The present boundaries of States of India were defined in 1956 when the geographical boundaries were reallocated after Indian independence, on linguistic basis. Kerala State was formed by adding the Malabar part of Madras Presidency and parts of South Canara to the erstwhile kingdoms of Travancore and Cochin (which had been integrated earlier in 1949 into 'The State of Travancore-Cochin'). It is surrounded by the Arabian Sea on West, and the Western Ghats on the East, if one analyzes this geographical entity through the ages, it can be seen that the boundaries remained more or less the same through ages. "Kerala has had the distinction of being an independent geographical and political entity from very early days". ¹ The present study being conducted, is pertaining to a period ending more than 500 years ago, when Kerala State as one understands it today did not exist but was split up into many minor kingdoms. At present, almost all the church buildings under this present investigation are confined within the boundaries of the present Kerala State, except one church building (see Map 2.1, in Chapter 2, p.21), which is located in the neighboring state, Tamilnadu.

1.4 Objectives

To conduct a detailed investigation, a set of plausible objectives are framed. They are:

- To study the growth of Christianity and development of indigenous church architecture of Kerala, through the socio-cultural history of the region, up to 16th century.
- 2. To identify all the indigenous church buildings of the study area that existed before 16th century and to deduce the original elements and architectural characteristics of indigenous churches of Kerala from them.
- 3. To re-construct the original architectural form/ forms of the pre-European indigenous church building of Kerala, as it existed at the time of the arrival of the Portuguese and to evolve different architectural typologies of them.
- To establish the evolution and metamorphosis of the original indigenous church architecture of Kerala.
- 5. To compare the deduced Indigenous church architectural form of Kerala with the church architecture of the West and the temple (Jain, Buddhist and Hindu) architecture of Kerala.
- To evolve a set of feasible strategies to conserve the architectural heritage of the indigenous church buildings of Kerala.

1.5 Scope

A lot of indiscriminate damage have been already done to these historical church buildings of Kerala State, which should have been actually an integral part of the rich cultural heritage of the State. The list of all churches built fully or partially before the 16th century, which has been brought out as a part of this investigation, can be graded on the basis of 'exceptionally interesting' and/or 'historically important' and the government can take steps to add these buildings in the 'list of the heritage-buildings' of the State. The list of all the pre-16th century churches, along with their present condition, etc. which has been formulated originally by the Investigator, provides an information base in itself and will also give impetus to conduct further investigation.

The Investigator envisages that this study will help in seeing these church buildings more as historic monuments and to understand that in the past, buildings of different religions in Kerala were always conceived as a part of a comprehensive and unified cultural fabric based on the dictates of the unique geo-climatic conditions and cultural setup. Therefore, this study can provide a greater appreciation among the general public about this indigenous church architecture, which as stated earlier, is older than the Early Christian architecture of the West and that of Britain. There is also immense tourism potential in conserving them as historic monuments.

The Investigator envisages that if proper steps are taken to disseminate the findings and recommendations of this investigation, it will stop people/ parishes from demolishing these old churches to build newer and bigger ones, which is practiced commonly as and when the number of parishioners increases. It can also develop an appreciation for the conservation of this indigenous church architecture of Kerala State.

1.6 Research Design

Descriptive and survey research methodology are employed in this investigation.

1.6.1 Research Methodology

The following methodology was employed in this investigation. At the outset, a literature review was done on four main areas: (1) Growth of Christianity in Kerala, through the socio-cultural history of the region, to form the background of this investigation, (2) Growth of church architecture in Kerala, to form the basis of this investigation (3) Church architecture of the West and (4) Architecture of the Jain, Buddhist and Hindu temples in Kerala. The last two are studied to equip the Investigator to attempt a comparative analysis, in the later stages of the study between them and the 'original church architecture of Kerala'.

A list of all the church buildings, built fully or partly before the 16th century, in Kerala was prepared based on the first two literature reviews done. The rationale for the selection of churches was following: Though the Portuguese landed in Kerala in 1498 AD, it took some time for their church architecture to get imposed or accepted in Kerala. Therefore, for the purpose of this present investigation, the year 1599 AD, which was also the year of the Synod of Udayamperoor¹, was assumed as the year of starting of a major deviation. Though in reality it was neither from a specific year, nor from a particular church building, this new trend was started, but the entire 16th, 17th and 18th centuries can be considered as the period where the indigenous church architecture of Kerala underwent a major shift.

ⁱ Synod is an ecclesiastical council convoked pursuant to the law of the church. This Synod is often quoted as 'Synod of Diamper'; a misquote after the anglicized pronunciation of the place name Udayamperoor. This Synod is dealt in detail later.

A list of 117 church buildings, that were established (originally built) before 1599 AD, was prepared based on authentic sources, such as, travelogues written in 16th century, stone edict that refers to church buildings before the 16th century, research papers, history books, etc. Antonio de Gouvea's monumental work '*Jornada do Arcebispo Dom Feri Alexis*', which was originally written in 1599 AD in Portuguese language, and translated for the first time in English in 2003, was the main source in preparing this list. Of this list of 117 churches deduced, 3 churches could not be identified (Karunagapalli, Kodumgalloor and the second church at Chendamangalam) because, although the name is mentioned in old records, in the last 500 odd years, either that church building is lost or the place with the name mentioned ceased to exist or the name mentioned had changed over the years, and therefore, only 114 churches could be identified.

The final list of 114 churches was considered for this present investigation. Subsequently, the primary survey was conducted, in all of these 114 churches, originally established and built before 1599 AD, by employing pre-tested schedules, to assess the present architectural condition of these churches, since there were many architectural interventions, in terms of alteration or addition at a later stage. On the basis of the survey results, the churches were grouped into 4 groups, based on the year of construction of the 'major part' of the present building. Group 1 consists of the churches, where the major part of the present building was constructed before 1599 AD. Group 2 consists of the churches, where the major part of the present building was constructed between 1600 and

1790 AD. Group 3 consists of the churches, where the major part of the present building was constructed between 1791 and 1930 AD and finally in Group 4 consists of the churches, where the major part of the present building was constructed after 1930 AD. It has been found, after the grouping, that the first, second, third and fourth groups consist of 24, 18, 37 and 35 churches respectively.

It has been observed that the churches in Group 4 (built after 1930 and therefore were mostly modern RCC structures) did not reflect any indigenous architectural character, and therefore, they were excluded from further analysis. So, after conducting the primary survey on all 114 churches, the list of churches to be considered for further analysis, contained 79 churches.

The survey results of 79 churches (included in Groups 1, 2 & 3) were then analysed thoroughly and the architectural characteristics of the 'original' indigenous church buildings of Kerala were deduced from them. Subsequently, based on those architectural characteristics deduced, 'building model/ models' were re-constructed, of the 'original form' of the indigenous church of Kerala before the influence of European church architecture changed it, in the 16th century. Further, five churches were purposely selected, which are evenly scattered over the study area, from the 24 churches listed in Group 1, and represent different architectural typologies. Detailed architectural studies were conducted in these 5 churches and were documented for further study of the 'reconstructed building form'. Of these five churches thoroughly documented, a church, which seems to be the oldest existing church building in the study area, was purposely selected for detailed study and its morphology was established.

Further, an attempt was made to compare the 'original form' of the indigenous Kerala church, deduced from the study, to the church architecture of the West and the architecture of Jain, Buddhist and Hindu temples in the study area. The similarities and dissimilarities found were analysed further to infer whether the indigenous churches of Kerala were architecturally more similar to Western Church architecture or the traditional Kerala religious architecture. A set of feasible strategies was also worked out to conserve the architectural heritage of indigenous church buildings of the study area.

The methodology followed in this present investigation is shown in Figure 1.1.

1.7 Data

Both secondary and primary sources of data have been collected and employed in this present investigation.

1.7.1 Secondary Sources of Data:

Literature pertaining to this investigation was collected from different published and unpublished sources and employed.

The published literatures, such as related books (written in English, Malayalam, as well as translated Tamil works, some written more than 1500 years ago), reports, and manuscripts were made use of. Another important source of data, was the souvenirs and pamphlets published by various churches, numbering to 250 and odd, during the time of its annual festivals.

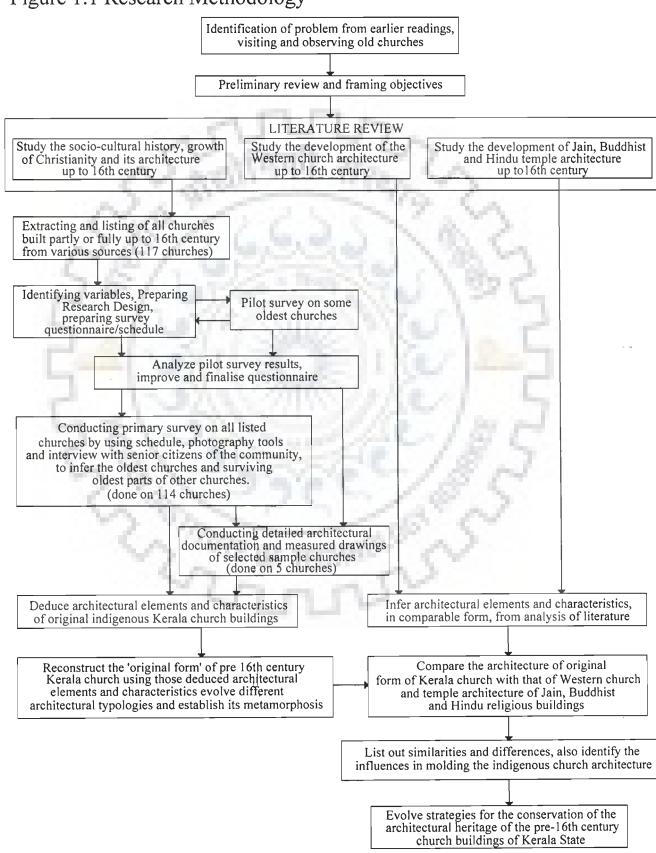


Figure 1.1 Research Methodology

The literature survey of Western church was comparatively easiest part since a lot of published data were available on this subject. An extensive study of architecture of Jain, Buddhist and Hindu temples of India in general, and Kerala in particular, was also done mostly based on the available literature in the local (Malayalam) language.

1.7.2 Primary Sources of Data:

An extensive primary survey was conducted by the Investigator by employing a schedule, photographic survey and personal observation on church buildings built fully or partly before the 16th century. Discussions were held with experts, and old people, at their doorsteps to understand further more about the old buildings. The main objective of this survey was to deduce the architectural characteristics of the pre-Portuguese church and to 're-construct' the model of the 'original form' of indigenous church building of Kerala.

Further, another major part of the primary survey was the architectural documentation of selected church buildings. For achieving this detailed measure drawings were made of the selected samples buildings. They were analysed thoroughly for verifying the re-constructed architectural model.

1.8 Survey Tools and Techniques:

An appropriate schedule was prepared to conduct the primary investigation. The schedule was developed based on the parameters that were required for studying the architectural characteristics for deducing the 'original form', the parameters considered in the schedule are presented in Annexure I. Lazar measurement tapes, digital photographic tools, magnetic compass, etc.

were also made use of in data collection. Finally, architectural documentation tools are used to document selected sample buildings.

The schedule used for the survey was pre-tested initially by conducting a sample survey to check for errors, and was subsequently improved there upon. **1.9 Analytical Tools and Techniques:**

1.9.1 Tools:

Optimal software's like MS Excel was used for compiling and undertaking analytical work. AutoCAD was used for entire architectural documentation (measure drawing) work.

1.9.2 Techniques:

Comparative analytical technique is employed in this investigation.
1.10 Limitations

Since the investigation is pertaining to a period of more than 500 years ago, the non-availability of data was the major limitation through out the study. The other major hurdle was the numerous additions and face-lifts on sample church buildings that took place over the last 500 years.

1.11 Results and Discussions

The outcome of the analytical work was discussed thoroughly to draw inferences about the indigenous architectural characteristics of the church buildings of Kerala, based on which the 'original form' of indigenous church building, before the European influence over it in the 16th century, was deduced and presented. The deduced 'original form' is discussed thoroughly in chapter four.

1.12 Inferences.

Inferences are made based on the thorough analysis and discussions, done in this present work and reported in chapter four.

The Investigator first deduced from the primary survey the 'architectural characteristics' of the pre-European Kerala churches and then, using those indigenous characteristics, reconstructed and established the 'original form' of the indigenous church building of Kerala State, before the European intervention of the 16th century. Subsequently, the factors that influenced the evolution of those original and indigenous architectural characteristics were identified. Then the metamorphosis of original Kerala church architecture was established and finally the investigation is concluded with plausible recommendations to conserve the architectural heritage of indigenous churches of Kerala state.

1.13 Organization of the Work

The thesis report consists of five chapters devoted to various aspects and steps of the study. A brief description of the salient features deliberated is highlighted in the following paragraphs:

The **first chapter** introduces the subject and gives an overview. It deals with the importance, scope and objectives of the study. Besides these, it spells out the methodology that has been adopted. This chapter forms the basis on which the subsequent analysis and research was carried out.

In the second chapter, the review of relevant literature is presented. The entire literature review is placed under four parts. Part one deals with the sociocultural history and the growth of Christianity in Kerala. It gives the required

background and framework needed for this investigation. The second part elaborates the state-of-the-art in the study of indigenous church architecture in Kerala. It forms the basis for further investigation. The third part looks into the development of church architecture in the Western countries and finally the last part deals with the development of Jain, Buddhist and Hindu temple architecture in Kerala. The last two parts equip the Investigator to do the comparative analysis, in later stages of the investigation. This literature review also gave the architectural parameters, which were used as variables in the survey questionnaire [Annexure I]. Further, this study was used to identify the churches to conduct primary investigation and the list of churches that were originally built before the 16th century was made from it.

Chapter three forms the primary investigation. The results of the survey are presented, analyzed and the architectural characteristics are inferred. The 'original form' of indigenous Kerala church is also reconstructed here. These findings formed the basis for selecting the churches to be documented for further investigation. The detailed architectural documentation of selected case studies are also presented in this chapter.

In Chapter four the detailed analysis of deduced 'original form' is attempted. In this chapter, an attempt is also made to compare the indigenous church architecture of Kerala, church architecture of the West and the architecture of Jain, Buddhist and Hindu temples in Kerala by considering various architectural parameters. These two are dealt with simultaneously. Further,

similarities and dissimilarities among the above are studied based on the comparative analysis, to draw inferences.

The **last chapter** spells out the findings, recommendations and policy guidelines to conserve the existing heritage of indigenous church buildings of Kerala State and ends with the conclusion.



CHAPTER 2. REVIEW OF LITERATURE

2.1 INTRODUCTION

In this chapter, an attempt has been made to review, and briefly present, the relevant literature needed for this study. It is organised in four sections; at the outset, the Socio-cultural history and growth of Christianity in Kerala is presented to get the required background and framework needed for the study. Secondly, the Church architecture of Kerala is presented, which forms the basis of this investigation. Thirdly, the development of church architecture in the Western countries, and finally, the development of Buddhist, Jain and Hindu temple architecture of Kerala are presented. The last two sections are studied for undertaking the comparative analysis in later stages of this investigation.

These reviews not only form the paradigm of the investigation but also that, it was from the first two reviews that an authentic list of all the churches that existed in Kerala, before the arrival of Portuguese, was extracted. This was done with the help of books that were published in 16th/ 17th centuries, travelogues written in 16th century, stone edict that refers to church buildings before the 16th century, research papers, history books, etc. Antonio de Gouvea's monumental work '*Jornada do Arcebispo Dom Feri Alexis*', which was originally written in 1599 AD in Portuguese language, and translated for the first time in English in 2003, was the main source in preparing this list. Therefore, this literature review becomes a very important aspect in this study and that's why it has been conceived and presented as a separate chapter in itself.

2.2 REVIEW OF LITERATURE

2.2.1 Socio-Cultural History and Growth of Christianity in Kerala

2.2.1.1 Introduction

Kerala, the anglicized version of '*Keralam*', "takes its name from '*Keram*' which is the Kanareseⁱⁱ pronunciation of the word '*Cheram*', after the Chera dynasty, one of the early rulers of this land". ² Another version assigns the origin of the name from the Sanskrit word '*Keram*' which means 'coconut' and thus *Keralam* meaning, the 'Land of coconuts'. The oldestⁱⁱⁱ and clearest mention of the land is in the Valmiki Ramayana and it also names some places in it, like *Murachi Pattanam* (Kodumgalloor^{iv}), and so does the *Puranas*. Panini; in the beginning of 7th century BC, Kautilya's *Arthasasthra*; in 4th century BC and Patanjali; in 150 BC also gives references about Kerala. The "Greek Ambassador Magasthenes in 4th century BC also refers to Chera kingdom in his account of ancient India". ³ Starabo, lived in 1st century BC, reports in his Geographia, Book II, that "nearly 120 merchant ships sailed to India from Red Sea".

Ancient Kerala had been famous for her spices and it was her fame as the 'land of spices' that brought foreign people and cultures into her shore from very early period. The Old Testament of the Bible contains plentiful references to

[&]quot; Language of Karnataka State, lying north of today's Kerala State.

ⁱⁱⁱ Although some authors have mentioned that the Rig-Veda mentions 'Chera Padar' [VII: 7 VIII], the investigator's attempts in finding it remains futile, but if that is true, and also that particular mention has something to with Kerala, then that would be the earliest mention of the land.

^{iv} Murachi Pattanam means 'town of Murachi'. It has been identified as Kodumgalloor (anglicized as Cranganore) by most scholars. Presently it is a coastal town in central Kerala. The name Kodumgalloor came later and is from 'Kodum Kaol Uur' means 'land of heavy killing'. It is referred to as Muchiri in early Tamil works and as Muyirikode in the Jewish Copper Plate of King Bhaskara Ravi Varman (1000 AD). The Greeks pronounced it Muziris. The great flood of 1341 AD in river Periyar caused an end to this being used as a port and so from then on Cochin became the best port in Kerala.[Menon, A. Sreedhara, A Survey of Kerala history, S. Viswanathan Printers & Publications, 1996. p.66.]

cinnamon and cardamom^v, which were the spices indigenous to Kerala. During "the closing centuries of the era before Christ, Kerala's trade in spices like ginger, turmeric and pepper assumed great prominence. The Greeks and Romans of those days carried extensive trade with Kerala". ⁴ The Old Testament of the Bible states that the Hebrew King Solomon's (10th century BC) navy went "by sea to Tarshish and brought from thence ... ivory, apes and peacocks". ⁵ Many Scholars are of the opinion that they obtained these from Malabar^{vi} Coast". ⁶ They identify 'Tarshish' with 'Tharisa' a now extinct coastal city near Kollam^{vii}. Tharisa Palli^{viii} copper plate inscriptions of 848 AD^{ix} are proof that the place Tharissa existed at least till ninth century. Further the Hebrew word for peacock is an adaptation of the Tamil "*Tukkeil*" (splendid tail; bird with); the language spoken in Kerala then,^x Many language experts, including Bishop Cladwell, consider this undeniable proof that Hebrews who had no peacocks got the bird and its name from the Tamil country.⁷ Also during the excavations at Ur, two necklaces made out of Amarzon stones were obtained that had accumulated at the time of the great

^v Exodus 30:23, Song of Solomon 4:14, Proverbs 7:17 (King James Version).

^{vi} Today only the northern part of Kerala is known as *Malabar*, but in earlier periods *Malabar* was a synonym to Kerala. The first mention of the word *Malabar* was by Albirooni (973-1048 AD), "*Malabar* is a compound of two syllables, viz, *mala* and *bar*, the former a Dravidian word meaning hill or mountain and later either the Persian word *bar* which means country or Arabic word *barr* which means continent" [Menon, A. Sreedhara, A Survey of Kerala history, S. Viswanathan Printers & Publications, 1996. p.13] Kerala was also called *malanad*, in Malayalam language means 'land of hills', to denote the *Sahyan* hills. ^{vii} Kollam, is a town 40 KM north of today's capital of Kerala; Thiruvananthapuram (anglisised as

Trivandrum). Kollam was the capital of Venad kingdom and later the capital of Thiruvithancore. Kollam is anglicized as Quilon.

^{viii} The word Palli was originally used to call assembly places of Jains and Buddhists, today it is used to call Christian and Muslim worship places. The word 'Tharissa Palli' literally means 'church in/of Tharissa'. This church is no more; historians are of the opinion that it was taken by sea. The word Tharissa is also being wrongly associated to the name St. Theresa by some authors.

^{ix} The Tharissa Palli Copper plates will be dealt in detail later. (see page xx)

^x Malayalam, the present language of Kerala, emerged as a language distinct from Tamil only in the 9th century AD. [Menon, A. Sreedhara, A survey of Kerala history, S. Viswanathan Printers & Publications, 1996. p.23.]

deluge. Since the nearest source of such stones was Nilgris of Western Ghats, it was concluded, "probably these were exported from Cranganore (Kodumgalloor)". ⁸

Archeologically, the history of Kerala has been, so far, taken back up to the Megalithic period. "A number of megalithic burial sites have been discovered all over Kerala ... Some relics of megalithic culture were discovered from Kodanad in Kunnathunad taluk in 1963. They include a good number of terracotta figures, those of male having beard and some of other sex in worshipping posture ... Some old burial jars, with large granite slabs over them, were unearthed at Kodukulanji in Chenganoor taluk in 1965". ⁹ The age of these findings is yet to be determined correctly.

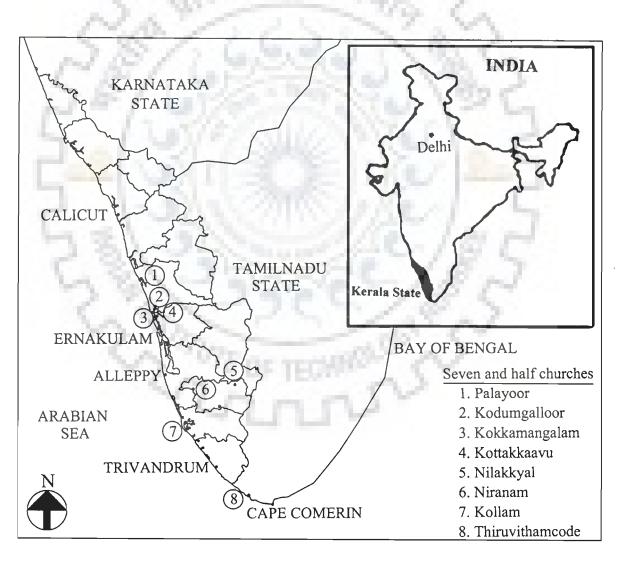
In spite of these evidences, some Authors seems to undermine the age of introduction of existence of culture here, K.A.Nilakanta Sastri puts this date as before 700 BC. Sreedhara Menon (1996) quotes Christoph Von Furer Haimendorf, the cultural anthropologist, who has propounded a theory that megalith-builders in India were a people of Mediterranean stock who came to the West Coast by sea and "entered South India by 600 BC and spread Northward, subduing the earlier Neolithic and microlithic peoples who were still in the semi-nomadic stage of culture". ¹⁰

2.2.1.2 Kerala In Ancient Periods

The geographical position of Kerala, as the narrow strip of land hemmed in between the Western Ghats^{xi} on one side and the Arabian Sea on the other,

^{xi} Western Ghats is a range of hill running along some 50-60 Km off West coast of South India, from Maharashtra State in North to almost the tip of peninsula in South.

has considerably influenced the course of its history [Map 2.1]. This geographical position has helped to ensure, to some extent, its political and cultural isolation from the rest of the country and also facilitated its extensive and active contacts with countries of the West and also in evolving "its own distinctive styles of art and architecture which are in many respects different from those in other parts of India". ¹¹



Map 2.1 Map of Kerala, showing the position of 'original seven and half' churches

There is a very popular legend that Kerala was brought up from sea by the Sage Parashu Rama, it seems there is a partial scientific background to this story. The Western Gahts were called 'Kadal-adi-kkodan Mala' in ancient periods, literally 'a hill which has Sea till its base', which implies that sea was there till the base of the Ghats in those periods. ¹² Tamil historian Kanakasabai is of the opinion that "There is indeed strong reason to suppose that in the early years of the Christian era the sea coast ran along the Eastern shore of the backwater, which extents at present to over forty miles from Changanaserry to Pallippuram ... it is extremely doubtful if the long strip of land which forms its Western bank, (of this back water) on which now stand the flourishing sea ports of Alleppy and Cochin, had any existence then". ¹³ Dalithbandhu (2001) argues that "geographically Kerala was definitely not the same as today in the first century AD. It is well known now that the Vypin island^{xii} was formed or 'came up' as late as in 1341 AD. Some places mentioned as the ports of Kerala by Pliny (Roman historian, lived 23-79 AD) in his Natural History, Ptolemy, the Alexandrian (95-162 AD), Plustthoos and Periplus of Eritrean Sea [written between 95 AD and 130 AD], Cosmos Indikopleustesxiii (written around 525 AD), are Nowra, Nelkinda, etc., which are today identified by most Scholars to places like Niranam, etc., which are on the Eastern side of today's long lake connection, which runs from North to South almost throughout Kerala. It does not, however, mean that there was no land then on the Western side of this water channel. It is

^{xii} Vypin is an island West of Ernakulam town.

^{xiii} A Byzantine Monk, called Cosmos the Indikopleustes, means 'the man who sailed to India', have visited Kerala in around 522 AD, and later written a detailed account of his journey; 'Christian Topography of Cosmos Indicopleustes'. English transilation published in 1907 from London, edited by Mc Crindle J. W.

but a strong argument, that supports the high possibility of the opinion of Chacko, A.C., and K. Rama Varma Raja (1933) that "the lands on the Western side of today's lake chain were lagoons in those periods. Manappuram, Beppoor, Kadamakkudi, Karappuram, Needakara, Ezhikkara, Kadakkara, Vechoor, Vaukkom, Vaeippu, were either below sea or on the coast, one time". ¹⁴ It is a well-documented fact that as late as in 1599 AD, Goan Bishop Menesis reached Kaduthuruthy church in a ship.^{xiv} The place Kadauthuruthy is today well inside from the lake into the East. Further, the name Kaduthuruthy itself is from 'Kadal' and 'thuruthu' means 'the island in the sea'. ¹⁵

Pliny, in his 'Natural History' [Vol. VI, 26], written in the middle of first century AD, speaks of the sea route to India and of the monsoon winds of July, and says that "from Osselis in Arabia, the ship took forty days to reach *Muziris* (Kodumgalloor), the chief port and center of commerce on *Malabar* coast". ¹⁶ This was actually made possible by "the epoch-making discovery of South-West monsoon by Hippalus, the Egyptian pilot, in 45 AD that facilitated direct seavoyage from the Persian Gulf to *Muziris*". ¹⁷ Pliny also refers to *Muziris* "as the most important port of India". ¹⁸

Roman, Greek, Arab and Jewish merchants were staying in *Muziris*, in connection with the pepper trade. The pepper that was collected, after the ships were gone after a season, were preserved for next season and it seems Roman soldiers were also staying there for its safeguard. Peutingerian Tables, constructed about 226 AD or 393 AD and found in Germany in about 1580's,

xiv As written in 'Jornada' by Antonio de Gouvea in 1606 AD. The term ship, in those periods, would imply a big boat, according to today's standard.

says that there was a Roman temple (of Augustus) in Kerala in those periods. Paranar says in Sangam^{xv} work 'Purananooru' [song: 343] 'the houses of Kerala merchants could not be seen from a distance because the pepper collected were piled to such a height in front of their houses'.

In the Sangam age, the geographical entity that is presently called Kerala, or what ever existed of it then, was the part of a larger unit, called Tamilakam, which covered almost all of South India. It was divided and ruled mainly by three powers; Chera, Chola and Pandya. Among this, Chera kingdom, from which Kerala evolved, was in the North-west of Pandya kingdom, with sea coast in its West, and "included Thanjavoor and Trishnapally (presently in Tamilnadu State) in its East". 19 In the early Sangam age "Politically, the land (what's geographically Kerala today) was ruled mainly by three powers, viz, the Ays in the South, the rulers of Ezhimala (mount Eli) in the North and the Cheras in the region lying in between". ²⁰ Ay kingdom was referred by "Ptolemy (2nd century AD) ... as Aioi" ²¹ and Ezhimala is referred to by many Sangam Poets. The Chera Empire (hereafter called First Chera Empire to differentiate from the later Second Chera Empire) lying in the center had its original capital at Vanchi-mutur. Although, there is much dispute among Historians in locating where it was, "the most accepted theory is that Vanchi-muttur was located at/ near ancient town of Muziris". ²² Pliny also speaks of Muziris as "the capital of the (First) Chera country". ²³

^{xv} First five centuries of Christian era is termed *Sangam* age, after a group ('*sangham*' in Tamil) of poets who lived during this period. Some scholars assigns the period of *sangam* poets from around 300 BC to 200 AD.

It has been believed traditionally that, Christianity, "was introduced in Kerala in the first century A.D., i.e., three centuries before it gained official recognition in Europe or become the established religion in Rome".²⁴ According to the traditions of Kerala Christians, St. Thomas^{xvi} came to India by sea from Socotra, an island off the African coast. ["In 1542 AD, the people of Socotra told St. Francis Xavier that St. Thomas, after spreading the Gospel in their land, went to Malabar (Kerala) and died a martyr at Mylapore". ²⁵1 He landed at the port of Muziris in the year 52 AD. "In the background of the extensive trade relations that existed between Kerala the Mediterranean countries before Christian era, it must be stated that there is nothing intrinsically improbable in the St. Thomas tradition". ²⁶ St. Thomas had naturally expected and found in Muziris a colony of traders from the Roman world, Greeks, Arabs and especially Jews. Cochin, the commercial center of Kerala, still has a small group of Jews who claim that their forefathers came to the region in the first century.²⁷ Periplus also mentions the landing and colonisation of Jews at Muziris. ²⁸ An ancient Jewish song mentions the arrival of them in Kerala, first to Palayoor and later settling in Shibush (identified as Chendamangalam). ²⁹ Palayoor still has many places like 'Jew street' and 'Jew hill' and in Chendamangalam there still is a very old Jewish Synagogue that is in ruins [It is currently being renovated]. The fact that all the seven churches claimed to be established by St. Thomas are at places where there were Jewish colonies in first century, has made some Scholars to put forward the theory that St. Thomas had come to Kerala looking forward to

^{xvi} Thomas Judas Didymos, one of the twelve direct disciples of Jesus Christ, Thomas in Syriac `is equivalent to 'didymos' in Greek both meaning 'twin'.

convert those Jews to Christianity. Regarding the visit of St. Thomas to India, based on the fame *Muziris* had by then gained among the Romans and the Jews, it is not only highly probable, but if St. Thomas has visited India its most logical to assume that he had come by sea and landed in *Muziris*.

2.2.1.3 Social life in Sangam Period

The Sangam works gives us a faithful picture about the society in Kerala during the First Chera Empire. Sreedhara Menon, (1996) sums up the social life of Kerala based on the Sangam works; 'the people enjoyed a large measure of social freedom and equality. The evil of untouchability was unknown to in the society. Women wore cotton fabrics as well as silk and woolen cloths and also wore ornaments as *Taali^{*vii}* etc. The leaf skirt was also quite popular and even the princesses used to wear it. Houses built of brick and mortar was common amongst the upper classes while the poorer classes lived in simple huts. The residences of kings had beautifully laid out gardens. The vast majority of people in Sangam age had no special religion till about 500 AD. Dravidian^{xviii} practices, which were not based on any particular religion, were followed. Ancestor worship was also popular. Though Dravidian practices were followed by the bulk of the population, Hinduism, Jainism and Buddhism also existed side by side. The

^{xvii} A pendent worn on necklace by married woman of south India. This practice is still in vouge among Hindus as well as Christians of Kerala.

^{xviii} Some scholars are of the opinion that, the term Dravidian was originally used to denote the Brahmins of South, as in Pancha Dravidas (just as those of north were called Pancha Gaudas]. However, by medieval times, the term 'Dravidian' was used to refer all southern people. In mid 19th century the term acquired a linguistic connotation when Bishop Caldwell classified the southern languages as belonging to Dravidian family. Here used in the present meaning of the word: original south Indian inhabitants, that's excluding the present 'high caste people' of the south, whore are 'supposed to have' migrated from north Indian Vedic people. [It is often quoted that, this division was started only in 1886, when Mountstuart Grant-Duff.

worship of Muruga, Indra and Varuna is alluded to in several poems. From the 5th century onwards, Aryan culture began to spread over large parts of Kerala and exercise a dominant influence in society. ³⁰ The Hindu religion in Kerala as of today "is the result of a synthesis of the Aryan (Vedic) ideas from the North and Dravidian ideas from the South". ³¹

Although St. Thomas, as stated earlier, must have come to convert the Jews in India, he was more successful in preaching the gospel to the local people. He is said to have, although there is no documentary proof to substantiate this, converted many people into Christianity, including twelve high caste families. (There is a claim that these high caste people were Brahmins^{xix} and from whom some Kerala Christians still trace their genealogy). This tradition is found in many texts as well as old Christian songs, like *Veeradian paattu*, *Ramban paattu* and *Margam kali paattu*, composed but in 17th century and later. However, it seems this high caste origin has helped the early Christians to enjoy a very high social status from early periods. It is also believed that he founded 'seven and a half' churches (seven full churches and a chapel) in Kerala. The traditional belief is that after several years of work in Kerala he went to the *Coramandal^{xx}* coast, where it is believed he was assassinated there in the year 72 AD. He was first buried in Mylapore (near Madras) and then the relics were taken to Edessa, some time before forth century, by a merchant named Kabir.

a British governor, told the upper caste non-Brahmin students of the University of Madras, that they belong to Dravidian race.]

^{xix} Brahmins are a high caste sub-sect among Hindu people; priestly class. The term Brahmins is however used to denote the priestly class Vedic people from the north; the priestly class of Kerala are called *Namboothiri*.

^{xx} The east coast of south India. *Coramandal* is the corrupted version of *Chola-Madalam*; meaning the 'area of Cholas'.

where they remained until that place fell into the hands of the Mohammedans, then it was transported to Chios in 1141, and finally to Ortona, Italy in 1257 where it is now enshrined under the main altar of St. Thomas Cathedral there. The popular Christian Malayalam songs of antiquity, known as "*Thoma parvam*" and "*Margam Kali Pattu*," describe vividly the advent of St. Thomas to Kerala, his apostolate there and his martyrdom at Mylapore, on third of July, 72 AD. The "*Ramban* Songs" are popular ballads, which the St. Thomas Christians have sung from generation to generation, narrating the work of St. Thomas in Kerala. These ballads were believed to have been originally composed in ancient Tamil by *Ramban* Thomas Maliekal who received baptism and priesthood from Apostle himself, in the first century and written down in the present form in around 1600's.

Although the earliest documentary proofs about the existence of Christianity in Kerala is the "statement of Pantaenus, the head of the Alexandrian school who visited Kerala in 2nd century AD, that he found a flourishing Christian community there" ³² and no archaeological evidence is observed to prove St. Thomas' 'actual missionary work' in Kerala, still there is enough evidence to believe that he attained martyrdom and was first buried at Mylapore, near Madras.

St. Gregory of Tours in 590 AD reports 'the corpus (bones) of Thomas the Apostle had first rested at Mylapore'. He also mentions an elaborately adorned monastery and a church of striking dimensions there. In 1517, the Portuguese had rediscovered the tomb and in 1523, they "by the order of their King opened

the tomb in Mailapur ... (made) of bricks". ³³ Later in 1940's "a Roman trading station was discovered" at Arikamedu near the ancient port of Pondicherry, belonging to first century. ^{xxi} This station existed in three periods and the second period was identified as belonging to 50 to 100 AD. There was a "great warehouse built out of bricks, begun after 50 AD and abandoned before 100 AD"³⁴. The bricks of Mailapur tomb were later compared to that of this warehouse it was found to be identical and it was concluded that "the tomb of the Apostle is, therefore, to be ascribed to this date (50-100 AD)". ³⁵ This is by far the only 'scientific' proof of St. Thomas' missionary activity in South India. Further, it is written in the English history that "King Alfred of England sent the Bishop of Marborne in 883 AD with offerings to the tomb of St. Thomas to fulfill a vow he had made when the Danes attacked him". ³⁶ It has been also noted in the letters of St. Francis Xavier that the Kerala Christians used to "go on pilgrimages every year to this tomb and they considered it their duty to do so at least once in their lives". ³⁷ In 1952, immediately after the 'All Kerala Celebrations of the 19th Century of the Landing of St. Thomas in India', the Roman Pontiff sent a Cardinal, who brought a part of the relics back to this land, confirming all this; its main portion is enshrined at Kodumgalloor where the Apostle first set foot in India and the other portion at Mailapur where he died. Above all, in support of this view, its also true that there is no other place in the world that claims to be the place of martyrdom and burial of St. Thomas.

^{xxi} This was the first time a Roman trading station was discovered in India. It belonged to the first century and was abandoned at the end of second century. For a detailed report about these excavations see: Arikamedu: An Indo-Roman Trading Station on East Coast of India by R.E.M. Wheeler and A.Ghosh, Ancient India, Bulletin of the Archaeological Survey of India. New Delhi, 1946, pp.17-24.

2.2.1.4 Alternate Views on St. Thomas Tradition of Kerala

The Investigator would like to point out that there also exists another school of thought, which doubts St. Thomas's coming to Kerala. Although they also credit St. Thomas as the father of Christianity in India, they assign the area of his work to Parthia (part of today's Iran) and Taxila (now in Pakistan). The base for this school of thought is an apocryphal work "Acts of Judas Thomas' by the Syrian Bardesan of 220 AD, which states that; 'St. Thomas was brought to India (greater India) by Hubban, an agent of a King called Gundaphorus, who was looking for an architect and carpenter to build a palace for the king. Gundaphorus gave St. Thomas the money to build the palace but he spent the money in relief of the poor. When the king came to see the palace, the Apostle said that he had built a palace for him in heaven. The king got very angry and imprisoned St. Thomas, but on the very same night Gad, the king's sick brother, had a strange dream in which he saw the heavenly palace built by St. Thomas. Early in the morning, he told the king about the dream, which lead to the release of St. Thomas. The Apostle also succeeded in converting Gundaphorus to Christianity besides getting the right to preach the gospel in king's realm'.

This incident, recorded only in the 'Acts of Judas Thomas', was dismissed totally as an unhistorical legend for long, because history did not mention about a king by that name nor a kingdom corresponding to the description given, but in 1834 the excavations in both East and West of Indus has unearthed coins and inscriptions which made it clear that Gundaphorus was indeed a historical figure and that he belonged to the Parthian Dynasty from Takshasila (Taxila).

Archeologists have unearthed coins that have the figure of King Gondophorus with his name inscribed clearly, and on the reverse is the figure of Shiva with his trident and with the clear inscription in Greek "Maharaja- rajaraja-samahata-dramia-devavrata- Gundaphorasa." These coins are now preserved in the Lahore Museum and numismatists had confirmed that these coins were minted between AD 10 and 50. A votile inscription of the same period was discovered in 1857, called the Takth-i-Bahi^{xxii} inscription, on it his reign is clearly marked: "In the twenty-sixth year of the great King Gudaphoara, in the year three and one hundred, in the month of Vaishakh, on the fifth day" This places his ascension to the Kingdom as AD 19 and the year 103 corresponds to the year AD 46 (which is just six years before the year St. Thomas has supposed to have landed in Kerala). Further evidence also indicates that this King had a brother named Gad.

The people who belong to this school of thought further assumes that in later periods this region, as is evident from history, was over-run by several invasions and the churches established in Northern India vanished along with the Parthian Empire without a trace. Some Authors are of the opinion that after leaving Taxila St. Thomas evangelized various parts of India and finally arrived in Mylapore near Madras where he was martyred. In the opinion of Farquhar, J.N., St. Thomas first worked in Gundaphorus' kingdom and later, after the destruction of the Indo-Parthian kingdom by the Kushans, he might have gone to the Malabar coast and then finally to the East coast. Some other Historians are of the view that he traveled by sea from the kingdom of Gundaphoros to Kerala and

xxii After the name of the place, north east of Peshawar, from where the inscription was found. It is 17

landed at Muziris. However, there is no evidence to prove the existence of any ancient Christian church in North India and at the same time the traditional Christians of Kerala are the living testimony to the St. Thomas tradition of the South. The Greek liturgical tradition upholds that "St. Thomas, named Didymus, having preached the word of God to the Parthians, and the Mades, and the Indians, was put to death by Misdeus, King of the Indians". Here a clear distinction is made between Parthians and Indians, and also makes it clear that he went to India after preaching to Parthians.

2.2.1.5 Early Accounts of Foreign Travelers

In support of the view of a very early beginning of Christianity in Kerala are the verifiable historical documents by early foreign travelers. Pantaenus, an Alexandrian missionary who visited Kerala in 189 AD, had later written about a "flourishing Christian community there". Further, he also wrote that there was a gospel of St. Mathew in Hebrew, which he took away to Alexandria. It is said that the spirit of Christianity had diminished by this time and alarmed at this, the Kerala Christians sent a deputation to Mar Demitrius, Bishop of Alexandria, requesting him to sent a learned teacher to lead the Christians in faith. Consequently, Pantaenus, the learned Professor of the seminary of Alexandria, came to Kerala in 189 AD. He brought back most of the apostatized to Christianity and brought a new awakening and spirit to the Kerala Church. As a mark of gratitude to him, the Kerala Christians presented him with a copy of Matthew's Gospel written in Syriac. This incident has been also recorded by both

inches long and 14 1/2 inches wide. It is also now kept in the Lahore Museum.

St. Jerome (347-419 AD) and Eusebius of Casesarea (4th Century AD). "The *Mani-grama-kkar*, a sect of caste Hindu Nairs found in Quilon (Kollam) and Mavelikara in Kerala, still preserve certain Christian customs; they are said to be the descendants of those apostatized early Christians". ³⁸

'Historia Nestoriana' written in 1295 AD, mentions a Persian Bishop Davood who visited Kerala in 295 AD. ³⁹ It is said that he was the Bishop of Basorah. Another version says that he was sent by Pappa, son of Persian Bishop Aggai, after making him resign the post as Bishop of 'Parat d' Maysan'. ⁴⁰ If this is true then he could be the "first of a series of Persian Bishops to look after Kerala Church" ⁴¹ till the arrival of the Portuguese.

"In the middle of the 4th century, (most probably in 345 AD) the strength of the Christian community in Kerala was increased by an influx of Syrian immigrants consisting of 400 Christians from 72 families belonging to seven tribes in Baghdad, Nineveh and Jerusalem under the leadership of a merchant Thomas of Cana (*Knanai Thomman*) probably as refugees from the terrible persecution of Persian King Sapor II (313-381 AD)". ⁴³ There were several priests

and a Bishop called Mar Yausef in this group. They landed at Maha-devarpattanam^{xxiv} (Kodumgalloor), which was then ruled by Chera King 'Kokkaru Iravi Varman' or Cocoragon (according to some Authors it was Cheraman Perumal^{xxv}) with his capital at Thiruvanchikulam (Thiru-Vanchi-Kulam) near Kodumgalloor, whose palace known as Allial-Perum-kovilakam, was situated in the vicinity of the great Pagoda at Thiruvanchikulam. The king then bestowed upon Thomas of Cana and his followers certain rights and privileges inscribed on a copper plate, today known as the "Knanai Thommam Copper Plates". Those Syrian Christians who claim to be the direct lineal descendents of Thomas of Cana are now called the 'Knanaya' Christians. They are also called 'Southists' in contrast with the bulk of Syrian Christians, some times called 'Northists'. The name Southists and Northists probably took their origin from the fact that the former lived in the Southern part and later in the Northern part of the town which formed the Christian quarters at Mahadevarpattanam. The Southists are now found in both Roman Catholic and Jacobite sections of Christianity, as distinct groups. However, this connection with the East Syrian church, although it infused new blood to the sagging old church, instigated in the beginning of a new era on which the Kerala Christians were started to be ruled by East Syrian Bishops. This

^{xxiii} He was a native of Maldives islands and has been taken as a hostage by Emperor Constantine so that Maldives people would not plunder Roman ships as they passed that way. In Rome he became a Christian and later became a bishop. He visited India in 345 AD.

^{xxiv} From 'Maha Thewar Pattanam' means 'the town of great king'.

^{xxv} According to this version Cheraman Perumal was the last of the First Chera kingdom, and he became a convert to Christianity and then went on a pilgrimage to Mylapore where he died some years later and was buried by the side of the tomb of St. Thomas, the Apostle. The historians are of the opinion that "there was never a ruler of Kerala by name Cheraman Perumal" [Menon, A. Sreedhara, A survey of Kerala history, S. Viswanathan Printers & Publications, 1996. p.144]

East Syrian connection is also the reason for Kerala Church being accused of being Nestorian by some.

The "Knanai Thomman copper plates" of 345 AD, xxvi is another archaeological evidence of early Christianity in Kerala. Although the whereabouts of this copper plate is now unknown, there are many references about this in many old texts and also translations of it are available at present. An old translation in Portuguese language is kept in the British Museum. A translation of this is available in the Travancore State Manuel 44 and J.T.Meckancy's 'Christianity in Travancore' (1901) also gives a translation. Fr. Lacross in his book 'Christianity in India' (1783) says that this Copper plate was given by Bishop Mar Yacob to the procurator of Cochin Fort and he destroyed it. However, some Historians doubt this because in 1599 when Bishop Don Menezes, Arch Bishop of Goa and a Portuguese dependent, visited Thevalakkara Christian community they requested him to ask the Portuguese to return this copper plate, which they had given to Portuguese. Later in 1604, Bishop Francisco Roz, who was Bishop of Kerala between 1599 to 1624, wrote to the Portuguese Authorities requesting it and he had stated in that letter that 'Religious of St. Francis' has taken it to Portugal. He also mentions in that letter that the copper plates are 1258 years old, which confirms the date of the plate as 346 AD and also that it was taken to Portugal. According to Fr. Hosten, the plates must be now either in 'Torre de Tomino' in Lisbon or in an old Franciscan monastery there. In the

^{xxvi} Some Authors like N.K Jose dates this copper plates to 9th century. [Jose, N.K., Kaanaai-thomman Oru Sathyamo? (Malayalam), Hobby Publications, Vaikom, 1987.]

British period many people actively searched for this plate, Conal Macaulay^{xxvii} was one amongst them, using his power he could trace out many other old copper plates from Cochin treasury but this was still missing. It is worth mentioning here that although Dr. Gundat, in his Madras Journal XIII, has stated that a copy of this Copper Plate engraved in stone is buried in the Northern side of *Thiruvanchikulam* temple, no attempt has yet been made to dig it out. Also the "*Veeradian Pattukal*," popular melodies sung by Hindus on special occasions extol the special privileges granted to Kerala Christians later by king Cheraman Perumal.

In 522 AD, Cosmos Indicoleustes, the Alexandrian merchant came to Kerala and found a strong Christian community there. He had later written a detailed account about his travel, '*Topographia Indika Christiana*'. In 1907 it was translated to English and published from London, on that Indicoleustes clearly states "...there is a church of Christians, with clergy of congregation of believers ... and such also is the case in the land called *Male* (Malabar), where pepper grows. And in the place called *Kalli* (Kollam) there a church and a Bishop appointed from Persia". ⁴⁵ Most Historians are of the opinion that "it contains perhaps ... the first indisputable evidence of Christian activity in Kerala". ⁴⁶

2.2.1.6 Prevailing Religious Practices in Early Christian Era

"Even in ancient period, Kerala became the meeting ground of all the Indian religions and philosophical systems as well as the most important world religions. In addition to the native religions like Jainism, Buddhism and Hinduism, foreign religions like Christianity, Judaism and Islam also found here a congenial

^{xxvii} A powerful British East India Company officer he was the Chairman, Indian penal code draft, in 1833.

soil". ⁴⁷ Most Scholars agree that Buddhism came there at least from the time of Emperor Ashoka, third Mauryan Emperor who ruled most of North India from 272 to 232 BC. Jain religion was also present there during the same time. Although most Historians of Kerala are of the view that the major in flow of Vedic people to Kerala occurred only after Sangam age, some argue that 'some Brahmins also were sent there by the Vedic people of North India (to Kerala) to preach the Vedic religion before Christian era'. ⁴⁸

Discussing the religious practises of people in the early centuries of Christian era in Kerala based on Sangam works, Sreedhara Menon, (1996) sumed up, "The people were, however, so catholic in their outlook that they had no objection to worshipping in Jain or Buddhist shrines and performing Vedic sacrifices at the same time". ⁴⁹ He states that Jain religion might have come to Kerala in 3rd century BC based on the fact that Ilango Adikal, (literally 'heir-apparent') the Author of the Tamil (Sangam) epic Silappadikaram, was a Jain prince who lived at Trikana Mathilakam, a famous centre of Jain religion and learning in those days. [The Mathilakam temple was later converted into Hindu shrine, for that matter, according to Historians most of the Jain shrines were converted into Hindu shrines In later periods, after the decline of Jainism.^{xxviii}] The decline of Jainism in Kerala started in the 8th century AD and then it almost disappeared. Jainism has not left much of a lasting impress on Kerala culture except in architecture. Logan (1887) has pointed that "Hindu temples and even

^{xxviii} Like Kudalmanikkam temple at Irinjalakuda, Bhagavathi temple at Kallil near Perumbavur, Bhagavathi temple in top of Edakkal cave near Sulthan Bathery, etc. are cited as examples of this activity. The Nagaraja temple at Nagarcoil was till 16th century a Jain temple. [Menon, A. Sreedhara, A survey of Kerala history, S. Viswanathan Printers & Publications, 1996. p.96-97]

Muslim mosques of Malabar have been built in the style peculiar to the Jains".⁵⁰ Like Jainism, Buddhism also held sway in Kerala in ancient period. According to one of the Asokan inscriptions, the rulers of Chola, Chera and Pandya countries made arrangements, within the their own countries, for the treatment of men and animals suffering from diseases. So it may be assumed that Buddhism came to Kerala during the reign of Emperor Asoka; that's 3rd century BC, itself. The Tamil works of the "Sangam age contain several references to the efforts of Buddhist Missionaries to spread the message of the Buddha". ⁵¹ There was a Buddhist Chaitya at Vanchi, which was famous all over South India. The Sangam work Manimekhalai, speaks of its "turrets reaching the skies". Similar to what happened to Jain temples, many Buddhist shrines were also, according to Historians, got converted into Hindu temples in later periods. XXIX The large number of Buddha images found in the Mavelikkara, Ambalapuzha, Kunnathur and Karunagappally taluks indicate the prevalence of Buddhist faith in these areas. One of the main centres of Buddhist faith was Sree-Mula-vasam, which is now under the sea. The proposal to excavate this was wound-up due to 'lack of funds'. In the Sanskrit work Mushakavamsha, king Vikramarama is said to have saved this famous Buddhist temple from the encroachment of the sea by throwing large blocks of stone and strengthening the shore. The discovery of an image of Lokeswara by M. Foucher in Gandhara with the short inscription "Dakshnapathe Mulavasa Lokanatha" proves that Sree-Mula-vasam was a famous Buddhist pilgrim centre even in North India in those days.

xxxx Kurumba Bhagavathi temple at Cranganore, Durga temple at Paruvasseri (21 miles east of Trichur) etc.

2.2.1.7 Christianity in Early Kerala

Regarding the history of Christianity in Kerala, the years from 52 to 345 AD may be regarded as the 'early period'. "Since the introduction in Kerala the Christian faith, though alien in its origin, came to be accepted as an indigenous faith and it made steady progress". ⁵² During that time the Kerala Christians, under indigenous administration and leadership, were very orthodox in the practice of religion. Some Authors put forward a theory that St. Thomas established the early liturgy here in Aramaic (Syriac) because in those days, Greek was the chief language of the West; and Syriac, that of East, but most church Historians of Kerala now dispute this theory. They argue that although on account of their close contact with the Jews, Aramaic may have been familiar to the people of Kerala, but it was only later, probably after the arrival of the Persians in forth century, that Syriac came to be used as the language in which the church service were held. After that, however, it continued to be the language of the liturgy in churches of Kerala, through out the centuries until Malayalam substituted it as late as in 1962 AD. It is because of this that numerous Syrian words, like for example; Mishiha (Christ), Eesho (Jesus), Sleeha (Apostle), Mar (holy), Sleeba (cross), Qurbana (sacrifice), Qudasha (sacrament), Qkasa (chalice), Mad'baha (altar), Ashan (teacher), all now commonly used Malayalam words, became current from very ancient times. Historians, disapproving the theory that St. Thomas established the Syrian liturgy here, are of the view that in all probability the early Christians had a Dravidian liturgy. "The acceptance of Christianity does not appear to have involved any revolutionary change in the life

of individual as 'conversion' in European period did. Hinduism has always recognised the liberty of individual worship and, in ancient times, seldom took notice of a man's beliefs as long as he followed the social practices appropriate to his caste. The king, as a rule, was expected to respect the religions of all his subjects. Hence, Kerala Christians were, in all probability, considered a sect like the Jains and Buddhists, who were numerous in South India in early centuries of Christian era". ⁵³ They are of the opinion that the early Christians, some time in the third/ fourth century, established contact with the Christian centres of Western Asia, to obtain Bishops for the Kerala Church, from Mesopotamia and Persia, a practice that continued till the Portuguese stopped it in 16th century. So most probably it must have been these West-Asian Bishops who introduced Syrian liturgy in time. Therefore, the Christians of Kerala were, though very Indian in their culture, became middle-Eastern in their worship and rituals, because the church was lead by Bishops sent from Persia.

In early periods, the traditional Christians of Kerala were called as 'Nasarani' after Jesus, the Nazarene. The Kaanaai Thomman copper plates, mentioned earlier, uses the word Nasarani for Christian. Pope John the 22nd's letter to Kerala Christians, dated 8th April 1330, also addressed them as 'Nasarani'. Some Scholars are of the view that "it was the Jews who were settled in Kerala first gave the name 'Nasarani' to early Christians". ⁵⁴ Some other old records call them as 'Mappila'. According to some Scholars^{xxx} this term is an amalgamation from the local words 'Margam' and 'Pillai'. Margam means 'the

^{xxx} Like M. C. Joseph, N. K. Jose etc. [see Jose, N. K., Nasarani (Malayalam), Hobby Publications, Vaikom, 1984. p. 50.]

way'. [The term used to denote conversion to Christianity as late as early 20th century was '*Margam koodal'*, *koodal* means to join]. As far as the term '*Pillai*, although it is also a caste name, was used as simply as 'a man' or 'the one' [like *Kanakka Pillai*, means 'one who does accounts', *kanakku* means mathematics or account]. So *Margam Pillai* means 'one who has chosen 'another way'. In fact, the word '*Mappila*' was also used in later periods to call people of Kerala converted to Islam. '*Nasarani-Mapla*' another term used to call Christians could be of a later coining, to differentiate a Christian *Mappila* from a Muslim *Mappila*.

The Investigator is of the opinion that the word '*Mappila*' itself is relevant in the investigation of architectural outlook of early Christians because whoever has coined the word, either the people who were converted called themselves, or others who called them so, the word reveals the thinking of the people, who coined the word and those who accepted it, that through conversion they are just taking a new path, or way, and not a new goal. What is relevant is that the people who coined the word, in their eternal wisdom, knew that they were only taking a new 'path' to the old goal and not a new 'goal' in itself and so give more emphasis to path.

After the Portuguese period they are also called 'Syrian Christians' to distinguish them from 'Latin Christians'. ^{xxxi} This is because they followed the

^{xxxi} The Kerala Christians were divided as (and called as) 'Latin' and 'Syrian' only after 16th and 18th centuries, respectively, by the Europeans. The Portuguese, after succeeding in 'converting' some traditional Kerala Christians as well as people from other religions into Roman (Latin) rite, then in order to distinguish them from traditional Christians, called them 'Latin' Christians. The word 'Syrian' Christians' was a later coined term, to distinguish the Christians who use 'Syrian' language for the 'holy mass' from 'Latin Christians'. It was first used in 18th century by the then Dutch Governor Adrian Moens. [Cyabet, Anso, '*Kollam Kristyanikal'* (Malayalam), Ed. A. J. Rosario, Pallissherry Publications, Kottayam, 1995. p.73.] It is not true that Latin Christians are only those who got converted to Christianity after the Portuguese. Many traditional Christians of Kerala, who accepted the Roman Pontiff during the Portuguese period, are also

Syrian (Aramaic) language for their liturgy. Aramaya was the mother tongue of the Jews, the language Jesus spoke, which the Greeks called 'Suriakos' because it was the language of Suria (Syria) the capital of Greek Seleucian Empire. It was also the official language of the then Persian Empire.

2.2.1.8 Kerala During Second Chera Empire

The Sangam age was followed by 'a long historical night'. "The history of Kerala in the 6th, 7th and 8th centuries is lost in obscurity". ⁵⁵ It is clear from many rock inscriptions and texts of those periods, from neighbouring kingdoms that Kerala was invaded by their kings and has established supremacy over Kerala. Although some Historians are of the opinion that "the claim of most of these powers expect the Pandyas to have established supremacy over Kerala is not supported by tangible evidence". ⁵⁶

This historical night "came to an end in about the beginning of 9th century with the revival of Chera power under Kulasekhara Varman^{xoxii}. An illustrious line of kings known as Kulasekharas ruled over Kerala from 800 to 1102 AD with their capital at Tiruvanchikulam or Mahodayapuram". ⁵⁷ This empire is known as Second Chera Empire and in it's zenith, it comprised practically whole of modern Kerala and more. The era of Kulashekharas was also the formulate epoch of Malayalam language and literature. In the beginning of 9th century, Malayalam began to take shape as an independent language and in course of time it freed itself from Tamil influence. This period also saw the decline of Jainism and

there among today's Latin Christians. Further, in places like Mattancherry and Palluruthy, old churches itself were 'converted' to Latin churches along with its parishioners.

Buddhism and the establishment of Hinduism as the predominant religion of Kerala. "As a matter of fact, Hinduism did not enjoy a position of prominence among the religions of Kerala prior to Kulasekhara age. Hence, what happened in the age of the Kulasekharas was not the revival of the Hindu religion but its spectacular establishment as the predominant religion of the land at the expense of rival faiths like Jainism and Buddhism and the Dravidian forms of worship". ⁵⁸ One of the main reasons for the decline of Buddhism and Jainism was the religious propaganda of Hindu reformers like Sri Sankaracharya^{xoxiii}. Nevertheless, it lingered on for some more time, and finally disappeared in the 12th century AD. Scholars are of the opinion that "images, processions, *utsavams* (festivals) etc., associated with popular Hindu temples in Kerala are said to be a legacy of Buddhism". ⁵⁹

"The progress of Hinduism had its impact on the social life of the people. The immediate effect was the rise of temple to a place of importance in religious and cultural life. The work of Nayanars and Alwars^{xxxiv} during this period, also lead to the establishment of a number of Saiva and Vaishnave shrines all over Kerala". ⁶⁰ From the archeological point of view also, inscriptional evidence on temples of Kerala are available only from about 800 AD. "The earliest inscriptional evidence about a temple in Kerala is found in Kantiyur Siva temple

^{xxxii} Kulasekhara Varman, ruled from 800 to 820 AD. Some scholars consider him as Kulasekhara Alwar, who figures in the history of Vaishnavite movement in South India and the author of Perumal Tirumozhi, one of the celebrated devotional works in Tamil.

^{xxxiii} Few authors assigns the life time of Sri Sankaracharya from 509 BC to 477 BC, against the most accepted period by the historians of 788 to 820 AD. However all scholars agree that it was after Sankaracharya that Jainism and Buddhism declined in Kerala. Even Swami Vivekananda had written that 'the sharpness of the sword of Sankaracharya was stronger than the sharpness of his theories (translation by the investigator) in 'Vivekananda Sahithya Sarvam', published by Sree Ramakrishna Mission, p.88-89.

in Mavelikara, on a stone lying in front of the temple, records the gift of land to the temple to the year 823 AD". ⁶¹ "The Parthivapuram, and Ayirur Devi-Devasam temples were constructed in 866 and 974 AD respectively". ⁶² It is certain that in the ninth century the culture of building temples with a 'built-form' got a new boost, if not its beginning, all over Kerala, which lead Scholars to form the opinion that "construction of (Hindu) structural temples, which begin in the 8th century AD received a fillip during the age of Kulashekharas as a part of the activity connected with the popularization of Hinduism". ⁶³ However, it does not mean that there were no temples before that period. It is only that the temples of those periods, like churches, were constructed of more perishable materials, like wood and thatch, which got wiped out by the age, heavy rainfall, onslaught of white ants, etc.

2.2.1.9 Christianity During Second Chera Empire

The Christians had become, by this time, prominent in the field of trade and commerce and before long they received several privileges and favours as merchants from the hands of ruling Kulashekharas. "This period also witnessed another large-scale immigration of Persian Christians to Kerala under a Persian merchant called 'Marwan Sabar Iso'. He immigrated to Quilon, in 825 AD, ^{xoxv} with a large party of Christians including two Bishops, Mar Sabor and Mar Proth".⁶⁴ He was welcomed by the ruler of *Venad*, Ayyan Atikal Tiruvatikal, and gave him vast properties, where he built a church, the *Tharissa-palli*. Later in 849 AD the King Ayyan Atikal Tiruvatikal of Venad during the reign of Stanu Ravi

^{xxxiv} Nayanmars and Alwars are Shivite and Vishnnavite saints respectively. There are 63 Nayanmars and 10 Alwars who lived between 5^{th} and 9^{th} centuries.

(844-885 AD) third Emperor of Second Chera Empire, conferred to the Persian merchant Shabareesho and the Christians of Tharissa-palli church 72 rights and privileges, in the Tharissa-palli Copper Plate, usually granted only to high dignitaries and with this they were exempted from import duties, sales tax and the slave tax, which existed then. "The 'Tarisappalli Copper Plate' xxxvi executed in 849 AD by Ayyan Atikal Tiruvatikal of Venad during the reign of Emperor Sthanu Ravi (844-885 AD) confers several important rights and privileges on the Christians of Quilon". ⁶⁵ These rights and privileges were inscribed on two sets of copper plates. Five of these plates still exist, three in the possession of Orthodox Syrian Church of Kottayam and two with the Marthoma Metropolitan in Thiruvalla. Of the Bishops who came with the Persian merchant, Mar Sabor lead the Kerala Church from Kodumgalloor and Mar Proth from Quilon. It was during their period that the Persian cross^{xxxvii} were popularised in Kerala and the Persian crosses of Kottayam Valiya Palli [Photo 2.1] and Kadamattom church were erected. They also built several churches^{xxxviil}. The immigrants mingled well with the local (Kerala) Christians and become one with them. However, the 'Mudalalis' of Quilon District claims their origin to these emigrants from Persia.

According to some Scholars, about this time, in the ninth century, a communal riot broke out at Kodumgalloor, the major Christian centre of that period, with the Jews and Christians on one side and the Mohammedans on the

^{xxxv} James Hue states the date of arrival of this Persian group as 730 AD and Bernal as 774 AD. ^{xxxvi} The grant is also known as 'Kottayam *Cheppad*' as they are now kept in Kottayam seminary. It is written in Tamil language and the script used was 'Vattezhuthu'.

^{xxxvii} Crocess carved in granite with Persion letters on it. Many such crosses are now found in Kerala. ^{xxxviii} The churches of Akapparambu, Athirampuzha, Kayamkulam, Kollam Tharisha Palli, etc. are said to be originally established by them.

other, in which the latter were victorious. Thereupon, most of the Christians left Kodumgalloor. Bishop Sabor shifted his residence from there to Udayamperoor (anglicized as Diamper), near Ernakulam, and from then onwards it became another major centre of Christianity in Kerala. The Christians of Kanjoor also claims to be the migrants of Kodumgalloor, (Meka-Dhevar-Pattanam) in proof thereof, they point out the documents (dating back to 1855) kept in this church, prefixing the word *'Mako-tevar-pattanattu'* before the names of people ⁶⁶. However, some Scholars are of the opinion that this destruction of Kodumgalloor happened only in 1524, "during the war between the Portuguese and the Arabs".⁶⁷

"The Tazhakad (Thazhekatt) church inscription, in stone [Photo 2.2], of King Raja Simha of Second Chera empire (ruled 1028-1043 AD), refers to two Christian merchants Chathan Vadukan and Iravi Chathan, who were members of the *Manigramam*,^{xoxix} being conferred certain privileges. Another Copper Plate Grant of 1225 AD of *Vira Raghava Chakravarthi*, the ruler of Chera Kingdom with its capital at Mahodayapuram to a Christian merchant, Iravi Kortanan, a Christian merchant of Mahodayapuram, confers on the latter, the office of *Manigramam*, i.e., the headship of the merchants of the place, in addition to several other rights and privileges. The Christians were honored in the same way as high class Hindus and were assigned a very important place in the socio-economic life of the State. "The Christians were treated all along on a footing of equality with

^{xxxix} A merchant guild existed in those periods. Like the temple committees of today's Kerala, these merchant guilds had complete control over commercial centers they rule. Anchu Varnam, Manikkiramam, Valanchyar were some of these famous merchant guilds.

Hindus and assigned a very important place in the economic and social life of the land".⁶⁸

Rama Varma Kulasekhara, ruled 1090 to 1102 AD, was the last king of the Second Chera Empire. During the beginning of 11th century, Chola kings gained much supremacy over the Cheras. "During the long war, the Chera capital of Mahodayapuram and neighboring places were completely burnt down by the Cholas". ⁶⁹ Rama Varma Kulashekhara seems to have moved his headquarters from Mahodayapuram to Kollam, the capital of Venad ^{xI}, which was under the Second Chera Empire then, during the last phase of war. From Kollam he marched against the Cholas, with a large army including the *Chavers* (suicide squads) and defeated the Cholas. "This incident marked the virtual end of Chola domination over Kerala". ⁷⁰ Later, however, Chola King Kulottunga I destroyed the city of Kollam, (1096) and this incident finally resulted in breaking up the Chera Empire into small independent states.

2.2.1.10 Kerala Christianity After 2nd Chera Empire Till Arrival of the Europeans

After the fall of Second Chera Empire, many principalities or independent States, evolved out of the empire. During these periods, called the Middle Ages, also many visitors have written about the Kerala Church. Marco-polo, the celebrated Venetian traveler who visited Kerala in 1293 AD had come across a large and prosperous body of 'Nestorian Christians'. It has been stated by some

^{x1} Venad kingdom was a small kingdom in the south, evolved after the Post-*Sangam* age and later become one of the principalities of Second Chera Empire. In 1096, after the fall of Second Chera Empire it rose again under Rama Varma Kulashekhara, who was also the last ruler of the Second Chera Empire. The name Venad is derived from Vel= chieftain or king and Nadu= country, meaning 'Country of the chieftain'. Its capital was initially at Kollam, later shifted to Thiruvithancode finally to Kalkulam (better known as Padmanabhapuram). Marthanda Varma converted Venad to Thiruvithancoor (anglicized as Travancore).

Authors that Marco-Polo's writings have spread the knowledge about these Christians in the West, which ultimately lead to the sending of the Dominican Friar Monti Corvino soon after that, by Pope Innocent, as his representative, and Friar Corvino was instrumental in bringing more Franciscan Missionaries to India. The Culmination of this activity was the arrival of Friar Jordanus Cattalaani of Severic, a Dominican, who came to Quilon in 1324 AD, had brought a papal bull to the Christians of Quilon. This bull is important as the first known letter of Roman pontiff to the church in Kerala. In his book 'Mirabilia Discriptica', and other letters written by him to various people including the Pope, he describes the prosperous Christian community in Quilon and he pays tribute to the rulers of Malabar for their spirit of religious toleration. In August 1329 AD, the Pope through a papal bull established the Kollam diocese and also appointed Friar Corvino as the Bishop of Quilon and subsequently he took over this charge "as is seen in the letter in Vatican Archives dated 31st March, 1330"⁷¹. He had also built a church in Quilon. This is confirmed, twenty years later, by another representative of the Pope, Fr. John Marinjoli, who visited Quilon, on his way back from China. He had later written an account of his travel where he says that he had worshiped in the church built by Friar Jordanus Cattalaani. This church is but no more, Historians are of the opinion that it was taken by the sea. Therefore, it may be stated that this church, built by Friar Jordanus Cattalaani could be the oldest church building in Kerala, which was built by a European.

There is a tradition among the Kerala Christians that "they had a dynasty of their own kings, a line of Nazaranee Kings of the Dynasty of *Vallarvattam*,

which become extinct in the end of 14th century"⁷² and left no records. Dr. K.V.Eapen, is of the opinion that, this story might have arisen because Raja (king) of Udayamperoor came to be known as the 'King of Christians'. However, some Historians are of the opinion that, it could be a possibility. The Udayamperoor Church, which stands even today is said to have been originally built by Raja of Vallarvattom in 510 AD. There are several inscriptions in this church that supports this view including the mention of one 'Raja Thomas' who ruled in 900 AD. In 1329, Pope John XXII appointed Friar Jordan as Bishop of Quilon and sent through him a letter dated August 4, 1330, to the Nazarane King of Vallarvattam.73 In 1349, Pope Eugene IV also sent letter to the King of Vallarvattam. In this letter, the Pope wrote: "To my most beloved son in Christ Thomas of Vallarvattam the illustrious ruler of the Indians, Health and Apostolic Benediction. The information has often come to us that your Serenity and all your subjects are true Christians...". 74 St. Antonius has also recorded that the King of Vallarvattam used to send a present of pepper to the Pope every year. 75 In 1439 Pope Eugene IV also addresses a letter to a Raja Thomas in Kerala. The Papal records during his period mentions "that there is a kingdom twenty days journey from Cathay, of which the king and all the inhabitants are Christians, but heretics, being said to be Nestorians". 76 Louie Salvador, a Franciscan Priest who visited Kerala in 1501 had also written that he had stayed for some time with the Christian King of Kerala during his visit here. The Christians of Kerala are also said to have presented to Vasco-da-Gama in 1502, a red staff with silver work on it and three silver bells on the top, which they said was the scepter of their kings.

Miline had written in 1835, "the kings of the *Vallarvattam* Dynasty were in power from the ninth to the end of fourteenth century". ⁷⁷ This tradition is not been approved by the main stream Historians, nor there is any other evidence to substantiate this, but it is generally agreed that the Christian community, by the beginning of 16th century, has become a major force in the cultural and commercial scene in Kerala. At the arrival of Portuguese in 1498, almost the total import and export of Kerala was controlled by Christians.

2.2.1.11 Kerala Christianity After the Arrival of the Europeans

On May 14th 1498, Vasco De Gama, the Portuguese explorer, reached India by sea, 'for the first time directly from Europe', taking a new route sailing all around Africa, when he landed at Calicut in Northern Kerala. It has been generally agreed that the advent of Portuguese changed the face of Christianity in Kerala completely. Their active missionary work lead to the Latinisation^{xli} of the Church of Kerala.

The Portuguese were happy to discover Christians in Kerala but they did not like their connection to East-Syrian Church and their cultural resemblance with the Hindu religion. They persuaded the local Christians to accept the Pope as the head of the Church. Until that period, the Christians of Kerala were very Indian in their culture, though spiritually led1 by the Bishops sent by Persian church, and so middle-Eastern in their worship. The Portuguese considered it their duty to bring these oriental Christians under the supremacy of the Pope of Rome by Latinising their Syrian liturgy and by purging them of their errors or

xli To convert to customs, beliefs, etc., of Latin (Roman Catholto) church under the Pope (Romam Pontiff).



'heresies'. The new ecumenists constituted a concerted attempt to alter the religious beliefs of the traditional Malabar Christians, declaring that it was heretic, Nestorian and Hindu. "The Missionaries who had accompanied them (the Portuguese) made converts, and (subsequently) the Latin dioceses of Goa (1533) and Cochin (1558) were established".⁷⁸

In 1542, the king of Portugal sent Francis Xavier (later saint) a Spanish Jesuit Missionary, better known as 'the apostle of the Indies', to spread Christianity in India. He first landed in Goa and later started actively working in Kerala. In 1544 when the Madhura army invaded Travancore, Francis Xavier had helped Unni Kerala Varma, the then King of Travancore, by persuading the Madhura army to cancel this attack. "perhaps he (the King) appealed to Xavier to get the help of Portuguese ... We do not know for certain (about what had happened then). Perhaps he (Xavier) met the captain of the army and talked him out of his quest for a fight by threatening him with the might of Portugal ... The fact remains that the army did not advance further ". ⁷⁹ The king was very happy with this juncture and gave some privileges and support to Francis Xavier for his missionary work. As a result, by the end of 1544 Francis Xavier has constructed 45 church buildings in Kerala and also converted many belonging to fisher folk community to Christianity. The majority of Latin Christians of South Kerala today are descendants of these converts.

In those periods (early 16th century), the Kerala church was spiritually lead by Bishops sent by Patriarchies of Babel of the Eastern Orthodox Church of Antioch (Damascus and Syria). It seems that the Kerala church was actually

never ruled by Persian Bishops in its strict sense, but they rather just looked after only its spiritual need. The ruling was done by 'Jathikku-Karthavyan' a post existed in Kerala then, which could be loosely translated as 'head of the faithful'. The Persian Patriarchies Mar Timothy, who ruled from 780 to 823 AD, addressed Jathikku-Karthavyan when he wrote a letter ⁸⁰ to him, as 'The head of the faithful of India', this means that even the very Patriarchies who send Bishops to India from time to time, agree that the head of the Kerala Christians was the 'Jathikku-Karthavyan'. 81 Lodovico di Varthema wrote in 1503, "Every three years a priest comes from Babylon to administer baptisms." 82 In 1549 Mar Jacob, last of the four Bishops sent to Kerala by Patriarchies of Babel died, and there was no Bishop to lead Kerala Christians for almost six years. So in 1555 understanding this, Patriarchies of Babel, sent another Bishop, Mar Ouseph, to Kerala. The Portuguese who always wanted to bring the Kerala church under the Roman Pontiff, or rather under their direct control, imprisoned Mar Ouseph in Goa for 18 months. When he was finally released to Kerala, he was accused of being a Nestorian by the Bishop of Cochin, who was a dependent of Portuguese, and later in 1568 Mar Oueseph died under mysterious circumstances. From then onwards, the struggle for Authority over Kerala church by the Portuguese became open.

2.2.1.12 The Impact of Synod of Udayamperoor (1599 AD) and After

In 1599 AD, Dom Menezes, the Archbishop of Goa and a Portuguese dependent, came to Kerala and started openly working towards bringing the Kerala Christians under the Pope. He convoked a Synod at Udayamperoor, in

central Kerala, in June 1599. The account of his visit to many local churches in Kerala were written in detail by Antonio De Gouvea, in 1599 AD and originally published in 1603 AD as 'Jornada of Dom Alexis De Menezes'. The very purpose of convoking this Synod, "as we understand from Jornada, was to purge them of their "heresies" and "errors", to give them "true Catholic Faith", to destroy all their "heretical" books". 83 "In order to manipulate the Synodal proceedings in his favor, the Archbishop conducted three ordination programmes before the event ... (and) with this, Archbishop managed to get sufficient supporters for his schemes; out of 153 priests who participated in the Diamper Synod, more than hundred had been newly ordained by Archbishop within the time-frame of four months (before the Synod)". ⁸⁴ It is clear that the Portuguese wanted to make many physical changes in Kerala Christianity, as they have imposed in Goa. "In Goa, the Portuguese realized homogeneity and uniformity through the process of Lusitanization, by which uniform food code (only Portuguese food culture), dress code (only Portuguese dress habits- from 1560s onwards) and language code (only Portuguese language - from 1683 onwards)" 85 was imposed to achieve this physical change. The local Goan Christians were made "to consume pork and beef, ... to dine at table with cutlery and crockery, to use shirts, trousers and hats. (The women) were to abstain from singing the traditional vovios, from wearing nose-rings, and flowers in their hair. Though what they (the Portuguese) wanted was to make the (local) Christians look different from the Hindus, these attempts finally ended up in bringing Christian life closer to European life-style. It was mainly through the various decrees of the Provincial Councils of Goa (1567,... 1575, 1585, 1592 and 1606) that the Lusitanization process was effected in Goa".⁸⁶

This Udayamperoor Synod was instrumental in formulating many rules that changed the Kerala church to a greater extent. It had a profound influence in changing the church architecture also. "Even at the time of the Synod of Udavamperoor, the priests (in Kerala) were married and made a living by engaging in some other work. The only difference they had among fellow Christians was that they were trained in saying Syrian mass and that they got 'blessing on the head' from a Persian Bishop". 87 The Synod stopped this tradition and Bishop Menisis even personally forced many married priests to leave their wives. Some Scholars have gone to the extent of terming this Synod as "Rape after a century-long dating (1498-1599)". 88 The Synod severed the connection between the Kerala Church and the "heretical" Persian Church and declared their loyalty to the Pope of Rome. Fr. Roz S.J. was then appointed as the Bishop over the Syrian Church. Even though "a section of Christian thus came under the juristration of the Papacy" ⁸⁹ it did not officially divide the Kerala Christians into two. He then set out to visit the churches in Kerala and during this visit destroyed many Syrian books kept in the churches by throwing them in fire.90 A large number of Syrian Christians resented this foreign incursion in the internal affairs of their church and wanted back their Syrian Bishops.

The Kerala Christians informed all this to the Patriarchies of Babel and he sent another Bishop to Kerala in 1653, but at Quilon port the Portuguese stopped the Bishop from landing in Kerala and even after several requests the

Portuguese refused to release him. Insulted by this the Syrian Christians met at the 'Church of Our Lady of Life' at Mattanchery, near Cochin on 3rd January 1653 and declared, the so called 'Coonan Cross Oath', that they would not be subject to the 'Sambaloor' priests, (the Portuguese Jesuit priests) anymore. This revolt eventually lead to a major split of Kerala church into two: one to recognize the Bishops appointed by Rome and the other continued to be with the West-Syrian Church of Antioch (called Jacobites).

In 1685 two more Bishops came from Persia to lead Kerala Jacobite Christians for some more time. During their period, they introduced many reforms within the Jacobite rite like the removal of all idols from the churches, which were installed by the Portuguese, and also advocated the marriage of Jacobite priests. Later in 19th century a group, now called '*Marthomites*', separated from Jacobites due to increasing Anglican Church influence. The Jacobites themselves were further divided into two groups: The '*Methran Kakshi*' or the Bishops group (Syrian Orthodox Church of India) whose '*Catholicas*' or supreme head resides in Kerala and the '*Bava Kakshi*'' or Patriarch's group (Jacobite Syrian Orthodox Church of India) whose head is the Patriarch of Antioch. After Coonan Cross Oath, Rome began to take more active interest in Kerala Christians. Several Carmelite Monks were sent to Kerala, it was as a result of this fact that the Roman Pontiff sent Fr. Joseph Sebastiani as a Bishop to Kerala.

In 1633, the Dutch conquered the city of Cochin and ousted all Portuguese from Malabar Coast. The new Authorities, Dutch Calvinists ordered all foreigners, including Bishop Sebastini (then Latin Bishop of Kerala) to leave.

Before leaving Bishop Sebastini consecrated F. Chandy Parambel, known in the West as Alexander de Campo, as the Bishop of Kerala on 1st February 1663, at Kaduthuruthy Church. He was the first native Bishop to rule Kerala church, centuries after the immediate successors of St. Thomas. The Portuguese had also, at the time of leaving, nominated 'administrators' for Malabar who stationed at Kodumgalloor. This dual jurisdiction, within the Roman Catholics itself, was a cause for complaints and complications. So in 1787, representatives from 84 Roman Catholic churches assembled at Angamaly in central Kerala and drew up a document to the Roman Pontiff, showing all this and also making a strong demand for native Bishops. This document is now called '*Angamaly Padiyola*'.

In 1789-1790, Tippu Sultan, the ruler of the State of Mysore, after capturing Northern parts of Kerala, attacked the Northern parts of Travancore, which today lies in the central Kerala. His army could come up to Aluva because the unexpected heavy rains and flood in Aluva river, which blocked the Mysore army from proceeding further. (Moreover, at the same time, the English army attacked Srirangapattanam, the capital of Mysore, so Tippu Sultan was forced to stop the attack on Travancore and proceed back to Mysore. He died in that very battle against the English army). However, this particular attack was a big blow to many church buildings of Kerala, because many church buildings were put into fire or destroyed. ^{xlii} Cochin Archaeological Research Reports as well as

^{xlin} The following churches were destroyed partially or fully; Akapparambu, Alangad, Ambazhakkad, Malayattoor, Kanjoor, Chowara, Chendamangalam, Vadakkan Paravur, Puthanchira, Koratty, Chalakkudi, Veliyanad, Palayur, Anammaavu, Parappoor, Kottappadi, Mattam, Kalparambu, Moozhikkulam, Manjapara, Kottamutti, Koithotta, etc. as per the records kept by these churches.

Buchanan's (1858) '*Christian Researches in India*' gives detailed accounts of Tippu's attacks on churches.

In 1887, Pope Leo XIII decreed the division of Roman Catholic into two with the separation of the rite of Syrian Catholics from that of the Latin. And in 1896 the Pope made another decree for the erection of three more vicariates for Syrian Catholics at Trissur, Ernakulam and Changanassery under three Indian Bishops. Also in 1911, Pope Pius X erected a third division within the Roman Catholics, that for '*Knanaya*' (or Southists, as stated earlier, claim to be the descendants of East-Syrian Christians who migrated from Persia along with Kanai Thomman in 345 AD) with vicariate at Kottayam From the beginning of 19th century the Protestant^{×liii} Missionaries also reached Kerala and established themselves there. A brief chronology of events in Kerala Christianity is given as Annexure II.

As far the question of whether different sects in Kerala Christianity had different architectural needs, and whether it would affect this study, goes, the Investigator would like to state that, that problem did not affect the study at all because all these sects started only after the arrival of Portuguese, and this study is pertaining to the period before their advent. Therefore, the complex history of different denominations of today's Christianity in Kerala, though have its minor impacts on church architecture, it was of a later phenomenon and was irrelevant in the period of study of this investigation.

^{xlin} On October 31, 1517, Martin Luther nailed 'the document of 95 protests' to the door of castle church in Wittenburg. Thirteen years later, with the Augsberg Confession of 1530, Protestantism was brought into official existence.

2.2.1.13 Culture and Traditions of Kerala Christians

Many foreigners, while discussing about traditional Kerala Christians, have "wondered whether they were not more Hindu, than Christian". ⁹¹ This was because the local Christians followed "Kerala customs ... in matters related to birth, marriage and death and Persian customs were followed for baptism, holy mass and ordination of priest". ⁹² In fact, there is nothing astonishing in this as even today if one looks in to the customs there are still many things common between Hindu and Christian religions in Kerala and a few are listed below:

- The ceremonies associated with childbirth bear many common semblances, between Hindu and Christian people. Both give the newly born baby gold and honey.
- The first children bear the names of their grand parents.
- First time administering rice used to be a ceremony and the initiation to study formed another, between both people.
- Many traditional Christians have maintained a home centred liturgy, like their Hindu brethrens, and so every house has a family shrine, mostly a room itself, where a sacred lamp is kept ever burning.
- Evening prayers (Sandya-Vandanan) are held obligatory, among both people.
- The houses of Christians were built according to the rules of *Vasthu-sthastra*, the traditional rules for the construction of buildings in Kerala, as was done by a Hindu, with the traditional compound wall and gateway at cardinal point. An open portico, an inner courtyard, the household

sanctuary, the bathing wells, etc. are all seen in the houses of the privileged class irrespective of the religion of the owner, are all unmistakable features of a common base.

- During marriage the groom ties a *thali* or *minnu*, (necklace) blessed by the Priest around the neck of the bride is another custom common in between Hindus and Christians. Even the shape of the *thali* is same, a cross made of 21 small gold balls is the only difference between both. The thread on which *thali* is put and tied around brides neck is prepared and taken from the thread of the wedding *saree* in the same way as that of Brahmins.
- The practice of '*pudava-kodukkal*' (giving of a *saree*) to the bride by the groom is another practice that's still prevailing and is common with the marriage of both communities.
- The marriage feast was always served on banana leaves, for both communities.
- In a letter written to the King of Portugal in 1530 Mar Jacob, the then Bishop of Kerala, makes a reference that "people were married at the door of the church"⁹³. It seems the Christians were even in sixteenth century were following the custom of Hindus who, still, gets married in front of the temple door.
- During festivals 'Ulsava-moorthis' or statues of Gods are taken around the Hindu temples. In church festivals also, the statues of the Saints are taken in procession around the church is accompanied by processions with 'Mutthu-kuda' (decorated umbrellas), elephants, musical instruments,

torches, etc. much like the Hindu festivals. The *Ambu Pradakshina* (circumambulation with an arrow) in honour of St. Sebastian, held every year in many churches, like Kanjoor church for example.

- An exact imitation of *prasadam* (offering) given in Hindu temples is seen also in many churches to people during festivals.
- There is an ever-burning oil brass lamp (*Keda-vilakku*) lit in the church, and the oil used in this lamp is used as *prasadam* and devotees apply it on their forehead. This practice can be still seen in many churches as well as temples.
- While saying Holy Mass a small brass bell is ring at times, much like it is done while performing the *pooja* of a Hindu temple. Offering the hair of ones head as an offering to God is also a curious custom seen in common between churches and temples.
- Both communities consider death as an occasion of pollution and during death no food is prepared in the house where it occurred.

The construction of a church and Hindu temple also has many things in common, which will be dealt separately.

These are few of the many practices and customs common between the Hindu and Christian religions today. "Till late seventeenth century, in the social scale, the Thomas Christians were considered next to Brahmins". ⁹⁴ It seems that the traditional Kerala Christians have kept several customs common to them and Brahmins alone; like Brahmins the Christians also follow the patriarchal system. In early days "*Nair* women were not permitted the use of an upper garment,

'Syrian' Christian women, like *Namboothiri* (Brahmin) women enjoyed that privilege". ⁹⁵ This is often said in support of the view that the earliest Christians were Brahmins converted by St. Thomas. The compiler of the 'Travancore State Manuel' in 1906 seems to have no doubt about conversion of some Brahmin families by St. Thomas into Christianity: "There is no doubt as to the tradition that St. Thomas came to Malabar and converted a few families of Nambudiris, (Brahmins) some of whom were ordained by him as priests such as those of Sankarapuri and Pakalomattam. For, in consonance with this long-standing traditional belief in the minds of people of the Apostle's mission and labours among Hindus, we have it before us today the fact that certain Syrian Christian women particularly of a *Desam* (place) called Kunnamkulam wear cloths as Nambudiri women do, move about screening themselves with huge umbrellas from the gaze of profane eyes as those only recently, but from among dignified families of similar aristocratic descent". ⁹⁶

It had its disadvantages also, the traditional Kerala Christians preserved the caste system; like the Brahmins. They would not go, in those periods, near the lower caste people. La Croze (1723) writes "In order to preserve their nobility the Christians never touch a person of inferior caste not even a Nair". ⁹⁷ However, things started to change after the Portuguese period because the Portuguese started converting people from other caste also into Christians, subsequently the Thomas Christians, some times, built separate churches for them, many of such churches can be still seen as unused small churches or as cemeteries of priests ^{xliv}, near the main church. This means that caste system was prevalent in seventeenth century among Christians too. At the same time, there is no evidence to presume that there was any caste system, or the practice of having a different church for lower caste Christian, inside Christian community before the conversion of lower caste people by Portuguese, although St. Thomas is said to have converted people from all castes in first century.

2.2.1.14 Inferences from Kerala Church History Study

Placid Podipara (2000) in his study on Kerala Christians, states that the traditional Christians were "Hindu in Culture, Christian in Religion, Oriental in Worship". ⁹⁸ Here the word 'Hindu' is used as a synonym to 'the inhabitants of Kerala'. In fact, this practice of describing the culture of Kerala as Hindu is a very frequent one. This has, however, *'led.* to many misunderstandings, the Investigator is of the opinion that it would be more accurate to say; those traditional Christians were following the 'Kerala culture', than to say 'Hindu culture'^{xdv}. The rational for this is that, the culture of a Hindu in Kerala is different from the culture of a Hindu in Tamilnadu or North India, whereas the culture of a Kerala-Hindu, Kerala-Christian or Kerala-Muslim is more or less similar. At the same time, the usage of Mackenzie (1901), that the Kerala Christians were "Hindus by race" ⁹⁹ may be more rational. As far as the customs are concerned, there are many similarities because Christianity in Kerala being very ancient, had

^{xliv} For example at Kadaplamattom Church, Kottayam. [This building is also under going demolition now, to pave way for a new parish hall.]

 $x^{1/2}$ However, the Investigator is of the opinion that, though this usage has lead to many misunderstandings, in a more deeper sense, there may be nothing wrong in that usage, in the sense that, if a native Christian

been developed at a time when it was not openly practiced even in the West, naturally took many customs from the local culture. It is not surprising that on becoming Christians the early Christians did not change their social customs as their Hindu brethren, because those customs were based on the culture, and not religion.

Anyone who visit Kerala today can see that, many of those customs penetrated to even now and is still very much in existence. Many functions, social ceremonies associated with family life, like marriage customs, rites connected festival, birth and death, religious observance, etc., still shows a noticeable similarity between Christians and Hindus, which evolved from a common cultural background. The Europeans, failing to distinguish between religion and culture, condemned the community's age-old practices (customs) as non-Christian, and did manage to change some.

2.2.2 Development of Church Architecture in Kerala

2.2.2.1 Introduction

It has been observed that studies pertaining to Church architecture of Kerala are very less. Of course the architecture part of Kerala Christianity is mentioned in the numerous works done on church history of Kerala, but they are mostly on peripheral level describing the form and style in a loose manner. The main comment of early European writers was that the churches in Kerala looked like that of the "pagodas of the Hindus". Many Europeans like Monserratte (1579), Gouvea (1599), etc. has written the same thing, using the word 'pagoda'

from an Arab country can be called 'Arab Christian, and a native Christian from Israel can be called

to describe the traditional Kerala church architecture. As far as the Investigator could find out, no serious study was done by focusing on this indigenous architecture and more importantly, none by an architect. This unique architecture, however, was curious to many a onlookers, especially foreigners, right from Cosmos Indicoleustes, in 522 AD, to many a European travellers, in 16th/ 17th century, and had mentioned about this. In modern times also, a few people have studied this architecture, the names of Prof. George Menachery and Andrews Athapilly are worth mentioning. There are some other research works published, but mostly a repetition of the views of the above said Authors.

2.2.2.2 Kerala Church Architecture in Early Periods

It is believed, traditionally, that St. Thomas had founded 'seven and a half churches (seven full churches and a chapel) in Kerala in the following places; Maliankara (near Kodumgalloor), Kottakaavu (North Paravoor), Palayur (near Chavakad, Trichur district), Niranan (near Thiruvalla), Kollam (Karikkoni Kollam), Kokkamangalam (near Vaikkom), Nilakkal (or Chayal near Shabarimala) and the 'half' church at Thiruvithamcode^{xivi} [see Map 2.1 in p.21]. The concept 'half church' or 'small church' is derived from the word '*Ara*' in '*Eazh-ara_Palli*' the original Malayalam word for 'seven and half churches', with '*Eazhu'* meaning seven and '*Ara*' meaning half. The word '*Ara*', generally meaning 'half', also has another meaning: 'important'. In '*Chen*-Tamil', the old version of present Tamil language and the language that was spoken in Kerala before Malayalam was developed out of it in 9th century, '*Ara*' means 'holy'. Therefore the Investigator is

^{&#}x27;Jewish Christian', there is nothing wrong with the term, 'Hindu-Christian'.

of the opinion that '*Eazh-ara Palli*' is to be translated more correctly as 'Seven holy churches' or 'Seven important churches'.

Although the establishment of church buildings by St. Thomas has been a matter of belief, and it has not been accepted by any serious Historians, some Scholars have put forward a theory that St. Thomas had only planted crosses and the early Christians assembled in some houses to say their prayers, as what their counterparts did in Rome. Some other Scholars are of the opinion that 'seven and a half churches' could just mean 'seven and half Christian communities'. Jose, N. K., (1982) interprets the belief of the establishment of these churches as, 'Seven 'mantram's or 'settlements', which had accepted the teachings of St. Thomas'. He is of the opinion that, "in those days an idea is accepted or rejected by a community or settlement together and not individuals." ¹⁰⁰ He also rejects the planting of crosses in Kerala by St. Thomas stating, "the veneration of cross by Christians itself was not started at that time". ¹⁰¹ However, it is significant that these seven churches are found in locations where there were Jewish colonies in Kerala in the first centuries. Roman coins of first century have been discovered in places near Palayur and Parur indicate the contacts these areas had with Rome and how important they were in first century AD.

Of these churches, none of them exists today in its original form. There is nothing astonishing in this because none of the built monuments that are dated back to the first century AD or even Sangam age, remains today in Kerala, whether they were religious or others. The reason behind this is that, as stated earlier, buildings of ancient Kerala were mostly made of wood, thatch and straw;

^{xlvi} The churches of Aruvithura and Malayatoor also clam to be the 'half' church.

so the strength of heavy seasonal rains and winds and the onslaught of white ants had a strong effect on shortening the life of those buildings.

Some Scholars are of the opinion that the earliest churches could be just a plain rectangular halls. Andrews Athapilly (2000) is of the opinion that "the first churches in Kerala must be simple rectangular hall in wood or bamboo and covered with thatched roof, with a raised platform on one end serving as sanctum, with no other distinction between them ... at this stage the distinction between the sanctum and the nave was not very clear in the minds of people. In second stage, inheriting some idea from Hindu temples, separating the sanctum from nave and elevated the sanctum roof from the rest". ¹⁰² However, the Investigator like to add here that this theory is not based on any tangential argument nor is rational. He cites the small church on top of Malayatoor and the church at Puthukad as examples of former type of church architecture. He is of the opinion that "in later stage, a division was made between sanctum sanctorum and nave and also was introduced, gaining some idea from verticality from Hindu temples, the projection of sanctum sanctorum above the nave roof ... finally in last stage, a portico was added in the front ... to accommodate people from neighbouring community on festival days". 103 This argument is also not substantiated by evidence of any kind nor the churches mentioned are that old.

The early Kerala Christians "unlike their brethren in the Roman Empire, had enjoyed freedom of worship but even the patronage of liberal Hindu kings".¹⁰⁴ However, the community must have obviously lived in early periods in a true isolation from other Christian centres simply because at that time there were

no flourishing Christian centres any where in the world, other than those working underground in Roman Empire and some small settlements outside Roman Empire. So the earliest churches in Kerala could only be; either the existing temples itself, of the local people, after they got converted into Christianity, or a building newly constructed for this purpose. Since there was no precedence existing elsewhere on how/ what should be the character, form for a church building, earliest Kerala Christians had no model to look into. Besides, the Designers, as well as the workers who worked on the new church building, could only be Jains, Buddhists or Hindus, or just converted Christians, who had in mind a settled idea of how a place of worship should be, so naturally they constructed a religious building from what they had in mind. Either way they ended up choosing the vernacular architecture as the model for the new church building.

"The acceptance of Christianity does not appear to have involved any revolutionary change in the life of individual as 'conversion' in European period did. Hinduism has always recognised the liberty of individual worship and, in ancient times, seldom took notice of a man's beliefs as long as he followed the social practices appropriate to his caste. The king, as a rule, was expected to respect the religions of all his subjects. Hence, Kerala Christians were, in all probability, considered a sect like the Jains and Buddhists, who were numerous in South India in early centuries of Christian era." ¹⁰⁵ So it is only natural that the local traditional architecture, especially religious, were looked upon as the model for Christian worship too. In fact, this natural adoption was later repeated in Kerala when the first Muslim mosques were required to be built. There do still

exist examples in Kerala, of early mosques that had more features of the traditional architecture than the typical elements one should expect in a mosque building [Photo 2.3]. So the earliest church builders definitely must have looked upon the then prevailing architecture, especially religious architecture, as model.

The earliest clear literary mention of a church 'building' in Kerala for the use of worship for the early Christians is only in 522 AD by Cosmos Indicoleustes, the Alexandrian merchant visited Kerala. He had later written a detailed account about his travel, 'Topographia Indika Christiana'. In it he explicitly states "...And in the place called Kalli (Kollam) there a 'church' (of Christians) with clergy of congregation of believers and a Bishop appointed from Persia". ¹⁰⁶ Unfortunately, other than this statement there is no description of the building. Some Authors have made out of this statement that 'church architecture in Kerala started in fifth century'. Ochanthuruthe (1986) in the official Verapoly Archdiocese Centenary document states: "... there is no reason to assume that there were architecturally important churches in Kerala before 1900 years (i.e. in the initial years of Christianity in Kerala)." ¹⁰⁷ Such assumptions may not be appropriate and is definitely assuming things to an extreme; just because the first clear mention of a church building in Kerala happened only in 6th century or that there were no church buildings in Rome in the early Christian era, are not rational enough to deduce that there could not be any church building in Kerala in those periods. So the Investigator is of the opinion that, while there are no clear evidence to assume that there were church buildings before 6th century, there is no reason to dismiss that possibility too.

In fact, some Authors have proposed that Sangam works mention the existence of Christian churches existed then. Jose (1985) says, "'Kadavul-Menakal' (or 'Deyva-ppurakal') mentioned in Pathutti-pattu (2:3) a much acclaimed Sangam literature could be Christian churches." ¹⁰⁸ Morris (1995) states: "Puranaanooru (poem. 33) of Sangam period mentions of what is called 'Palli' in those period. It further states that those churches were big buildings with 'shala' (hall) and had more than one door to enter it and were decorated with fresh flowers. It was widely believed that these structures were Buddhist Viharas (prayer halls), but the literature further says, during festival time, feast were held with mutton (meat of sheep) as the main item. Although Jain-Buddhist religions had gone through a lot of changes, it is never recorded in history that these religions ever accepted non-vegetarianism. Therefore, the 'palli' built by Chera rulers were not Jainist or Buddhist (but of Christians)". ¹⁰⁹ In fact, the Investigator sees no reason to dismiss the possibility that, while the Jains, the Buddhist and the Jews who were present in that society then (Sangam period), had a religious structure of their own, why the early Christians would even think about not having the same for them. Therefore, the early Christians of Kerala had churches and must have been modelled after the religious buildings that existed then.

The next 'scientifically accepted' historical document that mention of a church 'building' in Kerala, after the mention by Cosmos Indicoleustes, is the 'Tharisa *Palli*' document of 849 AD, which explicitly mentions the establishment of a church 'building' in Kollam. Again, here also, there is no description of the building, but it further stresses the fact that, church buildings existed in Kerala in

9th century also. The next proper literary record is of about 500 years later^{xtvii}, that of the construction of St. George church in Kollam by Friar Jordanus Cattalaani^{xtviii} between 1320 and 1330, which was destroyed by sea, thus again leaving no clue on how the building looked like. This church existed in 1346 AD because Friar John De Marigoli mentions that when he stayed at Kollam he celebrated mass in it. ¹¹⁰ He further mentions that there were no pictures inside that church and he decorated the church interior with many pictures. The Investigator would like to point out that, this statement also substantiate the fact, mentioned by other Portuguese writings also, that in the 14th /15th centuries Kerala Christian churches used no pictures inside the church building, this aspect will be dealt in detail later.

2.2.2.3 Early Syrian Influence

When the foreign Christians started to emigrate to Kerala from Persia, they could have naturally felt odd in the prevailing mode of totally indigenous worship and church buildings that looked totally different from what they have used to in Persia. As a result, they could have incorporated into Kerala's worship mode/ building-type some changes that they were used to in Persia as in the church building traditions of West Asia.

Therefore, soon after that Kerala must have started to develop a distinct and indigenous church architectural style of her own, to accommodate the West Asian church traditions into the indigenous traditional church buildings they were using for worship, which were based on local religious style. However, it can be

^{xlvii} However some church buildings of around this same period (1300's) have survived to today. ^{xlviii} He is the the author of '*Mirabilia Descripta*'.

deduced from the existing old church buildings, which were built partly or fully before the Portuguese arrival that the new style that emerged maintained most of the typical features of traditional Kerala buildings, especially religious, starting from the planning stage to the finishing touches. Most Scholars are of the opinion that the Syrian liturgy of worship, which prevailed completely in Kerala till the Portuguese changed it, was introduced first by these Syrian immigrants. In fact, even the language of the liturgy in Kerala churches used to be in Syrian language until Malayalam, the mother tongue of Kerala, substituted it in 1962. Unfortunately the buildings of early periods were built with perishable materials, and so did not survive for longer periods. This perishable quality of buildings was true also for the buildings of other religions; Hindu, Buddhist and Jain temples, thus leaving the later constructed buildings of more permanent materials as the oldest surviving architectural examples. The oldest existing buildings of Kerala belong to 8th, 9th centuries only.

The rational for formulating this theory is that, when it is clear that the church liturgy was completely influenced by the Syrian church, then there is no reason to assume that the architecture was not affected. The "Syrian church would have influenced the architecture as they had supplied the liturgy". ¹¹¹ The vaulted roof seen over the altar of most of the traditional Kerala churches, also could have come from the churches of Syria [At the same time, it could have come from the Buddhist *Viharas*, which also had vaulted roofs.] However, the exact period of this Syrian influence could not be identified and it could be anytime from 4th century to 13th century.

The Armenians also came to Kerala and built churches. There are still remains of an old church, called Thommay-*palli* (literally 'church of St. Thomas') at Kumari-Muttom, just a mile East of Kanyakumari (Cape Comorin), in the extreme Southern tip of the Indian sub-continent. Barbosa writes in sixteenth century, "At this cape there is an ancient church of Christians, which was founded by Armenians who still direct it, and perform in it the divine service of Christians and have cross on the altar". ¹¹² The Travancore State Manual (1906) also states, "Two inscribed stone pillars were unearthed, later identified as edicts of Maharajah of Travancore, first belong to 1494 AD, making over to that church (Thommy-*palli*) certain incomes from fishing and certain dues from boats entering the harbor there; and the other of 1526 AD, giving permanent asylum to Christian fishermen within certain boundaries". ¹¹³ Although J.M Villarvararyan, wrote in late 1990's that, "The foundations of this church are still in-situ with a Kurusady at its head and a well in front, both named after St. Thomas", ¹¹⁴ the Investigator could find only a few fragmental remains of it there.

Jesus said, "Thou art Peter, and upon this rock, I will build my church". ¹¹⁵ "In early Christian literature the word 'church' meant an assembly and not a building". ¹¹⁶ Since the New Testament of the Bible was originally written in Greek language, the English word 'Church' is translation from that; original Greek word was 'EKKLESIA', which means 'Called out ones' - from EK (out), and KLESIA (called). Church is also referred to the household (or family) of God in Bible.¹¹⁷ Therefore, 'Church' is a 'group of people' and universally, from that view point, the Christian 'service' was conceived, traditionally, as a community

gathering to praise the Lord, as the very term 'Holy Mass', literally means, under the leadership of an elder/ priest to lead this function. Later 'Church' became a synonym of that 'gathering'. So the church building was designed basically to accommodate the associated functions, like a space for the priest/ elder to lead the program and the space for people to gather. Therefore the general plan of churches all over the world is basically the same; namely chancel with a table (altar) and a hall (nave) for congregation.

The traditional Kerala Church also follows basically the same plan, with a hall divided into chancel and nave. The chancel, or the sanctum or altar area, where the altar is kept, is called *Madbaha*. The word *Madbaha* is derived from the Syriac word '*Dabaha*' which means sacrifice. The main assembly hall (nave) of the church was called *Hykala*. It came from *Hykalo*, the Syrian word meaning 'temple'. However, in Kerala there is an extra porch like hall, in the front, called *Mukha-mandapam* [Photo 2.4]. At the same time, when it comes to the architecture part, things are different, drastically, from that of any other region.

2.2.2.4 European Influence After the Synod of Udayamperoor

In 1599 AD, as stated earlier, Bishop Alex de Menezes convoked a Synod, at Udayamperoor for changing the Syrian Christians into "true" Roman Catholics. He persuaded the Synod delegates to pass several decrees admitting that their Church had been heretical in some tenets and practices. The proceedings of this Synod were written by Antonio De Gouvea (1599) and Michael Geddes (1694). Further in 1745, Joannes Facundus Raulin, had translated the original 'Acts of the Synod of Diamper' from Portuguese into Latin¹¹⁸, both published from London. These works, especially of Gouvea, gives some information about the indigenous churches of Kerala, and it had helped the Investigator in bringing out the list of churches that existed at the time of the arrival of Europeans, presented herewith.

Gouvea (1599) explicitly writes that "all the old ones (churches of Kerala) were built in the style of the temples of the gentiles" ¹¹⁹ and were "small" ¹²⁰, "so narrow and low, that scarcelyras it possible to raise the Most Holy Sacrament at the altar" ¹²¹ and "very dark" ¹²² inside, as they were no windows. He also mentions that the Kerala Christians had "made around (the church) ... a very high wall", ¹²³ which could be crossed only "with ladders" ¹²⁴ because of its height, this fact is also asserted by many such compound walls that are still remaining. Some churches, like Aruvithura (Erattupetta) church was "built of bamboo, like the temples of the gentiles, ... The Christians wished to built it in stone and lime ... (and later) ... they found good stone ... with which ... they built the church which today has". ¹²⁵ Asserting that there were also churches built of bamboo and stone too.

As far as the usage "(built) like the temples of gentiles", many other Europeans also, like Monserratte (1579), etc. have written that the traditional Kerala churches looked like that of the "pagodas of the Hindus". The rationale for this view was mainly that the Kerala churches looked totally different from the churches they were used to because unlike a European church, which always had a decorated 'front façade', the Kerala churches did not a 'front façade'. Further, in many cases, it also had a traditional '*Mukha-mandapam*' (open

entrance porch) in front. Even if the porch is absent the façades were simple with the thatch roof projecting further over the front wall, giving it a different look. All these making the Kerala church looking drastically different from what the Europeans were used to and further, these features, especially the *Mukhamandapam*, made it "look like the pagodas of the Hindus".

The indigenous churches of Kerala had no statues either, inside the church, other than a plain cross, till the arrival of the Portuguese. Fr. Alvaro Penteado wrote to the king of Portugal in 1517-18, "They (Kerala Christians) have crosses in their churches on the altars as well as engravings, but no images or engraved outlines of profiles and faces". ¹²⁶ Gouvea also says, the Archbishop Menezes did not "find any in the church anything more than a cross". ¹²⁷ In fact, a decree of the Synod of Udayamperoor (Action VIII, Decree XXIX) deplores the mean look of the interior of Kerala churches saying, "almost all of the Churches of this Diocese are without pictures" and further orders that all churches "shall be to set up some images". ¹²⁸ Gouvea further says, "he (Archbishop Menezes) provided (the Kerala Christians) with pictures and images, ... because none of these things were there in the churches of Serra (Portuguese word meaning 'mountains', meaning Malabar) ... because in olden times (it) was accepted among Christians, the error against the holy images". 129 Athapilly (2000) says, "The Portuguese noticed the reason for this (is) that, St. Thomas had forbidden the use of statues". ¹³⁰ According to some Authors, it does not mean that there was no image or painting at all, because the murals of Cheppad church "is claimed to be of thirteenth century" 131 (However, the date of Cheppad murals is

not scientifically determined yet). In fact, before the Portuguese period, not only that the Kerala Christians did not used pictures or idols in their churches, but they even looked upon the Portuguese as 'idol worshippers'. Friar Marigoli (1348) writes that "some of the Christians regarded the Latin's as worst of idolaters because they (Latin's) used statues in their churches". ¹³² Therefore, it can be well concluded that the early Kerala churches had used only crosses, that too without the image of Christ in it, as a symbol, mostly kept in the *Madbaha*, and never the images/ statues of Jesus Christ, Mother Mary or any saints inside their churches for veneration, although it is a very popular practice now, having been introduced there by the Portuguese. So the interior spaces of Kerala churches were always plain and without any pictures.

Initially, many churches the interior was not even plastered, for that matter even the exterior was not plastered in many churches until a recent period. The sketch of the then interior of Kottayam *Valiya palli* given in the book 'Life of Bishop De Wilson' proves this point [Photo 2.5]. It shows the interior with exposed laterite^{xlix} walls with flooring material of stone slabs, both increasing the darkness inside. This drawing also explicitly states the point, which has been attested by many other literary works, that the indigenous churches had no windows to the Madbaha, nor to the Hykala. It is also stated that, till 1870's, the faithful were buried inside the church itself.

The Kerala churches did not have chairs, or long benches, in nave area and in most cases people sat cross-legged on the floor. It has been quoted by Bishop Theophilus, who as stated earlier visited Kerala in 345 AD, that "their

worship practices deferred considerably from those of other parts of the world. Particularly he noticed that they sang, heard the gospel and worshipped sitting down, he thought this practice was outrageous and ordered it changed". ¹³³ As a matter of fact this practice of sitting on the floor is the local tradition and is still followed in many churches that were not subjected to the European influence! "The floor of the church used to be painted with cow dung". ¹³⁴ as was the practice in most residences of Kerala in those periods. Christian Encyclopedia while describing the Kerala church building before Portuguese period says: "During Christmas and Easter, leaves of 'Edana' tree, which had a good smell, were laid on the floor.... The first half of the nave was demarcated for men and there were separate doors for men and women". ¹³⁵

In the 15th century, the roofs of the indigenous churches were only thatched. It's only after 15th century that local 'kurod' (small tiles) started to be used as roofing material. Gouvea (1599) says, "the Christians (of Chenganoor) have decided to cover the roof (of church) with tiles (probably *kurod*, or small tile) a thing they tried many times, they got no consent from the Regedors (local ruler), who said it would be contempt of temple". ¹³⁶ He continues his account saying that with great difficulty they managed to do it. Also as late as in 1735 AD, when the Kottayam Thazhathangadi '*kurishu-palli*' was built by the affluent merchant community, it was "a small church made of wood and thatched roof" ¹³⁷ and it was called '*olla palli*' (literally thatched church). Probably, the walling

xlix Laterite is a kind of soft rock abundantly found in Kerala.

¹ Infact the very word for chair in Malayalam is 'Kasaera', is from the similar Portuguese word for 'chair'.

material was wood in this case. All this concludes that in 15th century most churches had a thatch roof.

Likewise, it must also be stated here that, at the time of the Synod of Udayamperoor the churches in Kerala did not have a separate room for the Parish Priest to stay, as is clear from the proceedings of the Synod. At the same time, in some churches, a balcony was constructed inside the church for the Priest to stay, if he is an unmarried one. However, as inferred from the literature review, in those periods (15th century) most priests were married¹¹ and were staying with their parents and family, and so does not needed a separate 'Parish Priest's room' to stay. The Synod, in fact, also prohibits the very practice of marriage of priests, and further even decrees, through Action VII Decree XVII, "The Synod doth declare, that those priests (who are married) follow the advise of the Synod in turning away their wives". ¹³⁸ And also asks them to stay in Parish Priest's room.

As stated earlier, the Kerala churches also had a porch, '*Mukha-mandapam*', in front of the church, which was an unique characteristic feature of it. Gouvea cites, in many occasions, that the Archbishop Menesis rested in the "porch of the church", ¹³⁹ which again is asserted by many such structures that are still in existence. Further, the Kerala churches, also did not have a separate and permanent baptism font, till the Synod insisted upon it. Action IV Decree XIX of the Synod clearly asks the churches that a baptism font "may be built" and

^{li} The Investigator would like to appraise here that it was only in the Trent Council (1545-1563) the practice of celibacy of priesthood was introduced compulsorily for the first time in the Roman Church.

further says, "neither shall they hereafter make use of any common Vessel, as has been the Custom hitherto". ¹⁴⁰

This influence of traditional religious architecture of Kerala over its churches, which started from the very early days of Christianity there, did not fade away with time, in fact, it was prevailing at the time of the arrival of Portuguese also. Alvara Velho, (1499) who accompanied Vasco-de-Gama on his journey to India and wrote the journal of Gama's travels, says, "(Vasco-de-Gama had) entered and worshipped in a Hindu temple at Calicut because he mistook it for a Christian Church" ¹⁴¹ probably on account of the similarity with each other. The Portuguese were surprised and annoyed when they found that the churches in Kerala looked like the Hindu temples because they came with a certain idea in their mind of how a church should look like. Later when they got some power over the churches in Kerala they imposed Western style over traditional Kerala style as much as they could. The Portuguese were the first to bring in European architectural styles to India, by imposing it in place of Kerala's indigenous church architectural style, forcing it to be pushed aside.

The Investigator would like to state here that, since this investigation is pertaining to the church architecture of Kerala 'before' the arrival of the Europeans, this influence and its impacts are beyond the scope of this investigation. However they are briefly presented here for the matter of record. It is often stated that the first European church in India is the St. Francis church^{lii}. [Photo 2.6], Cochin, (1505-1515) built by the Portuguese, but in fact, it is a well

recorded fact that Friar. Jordan Kattalaani had built the St. George church in Kollam, between 1320 and 1330. This church is no more there, as it was taken by the sea. However, from the writings of Friar John De Marigoli, a verifiable written record of his stay at Kollam in 1346 AD, it can be understood that this church was there during 1346 and also that, there were no pictures inside that church. It can be safely assumed that Jordan Kattalaani, who did not impose pictures and idols to Kerala church, must not have imposed a new architecture also and must have followed the traditional style and materials. Therefore, it is to be deduced that, the St. George church, Kollam, was the first church in Kerala to be built by a European, and it followed the indigenous style. The St. Francis church in Cochin, was the second church in Kerala, to be built by the Europeans, but it could be the first to start the new trend in church architecture, or 'first European style' church building.

This first 'European style' church building in Cochin was also the first 'European style' church in India, built between 1505 and 1515. It was built when the Portuguese Admiral Alfonso De Albuquerque established a factory there. It is a small modest church of the Portuguese style of the Middle Ages. As the Portuguese power in Indian was strengthened, a great number of new churches were built over Kerala, especially in the regions where the Portuguese influence was high, in their style of architecture. Later, when the Portuguese took over churches in Kerala, they also brought in many additions and alterations on existing indigenous church buildings itself, so that it may now look "like a church".

ⁱⁱⁱ When Vasco de Gama died in Cochin in 1524, he was first buried in this church. Later his friends moved his mortal remains to Lisbon, leaving just the old tombstone there. Therefore this church is also called as

The main changes they brought in were to add an 'imposing front façade' on the earlier plain Western wall, to decorate the altars in their own way, to introduce windows to Madbaha and Hykala, to add dovetailed glass for windows, also Statues and saints' pictures were painted to decorate the altar and the ceiling. Paintings were carried out according to the style of senior European artists who taught Indian artists and statues were usually made of wood and they avoided the use of stone because of its association with the Hindu art, thereby making it unacceptable to them. The reason for teaching the local artists on how to make paintings and statues may be because if the local sculptors were asked to make sculptures it would definitely reflect the local style and the Europeans wanted to avoid it. It is well known incident that seeing the stone statue made by a local Sculptor, kept in the Kuravilangad church, Sir C. P. Ramaswamy lyar, the former Diwan (Chief Minister) of Travancore Kingdom, said, "This statue is exactly like the (statue of Goddess) Karthiyani of Kudamaloor (temple)". Another element they associated with Hindu religion, which was actually more a part of Kerala culture, was the use of oil lamps inside and outside indigenous church building. The Portuguese introduced candles in its place. They used their own style of architecture to build new churches, which they built in Kerala, this trend have started when the Portuguese started with the Vasco De Gama Church. It slowly started to gain more influence over the local Christian population and later penetrated further. Later, as and when they gained more influence, and started building more and more churches, this trend continued further. "In 1516 Lopo Soares, the Governor, forced the Rani (Queen) of Quilon to rebuild the church of

the 'Vasco de Gama church'.

the Thomas Christians in Quilon". ¹⁴² Naturally, the influence of Portuguese architecture was more in such structures, especially in the front façade.

Originally the St. Francis church was also built in wood, but soon it was replaced by the present building, built of laterite and lime mortar in Portuguese style of architecture as it stands today. It had high projecting front facades with pilaster in its exterior and an interior with highly decorated and gold painted 'raathaal' (back-drop to altar), 'pushpam' (highly carved and often gold painted pulpit), usage of 'ramsenthi' (wooden flower decorations) on the altar and wooden statues of saints, which were all typical features the Portuguese introduced, and later become popular and typical features of post-Portuguese Kerala churches. All these features can be seen in St. Francis church. Soon these features were imposed on, or adopted by, most Churches in Kerala.

It is clear that in the Portuguese period there was a conscious attempt to change the traditional indigenous style of church architecture of Kerala. "The zealous heart of the Westerner could not tolerate such gross ignorance on the part of Indian Christians". ¹⁴³ Monserratte S.J., a Spanish priest who visited Kerala in 1579, says "Their churches, of which there are still many, were built in the same manner as the houses of the idols of these parts; the present Archbishop sees to it that they are built in our style". ¹⁴⁴ Also Manjali (2000) has noted that "from 1530 to 1545 AD, Fr. Vincent, who completed the work of Puthenchira church building, has extensively traveled and visited many a Syrian churches, and introduced Gothic style in many churches of Kerala". ¹⁴⁵ This conscious attempt to alter the indigenous church architecture of Kerala Christians

caused an irreparable break in the system, and it introduced a totally new and alien style to traditional church building scenario, in terms of architectural character, form and scale, forcing the traditional style to be given up gradually.

Indigenous churches were still very common even after the Portuguese influence on church architecture began to be practiced. One of the reasons behind this was the local belief or fear prevailed against pulling down of a church building. The experience of Fr. James Fenicio S.J., a Jesuit missionary in Calicut, ... who worked there between 1600 and 1607, proves this point. He had obtained permission from the Samoothiri (King) of Calicut to erect churches in the king's territory. He has later written about the construction of a church in the Palayoor in a letter which says, "The stone church which I begin two years ago [enclosing, apparently, within it the primitive building] had risen to the height of windows. At this stage no one would dare to pull down the old wooden building, fearing to be struck down by sudden death: it stood surrounded by the walls of new erection, but after I prayed and removed their timidity, the old structure was pulled down, and the new building stood out in such fine proportions that the Hindus, the Mohammedans, and the Jews flocked to see it". 146 This incident, besides substantiating the reluctance from the part of local Christians in pulling down an existing church building, also shows the imposition of Western style over traditional Kerala and the pride of the Europeans on the new style. A part of this church, built by Fr. James Fenicio S.J., still exists and in January 1994, when the inside of this church was excavated, remains of the old wooden church were also found.

The British also followed the great European traditions in church building. Their churches in Kerala were usually larger and more decorated than the Protestant's churches, using the cross shape as basic building plan. It was one of the major changes in church architectural feature, that were brought into India during the British colonial time, especially in places where a great number of devotees gather. In addition to the obvious symbol of the cross, this design allows a better view for the altar from any point of the church. However, this completely changing the traditional concept of mystery of Eucharist. It is clear that the British also, like Portuguese before them, did not prefer the Indian style of architecture in church design. So the British era had witnessed further radical changes towards the 'Westernisation' of Kerala churches, with the willing consent of local priests and parishioners.

2.2.2.5 Inferences from Kerala Church Architecture Study

The following inferences were drawn from the study of indigenous church architecture of Kerala, before the Portuguese Period:

- There existed a church building at Kollam in 522 AD, as evident from the writings of Cosmos Indikopleustes.
- The mention in Sangam literature about the existence of a *palli*, which celebrated its festivals with non-vegetarian food, could only be Christian churches.
- Indigenous churches did not have the 'typical church façade' and looked like Hindu temples.

- Pre-Portuguese churches were very dark inside because there were no windows in the Madbaha or in the Hykala.
- Indigenous churches had high compound wall built around church premises.
- There existed in the pre-Portuguese period, indigenous churches built of bamboo, stone and wood.
- Most of the indigenous churches had thatched roof in pre-Portuguese periods.
- The interiors, as well as the exterior, of many indigenous churches, built of laterite, were not plastered, this leaving laterite walls exposed.
- Most pre-Portuguese churches had a porch (*Mukha-mandapam*) in its front.
- During the Holy Mass, the people and the Priest faced the Madbaha, which is kept on East end inside the church building, so that all could make their prayers facing same direction. East was chosen because, may be, East direction was always considered to be an auspicious direction.
- Pre-Portuguese Kerala churches did not have, nor used, any statues (of saints or otherwise) inside the church.
- The floors of most indigenous churches were plastered with cow-dung, as was the common practice in residences in those periods.
- There were no chairs or benches inside the church in pre-Portuguese churches and the devotees sat cross-legged on the floor. The nave was

divided into two, with the space near the altar for men and the rear space for women.

- There were no permanent baptism fonts, until the Synod of Udayamperoor (1599 AD) insisted on a permanent one.
- There were no separate building/ room for the parish priest to stay before 1599 AD. A balcony was constructed inside many churches for this purpose.
- As Monserratte, the Spanish priest who visited Kerala in 1579, clearly attests, Indigenous Kerala "churches, of which there are still many, were built in the same manner as the houses of the idols of these parts; the present Archbishop sees to it that they are built in our style"
- From this study, as well from the study of Kerala church history, a list was prepared of all the church buildings in Kerala originally built before 1599
 AD. The list is attached as Section 2.2.2.6.

2.2.2.5.1 Discussion on the Inferences of Kerala Church Architecture Study

It is evident that, since Christianity has a very ancient origin in Kerala, when the number of the early Christian community grew and spread through years the need for new churches came and were built much the same way as other contemporary religious buildings that prevailed then. The rationale for formulating this theory is that (1) since there were no precedence existing elsewhere on how/ what should be the character and form, for a church building, earliest Kerala Christians had to find one (2) the clients, designers and workers who worked on the new church building could be only practitioners of prevailing religions or the new converts to Christianity, who had in mind a settled idea of how a place of worship should be, and so they made a religious structure according to their prejudice (3) the local masons who were used to the prevailing vernacular constructional practices and rules, or the traditional science of '*Vasthuvidya*', that actually belongs to the region and not a religion, which developed and perfected through ages according to its climate, its geology, its socio-economic conditions, etc., they must have naturally looked into the theories of the prevailing indigenous architecture. (4) Above all, religion was, in those days, a way of life of the people and had not yet became an organised set up as of now. So its only natural that prevailing worshipping places were looked upon as the model for Christian worship too. The fact that this copying was later repeated in Kerala when the first Muslim mosques were required to be built further reinforces this theory [see Photo 2.3]. There do still exist examples of early mosques that look like temples.

Later, when the Persian Christians emigrated to Kerala, they definitely must have felt odd in the prevailing mode of indigenous worship and temple like church buildings of Kerala and as a result they incorporated into Kerala's building type some changes which they were used to in Persia and it must be since then that the Christians of Kerala have started to use the classical 'altar and hall' model in church buildings. Soon after that Kerala must have started to develop a distinct and indigenous style for its church architecture to accommodate the West Asian church traditions into the indigenous traditional style buildings they were using for worship. The main future of this new architecture must be the

incorporation of 'altar and hall' model form of worship, but this new architectural style that emerged kept on almost all the typical features of Kerala temples style, starting from the planning stage to finishing touches, as is evident from this study of surviving churches. It went on to develop as a totally indigenous style of church architectural form then on, until the Europeans came in the sixteenth century.

The early church architecture of Kerala is shrouded in obscurity, and therefore, one can only make surmises based upon the existing old churches and temples. It is very evident throughout the study that the façade that one actually saw when looking at a church during pre-European period was totally different from what one sees today, which is an imported church façade after sixteenth century with the advent of Europeans.

2.2.2.6 Identified List of Churches for Primary Survey

Although it is a matter of belief that St. Thomas established seven church buildings in Kerala, as stated earlier, there is no concrete evidence to support this theory. The earliest scientific evidence about the existence of a church in Kerala is the mention of a church building at Kollam by Cosmos Indicoleustes in 522 AD ^{IIII} [Church no. 47, in the list given below]. The second earliest mention is in the Tarissa-*palli* copper plate, executed in 849 AD, which throws light into the establishment of the Tarissa church [Church no. 48, in the list given below]. Next historical document that throws some light in this direction is the Thazhekatt stone inscription, written between 1028 and 1043AD, by king Raja Simha, which

^{liii} 'Christian Topography of Cosmos Indicopleustes', written 522 AD, English transilation published in 1907 from London, edited by Mc Crindle J. W.

establishes the existence of Thazhekatt church. [Church no. 101, in the list given below] Another historical document, which establishes the existence of the Mahodayapuram church [Kodumgalloor, church no. 44, in the list given below], is the copper plate inscription of 1225 AD of king Vira Raghava Chakravarthi. In 1293 AD, Marco Polo (1321) mentions the Kerala Christians and their churches in general but does not mention about any church in particular. The lithograph in the Muttuchira open-air granite cross, with its consecration date on it stating 1500 AD, confirms its existence [Church no. 76, in the list given below]. Thus giving only a list of 5 churches, that existed before 16th century, with some 'scientific/ archeological' backing.

Ideally, for the study of church architecture of Kerala before Portuguese period, it would be better to take only those churches, about which there is a 'scientific' proof of existence before the arrival of Portuguese to Kerala. At the same time, though the Portuguese landed in Kerala in 1498 AD, it took some time for their architecture to get imposed or to get accepted in Kerala. Further, although the Portuguese had built the St. Francis church between 1505 and 1515, the first church in Kerala to be built in European architectural style, it was not that all new churches immediately accepted that style, but it took much more time for that style to percolate, gain acceptance and transform the indigenous church architecture. In fact, the entire 16th/17th centuries was not good enough for this transition, because in 1599 AD, Gouvea clearly states about many churches that looked like the 'pagodas of the Hindus'. At the same time, for the purpose of this investigation, some 'cut-off year' has to be taken. Therefore, for

the purpose of this investigation, the year 1599 AD was taken as the year of transition. Though in reality it was neither from a specific year, nor from a particular church building, this new trend was started, but the entire 16th century can be considered as the period where the indigenous church architecture of Kerala had started to undergo architectural changes. Further, the year 1599 was also the year of the Synod of Udayemperoor, in which many foreign rules were imposed over indigenous church architecture of Kerala.

Antonio de Gouvea's monumental work 'Jornada do Arcebispo Dom Feri Alexis', which was originally written in 1599 AD, describing the visit of the Goan Archbishop to many Kerala churches, clearly specifies the churches he had visited. However "most of the churches ... Archbishop made visits, happened to be ... (the ones) on the valleys of river systems of central Kerala" 147 may be because he was mainly traveling through the waterway. Gouvea gives information about 76 churches [Church nos. 2, 3, 5, 7, 8, 9, 11, 13, 16, 17, 18, 19, 20, 21, 23, 25, 26, 27, 28, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 47, 48, 50, 51, 54, 55, 57, 58, 60, 63, 64, 66, 67, 68, 69, 71, 72, 74, 75, 76, 78, 82, 83, 85, 86, 88, 89, 92, 93, 94, 95, 98, 100, 102, 103, 104, 106, 107, 108, 109, 112, 113, 117, in the list given below]. This book, originally written in Portuguese language and translated for the first time in English in 2003, was the main source in preparing this list. However, Gouvea does not give the list of churches that participated in the Synod of Udayamperoor. At the same time, Joannes Facundus Raulin, who translated the original 'Acts of the Synod of Diamper' from Portuguese into Latin,¹⁴⁸ in 1745 gives a list of churches that

attended the Synod, which further adds to the ones already mentioned by Gouvea [Church nos. 4, 6, 10, 14, 15, 29, 30, 39, 45, 46, 49, 52, 53, 56, 59, 61, 62, 65, 70, 73, 77, 79, 87, 90, 91, 96, 97, 110, 111, 116, in the list given below]. Similarly many churches still keeps records today, that firmly establishes that it existed, at least, in 16th century. Early Portuguese documents, as well as research papers based on them, also give details about some churches in 16th century [Church nos. 1, 12, 22, 24, 43, 80, 99, 105, 114, 115, in the list given below].

Therefore, the final list is of 117 church buildings that were established (originally built) before 1599 AD, has been prepared based on the above authentic sources, in the following manner: (1) 5 churches from pre-Portuguese travelogues, copper plate inscriptions and stone edicts, (2) 72 churches^{liv} from Gouvea's book written in 1599, (3) 30 more churches from Raulin's list of churches that attended the Synod in 1599 and (4) 10 churches from the old records kept in some churches and other early Portuguese documents. Though there are few more churches claiming to have been established before 1599 AD, some of those claims may also be true, but for this study only those churches were taken, which have some scientific backing to their claim of existence in 1599 AD.

^{liv} Though Gouvea mentions about 76 churches, 4 of them are repetitions of the ones already inferred from pre-Portuguese sources.

These 117 churches in Kerala, that were originally built before 1599 AD

are presented here in alphabetical order:

- 1. Aalapuzha
- 2. Aalengad
- 3. Aarakkuzha
- 4. Aathirampuzha
- 5. Akaparambu
- 6. Ambazhakkad
- 7. Angamaali 1 (Padinjare)
- 8. Angamaali 2 (Kizhakke)
- 9. Angamaali 3 (Yakoba)
- 10. Arimboor
- 11. Arthaat
- 12. Arthungal
- 13. Aruvithura
- 14. Bharanamganam
- 15. Chalakkudi
- 16. Changanassherry
- 17. Chempu
- 18. Chendamangalam 1
- 19. Chendamangalam 2
- 20. Chenganoor
- 21. Cheppad
- 22. Cherpungal
- 23. Chowara
- 24. Chungam
- 25. Eanammavu
- 26. Eda Kochi
- 27. Edapalli
- 28. Elanji
- 29. Kaarakkunnam
- 30. Kadamattom
- 31. Kadambanad
- 32. Kadathuruthy 1 (Kanaya)
- 33. Kadathuruthy 2 (Catholic)
- 34. Kallada
- 35. Kallooppara
- 36. Kalloorkad (Chembakkulam)
- 37. Kanjirapalli
- 38. Kanjoor
- 39. Karingachira
- 40. Karthikapalli
- 41. Karunagapalli
- 42. Kayamkulam

- 43. Kochi (Fort Cochin)
- 44. Kodumgalloor
- 45. Kokkamangalam
- 46. Kolancherry
- 47. Kollam 1 (Port Church)
- 48. Kollam 2 (Tharisha Palli)
- 49. Koratty
- 50. Kothamangalam 1 (Valiya)
- 51. Kothamangalam 2 (Cheriya)
- 52. Kothanelloor
- 53. Kottapadi
- 54. Kottayam 1 (Valiya)
- 55. Kottayam 2 (Cheriya)
- 56. Kottekkaad
- 57. Kudamaalloor
- 58. Kundara
- 59. Kunnumkulam
- 60. Kuravilangad
- 61. Kuravilangad
- 62. Maamalassherry
- 63. Malayattoor
- 64. Manarkaad
- 65. Manjapara
- 66. Mattam (Kurishu Palli)
- 67. Mattancherry
- 68. Mavelikkara
- 69. Mayilakkombu
- 70. Moozhikkulam
- 71. Mulakkulam
- 72. Mulamthuruthy
- 73. Mundenveli
- 74. Muthalakkodam
- 75. Muttam (Cherthala)
- 76. Muttuchira (Kochu Palli)
- 77. Naagapuzha
- 78. Nadamel
- 79. Nediyashala
- 80. Neendakara
- 81. Nilaykkal
- 82. Niranam
- 83. Njarakkal
- 84. Omalloor

85. Pala 86. Palayoor 87. Paliyekkara 88. Pallippuram (Kurishu Palli) 89. Palluruthy 90. Parappookkara 91. Pazhuvil 92. Piravam 93. Poojaar 94. Pulinkunne 95. Purakkad 96. Puthanchira 97. Puthupalli 98. Ramapuram 99. Tangi 100. Thavalakkara 101. Thazhekatt

- 例如 - 一部

102. Thekkan Paravoor 103. Thiruvithamcode 104. Thumpamon 105. Thuruthipuram 106. Udayamperoor 107. Vadakara 108. Vadakkan Paravoor 1 109. Vadakkan Paravoor 2 110. Vadakkan Puthukkad 111. Vadayaar 112. Vaikkom 113. Vaipin 114. Valappaad 115. Vechoor 116. Veliyanaad 117. Venmani

2.2.3 Development of Church Architecture in the Western Countries

2.2.3.1 Introduction

In this section, an attempt is made to briefly outline the growth of Christianity in the West and in the Near East, and to extract the typical architectural features and characteristics of that church architecture, so that it can be used later for comparative analysis. Since there is no literary or archeological evidence to support any view that the Western architecture have put in any architectural influence over the indigenous church architecture of Kerala, this study, which is being done only for the sake of a comparative analysis later, is attempted with that view in mind, and therefore have only looked into the basic required detail. It is attempted with the clear understanding that only the basic architectural characteristics of each periods can be of any use at the comparative analysis stage, and therefore the study is limited only to the plan form of each period and major features of each.

2.2.3.2 Growth of Christianity

The first Christians were a handful of Jews who were "assiduous temple goers as they had recognized Christ as the Messiah". ¹⁴⁹ They obviously would have needed a place to gather and worship, as the orthodox Jews' Synagogue could no longer be used for the worship of the new Messiah. However, "the early Jewish Christians continued to take part in the services of the Synagogue, and only the 'breaking of the bread' was performed in the house of one of the faithful".¹⁵⁰ These places were mostly "private houses, merely the villas of the rich Christians, opened to the (Christian) community. History has preserved a few names: in Rome, the senators Clemens ...". 151 However, on 19th July 64 AD, everything was changed, when a great and devastating fire broke out and destroyed most of Rome, while Emperor Nero was ruling (64-68 AD). The Christians were formally accused of its cause and under the order of the Emperor they were condemned and massacred. Since then the Christians suffered continuous persecution for nearly two and a half centuries and the whole Christian movement was driven underground. At least "twice in the first century ... (first) under Nero in 64 AD ... and (then under) Domitian in 95 AD, there was officially sponsored persecutions, though how widely spread beyond Rome is not known. ... During the first half of the second century a moderate policy prevailed, first established by Trajan ... and generally followed in the reigns of Hadrian (117-138 AD) and Antoninus Pius (138-161 AD). Nonetheless, Christianity was still not officially tolerated, and its adherents remained liable at any time to arrest, torture, imprisonment, confiscation of property, banishment to the galley ships or

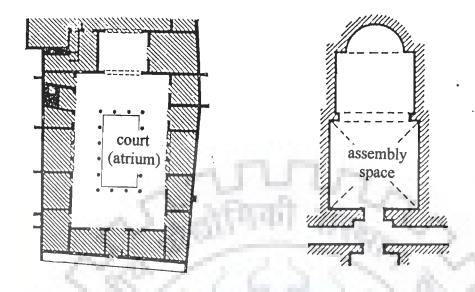
mines, and even execution." ¹⁵² In these periods the early Christians "met in secret at any convenient place for worship". ¹⁵³ At the same time, some places "that lay outside the Roman Empire … enjoyed freedom of public worship" ¹⁵⁴ and might have built churches also. There is also another theory that, "The first Christian church in the world was built in Edessa^{IV} by its king. It was rebuilt in 282 AD". ¹⁵⁵ However, this theory is not proved beyond doubt.

2.2.3.3 Church Architecture During Persecution Periods

As Christians were under persecution from the time of Emperor Nero up to 305 AD, when Emperor Diocletian stepped down from the throne, constructing a public church 'building' was unthinkable in the Roman Empire. During this period the early Christians, continued to worship secretly in private houses and also during the "periods of persecution the catacombs were also used for secret worship" ¹⁵⁶. This situation continued for almost two and a half centuries. So during the persecution periods Christian worship took place mainly at two centers; (i) Houses of the faithful and (ii) Catacombs.

The typical Roman house of those periods had an atrium in the centre surrounded by rooms. This central courtyard naturally provided the ideal place for congregation during periods of persecution [Figure 2.1]. This courtyard was a colonnaded court with the tablinum at one end and "immediately in front of the tablinum stood the ornamental stone table, the only reminder of the ancient sacred hearth; this is precisely the position of the Christian altar". ¹⁵⁷

¹^v Edessa is today's Sanliurfa, known also as Urfa, is in the South Eastern Anatolian region of Turkey.



(Source: Hubsch and Lowrie)

(Source: De Rossi)

Figure 2.1 A sketch of a typical Roman House

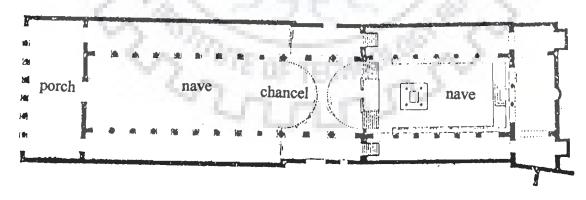
Figure 2.2 Sketch of the Catacomb of St. Sotere

Catacombs were underground cave like structures, which were used also as the tombs of the martyrs, which were in plenty during periods of persecution. One can see here, "the germination of (many elements that later become) the main features of Early Christian architecture". ¹⁵⁸ It was these catacombs that served as the first places of worship, or the 'church' for early Christians. The earliest of these 'churches' existing today is "the Capella Greca, in the catacombs of St. Priscilla ascribed to the second century. Here we can see certain forms, which later become characteristic of Christian architecture of the West, (is already present) ... It is rectangular in shape, has an apse at one end, and it is decorated with symbolic paintings of various episodes from the gospel of St. John. Another chapel in the cemetery of St. Sotere [Figure 2.2], is more developed with three main divisions; the nave, chancel (altar space) and apse already there, which later became the typical feature of 'Early Christian architecture'. ". ¹⁵⁹ The catacombs were "completely unknown in the West, before the coming of the Christians, (and) was certainly imported from Near East by the first faithful, who were Jewish converts", ¹⁶⁰ but in Italy this tomb underwent considerable modification, initially as tomb itself and later as a space for congregation. It contained the first forms of Christian paintings that later used as such in basilicas. This means that decoration of interior spaces of church buildings started even at this early stage.

2.2.3.4 Post Constantine Church Architecture

"In the fourth century Constantine the Great became Emperor, and in the course of his reign (from 312 to 337 AD) he recognized Christianity, and made it the religion of the State". ¹⁶¹ Then, naturally, it became necessary to provide places of public worship to the Christians. Subsequent edits totally changed the scenario with the Emperor himself building churches. The edict of Emperor Theodosius, making Christianity the State religion of the Roman Empire, completely changed the way a church building was looked upon. In fact, this drastic change of Christianity, from the 'under-ground religion' to the 'State religion', had a tremendous effect in its architecture. Also now that church had become a 'State affair', ceremonies in the churches were now to be conducted in the way 'fitting to the imperial court'. It also imposed or "added the problem of its establishment in society". ¹⁶² "The general tendency and style in building a church changed drastically; on one hand, towards elaboration and growing magnificence and, on the other, towards increasing the solemnity and mystery, of so sacred a

character as to prohibit admission to outsiders". ¹⁶³ To cope up with this, the new church "merely adopted and adapted already existing forms" ¹⁶⁴ that were prevailing in the Roman Empire. "Probably the Christians would have been ... reluctant to make use of heathen temples, and few temples, if any, were adapted for the assembling of a large congregation but the large halls of baths and the basilicas were free from associations of an objectionable character, and well fitted for large assemblages of worshippers. These ... in the first instance, employed as Christian churches. The basilica, however, became the model ... when new buildings were erected for the purpose of Christian worship". ¹⁶⁵ So the Roman basilicas not only became the earliest public 'church buildings' of Christians and but went on to become a 'model' when new buildings were erected for the purpose of Christian worship. Emperor Constantine greatly encouraged the erection of basilicas for Christian worship, with he himself building many basilicas in Rome: like St. Giovanni in Laterano; St. Lorenzo, Rome [Figure 2.3], St. Peter's, built over St. Peter's tomb [Figure 2.4], etc.



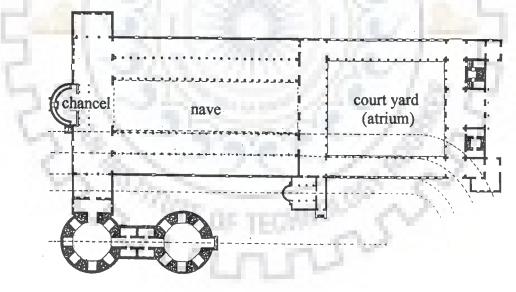
(Source: Hubsch)

Figure 2.3 St. Lorenzo, Rome, showing the original 4th century church of Constantine (right), and the larger 5th century church (left)

2.2.3.4.1 Roman Basilicas

Roger Smith (1890) concluding his study on Roman basilicas, states, "The chief interest attaching to (Roman) basilicas lies in the fact that they formed the first places of Christian assembly (after Emperor Constantine recognized Christianity) and they served as the model upon which the first Christian churches were built" ¹⁶⁶ and "during the forth century, and several succeeding ones, the churches of the West were all of basilica type". ¹⁶⁷

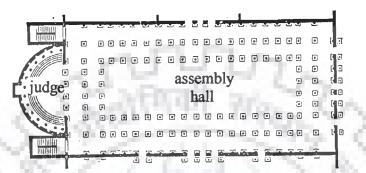
The basilicas, most remarkable of all Roman public buildings were mostly "Halls of Justice, which were also used as commercial exchanges ... They were generally (though not always) covered halls, oblong in shape, divided into three or five aisles by two or more rows of columns, the centre aisles being much wider



(Source: Hubsch)

Figure 2.4 The plan of the original St. Peter's Church

than those at sides ... At one end was a semicircular recess or apse, the floor of which was raised considerably above the level of the rest of the building, and here the presiding magistrate sat to hear causes tried ... All these buildings had wooden roofs and were of no great architectural merit" ¹⁶⁸. The basilica of Trajan, otherwise called the Basilica Ulpia, excavated from the Forum of Trajan can be taken as an example of this [Figure 2.5].



(Source: Hubsch)

Figure 2.5 Ground Floor Plan, Basilica Ulpia, Rome

2.2.3.4.2 Earliest 'Built' Christian Churches

When it became permissible to build a church publicly, the earliest builders faced many problems in choosing a model for their building. Above all unlike the earlier Greek and Roman temples [Photo 2.7] where the worshippers actually gathered outside the temple, a church was basically meant to house a group of people inside for saying prayers. While the Greek and Roman temples had colonnade, rich entablature and other decorations outside the building, which covered the insignificant cell inside, the early churches needed better interior spaces that helped in inspiring the worshippers. This is what was architecturally needed and the answer came in readymade form, through the prevailing Roman basilicas. With its columns inside, standing as a border to the nave that helped in leading the eye of the worshipper directly to the altar. So the early Christian churches were wholly dependent for its form and details upon Roman basilicas, and so they were technically no great innovations at all. Cecil Stewart (1954) says, "The remarkable discovery of a pagan temple, fifty feet below the ground near the Porta Maggiore, Rome, dating from the first century and having all the essential features of a Christian basilica- nave, aisles and apsidal end- indicates that this form was already established in Rome before Christianity had taken root". ¹⁶⁹ The form of Christian basilica that came into being as architectural entity continued with out much physical change in character from the fourth to the ninth century. Emperor Constantine himself built the "first great Christian cathedral, the Lateran Basilica in Rome". ¹⁷⁰

2.2.3.4.3 Basilica Type Churches

Roger Smith (1890) thus describes a basilica church; "Access is obtained through (an open) forecourt to which the name ... atrium is given^[vi], ... (between atrium and church was the) narthex or porch; and when an atrium did not exist, a narthex at least was usually provided. The basilica has always a central avenue, or nave, and sides or aisles, and was generally entered from the narthex by three doors, one to each division (with no side entrance). The nave ... is lofty, and covered by a simple wooden roof; it is separated from the side aisles by arcades, the arches of which spring from the capitals of columns; and high up in its side walls we find windows. The side aisles, like the nave, have wooden roofs. The nave terminates in a semicircular recess called 'the apse,' the floor of which is higher than that of the general structure, and is approached by steps. A large

^{1v1} Because this space is much like the atrium in a Roman house, being enclosed with a corridor which is covered with shed roof, and open in the centre.

arch divides the apse from the nave. (The apse is covered mostly by a semidome) ". ¹⁷¹ He further concludes "This description ... would apply, with slight variations, to any one of the many ancient basilica churches in Rome, Milan, Ravenna and other older cities of Italy". ¹⁷² St. Peter's Basilica in Rome, built over St. Peter's tomb, by Constantine, between 324 and 344 AD, can be taken as the typical example for this (see, Figure 2.3). In large churches, a transept or 'bema', was stretched across from North to South without a break, was introduced between the apse and the body of the church was separated by a 'triumphal arch'. The central and the most important apse is called '*haikal*'. In front of the church, generally, a courtyard was present, and in the centre of this courtyard was the fountain, which in early days was used for washing before service, in the atrium. This was "later abolished, chiefly to avoid resemblance to Mohammedan custom" ¹⁷³ and holy water stoups were introduced in its place near entrance of the church. This means that a water body was present in front of early churches.

The basilican church, especially the ones used lintels instead of arches, offered a great expanse of unbroken wall surface for decoration; in form of painting, mosaic pictures. The portion above the triumphal arch and the semidome over the apse were also provided for the same purpose. Therefore the interior of basilican churches was highly decorated. However, it must be said that the early churches externally possessed little of the rich decoration it had inside. The outer walls were just plastered and mostly with no decoration and architectural ornamentation.

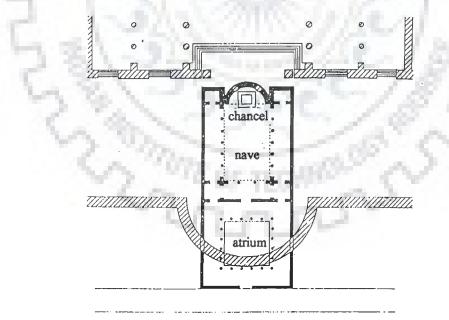
The later basilica churches were built following the older basilica plans, and in fact, these arrangements did not change much, in the Gothic, or even Renaissance periods. Geographically, this architecture was not limited to Rome or Italy, examples can be found in Egypt, Syria, Greece and Constantinople. However, the Early Christian basilicas, compared to later Romanesque and Gothic have more width than height, and therefore one feel that it is more spacious. Although most churches had rectangular plan, and not cuneiform, there are very few cases where the building was circular in plan.

2.2.3.4.4 Characteristics of Early Christian Architecture

<u>Orientation</u>: As far as the orientation of church building is concerned, Cecil Stewart (1954), after studying the Early Christian architecture, has concluded that, "until the beginning of the Middle Ages, there does not appear to have any rule. The variety of direction is especially great in Rome, where nearly every point of the compass is represented. It was very rarely that a church lay exactly East and West". ¹⁷⁴ To illustrate that no directional norms were followed regarding the orientation of early churches in early centuries; the church of 'St. Paul Outside the walls', when it was 'rebuilt in 386, just after 56 years after it was originally built, the orientation was completely reversed' ¹⁷⁵ [Figure 2.6]. Similar is the case of St. Lorenzo, when it was rebuilt after a century (see, Figure 2.4). The situation was so in the Eastern Empire also where some of the early example churches were directed towards the West and some towards East. However, "by the end of fourth; entury, say from 386 AD, the altar was generally placed towards the East". ¹⁷⁶ This practice was followed more or less from then on. However, it

was not a hard and fast rule, "there are many variations arising out of particular topographical conditions". ¹⁷⁷ Therefore, it may be concluded that strict directional rules never guided the orientation of 'Early Christian' churches.

<u>Chancel</u>: As stated earlier, the earliest builders faced many problems in choosing a model for the church building and an answer came to them in readymade form through the Roman basilicas. "In the classic (Roman) basilica the apse was the tribunal, and a raised seat with a tessellated pavement occupied the central position in it, and was the justice-seat of the presiding judge; and in the sweep of the apse, seats right and left, at a lower elevation, were provided for assessors or assistant-judges. In front of the president (judge) was placed a small altar^{*}. ¹⁷⁸ This area became the chancel with the seat of presiding judge becoming the throne of the Bishop and the seat of the assessors was for the clergy.



(Source: Hubsch)

Figure 2.6 Basilica of St. Paul Outside the Walls, showing in black the original 330 AD church, and in shaded, a portion of later basilica

Altar: The table for the judge, in the Roman basilica, became the altar in church, in old position itself, but with an extra canopy erected over it. "At the end of the fifth century, when it became the practice to dedicate each church in honour of the saint whose remains it enshrined ... sacred relics were placed beneath the altar". 179 "Wooden altars were used for many centuries, stone altars being probably a development from the altar tombs of the catacombs ... By the sixth century the cult of relics had changed the table form into a box like structure". ¹⁸⁰ Transept: Although the original St. Peter's in Rome, built between 324-330 AD, has now entirely disappeared, it can be completely understood from the careful 16th century measured drawings (see, Figure 2.3). It can be seen that one feature present in this church was a projecting space on either side; which some Scholars regard as rudimentary transepts that later developed into cruciform plan of churches by the designers of Romanesque Cathedrals. Roger Smith (1890) says, "the cross passage to which we have referred as having existed in the old Basilica of St. Peter, and many others, is the original of the transept, which in later churches have been made more conspicuous than it was in the basilica, by being lengthened so as to project beyond the side walls of the church". ¹⁸¹

<u>Triumphal Arch</u>: Another feature that was common from very early days itself was the presence of an arch between the nave and apse. 'In basilican churches, it is usually a big arch, the only one, guiding the onlookers eyes directly to the chancel. This was called the arch of the triumph' ¹⁸² [Photo 2.8].

<u>Pulpit:</u> A pulpit is a place from where the priest delivers the sermon. In the "Jewish custom the Bishop remained seated while delivering the sermon. (When

early churches were built) at first it (i.e., pulpit) was very simple in form and made of marble or wood ... It was known in the West as 'cathedra', and was originally placed in the centre against the back wall of the apse behind the altar ... (this) position in the apse, however, was inconvenient for preaching, hence the development in the fourth century of the pulpit in the nave, also originally a Jewish feature". ¹⁸³ This feature is still followed in Jewish synagogues [Photo 2.9].

<u>Baptism Font</u>: 'Baptism was first performed at riversides and hence required no architectural setting before the persecution period. During the persecution periods this required utmost secrecy and privacy so it was transferred to indoors. Later, after the official recognition of the church, 'the warm rooms of some of the Roman baths would have been converted'. ¹⁸⁴ After Constantine, "when pagans were being converted in large numbers and adult baptism was general, a separate baptistery was necessity, for the non-baptised were not admitted into the church itself'. ¹⁸⁵ Therefore, a separate room was built so that even non-baptised persons can be allowed to enter there for baptism, as non-baptised persons were not allowed inside the church.

<u>Burial:</u> "In the early days of Christianity the sanitary laws of the Romans still prevailed, and bodies were buried in catacombs or graveyards outside the city. ... (Later) in 563 AD, the Council of Braga gave permission for burial in church yards, 'in case of necessity', but in no account within the walls of the church. In 813 AD the Council at Mayence decided that "Bishops, worthy priests, or faithful layman" ¹⁸⁶ may be buried inside the church building.

2.2.3.5 Early Church Architecture of the East

The study of the churches of the Eastern empire^{Ivii} is more important to the present investigation as the Christians of Kerala were more interactive with the Christians of the East, before the arrival of the Portuguese in 1498 AD. Besides the fact that Jesus himself was born and brought up in the East, it was there "his disciples were called 'Christians' first, at Antioch in the Eastern Empire". ¹⁸⁷ The Eastern Empire had played a major role in the growth of Christianity in Kerala.

"Sassanian architecture, which prevailed in the Near East from pre-Christian period was very "elaborate ... and varied through its incorporation of diverse traditions ... brick, faced with stucco was used in conjunction with stone (and) ... high barrel vaults ... gave buildings a majestic appearance". ¹⁸⁸ In 3rd century AD, King Shapur brought in tremendous changes and "he built a town and palace for him at Bishaput (beautiful Shapur) ... The palace, part of which has been (now) excavated, consists of a great hall built on a cruciform plan, with four arched iwans opening on to the square central structure, it was covered with a dome ... at a height of about 80 feet" ¹⁸⁹ [Photo 2.10]. In fact, vaults prevailed there from much earlier periods. "While the Latin countries continued to build both basilicas and edifices on a central plan of traditional type, the East devised many variations on the later plan". ¹⁹⁰ "The majority of Christian countries of the East; Syria, Mesopotamia and especially Armenia, developed the church with central plan, but the various solutions that they found, however interesting they

^{lvii} The word East is used here to represent the area now know as Near East.

may be, fade into insignificance beside domed basilica, which combined in a single structure the two plans typical of Christian architecture". ¹⁹¹

One of the most vital differences of Eastern Orthodox Churches had with its Western counterparts was that, "a (high) solid screen or partition, ... called an *iconostasis*, divides the sanctuary from the rest of the church. The congregation looks into the sanctuary through doorways in the *iconostasis*". ¹⁹² This was done to give more sanctity and sacredness to the sanctuary. They also used cloth curtains to hide the sanctuary from the nave when worship was not going on. Unfortunately, not much of the early Eastern Church architecture were survived.

2.2.3.6 Byzantine Architecture

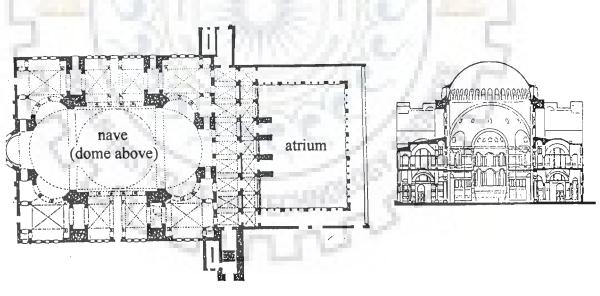
Emperor Constantine shifted the capital of Rome to Byzantium^{Iviii}. The solemn foundation of Constantinople took place in 324 AD and the inauguration of the new city in 330 AD. In this new place, "among a people largely of Greek race," after almost two centuries of building basilican type churches, a new architecture developed with 'buildings of most original design', known as Byzantine architecture.

2.2.3.6.1 Sancta Sophia (527-565 AD)

"There is every possibility that (in the first two centuries of Byzantine architecture, churches) ... may have been vaulted basilicas; the more so as the very ancient churches in Syria, which owed their origin to Byzantium ... are most of them of the basilica type". ¹⁹³ Historically, Byzantine period is usually taken from 324 AD, the year of the founding of Constantinople, however, the turning

point from Early Christian to Byzantine came in early sixth century with the building of Santa Sophia^{lix} [Figure 2.7] under Emperor Justinian (527 – 565 D).

Sancta Sophia, "one of the most famous buildings of the world, and one which is typical and central embodiment of a distinct and very strongly marked well-defined style". ¹⁹⁴ Its dome, upheld by pendentives became a dominant motif of Byzantine style. "The (very) basis of this style may be said to be the adoption of the dome, in preference to the vault or the timber roof, as the covering of the space enclosed within the walls; with the result that the general disposition of the plan is circular or square, rather than oblong". ¹⁹⁵ However, "Externally this church is uninteresting; but its interior is of surpassing beauty" ¹⁹⁶ [Photo 2.11, 2.12]. This church can be taken as a typical example of Byzantine architecture.



(Source: Salzenberg)

Figure 2.7 Sancta Sophia, Constantinople, Plan and Section

^{1vin} It was an ancient town, that was in ruins when the Emperor choose it as his new capital, but he had it rebuilt and re-established it as a city and re-named it Constantinople, i.e. the city of Constantine. Now this place is known as Istanbul, and is in Turkey.

2.2.3.6.2 Characteristics of Byzantine Architecture

Interior Space: The essential characteristic of Byzantine architecture is the great central square space. The plan of the building is generally square [Figure 2.8]. The central space is always covered by a dome, which was achieved by the use of 'pendentives'. The Byzantine's used pendentives in such magnificence and they were the first to grapple with the problem of its use, which demanded a constructional skill far beyond anything that had been achieved before.

The interiors of Byzantine churches were always decorated with murals or mosaic, which were carried over also on the vaults and domes without interruption, which in fact, gave more canvas space that was needed for decoration. Various surfaces were used to provide a series of pictures of

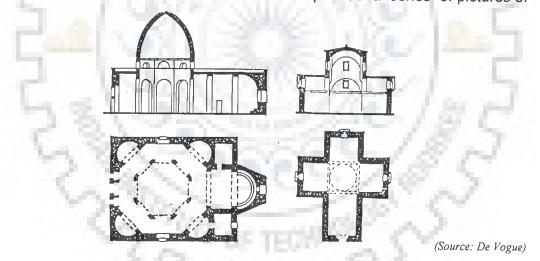


Figure 2.8 Examples of Early Byzantine Churches

Biblical incidents and characteristics to teach and assist the illiterate, and overawe the spectator. The floor of the churches were also decorated with mosaic, following the Roman prototypes, designs were geometrical in character

^{lix} Sancta, not Saint, after W.R.Lethaby, since the Cathedral was dedicated not to a Lady Sophia but to the Divine Sophia; the Wisdom of the Logos, or word of God.

and composed of many coloured marbles. The roof of a Byzantine church consisted of a series of domes. However, the Eastern outlook that stimulated the iconoclastic movement resulted in a ban on sculptural representation and encouraged the elaboration of non-representational ornament, resulting finally in an Edict by the Eastern Emperor, in 726 AD, commanding 'the destruction of images' in church.

<u>Bell Tower</u>: Another feature of Byzantine architecture is the introduction of a belltower. However, it was of a comparatively late origin, probably 6th century. "There can be no doubt, (the bell towers) originated with basilicas of Italy". ¹⁹⁷

2.2.3.7 The Impact of the Division of Roman Empire

In the early periods "there were many kinds of Christian leaders, both men and women. No central Authority regulated their activities, but by AD 100, churches began to distinguish between religious leaders, called clergy, and the general membership. The most important leader in every large church was a Bishop". ¹⁹⁸ At the close of apostolic age, Christianity existed in other places also, in different parts of the vast Roman Empire. "By the time of Paul's conversion a number of Christian communities had already come into being – not only in the Holy Land but also in Phoenicia, Syria, and other parts of Asia Minor. When St. Paul later traveled to Rome, there were church members waiting to greet him at several stops on the way". ¹⁹⁹ In those periods, these communities were independent of one another, with its main leader called the Bishop. However, by the end of fourth century Christendom had come to be largely dominated from five centers; Rome, Constantinople, Antioch, Alexandria and Jerusalem. The Bishop of these centers had come to be called Patriarchs with each one having full control over his own province. In 395 AD, Emperor Theodosius divided Roman Empire into two parts; Western and Eastern, with Rome as the capital of the West and Constantinople, capital of the East. Gradually, the Patriarchs of Antioch, Alexandria and Jerusalem came to acknowledge the leadership of Constantinople and Rome was isolated. Thereafter, the struggle for the leadership of Christendom arose between Rome and Constantinople.

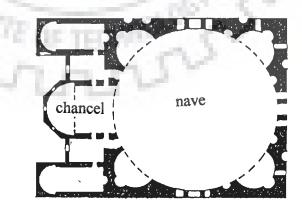
Finally in 476 AD, "The last (Western) Roman Emperor lost power (and) ... German chieftains carved up the Western Empire ... (however) after the fall of Roman Empire, the Pope had more Authority than any other person in Europe".²⁰⁰ "The Eastern Empire survived as Byzantine Empire (till) ...1453, when Turks (Ottoman Muslims) captured its .capital, Constantinople ... The Middle ages began after the fall of the Western Roman Empire and continued for about 1000 years. ... The two centres of Christianity - Rome and Constantinople - drifted further apart during early Middle Ages. ... Disagreements over the Pope's Authority in the East (and finally) produced a schism (split) in 1054 AD, between Eastern Orthodox Churches and Roman Catholic Church".²⁰¹ Impact of the Division of Roman Empire in Church Architecture: The division of

Roman empire into two, in 395 AD, leads to remarkable changes also in the character of church architecture, especially in the East. Architecturally they started to "develop independently" with the East depending more on traditional lines while (in the West) the Roman "basilica was to influence the ... (Western) church (architecture) for the next four hundred years; and it was the basilica (type

church) which, leading up through the Romanesque (architecture) ... provided the basic plan for Gothic Cathedral". ²⁰² In the East, local traditions influenced architectural development to a far greater extent than had been possible in the days when the imperial stamp was set on all buildings. One style was no longer general over Southern Europe and West Asia. Further, from fifth to eighth centuries, Rome and Italy suffered a long series of disasters, while Constantinople gained and prospered. In 586 AD, Italy was completely overthrown, only to rise again in 800 AD under Charlemagne, and the rise of Papal power under the Popes Adrian I and Leo II (772-816 AD). Some Scholars are of opinion that the architecture of Italy after this period "might almost be called Papal". ²⁰³

2.2.3.8 Syrian Churches

The early Byzantine examples in Syria can be seen as the connecting link with Early Christian architecture. The cathedral at Bozra of 512 AD [Figure 2.9] is a typical example. It is square externally like the Early Christian architecture, but circular inside and has four niches to fill the corners of the square.



(Source: De Vogue)

Figure 2.9 Cathedral at Bozra

"The church architecture of Syria "is almost entirely limited to the fifth and sixth centuries. The country was peopled chiefly by the Greeks who, though quite independent of other Christian countries, evolved there a style of considerable ingenuity which might have had great effect on the architecture of Western Europe, (but) in 639 AD the country fell into the hands of Saracens, who completely put an end to Christian building. (The) doorways and windows have arched openings.". ²⁰⁴ Early churches in Syria had shown considerably more external ornamentation than what was followed in the West. The semi-circular apse is again fixed inside the thickness of the wall mostly, but there were also present churches with the apse projecting out.

<u>Vaulted Roof</u>: The shortage of timber and abundance of stone encouraged the Syrians to develop of barrel vaults in stone over the nave, in place of Roman timber frames. Churches, especially in "Southern part of Syria, in what is known as the Haouran, were vaulted with stone ... which is of third or forth century. The most noticeable peculiarity of (these churches) were their spaciousness. (They) had much greater width and less height than churches which came after".²⁰⁵

2.2.3.9 Early Coptic Churches

Coptic^{lx} art (was the art) produced by the Christians in the Nile valley, from the time of the Peace of the Church (313 AD) until the Arab conquest of Egypt (640 AD). It was distinctly different from that of ancient Egyptian art. "The one and only symbol of the ancient art officially adopted by Egyptian Christianity was

^{1x} The word 'Copt' is merely a corruption of the Greek word *aigyptios* meaning Egyptian. [Huyghe, Rene. (Ed.) Larousse Encyclopaedia of Byzantine and Medieval Art, The Hamlyn Publishing Group Ltd., Great Britain, 1968, p.67]

the ansate cross, the hieroglyphic sign for the word 'life'". ²⁰⁶ Its church seceded from the main body of the Roman church after the council of Chalcedon (451 AD).

In Coptic churches the exterior of the churches were again very bare and plain. It "always (had) three altars. This tri-apsidal arrangement was evidently customary in Egypt long before it appeared in Italy. The seats of the clergy are generally arranged around the central apse, like that of Torcello Cathedral [Figure 2.10], and behind the Bishops chair, in the center, is a little niche in the wall for the ever-burning lamp. The East end is separated from the body of the church by a screen of wood with doors (iconostasis)." ²⁰⁷

<u>Vaulted Roof</u>: The nave is generally barrel vaulted in stone, instead of having a timber roof as in Italy. These barrel vaults were semi-circular earlier and later

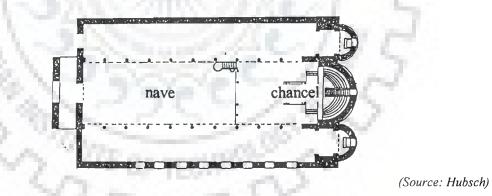


Figure 2.10 Torcello Cathedral, Egypt

they became pointed. This means that the Copts were employing the use of arches between columns in their churches, long before it appeared in the West. <u>Apse</u>: Another important difference was that, there were generally three domes, side by side, over the East end. The apse, semicircular, dome is generally built in

the thickness of the wall. The church of Abou Sargah [Figure 2.11] in the ancient Roman fortress called Babylon in Old Cairo, built in eighth century, can be taken as an example of this.

2.2.3.10 Romanesque Architecture

On Christmas day, 800 AD, Charlemagne, king of Franks, (France) was crowned Emperor in the basilica of St. Peters Rome after it became clear that the

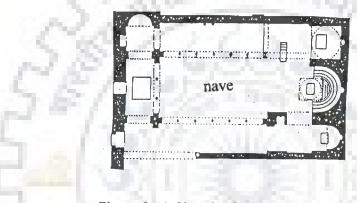


Figure 2.11 Church of Abou Sargah, Cairo

Emperor at Constantinople was no longer able to protect the Western empire. Also there was strong dissatisfaction and disagreement between the Roman Pope and Patriarch of Constantinople on matters of superiority, especially in the time when there was an urgent need for a leader to defend the Christian faith and territory from the Saracens. There was also a strong dissatisfaction in the Western church with the Edict of Eastern Emperor in 726 AD commanding 'the destruction of images' in church.

The term Romanesque^{ixi} is used to indicate a style of Christian architecture, founded on Roman art, which prevailed throughout Western Europe

(Source: Butler)

from the close of the period of 'basilican' architecture to the rise of Gothic architecture. The essential characteristics of Romanesque style were determined between eight and tenth centuries, and the beginning of eleventh century marked a new era of development and the basilican plan, with its nave and aisles, and timber roofs along with other 'local' Roman ruins formed their modal. One of the reasons was that "until the end of eleventh century the Benedictine Order was all-powerful in determining the matters of church planning and ritual, but in 1098 AD the Cistercian, a rival order, was founded. S. Bernard, the most famous member of the new order, laid down stringent rules for his followers. A church, he declared, "shall be of greatest simplicity, and sculpture and paintings shall be excluded". ²⁰⁸

2.2.3.10.1 Characteristics of Romanesque Architecture

Interior Spaces: The plan of Romanesque churches "was (also) based upon that of the basilica; the atrium was omitted, so was the transept sometimes; but when retained the transept was generally made more prominent than in the basilica ... Window openings are usually small". ²⁰⁹ An arch similar to the 'Triumphal arch' as occurred in basilica type churches occurs here also. The best example for Romanesque architecture is the Pisa Cathedral, built between 1063 and 1118 AD [Figure 2.12]. The Romanesque churches "have an apsidal East end ... The plan of these churches was founded on the basilica type". ²¹⁰

<u>Intersecting Vaults</u>: Structurally, the most important feature of Romanesque was the introduction of intersecting vaults and as a result the timber roofing of earlier

^{bi} The word Romanesque was actually coined by Charles de Gerville, a Norman archaeologist, in order to define Western architecture from 5th to the 13th centuries.

churches disappeared from larger churches or was used only to cover and protect the vault beneath. Another difference was 'piers' replaced the columns in early Christian churches and the thickness of walls increased, as architects feared the thrust of the vaults could damage the structure.

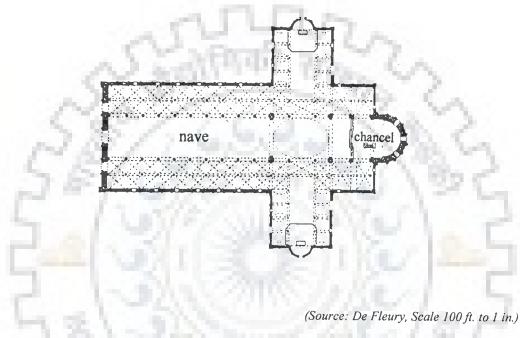


Figure 2.12 The Pisa Cathedral

2.2.3.11 Gothic Architecture

In 1140, in the Abbey of St. Denis near Paris, a new and revolutionary style was born which, though owing much to the Romanesque style, was sufficiently distinct in its character to deserve a title of its own- Gothic. Though, this date must not be regarded as a terminus to one phase of architectural development, Gothic style originated in around this time, mainly in France, the "excellent building stone of France ... aided" ²¹¹ this development. "The point of

departure (was a) vaulting framework of intersecting stone pointed arch ribs, which supports the stone panels above". ²¹²

However, the basic plan was almost like that of Romanesque, except for a tower-like façade in the front, which had developed slightly from Romanesque period itself. The central nave of Gothic churches always had a very high roof, which makes the human being inside very tiny. Gothic architecture continued till around 16th century.

The best example of Gothic style church building is Notre Dame, Paris [Figure 2.13] built between 1163 and 1250 AD.

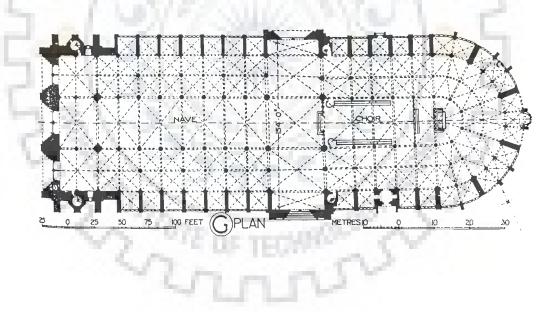


Figure 2.13 Notre Dame Cathedral, Paris

2.2.3.12 Inferences from the Study of Western Church Architecture

To sum up, though the West European church architecture went through different phases, like Early Christian (before c.330 AD), Byzantine (330 AD to

around 9th century), Romanesque (9th to 12th centuries) Gothic (from 12th to 16th centuries), the basic plan of the church did not change much, unlike its elevation, volume and magnificence of construction.

2.2.3.13 Common Characteristics of Western Church Architecture

- The interiors of these churches were always highly decorated, dignified, bright and impressive right from early days up to Gothic period.
- Comparatively the attention is paid to exteriors was always less, but still it
 was always consciously decorated right from early basilican churches, and
 this trend increased as time passed by and reached its pinnacle in Gothic
 period.
- There were no strict rules regarding the orientation of churches right from
 early churches to Gothic period.
- A water body was present in front of early churches but it was abolished later (around 8th century).
- There were no compound walls around the church premises at any stage.
- In Eastern churches there was a partition (*iconostasis*), which divides the sanctuary from the nave. In later periods it was replaced by a curtain.
- In the Eastern churches, a vault was present in the church, mostly over the altar, sometimes completely. It was absent in the Western churches.
- An arch known as 'Triumphal arch', separated the chancel from the nave, in most churches.
- In no case the width of the chancel was found to be a smaller rectangle than the width of the nave.

- In no case the roof of the chancel was found to be projected upwards, to extenuate its position in the over all form.
- The basic architectural plan of the churches was more or less the same, based on basilican churches, through out this development, as can be seen by comparing the plans of the above periods. [Figure 2. 3, 2.13, 2.14]

2.2.4 Development of Jain, Buddhist & Hindu Temple Architecture in Kerala 2.2.4.1 Introduction

The temple architecture of Kerala forms a totally different class of its own mainly because of the fact that the major material used for construction of Kerala temples was predominantly timber, compared to the main stream of Indian temple architecture where stone has been the principal construction material. The temple architecture of India itself was predominantly timber earlier, until 'living' rock first (3rd century BC), and finally stone blocks (early 5th century AD) replaced it. This fact is evident from the earliest rock-excavated Buddhist temples, which were all copies of the brick and timber architecture that existed during that period. Although the basic concept of Kerala temple design is not different or extraneous from the main stream of Indian temple architecture, the influence of climate, especially the heavy rainfall of the region and indigenous materials available there, made it drastically different from that of the rest. The South Indian style of temple architecture is usually called the Dravidian style and the Northern style, Indo-Aryan. Some Scholars classify the temple architecture of Kerala as *Dravida*-Kerala, i.e., a regional style of *Dravida* tradition, influenced by

Kerala's geological and climatic conditions. However, the so-called Dravidian architecture of South India also had only a limited influence on Kerala's temples. Even the temple rites in Kerala temples are different, "mostly based on thaanthric^{1xii} mode as against the predominance of Vedic system elsewhere". ²¹³ To understand Kerala temple architecture a brief outline of the growth of temple architecture in India in general is necessary.

2.2.4.2 Religious Architecture of India in Pre-Christian Era

In the vast remains of the Indus valley civilization there have been not, at least not yet, found any building that can be categorically be classified as a temple, except for some rudimentary structures which some Scholars consider as sacrificial altars. Ixiii Therefore, if at all those structures were indeed sacrificial altars, it can be safely assumed that as far as religious architecture is concerned the Indus civilization went only up to the construction of rudimentary sacrificial altars. If there was a phase before this, of which nothing survived, a period in which only ephemeral materials were used for construction, then it would have been copied in brick by the Indus builders and one would have found some remains of it, amongst the vast ruins of Indus Valley. So, in the absence of that, it is generally agreed by most Scholars that, the earliest temple with a 'built form' had its beginning only some where between the decline of the Indus valley civilization and the rise of Buddhist architecture under the Maurya dynasty.

bii Thantras are works containing mystical formulas. There are 3 important *thaantric* systems in India; i.e. Kerala, Kashmiri and Bengali (Gouda). Kerala one is more saathvik and it is Vedic worship in Thaanthric mode while other two are non Vedic (vaama-maarga). The earliest thaanthric work current among the thanthries in Kerala is Prapanchasaara Thanthra of Shankaracharya written in 9th century AD. kin Many scholars, like Romila Thaper, dispute whether those elements were indeed a sacrificial altar or

not.

However, between the decline of Indus civilization (about 1600 BC) and the development of Mauryan empire, which established itself as the first single paramount power of Northern India, under Chandragupta Maurya (c. 320 BC), there is an archaeological black hole of about 1300 years. We know about this period only from the Vedic texts, which are religious inspirations and provide not much historic evidence.

According to 'Sanatana Dharma',^{kiv} as it can be understood from the Vedas, the earliest form of worship, "was 'Svarth-yajna' i.e., sacrifice (by oneself) on behalf of one self, in ones home and (it was only) later the new concept of 'Paratha-yanja' i.e. sacrifice (by oneself) for others came. This lead to the existence of 'Yajna Shalas' for public worship". ²¹⁴ Most Scholars argue that this was the reason why temples are not mentioned in the Vedas. "The Vedic people did not raise temples because the particular network of their worship did not required such edifices". ²¹⁵ While the Vedas do not encourage the use of idols^{bw}, modern Hinduism, which developed out of it, came to be gradually modified as the largest user of idols, may be through its contact with Jainism and Buddhism, as well as other indigenous cults that existed then. This could have lead to hypaethral 'temples'; if at all those structures may be called temples. So it is believed by a School of Historians that the rise of Jainism and Buddhism, during the last centuries of pre-Christian era, and the development of their own versions of the rituals and the like, resulted in the post-Vedic Hindus also adopting the use

^{bxiv} The broad name given to the religious practice of the Vedic Period, from which modern Hinduism developed later.

of idols, which in turn resulted in the formulation of the earliest temple forms, that exists today. The rationale for formulating this theory is only that, there have not vet been found any temples that are older than the Buddhist Stupas. "Brahmanisam absorbed many teachings and rituals of Jains and Buddhists and then got itself transformed to modern Hinduism; practically a "new religion", which led to Vaishnavisam, Shivisam and 'Bhakthi Cult^{lxvi}."²¹⁶ Although most Scholars accept that in the transformation from Sanatana Dharma to modern Hinduism the doctrines of Jains and Buddhists extended a profound influence, the theory that Hindu temples came from, or after, Buddhist is now disputed by the very fact that the earliest Buddhist rock-excavated temples were all faithful imitations of the existing timber structures of that period, which served as their models. These original structures, being made of perishable materials, got decayed but their imitation in rock continues to live to this day. The Scholars of the first School of thought counter this by saying that, the early Buddhist structures were indeed imitations, but only of secular/ residential buildings and not religious buildings. Again, although 'places of worship' are mentioned in the 'Puranas', which are definitely older than Buddha's time, and also there is the classic instance of the infant Buddha himself being taken to, soon after birth, to the 'shrine' of yaksha^{kvii}, Sakya Vardhana; but the possibility of these 'place of worship' and 'shrine' being hypaethral is not denied by later school. The

^{bv} One of the Rig Vedic hymes say, '*Prathima Swalpa Buddhinaam*', meaning, 'those of little inteligence uses idols'. However, from this statement itself, it can be deduced that the authors of these Vedic hymns knew idol worship.

^{lxvi} Workship of personal God.

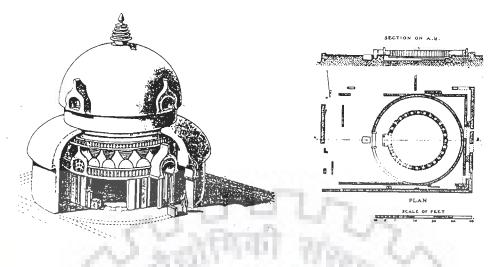
^{Ixvii} Yaksha is a demon god.

Investigator, therefore concludes that 'the exact sources of Hindu architecture still remains obscure'.

In South India also, idol worship was in vogue, at least from second century BC. In fact, some of the roofed temples of later periods were originally hypaethral in its earliest period. "The recent excavations in the Gudimallam temple in Chittor on Tamilnadu-Andhra border revealed the fact that the linga with its *pitha* (base), both of sand-stone, were originally hypaethral in second century BC and a brick shrine (walled enclosure) enclosing it came up only in first-second centuries AD". ²¹⁷ This is also, the oldest instance of an idol worship practice found in South India. This practice of keeping the temple hypaethral continued for a very long time throughout India.

The earliest known 'structural' temple of India, discovered through excavation, which Scholars, including Percy Brown, have identified as a Buddhist temple, belongs to the Mauryan period (c. 2nd century BC). It was found in Bairat district of Rajasthan but is too fragmentary to extract a complete idea about its form. It is a circular shrine measuring 8.23 m in diameter and made of lime-plastered panels of brick work, with 26 octagonal pillars of wood [Figure 2.14].

It was entered from East through a small portico, supported on two wooden pillars. The whole structure was subsequently enclosed within a rectangular compound. The second oldest temple was also Mauryan; Temple No. 40 at Sanchi of c. 1st cent AD. Externally it was rectangular in plan, but inside it is apsidal with an ambulatory path in between. The side entrance of this temple, however, clearly shows that it has been copied from rock-excavated style



(Reconstructed by Percy Brown)

Figure 2.14 Reconstruction of circular temple at Bairat, Jaipur (c. 2nd cent. BC) of architecture, meaning that it was built after rock-excavated architecture had come into vogue. Therefore, it can be deduced that, as stated earlier, the earliest temple with a 'built form' had its beginning between the decline of the Indus valley civilization and the rise of Buddhist architecture. Also in a fragmentary inscription again of the 1st century BC found in Besnagar near Sanchi, the site of the famous 'Column of Heliodorus', "there is a reference to the 'excellent palace of the God of *Vasudeva*'^{lxviii}, it seems certain that an image of the deity had been housed there". ²¹⁸ All this clearly shows that the practice of using an idol was there in the last centuries of pre-Christian era.

2.2.4.3 Jain Architecture

The term 'Jainism' has come from the word 'Jina' which means a conqueror, that's a person who has achieved spiritual liberation. Jains believe

^{kviii} Another name for God Vishnu. The inscription refers to the column as a Garuda standard, presumably because it originally bore an image of Vishnu's eagle mounted on the top, of which no trace can now be found. The patron is named as Heliodorus, emissary to the Shunga court at Vidisha from Taxila, capital of Gandhara kingdom now in northern Pakistan.

that there are 24 such liberated persons or saints known as 'Thirthankaras'. Kalpa Sutra, a Jain canonical text, describes the lives of first Jina, Rishbhanatha, and 24th Jina, Mahavira, along with some other Jinas like Parshvanantha, the 23rd Jina, who lived 250 years before Mahavira (who introduced the main vows of Jainism). The Jainas believe that Jainism has existed since eternity and it has no beginning and would have no end. Mahavira, the last Jina, was born in a Kshatriya family. The Jains of course, do not consider him as the 'founder' of their religion, as is but believed by some others. It is believed that, Chandragupta Maurya (reigned from 321 BC to 297 BC), the great Mauryan Emperor, became a Jain monk, abdicated his throne and went to Shravanabelgola in Mysore. Although Chandragupta Maurya went only up to Mysore, his followers traveled further to different parts of South India and Jain religion had its beginning in Kerala and the extreme South of India during this period. The Tamil classics Manimekhalai and Silappadikaram refer to the high degree of Jain influence in South India in the first centuries of Christian era. "Jainism was the first Sanskritic non-Hindu religious tradition, though later on Prakrit was also resorted to. It established the first historical monastic community". ²¹⁹ However, in 80 AD, some 600 years after the death of Mahavira, the Jainas got divided into two principal sects, mainly on the question of whether one should wear clothes or remain naked, and of whether salvation is possible for woman.

King Kharavela of Kalinga in modern Orissa State, who ruled in the first century BC, was another follower of Jainism. He excavated many Jaina caves and set up Jaina images and memorials for monks. He built a large number of residential chambers and commodious hall on top of the Udayagiri hill in Orissa for the use of Jaina monks. In North India, the Jain temples are called *Bastee*, *Jina-mandira* or *Chaitya* and in South India they are called *Palli*.

2.2.4.4 Buddhist Architecture

Buddha was born in c. 563 BC and died in c. 483 BC. "Buddhist tradition mentions the erection of a number of Stupas immediately after the death of Buddha, eight of them over his corporeal relics and the ninth over the vessel in which such relics were originally deposited. Here the votaries of Buddha were simply following a long established custom. Tradition has it that (after 262 BC) Emperor Ashoka pulled down the original Stupas and re-erected them, besides raising up many new ones". 220 However the relic worship occupied a prominent place in the rituals of early Buddhism and later Stupas in itself, become a symbol of Buddhist faith and its architecture became particularly associated with the Stupa, the domical structure of brick and stone masonry. Structural shrines known as Chaithyas, with a Stupa installed inside, came later and it replaced the open Stupas as meditation/ prayer spaces of Buddhist monks and devotees. The Chaithya shrine, in its typical form, was a long rectangular hall, apsidal at the rear end, and divided into three sections by two rows of pillars, originally in wood, along the length of the hall meeting at the back end. Archaeologically only a "few remains of structural Chaithya halls are (found and they are) extremely fragmentary; in most cases only foundations are left, and in plan they conform to typical *Caithya* shrine". ²²¹ They usually had a vaulted roof, again in timber.

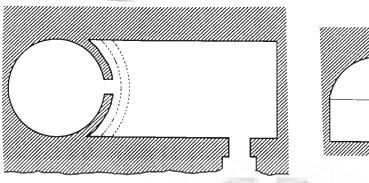
It was, at this juncture, the third Mauryan Emperor Ashoka (ruled 274-232 BC) steps in, bringing a turning point in Indian religious architecture. He embraced Buddhism and started to work towards spreading the faith by building Stupas and other monuments. He seems to have realized the fragile nature of prevailing timber structures and started to look for a more permanent material for construction and this search ended in 'living' rock. So, side by side with the timber architecture of the times, there arose a movement, which resulted in a series of *Chaithyas*, and other religious resorts, being 'excavated' into living rock.

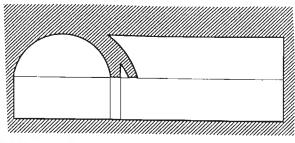
India's connection with the Greek, especially after the invasion of India by Alexander the Great in 326 BC, is well established by Historians now. Also known by now is that Seleucus and Chandraguptha Maurya had established diplomatic relationship with each other and there was "private and friendly correspondence between Greek king Antiochus I (ruled 280-261 BC) and Bindusara (Chandragupta's son ruled 298-274 BC)". ²²² Emperor Ashoka, Bindusara's son, had his "edicts engraved in rock faces and on columns, and the languages used were, other than a variety of Indian languages, Greek^{bix} and Aramaic". ²²³ All these clearly shows that Greek language and culture was very well known to Mauryan sculptors, so it can be also assumed that they had a fairly good knowledge of Greek architecture in rock (marble) also. It could be possible that after understanding about the possibility and durability of rock construction from the Greeks, Mauryan sculptors were encouraged into taking one step further and started to excavate directly into living rock. Being made of a more permanent material, these structures have survived to the present day. Although Emperor Ashoka wanted his structures to last forever, or at least for more time, he/ his craftsmen, apparently, did not attempt to change the existing architectural style, therefore those cave excavations were all faithful imitations of the contemporary timber structures, which served as the models. This reproduction of all the existing architectural details of that period, at least what they could imitate in a cave structure, that's in their frontal and interior aspects, enable us to form an idea of how the buildings of those periods looked like. It can be seen that they were simple structures, comprised of a square sanctum with a small pillared porch, called *Mandapa*, in front, both covered by a conical roof.

In some of these early rock excavations, wood-work was done at the entrance, continuing the old style, but later that too was changed to rock. The earliest of these caves excavated by emperor Ashoka, in 262 BC, are in Barabar and Nagarjuni hills near Gaya in Bihar. They were but dedicated to the Ajivikas^{bxx}. The most important examples of this group are 'Sudama' and 'Lomas Rishi' rock excavations [Figure 2.15]. This series of caves are indicative of the earliest simple structures consisted of a circular cell or shrine alone, with out porch or mandapa. "The *Chaithya* cave at Karle (c. 1st century AD) is the most mature expression of this early movement" ²²⁴ [Figure 2.16]. This phase of rock excavated architecture extended approximately over a period of more than a

^{1xix} In a bilingual edict erected by Emperor Ashoka now located in Afghanistan.

^{1xx} The Ajivikas, 'Followers of the way of Life,' were an ascetic order that started at the time of Buddha and Mahavira and lasted until the fourteenth century. Asoka in his Seventh Pillar Edict ranks the Ajivikas third in importance of the religious groups he patronised after the Buddhists and Brahmans. They were therefore ahead of the Jains. It was probably because of this that Ashoka excavated rock-cut caves to them as monasteries.





(Source: Percy Brown)

Figure 2.15 Plan, Section of Sudama Cave, Barabar Hills

thousand years from the time of Emperor Ashoka, and is found scattered all over India, the latest of them belonging to the close of the tenth century AD.

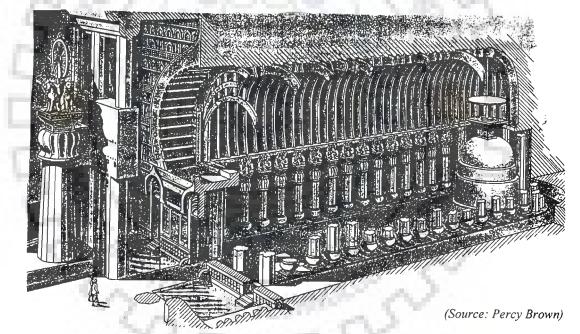
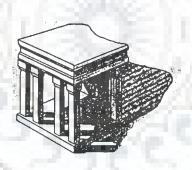


Figure 2.16 Sectional Perspective of Karli Chaitya (c. 1st cent. BC.)

2.2.4.5 Hindu Temple Architecture in North India

It seems a curious fact that, the organised Hindu religion and Jains did not adopt this new rock-excavated style of architecture for at least some 700 years after its initiation by Emperor Ashoka. Some Scholars are of opinion that there was a lingering tradition of a taboo on using stone for temple architecture because of their long association with funerary erections. Then, around 400 AD, the Brahmanical and Jain creeds also started to adopt rock excavated mode of temple architecture, probably by now understanding its durability, or its influence over the public. This development of Hindu art and architecture could also be the result of newly established ruling houses, most notably the Guptas in North India, and the Chalukyas (in 5th century AD), the Pallavas (in 6th century AD) and the Pandyas (in 7th century AD) in South India. In the North, the Guptas commenced the inauguration of this style.

The earliest Gupta examples of 'Hindu' rock-excavated cells are at Udayagiri,²²⁵ which were excavated by Chandragupta II, ruled 382 to 401 AD. Here some caves, for example cave-shrine No. 1 at Udayagiri [Figure 2.17] was



(Source: Percy Brown)

Figure 2.17 Entrance to the Cave-Shrine at Udayagiri

only partly a rock-cut sanctum, because it had a structural porch, with four pillars, projecting outside the cave, as the entrance, which made it being called 'false caves'. This feature was later adopted by Gupta architects, in around 415 AD, to give the basic form of Gupta structural temple. Hitherto, the Hindu structural temples, if at all structural temples were used by Hindus, they were made of timber or other perishable material, but under the Guptas the potentiality of

dressed stone were appreciated for the first time. This was a major step towards the formulation of a built-form for Hindu temple. So, it was during this period that, a square sanctum with a pillared porch in front (Mandapam) became the basic characteristic 'form' of an Hindu temple, or at least it is certain that this form was first built in stone, because it is also possible that, as stated earlier, the form was already adopted and was in vogue, as the accepted temple form, but being built in timber it decayed with time because of the perishable materials used. So in the Gupta period the most important development in the growth of Hindu temple architecture took place; the construction of temple in cut stone. The impact of bhakthi cult, that is the worship of a personal God, which was in vogue during this period also accelerated this and an age of temple construction flourished during this period (c.400-700 AD). It could be said that it was around this period that the transformation of Sanatana-Dharma into modern Hinduism was formally complete, and 'Nirguna-Brahma' (God worshipped with out a form) of Sanatana-Dharma become 'Saguna-Brahma' (God worshipped with a form usually as an idol or picture) in these period and image worship become established.

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This new development under the Guptas is well represented by Temple No. 17 at Sanchi built in about 415 AD [Photo 2.13]. It is a square sanctuary built of stone blocks with a small pillared porch in front both of which are elevated on a plinth. The roof of the sanctuary is flat and is created by horizontal stone slab and there is no tower like structure over this roof. The plain wall surfaces are capped by a horizontal moulding which functions as a cornice. This form continued to be

the accepted form of Hindu temples for almost two centuries and many examples of this type can be seen, belonging to 4th and 5th centuries AD.

The next stage in the development of the temple form, from the Gupta temples, came in the 6th century, when a spire was started to be added over the sanctum. Dashavathra Temple at Deogarh in Lalithpur district [Photo 2.14] is one of the early examples of this. It is built of stone and shows a rudimentary spire built over the sanctum roof. This spire structure was later called '*shikhara*', and it went on to become the most striking feature of an Indian temple. So the idea of roofing the sanctum with a tall, curvilinear *shikhara* was started only from about the beginning of seventh century. The later Gupta period appears to have been an age of further experimentation of styles in North India because one can still see various other temples forms were tried during this period, (7th –8th centuries); temples with flat roof, temples with under-developed *shikhara* and a few with paramedical roof of resenting tiers.

2.2.4.6 Worship Practices of South India in Early Christian Era

A fairly vivid picture of the life and the organized worship practices of this land during the Sangam age is available from its literature, which mentions erection and veneration, with accompanying rituals, of monuments raised in honour of the dead like '*Nadukal*' or stone-erections. The origin of this cult could be totemism and ancestor worship. Historians are of the opinion that this culture that had its beginnings somewhere around 500 BC, if not earlier, and prevailed till around 500 AD and continued in some modified or restricted form for centuries thereafter. The worship of trees as the abode of the spirits and Gods was also very common, especially in South India. "The Tamil epic *Silappadikaram*, thought to be written in third century AD^{bxi}, also mentions a *Podi-manram*, or temple of Bodhi-tree (*Vriksha-Chaitya*) of Buddhist affiliations. The worshipers of Yakshas and Nagas appear to have been the most primitive group". ²²⁶ It also mentions Buddhist Chaithyas as well as other temples, though Scholars are of different opinion as of what this word 'temple' means. The practice of the worship of Shiva Linga in Gudimallam (in modern Andra Pradesh) in 2nd century BC is already mentioned. So all this implies that worship of trees as well as the practice of idol worship was prevalent in South India at least from the early Christian era.

The earliest 'built' monument to come into vogue in South India also must have been hypaethral; simple low hemispherical solid dome (*Anda*) built over a burial place. Even the elaborate Buddhist Stupas of later period had its beginning much earlier from these simple, small hemispherical solid domes. Later, when it was associated with Buddhist worship and got king's patronage, it went on to grow into massive sizes, some even enlarged in later periods. The *Amaravathi* Stupa built in second century AD, revealed below its level urn-burials that was undoubtedly of a much older period. Some of the roofed temples of later periods were also hypaethral originally in its earliest period (like, as stated earlier, the Gudimallam temple). This practice of keeping the temple hypaethral continued for a very long time throughout India. There are many temples in Kerala which are still hypaethral, especially in the tribal district of Wynad. The famous Valliyoorkavu temple, in Wynad, was hypaethral till 1980's. However, in later

^{lxxi} Silapadikaram was written by Ilango Adigal, the son of a Chera King. The heroine of the story is Kannagi and is rooted in the ordinary lives of the early people of the Pandyan Kingdom. The most

Sangam period, wall enclosures were built around it and some were also roofed. Although none of these temples survived we have some word pictures of there simple or storied constructions in Tamil Sangam classics where it describes: "a temple with high brick walls and wooden beams, containing inside, on its brick wall, the painted picture of the deity that was worshiped, indicating that it was either a mural painting or a stucco figure, or sometimes a carved wooden plaque that constituted the principal object of worship".²²⁷

When roofed structures were built enshrining such existing platforms and cult objects (iconic representations), probably as a climatic and social need, they must have naturally imitated the secular buildings in architectural style of construction. Such temples are designated in Sangam works as *Kottam, Nagaram, Koyil* and *Palli.* Evidently, these names indicate different plans and styles of construction, although it is still a matter of dispute whether these structures had a 'roof' or were just walled enclosures. The epic *Manimekalai* speaks of temples of brick having imposing entrance gateways. So it is evident that in the early centuries of Christian era there existed even entrance gateways in Tamilakam, although none of it exists today. These temples, with its architectural style evolved out of secular vernacular buildings, could be Dravidian, Jain, Buddhist or Vedic-Hindu by religion. The main reason for its decay was mainly the perishable material of their construction, mostly brick and wood, which was abundant in the area. The harsh climate of the land also played an important role in its decay.

accepted time of its writing is between 200 - 300 AD, but some scholars put this date as 5th-6th century AD.

Latest excavations in Nagarjunakonda, in Andrapradesh have revealed the existence of Hindu temples side-by-side with Buddhist monuments of second century AD or older. Srinivasan, K. R., (1971) says, "One cannot fail to notice here the close similarity in architectural traditions between Buddhist and non-Buddhist types. These relics therefore also reveal the fact that the temples or shrines had a common plan, design and mode of construction, irrespective of the creeds to which they belonged in the formulate period of 'built form'. The creedal difference was marked only by the Gods or objects that were installed for worship and appropriate symbols or the plastic representations that formed the decorative elements of such temples". ²²⁸ Although generally the basic plan of a Buddhist *Vihara* always contained a space for the monks to assemble and meditate together, the above excavations prove that in early 2nd century, the Buddhist and Hindu temples had a common plan. Nilakanta Sastri (2002) is of opinion that, in those periods the "temple form were common to all creeds". ²²⁹

2.2.4.7 Temple Architecture of South India after Sangam Age

While the Guptas were building in North and central India, another brisk building activity was being pursued in the Deccan by the Chalukyan dynasty (5th to 8th centuries) in Aihole, Badami and Pattadakal in the present Bijapur district of Karnataka State. The Chalukyan King Mangalesha started this experimentation in 578 AD in Badami to give a new form to South Indian temple architecture, by starting to make 'rock-excavated' temples.

The Pallava dynasty of Kanchi, which ruled from 525 to 885 AD, was the next in South India to plunge into rock-excavated architecture, and they took it

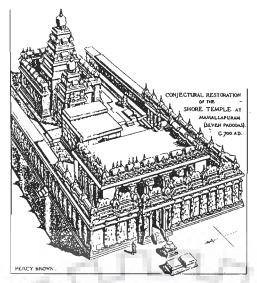
even further from just 'excavation'. Pallava King Mahendra I, (reign from 610 to 640 AD) contemporary of Chalukya king Mangalesha, taking the cue, excavated his first cave temple in Mandagappattu's very hard close-grained granite rocks, far away from his capital Kanchi. There is an inscription there which states, "this brick-less, timber-less, metal-less and mortar-less abode of Lakshita was caused to be made by King Vichitrachitta for Brahma, Isvara and Vishnu." This inscription is also important from the aspect that it tells that this work was a clear departure from the contemporary temple construction techniques using brick, timber, metal and mortar. Here again, as in Ashokan times, the rock-excavated architecture copied in all details the interior aspects of the existing structural temples, essentially *Mandapa* type of temples, which they imitated.

The next phase in the development of the rock-cut architecture was initiated by Mahendra's great son and successor, Narasimhavarman I Mamalla (640-668 AD). He not only continued to excavate into living rock and thereby copying all the interior details of the existing structural monuments of the period, but also tried to imitate the exterior aspects, or rather gave more importance to exterior aspects than interior aspects. To make this, his craftsmen cutout totally, from a monolithic rock, the complete exterior form of the existing temple form, like a sculpture. These monolithic structures are the most outstanding contribution to rock cut architecture by the Pallavas. They are located in the port town of Mahabalipuram and are now called *'Rathas'* [Photo 2.15]. The most interesting fact is that these structures translated into the hard imperishable stone monoliths, the various forms of a structural temples of brick and timber,

that were prevalent in the commencement of seventh century, thus they stand out as an exhibit of various temples that existed, or were already evolved at that time. Thus they form the most important landmarks in the study of earliest South Indian temple architecture. The most important contributions of these structures are that they stand as a model, and proclaim solidly to the world explicitly how the structural brick/ wooden temples looked, before stone temples were introduced in South India.

By this time, the Chalukyan kings had developed the 'rock' construction further, by moving from excavating into rock, to using 'dressed stone blocks' as construction material. The Pallava king Narasimha Varman II Rajasimha, taking the clue from Chalukyas, abruptly stopped all experiments with monolithic rock carved temples and constructed the Shore temple of Mahabalipuram [Figure 2.18], in around 700 AD. Although built using the same stylistic composition of the *Rathas*, it was built using carefully dressed granite blocks, and not carved in rock as earlier. The structure is oriented Eastwards and stands within *Prakara* (a walled enclosure, typical of South Indian temples) and with a small *Gopuram* (gateway). It is often said that, with the construction of this temple, the Dravidian architecture entered a mature phase, with its own distinct characteristic features.

There is, however, a further series of rock-excavated temples by Pallava kings after reaching their greatest achievement; the Shore temple. These are but small and less interesting probably because, now that rock structures could be 'built' with less effort and faster, naturally the laborious and time-consuming rock-



(Source: Percy Brown)

Figure 2.18 Conjectural reconstruction of Shore Temple at Mahabalipuram (c.700 AD) excavated architecture faded. The present State of Kerala has, unfortunately, most of its rock-excavated architecture started only in the post 700 AD period, and therefore are all such small cell shrines.

The Pandya dynasty, contemporary of Pallava dynasty, also started rockexcavated architecture soon after the pioneering Chalukyans and Pallavas, from the middle of the seventh century for over three centuries, (c. 650-950 AD) till they were overthrown by the Cholas. Their rock-excavated temples, in the Southern half of Tamilnadu and Kerala area are, though far more numerous than those of Pallavas, were all of less artistic value. It seems that these rulers have attempted rock-cut architecture in Kerala region also, mostly in 8th century; as it can be seen in Kottukkal, Irunilamcode, Trikkur, etc. The Authorship of these is doubtful because the history of this period, especially of Central and North Kerala, in itself is not very clear. However, the cave temple at Vizhijam, near Thiruvananthapuram is, although some Scholars site as an example of Pandya-Muttaraiyar vintage, it could most probably be an imitation of the Pandya style by the local Ay rulers, Vizhijam was their capital till the early 10th century.

To sum up, as far as South Indian Hindu temple architecture is concerned, this period, starting from 578 AD, when the Chalukyas starting rock-cut excavations (in Badami), through 640 AD, with the Pallavas started sculpting monolithic temples on rock (Radhas, Mahabalipuram) and through 680 AD, when the Chalukyans did first structural temple in dressed stone (Papanath temple) and finally its culmination in perfection by the Pallavas, in 700 AD (Shore temple, Mahabalipuram) is of profound importance. This period, 6th and 7th centuries, of organized Hindu religion accepting and starting to use rock/ stone based architecture, is also the period of many reformist movements in Hindu religion and also the period of many Nayanmars and Alvars. Ixii It is but a curious fact to note that this new type of temple architecture of this period, though created by great kings or with their patronage, was almost totally ignored by these Tamil hymnists. This was perhaps because "they were innovations that avoided the use of traditional (construction) material ... and as such militated against sampradaya (traditional practice)". ²³⁰ This omission by the hymnists again supports the theory that there was a lingering tradition of taboo in using rock for the construction of a temple because of its association with funeral structures. Evidently, it took time to become acceptable as what happened in North India. The Investigator would like

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to repeat here that, to get a better perspective, by the early 6th century there already existed a Christian church building in Kerala, as asserted by Cosmos Indicoleustes, who visited Kerala in 522 AD.

^{kxii} Nayanmars and Alvars were Tamil hymnists lived around fifth to seventh centuries, praising the Hindu gods Shiva and Vishu respectively. [Kulashekara Varman, the Chere king ruled from 800 AD to 820 AD, is considered as one of the Alwars and Rajashekhara Varma, his successer (ruled 820 to 844 AD), as one of the Nayanmar]

2.2.4.8 Temple Architecture of Kerala

As stated earlier, it is evident that when the practice of excavating into rock started, in the wake of 5th century, the early Indian architects copied the same design and details of prevailing timber architecture, whether secular or otherwise. Later, this copying was repeated again during the shift from rockexcavated to stone-built temples. Therefore the earliest stone temples form an important landmark in the history of Indian architecture because, they were all exact replicas of the timber architecture that stood before it, and it reveals how exactly the timber architecture of those bygone era looked. In pure Kerala style temple architecture, unfortunately this shift never happened. Laterite and timber were always the construction materials, because of the abundance of those materials there. Even after the rest of the country shifted from timber/ brick structures, to rock/ stone structures, in Kerala, the builders stuck to laterite and timber, therefore; as a result, being made of these perishable materials, none of the structures could last long. As a result, there are no buildings in Kerala, whether religious or otherwise, that are older than 9th century AD. The rockexcavated temples of Kerala also, with their indeterminate Authorship, belong only to 8th century and later. So, in Kerala, even to deduce that, the early stone temples were copies or replicas of the timber architecture of bygone era, as was the case in North Indian and Dravidian architecture, is also not possible. As far as rock-excavated temples are concerned, as stated earlier, they were mostly built by Pallava and Pandya kings, during the period when Kerala was ruled by them.

The earliest inhabitants, as stated earlier, worshipped totem Gods, spirits, trees, etc. They propitiated them by offering food with accompaniment of music and dance as is evident from Sangam literature. Gradually, sepulchral shrine took shape. The Kudakallu or 'umbrella stone' [Photo 2.16] found at Arikkanniyur (near Guruvayoor) is a typical example for this. Most Scholars are of the opinion that the Kodumgalloor Bhagavathi (goddess) temple is also grown around sepulchral shrine, erected by Cheran Cenkuttuvan in honour of Kannaki mentioned in the Sangam epic Shilappathikaaram. It is possible that, in Sangam age itself, fire worship penetrated into Chera country because Purananooru as well as Patirru-ppattu and other Sangam works, refers to the worship of sacred fires in houses, by local people as well as the kings. At the same time, whether it was Vedic or not is still a matter of debate among Scholars, the reason for this is that, the Sangam works, translated by different people give totally different versions and interpretations to the same words, in their effort to put in words like Dravidian, Aryan etc., which are in itself vague, in terms of an accurate meaning. The advent of Jainism and Buddhism into Kerala in the preceding years of Christian era (around 3rd century BC) also had its impact on the local people. The growth of Bhakthi movement heralded by Nayanmars and Alwars resulted in the rise of Hinduism at the cost of Jainism and Buddhism.

Though in a few places in Kerala, the typical Dravidian type of temple architecture is also found, built as late as in the medieval and late medieval periods, the vast majority of the traditional temples, or *Sri Kovil* as they are locally called, do not follow this style. The Bhagavathi temple at Vizhijam in the present

Trivandrum district is the earliest specimen of Dravidian style. It was built in stone "in the style of early Chola temples and has been assigned to the 9th century AD"²³¹. While the Dravidian temple was completely built in stone, the Kerala *Sri Kovil* is usually built with their base in stone, walls in laterite and roof in timber frame with clay tiles or wooden planks or sheet metal laid over it. This is because laterite and timber was abundantly available and sloping roofs were necessary in the high rainfall of this region.

As far as the question concerning how old this tradition is, there is no clear answer. The '*Sthala-purana*' (mythical history of the place), though with no scientific backing, usually places the establishment of many temples before the commencement of Kali-Yuga.^{bxiii} However archeological inscriptions on temples of Kerala are available only from about 800 AD. "The earliest inscriptional evidence about a temple in Kerala is found in Kantiyur Siva temple in Mavelikara, on a stone lying in front of the temple, records the gift of land to the temple to the year 823 AD" ²³², which would again take to the time bracket of 9th century, as of rock-excavated temples.

In the Sangam period the favorite deity of the present Kerala region (called Tamilakam then) was "Goddess Kottavai (Dravidian Durga) and she was propitiated with elaborate offerings of meat and toddy".²³³ "Ancestor worship was popular in Kerala and so was the worship of *'Kaali'* and *'Shastha'*".²³⁴ Parameshwaran Pillai, V.R., (1986) is of the opinion that, *'Kalari* was actually setup in every house for the worship of ancestors. *Kaavu* was actually the

technical term used for the temples of Kaali, Kurumba and Ayyappan. The term Kaavu came later than Kalari, when people felt the necessity of a centre for common worship in each social unit'. ²³⁵ The name Kovil for the temples is definitely older than both these terms. It seems that the idea of personal gods and setting up of 'Kalari' in each family lingered on for more time in Kerala and is still existing in many, or the Investigator must say, most houses irrespective of the religion of the owner. This practice is also suggestive of 'Svarth-yajna', i.e., sacrifice on behalf of one self, in ones home, as was the practice of 'Sanathana Dharma' of Vedic period. Like the question of origin, another puzzle yet to be solved, is that, the Kerala temples were also called in earlier periods 'mukal vattom' which means 'top round' for some reason. Some Scholars, including Parameshwaran Pillai, V.R., (1986) have put forward an argument, but with no scientific evidence to support it, that in "earlier period the central shrines of Kerala might have been constructed in the shape of 'Gaja-prstah' (the back side of an elephant), imitating the plan of Buddhist Viharas". 236 He base this theory on the term 'mukal vattom', since the roof or doors of the temples were never round in shape, it could be only from the shape of the plan that this name came.

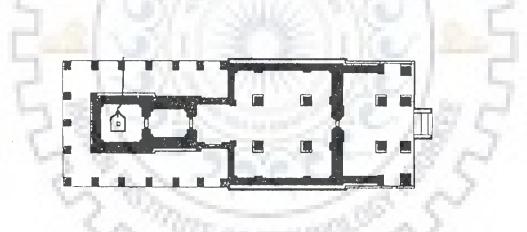
2.2.4.9 Jain Architecture of Kerala

As stated earlier, Emperor Chandragupta Maurya (321- 297 BC) on becoming a Jain monk, abdicated his throne and went to Shravanabelgola in Mysore and his followers traveled further into South India. It is believed that, in Kerala, Jain religion has had its beginning during this period. Sangam literature

^{bxiii} According to Hindu calendar the time from creation to the future destruction of world, is divided into four ages (*yugas*) and is arranged in order of declining span, peace and happiness. *Kaliyuga* is the last of

clearly shows that Jainism had considerable hold on the people of Kerala and it had royal patrons in Kerala as well. Ilango Adikal, the Author of the Tamil epic Shilppadikaram, was a Jain and a royal Kerala prince himself. This means that there were even Jain royal families in Kerala. He lived at Trikkana-Mathilakam (Kunavayilkottam) and it was a famous center of Jain religion and learning.

"The decline of Jainism in Kerala started in the 8th century AD when the Saivate and Vaishnavite movements made their impact, but it seems to have lingered till 16th century ... however, (it is) said to have influenced the architecture of (Hindu) temples and mosques of Malabar". ²³⁷ Logan (1887) has also drawn attention to the fact that "Hindu temples and even Muslim mosques have been built in the style peculiar to the Jains". ²³⁸



(Source: Brochure by Tourism Department, Government of Kerala) Figure 2.19 Kidanganad Jain Palli, Sulthan-Bethery, Kerala

There are some old ruins of a granite Jain *Palli* in Sulthan-Betherry, in Wynad district, it is called Kidanganad *palli* [Photo 2.17]. Some Scholars date it to 9th century, but most others only to 14th century. It has an axially arranged plan, consists of a square *Garbha-graha*, an assembly space in front of it, both

these yugas and it had its beginning corresponding to the Roman year 3013 BC.

connected by a narrow passage and a *Mandapa*, of the same width as the assembly space, in front [Figure 2.19]. It also has another detached *Mandapa* in front of the shrine. Unlike the Kerala style of temples, it has an almost flat stone roof, with two inconspicuous domical projections on top, one above *Garbha-graha* and other over the assembly space. Originally, the temple seems to have been enclosed by a peristyle, in which octagonal columns have mostly been used. The columns inside the assembly space are more carved than exterior ones. It's granite doorway and lintels are carved with Jain figures.

Although originally "there is no place for *bhakthi* or *pooja* in Jain religion, yet the impact of *bhakthi*-cult was so great that it (Jain religion) could not remain with out adoration" ²³⁹ as a result in "later Jain works ... (there is) elaborate details of *pooja* and *bhakthi*". ²⁴⁰ Therefore, in its most basic plan, the Jain *palli* has, like a Hindu temple, a *Garbha-graha*, but the main difference a Jain *palli* has with a Hindu temple is that, there is always present a room in front of Garbha-graha, where the Monks and devotees can sit and meditate or pray, which is not there in a Hindu temple.

Sreedhara Menon (1967) says, "there were several Jain shrines and temples in ancient Kerala and a few of them continue to exist even today as Hindu shrines, after undergoing a process of transformation". ²⁴¹ He gives the temple of Mathilakom, Kudalmanikkam temples at Irinjalakuda, Kallil cave temple, etc., as examples for this. In fact, Jains even now visit the Kallil cave temple, to worship the Jain Gods that are still there, which is carved on rock. Similar is the case of Chitharal cave temple and Nagar-Kovil. The Nagar-kovil

temple has kept records, which states "in 1504 AD, Venad king Bhoothala Veera Udaya Marthandavarma, had given some donation to this temple as '*Palli-Chantham*'."²⁴² The term Palli-Chantham is used to denote the donations given to Jain and Buddhist temples. This document thus asserts that in 16th century it was a Jain *palli*, it also points out that Jain temples were called *Palli* even in 16th century.

As far as Jain structural temples are concerned, most Scholars consider the Chandrapraba Jain temple in Palghat as the oldest, but "its date cannot be ascertained in view of the wholesale renovation it has undergone in recent times". ²⁴³ In front of the present temple stands the basement of an earlier shrine, which has a *Bali-peeda* (literally sacrificial altar, but mostly used to offer offerings), like any Hindu temple, and it is worthy to note that the granite *Adhishthana* (basement) of the deserted shrine is of '*Manchaka*' type [see Figure 4.9]. Another old granite ruins of a Jain *Palli* can be seen at Kidanganad in Wynad district, of Northern Kerala. In its axially arranged plan, it consists of a square *Garbha-graha*, an assembly space in front of it, both connected by a narrow passage and a *Mandapa*, of same width as the assembly space [Figure 2.25], in front. It also has another detached *Mandapa* in front of the shrine. This gives an idea on what temple plans of earlier periods could be.

"Apart from epigraphical data, the Jain monuments in Kerala may be grouped under two categories: rock-shelters and structural temples. While the former group is still intact despite their conversion into Bhagavathi shrines, traces of structural temples in original form are not many". ²⁴⁴ As far as the rock-shelters

are concerned "the most impressive ... (is at) Chitral, District Kanyakumari ... it is located in the ancient Ay territory and is associated with the inscription of the Ay king Vikramaditya Varaguna (c. 880-925)". ²⁴⁵ It still has the statues of Jain Monks carved in rock in the temple. "The rock edits here makes it clear that it was only in the 14th century it was converted to Bhagavathi temple". ²⁴⁶ As far as structural temples are concerned Chandrapraba Jain temple in Palghat seems to the oldest, but "its date cannot be ascertained in view of the wholesale renovation it had undergone in recent times". ²⁴⁷ In front of the present temple stands the basement of an earlier shrine, which has a *bali-peeda* (literally sacrificial altar, but mostly used to give offerings), like any Hindu temple, and its worthy to note that the granite *adhi-shthana* (basement) of the deserted shrine is of *Manchaka*-type.

2.2.4.9.1 Discussion on the Term 'Palli'

In South India, Jain Viharas were called by the term *Palli*. Functionally, there are some basic difference between Hindu temple and Jain *Palli*, while the Hindu temple is looked upon more as an 'abode of God' in the form of an idol, whereas the Jain *palli*'s are mostly a place where Jain monks and devotees could 'assemble' and meditate or pray. Therefore, *Palli* is conceived architecturally as a place where monks/ devotees could also 'assemble'. The Hindu temples were never called '*palli*', but Christian churches, Jewish synagogues as well as Muslim mosques are still called *palli* in Kerala.

As discussed earlier, the two early literary evidences that mention of a church building in Kerala, the travelogue of Cosmos Indicoleustes in 522 AD and

the Tharisa Palli document of 849 AD, other than mentioning a church building, does not describe the building. Therefore, in the absence of direct description of the form of early church buildings, other methodologies had to be adopted to deduce the form of early church building. In the 'Tharisa *Palli*' document of 849 AD, the word used to call the church building is '*Palli*', which is still the popular word for a Christian church in Malayalam. This term is today commonly used in Kerala to denote Muslim mosques as well as Jewish synagogues. Etymologically, it has been recognized that '*palli*' is neither Dravidian nor a Persian word, but a Paali word. A search into the evolution of this word may shed some light into the original character of the early churches, which compelled the naming of the worship place of Christians as such.

Palli was the term originally used to call places where Buddhists and Jains assemble for meditation and prayers. This term was used to differentiate it clearly from a Hindu temple, which is known more as '*Devaalayam*' or 'the abode of God'. There was essentially a difference between the two; one is meant for the followers to assemble and other was a structure for 'God to stay'. A Kerala Hindu temple, say, a Shiva temple, is not built for the devotees of Shiva to sit and pray but to install (or more correct word would be '*Prathisthta*', loosely meaning the same) the idol, or other symbol, of Shiva. The devotees would only assemble outside the building to worship Shiva, through the idol, when the doors of the temple are opened for this purpose. Therefore a Hindu temple was always designed as an 'abode of God' and the worshipper goes there mainly to 'see' and pray to the God, through an idol/ image kept inside this cell, from outside. This

act of seeing the idol from outside, when the doors of sanctum is opened for this purpose, called 'darshanam' and it is one of the most important activity a worshipper hopes to accomplish in going to the temple. This is totally unlike a Jain/ Buddhist *Palli* where the monks/ worshippers assemble inside a hall to meditate and to pray. In strict sense it would be more accurate to call the Christian church '*Palli*' than '*Devaalayam*' (which in fact, is also another Malayalam word for church, the rationale for that is discussed later) because universally the church is conceived more as a place for 'assembling' than as a place where God 'stays'. It is this thinking that prompted Jose (1985) to argue that "The term *Devaalayam* itself is against Christian theology." ²⁴⁸ It must be stated that the most popular English term for Christian worship is 'Holy Mass', which again supports this view. So the term *Palli* was used correctly, because of the functional similarity, to denote both the Jain temple and the place of Christian worship.

In other words the essential basic difference it has with a Hindu temple was accepted and acknowledged, and could also may have been used, in conceiving the building architecturally, from early periods, or at least from 9th century.

The Investigator would like to add here that, in fact, this essential basic functional difference with a Hindu temple was one of the main reasons for the churches of older periods could not survive for a long time, while a Hindu temple of the same period did. It is a basic fact that the size and usage of a church building was directly proportional to the number of parishioners, and it ceases to

function well the moment the parishioners outnumber the holding capacity of the church building. Unlike a Hindu temple, where there is no need for people to enter inside the building for worship, the Christian church is basically a place for the faithful to assemble. So while the increase in the population, depending on a particular temple, did not affected its size, whereas the church building has to be made bigger as and when the number of parishioners increase.

2.2.4.10 Buddhist Architecture in Kerala

Most Historians are of the view that "Buddhism appears to have been more popular in Kerala than Jainism. According to one of Asokan inscription (of 3rd century BC), "Keralaputras (Cheras) instituted arrangements in their country for prevention and treatment of diseases of men and animals" ²⁴⁹, which also asserts the presence of Buddhism in Kerala even in 3rd century BC. The Sangam epic *Manimekhalai* contains a detailed discussion of the different doctrines of Buddhism. "The Chera rulers ... patronized Buddhist temples without reservation. According to tradition, the Chera king Palli Bana Perumal and Vikramadithya of Ay kingdom, embraced Buddhism. Thus, by 5th century AD Buddhism gained considerable popularity in Kerala". ²⁵⁰ There were at least two major Buddhist universities in Kerala, at Trikkanna-mathilakam and at Sreemulavasam.

However, unlike Jainism, Buddhism did not leave any remains of its architecture, except for a few statues [Photo 2.18]. Even in the rock-cut caves of Kerala, there are none of Buddhist affiliation. Most Scholars agree that the existence of temples with *Gaja-prashta* shape (apsidal plan) suggests the possibility of the influence of the Buddhist *Palli* on them. There are also a number

of stray images of Buddha bequeathed to posterity in many parts of Kerala. Scholars are of opinion that many famous Hindu temples of the present day, such as the Vadakkunnathan temple, at Trichur, the Madavoor-para Siva temple, at Kazhakkoottam, Burumba Bhagavathi temple, at Kodumgalloor, etc. were Buddhist temples at one time.²⁵¹ The Buddhist religion began to decline from 8th century AD. The reasons for the decline of Buddhism and Jainism were mainly the rise of *Bhakthi*-cult, as well as the religious propaganda of Hindu reformers like Sri Sankaracharya. Nevertheless, it lingered on for some more time and finally disappeared completely by the 12th century AD. Scholars are of opinion that "images, processions, *utsavams* (festivals) etc., associated with popular Hindu temples in Kerala are ... a legacy of Buddhism".²⁵² Many Historians consider that "the artistic and architectural styles of the Buddhist temples influenced the Kerala temples to some extent".²⁵³

2.2.4.11 Temple Construction in Kerala After 800 AD

A major inflow of Brahmins from North India to Kerala 'through '*Tulu-nad*' happened in the seventh and eighth centuries AD (this may not be the first inflow) and they exercised powerful influence over the social life in Kerala. This was followed by the construction of temples and the establishment of '*Brahma-deyas*'. Dravida God's Kaavu's were pushed to the background. Buddhist *Viharas* like *Nagar-kovil, Citaral, Kallil* and *Velimala* were converted into Hindu temples. Most Hindu temples that are found in Kerala State today had had their origin in about this period. The majority of them were constructed with central shrines in '*Vesara-Vatta*' style. As stated earlier, the archeological evidence also

suggest the starting of construction of 'built' Hindu temples in Kerala only from 9th century, the oldest being Kondiyur temple of 823 AD. It is certain that, in the ninth century, the culture of building temples with a 'built-form', got a new boost in all over Kerala.

Most Scholars divide the temple architecture of Kerala into three phases, with the earliest phase starting from 800 AD. ²⁵⁴ They divide the entire span of Hindu temple construction into three, with the early phase from 800 to 1000AD, the middle phase from 1001 to1300 AD and the late phase from 1301 to1800 AD. According to them "In the early phase, which roughly corresponds to the second Chera Empire of 800 to 1102 AD. When structural temple culture began to spread, there were only simple structures, side by side with hypaethral temples. The worship of Mother Goddess/ Bhagavathi, Shiva, Vishnu, Krishna and Shastha became very popular. The typical lay-out of a temple consists of a sanctum, with or without a frontal namaskaara-mandapa and a cloister, known as nalambalam enclosing it. In the middle phase, which again roughly corresponds to the rising of several minor principalities into prominence, there were many developments especially in the interior arrangement of a temple. The practice of enshrining the consort of the deity at the back of Garbha-graha must have received great fillip in this period. Finally in the last phase timber roofs were covered with copper sheets and all such roofs have beveled edges to protect it from getting damaged due to falling of rainwater.

2.2.4.12 Elements and Architectural Characteristics of a Kerala Temple

<u>Garbha-graha</u>: The Garbha-graha is the innermost chamber in any temple where the deity is kept [Figure 2.20]. What ever be the scale of a temple, it is invariably a small chamber and in Kerala it is covered by an outer shell called '*Sri Kovil*', with a *pradikshina* passage in between, called '*Antharaala*', which in open only to the priest and not generally to the worshiping public. The *Sri kovil* is only the outer shell of the *Garbha-graha*. So technically, as in a Dravidian temple the *Garbha-graha* is covered with a stone enclosure called '*vimana*', in Kerala the *Garbha-graha* is covered with laterite or wooden enclosure called *Sri Kovil*. Normally, the *Sri Kovil* has only one entrance on the East, or sometimes West. In some cases entrances are found in both East and West, with the space inside the shrine chamber divided into an Eastern and Western half by a transverse wall, each half containing a different deity. It is mostly square in shape irrespective of the shape of *Sri-Kovil*.

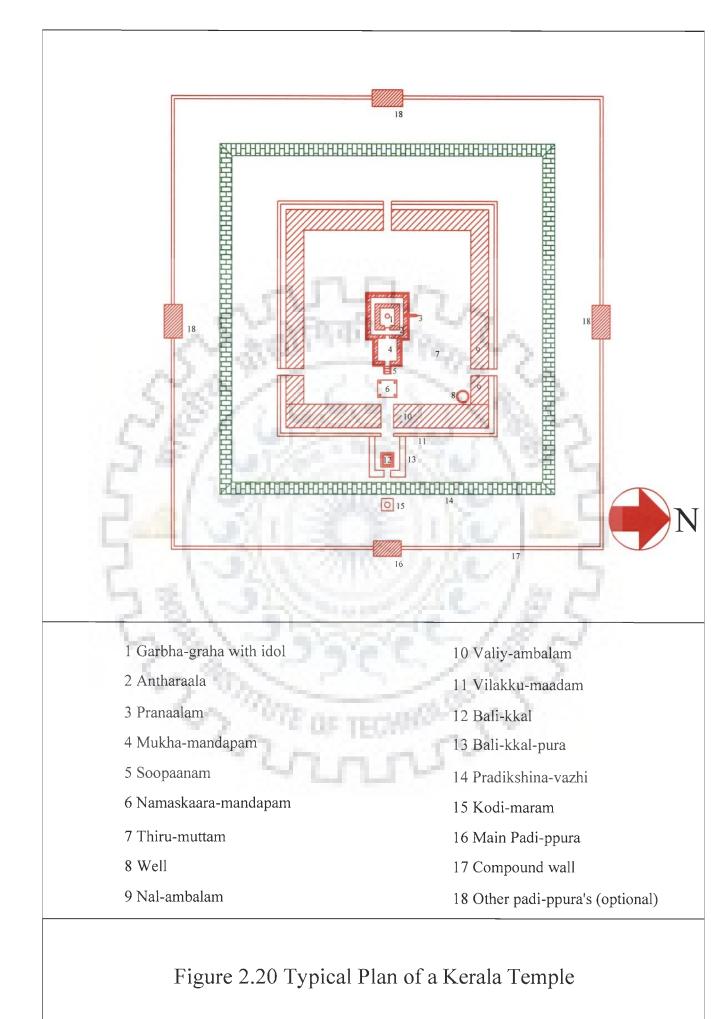
<u>Pranaalam</u>: A water-outlet, called *praanalam*, is another typical feature of *Srikovil* [Photo 2.19]. It is the water outlet from the *Garbha-graha* and is projected in Northern side, is of a characteristic shape- thick, long, cylindrical and tube-like, with a narrow bore made through it, simulating a straight elephant's trunk emerging out of a *vyala* mouth. Externally, it is often ribbed and divided into ringed nodes at intervals.

<u>Mukha-mandapam</u>: In front of the Garbha-graha is an enclosed structure called the Mukha-mandapam [Photo 2.20]. However, it is not an essential part of a Kerala temple and is present only in important temples. Sometimes it is present just as a portico entrance attached in front [Photo 2.21].

<u>Soopaanam</u>: In front of the entrance is a flight of stone steps flanked by stone side-slabs or balusters, which contain rich relief sculptures, the banister or coping being shaped in the form of an elephant trunk issuing from a *vyala* mouth, or similar interesting patterns. This step is called *'Sopaanam'* [Photo 2.22].

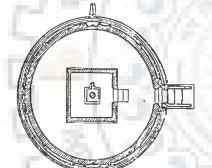
<u>Sri kovil</u>: The entire structure containing *Garbha-graha* is called *Sri Kovil*. It is mostly square, circular or apsidal in shape, and is supported by a number of pillars independent of the *Garbha-graha*. This structure has a pyramidal roof – conical in case of circular plan – in wood, covered on the top with tiles or copper sheets. The basement of the *Sri Kovil* is generally of cut-stone with ornamental plinth work called '*Pancavargam*'. The super structure of the *Sri kovil* is of laterite, brick or sometimes wood itself, with excellent fret work designs, relieved by intricate carvings of figures in wood. The *Sri Kovil* is sometimes two storied, [Photo 2.23] with a top roof and a sloping lower roof with a copper sheet covering. Another peculiarity of the temples of Kerala is that there is only one *Sri Kovil* and one *Garbha-graha* for the central deity. When there is another deity, or *Devi* is present in the same temple, they are placed back to back in the *Garbha-graha*, with a separating wall in between. This is unlike the Dravidian type where a separate *Garbha-graha* is built for the subsiding deity.

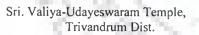
The rafters of the roof project beyond the wall, forming well formed kapotas like eaves. A carved wooden framework often additionally supports these with carved wooden brackets sprung from the walls, like caryatid. In larger

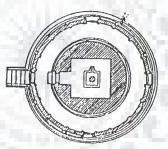


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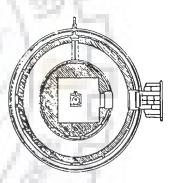
Sri kovil, the body is double walled, with a circumambulatory passage in between. The inner wall rising up to carry the conical or pyramidal gable roof. The circumambulatory has a roof at a lesser level which slopes down from the middle height of the inner wall and projects eave-like over the top of the outer wall. The conical or slopping main roof has a dormer (*nasika*) projection, which is locally called '*kili-vathil*' (literally parrot entrance), with finely carved wooden frames (*thorana*) fronting them. The entire form, or at least their front is called *mukha-petti*, it is triangular in shape, or sometimes arched or horse shoe in shape [Photo 2.24]. It is not also unusual for the outer wall to be circular, but the inner one around the sanctum to be square, or vice-versa. [Figure 2.21]







Sri. Narayana temple, Kannoor Dist.



Sri. Shiva temple, Tirunellayi Palakkad Dist.

(Source: Temples of Kerala, Directorate of Census Operations, Kerala) Figure 2.21 A Circular Temple with Square Inner Sanctum

The walls are usually of laterite blocks that are abundant in the area, which can be cut and shaped easily when freshly quarried. Since the surface of laterite wall is rough and pitted surface, they are heavily plastered in lime mortar and a few decorations are picked out in stucco. The walls form a good background for mural paintings, which usually take the place of relief sculptures, and therefore the Kerala temples are noted for their rich colour paintings in the fresco techniques.

<u>Namaskaara-mandapam:</u> In front of the Sri-kovil often is a detached small covered area called Namaskaara-mandapam or 'the hall for prostration'. It is usually square in plan with a pyramidal slopping roof. It has an elevated basement, but with no steps to it. It is for the temple priest to prostrate [Photo 2.25]. The Namaskaara-mandapam always have a flat false-ceiling, which is divided into grids of nine columns and rows, paneled in wood and is called 'nava-khandam,' (nine divisions) with curved figures of Asta-dik-palas with Brahma in the centre, usually carved there in. The intricate carvings in this nava-khandam in many temples provide a feast for the eye of the devotee. However, this structure is not always present in all temples.

In smaller temples a similar structure is built for the general devotees. The worshippers approach the temple sanctuary in order to make visual contact with the sculpted image or emblem of the deity placed inside the *Garbha-graha*. This act of seeing, called '*darshanam*', is central to all forms of veneration in Kerala temples, as well as Indian. This open hall is often provided in smaller temples, to protect the devotees from sun and the long rainy seasons of Kerala, while they wait for the *darshanam*. This structure is also called *Namaskaara-mandapam* [Photo 2.26].

<u>Thiru-muttam</u>: An enclosure surrounds the *Sri Kovil* and *Mandapam*. The open courtyard like space in between them is called '*Thiru-muttam*'. In this space is usually located also a well, in the North-East corner.

<u>Nal-ambalam</u>: The enclosure which surrounds the *Thiru-muttam* is called "*Nal-ambalam*' or '*Chutt-ambalam*' [Photo 2.27]. It is a raised verandah with pillared corridor and wall on the outer side. It also sometimes accommodates a kitchen or two, one for day-*pooja* and another for night-*pooja*. A safe-room, small subshrines for minor deities, room for temple '*mala-kettu*' (making flower garlands for the deity) and open or railed yards for feeding are provided in the '*nal-ambalam*' on bigger temples. In smaller temples *nalambalam* is omitted and is replaced by a compound wall. However a small kitchen for temple cooking is invariably provided, close on the outer side, but separate from it.

<u>Valiy-ambalem</u>: In the front (Eastern) portion of the '*nal-ambalam*' is generally a much bigger hall called '*valiy-ambalam*' where '*Katha-kali*' or other performances are held during festivals and this is also the resting place for devotees before they enter the temples.

<u>Vilakku-maadam</u>: It is a structure, more like a wall in wood, all around the nalambalam, with a galaxy of lamps fixed to it [Photo 2.28]. Sometimes there is a space left between nal-ambalam and vilakku-maadam, and is used for circumambulation.

<u>Balikal-pura</u>: A rectangular projection called '*bali-kal-pura*' is present in the front of the '*Valiy-ambalem*' in most temples, which also forms the main entrance. Balikal-pura literally means 'room for sacrificial altar', though there are no sacrifices, this portion always contains a sacrificial-table like stone called '*balikkal*' [Photo 2.29]. In smaller temples, the *bali-kal-pura* is omitted. There are also

many temples, though without bali-kal-pura, still has a *bali-kkal* in the open [Photo 2.30].

<u>Pradakshina Vazhi</u>: In major temples this '*nal-ambalam*' is surrounded by a circumambulatory path called '*Pradakshina Vazhi*' for worshippers to go around [Photo 2.31] and for the '*Shanthikar*' or priest to go around with the image of the deity on his shoulders thrice a day.

<u>Kodi-maram</u>: In front of the *bali-kal-pura*, but out-side in the open, is the 'Kodimaram' or a flagstaff. The flagstaff is fixed at a place, which forms the limit for the approach of non-Hindus [Photo 2.32]. It is also called *Dwaja-stambham*. Mostly, it is placed directly in front of the idol.

<u>Padi-ppura</u>: The gateway structure to the quadrangular enclosures, or the main entrance to the temple premises, is called the '*Padi-ppura*' in Kerala [Photo 2.33]. It is similar to the *Gopura* [Photo 2.34] in the Dravidian style in function, but architecturally things are different. There could be only one padi-ppura in the front (i.e. on the East side), or sometimes one on the rear and occasionally also on the sides. Although the *Sri kovil* do have square, circle and apsidal plans, rectangle is more common for the *padi-ppura*.

<u>Vilakku-maram</u>: The temples in Kerala also have an open oil-lamp post, called 'Vilakku-maram', in which five to nine rows of small brass lights are fixed permanently with nails over a wooden frame work. It is also called *Dwaja-stambham* [Photo 2.35]. It is another peculiar feature present in Kerala temples and is not seen in the temples of East coast. This is made in wood or stone, and if in wood, is always covered with brass to prevent from catching fire or otherwise

deteriorating. It is generally roofed separately with copper sheet or tiles over single vertical posts to protect the burning lamps from the rain [Photo 2.36]. Most of these *Vilakku-maram* stands rest on large brass turtles.

2.2.4.13 Differences between Kerala Temples and Other Indian Temples

There are many vital architectural differences between Kerala type temple and other Indian temples (Indo-Aryan as well as Dravidian). The main difference is that in other temple styles, stone is the principal construction material, whereas in Kerala style, laterite and wood are the construction materials. This is more so in the case of the roof; while other temples are covered with stone slabs, the Kerala temples are covered with wood and tiles (or sometimes copper sheets). Further, while stone tiers form the roof of Indo-Aryan and Dravidian temples, Kerala temples always have tiled roof put on timber frame. All these make the *Sri Kovil*, in architectural form, drastically different from any other temple in India.

Also, in the Dravidian style, the *gopurams* or the entrance gateways are treated with more architectural importance, with monumental and gigantic size, that aggressively arrest the attention of people even from far away, than the actual sanctum sanctorum itself. However in Kerala, the *Padi-ppura* are comparatively small in size and are always treated in a less magnificent way than the main *Sri Kovil*. Again, unlike the Dravidian style, where gopurams are the highest structures, the roof of Sri-kovil is kept the highest structure in the entire temple complex in Kerala. It was an unwritten norm that, no people of the locality will build any structure higher than the *Sri kovil* roof.

Further, unlike other temple styles, the temples in Kerala style are mostly shy self-effacing. It never towers above the surrounding landscape, but nestles amongst it. The flagstaff (*Kodi-maram*) and oil lamp post in the open (*Vilakkumaram*) are always present in front of Sri Kovil unlike many other temple styles. Also, in Kerala style the exquisite sculptures in wood and stone and mural paintings of a high order usually lie-hidden under the over-hanging roofs of temples and *mandapas*, unlike other temple styles, which always display an aweinspiring profusion of huge carvings.

2.2.4.14 Inferences from the Study of Kerala Temples

The following inferences are made about temples from the study of Kerala temple architecture:

- Architecturally the temple architecture of Kerala looked very different from that of Indo-Aryan and even Dravidian, mainly because Kerala temples were built of laterite and wood, and the roof in tiles, whereas the others were completely, even the roof, were built of stone.
- All temples (Jain, Buddhist and Hindu) were placed in a site with the front facing the East, irrespective of the side of approach road to it.
- A compound wall usually encloses the temple premises.
- A water body (at least a well) was mostly present near the temples, mostly inside the compound wall itself.

- These compound walls have a gateway (*Padi-ppura*) present in the cardinal direction in many cases.
- In Dravidian temples this gateway, in later stages, gained more size and became the highest structure in the temple complex.
- In pure Kerala style temples, the Sri-kovil (the complete Garbhagraha complex) is always treated as the highest structure in the temple complex. Even the houses built nearby are not built higher than this structure.
- Doors of the Garbha-graha in all temples are kept closed for most of the time and are opened only for 'darshanam'.
- There was no built-in space/ provision for any assembly of people to sit and meditate or pray in a Hindu temple. However, Jain and Buddhist temples (*Palli* and *Vihara*) have such a provision for devotees/ monks.
- There were no windows provided to the *Garbha-graha* in any temples, to bring in more sanctity to the Sanctum Sanctorum.
- Most temples have an ever-burring lamp kept inside the Sanctum Sanctorum.
- The Buddhist Viharas have their roof built as vaults and those vaults end as an arch, in the entrance. This arch shaped pattern (called *kudu*) become characteristic of early north Indian structures. It can be seen in many early Kerala temples also.

- There is in most cases, a porch in front of the temple. It was called *Mandapam*.
- Many early temples have a pillar in front of the building, called Stambha, which holds a symbol of the deity of the temple.
- The excavations in Nagarjunakonda, in Andrapradesh have revealed the close similarity in architectural traditions between Buddhist and Hindu temples in 2nd century. These facts endorse that, in those periods the "temple forms were common to all creeds".

2.3 CONCLUSION

The inferences from the last two sections of this literature study; namely, the study of Western church architecture and the study of Jain, Buddhist and Hindu temple architecture of Kerala will be used later, in the forth chapter, for comparative analysis. The inferences from section I, that is the study of the history of Christianity in Kerala, as well as from section II, the study of indigenous church architecture of Kerala, have given the required background to build up a case, for investigation. Above all, it is from the inferences deduced out of section II, the study of historical development and the 'state-of-the-art' of the church architecture of Kerala, basic evidence has been derived which will help in taking this investigation further. Subsiquently, the list of 117 churches that were originally built before the influence of European architecture over the indigenous churches of Kerala started, extracted from this particular study, is the base from which investigation can be further taken up. Also, the entire literature survey was also useful in selecting the variables [Annexure I] as well as framing the questionnaire for primary survey.





Photo 2.1 Persian cross in Kottayam Valiya palli



Photo 2.3 An old Muslim mosque in Kerala

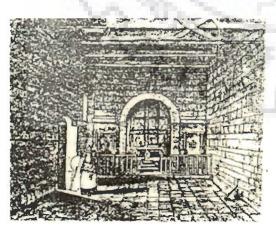


Photo 2.5 Sketch of Kottayam *Valiya* palli front Bishop De Wilson's book



Photo 2.2 Old stone inscription in Thazhekatt church



Photo 2.4 Old *Mukha-mandapam* of Mar Stapanos church, Koothattukulam



Photo 2.6 St. Francis church Cochin, the oldest European style church in Kerala



Photo 2.7 A Greek temple with decorated exterior columns



Photo 2.8 Triumphal arch in an old Roman Basilica



Photo 2.9 Central Pulpit in the Cochin Jewish Synagogue



Photo 2.10 Vault in Shapur's palace, Bishaput, Iraq, 3rd century AD



Photo 2.11Sancta Sophia, uninteresting exteriors



Photo 2.12 Sancta Sophia, highly decorated interiors



Photo 2.13 Temple No. 17, Sanchi, Madya Pradesh



Photo 2.14 Dashavathra Temple at Deogarh in Lalithpur district

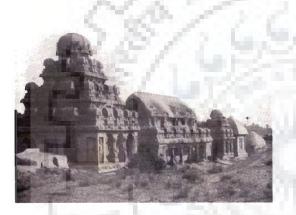


Photo 2.15 Rathas, at Mahabalipuram, in Tamilnadu



Photo 2.16 *Kudakallu*' at Arikkanniyur, near Guruvayoor, Trichur



Photo 2.17 Kidanganad Jain *palli* at Wynad



Photo 2.18 Buddhist statue at Mavelikkara





Photo 2.19 *Pranaalam* in a Hindu temple

Photo 2.20 Typical *Mukha-mandapam* in front of a temple



Photo 2.21 *Mukha-mandapam* in front a temple, present as a porch



Photo 2.22 Typical *Sopaanam* in front of a temple



Photo 2.23 A two storied Kerala temple



Photo 2.24 Typical dormer window-like projection in temple roof



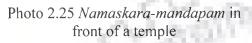




Photo 2.26 Namaskara-mandapam for the devotees in front of a temple



Photo 2.27 Typical *Chuttambalam* around a temple





Photo 2.29 Typical *Bali-kkal* in front of a Kerala temple

Photo 2.28 Typical *Vilakku-maadam* around a temple



Photo 2.30 *Bali-kkal* in the open in front of a Kerala temple



Photo 2.31 *Pradakshina Vazhi*' around a typical temple



Photo 2.32 Kodi-maram in front of typical temple





Photo 2.33 Typical *Padi-ppura* in front of a Kerala temple

Photo 2.34 Typical *Gopuram* in front of a Dravidian temple



Photo 2.35 Stone *Dwaja-stambham* in front of Mannaar temple



Photo 2.36 Vilakku-maram with cover to protect from rain

CHAPTER 3. THE RECONSTRUCTION OF ORIGINAL CHURCH FORM AND ITS VALIDATION

3.1 Introduction

This chapter covers the primary survey part of the Investigation. It starts by stating the aim of the survey, the procedure followed in selecting the variables used in the schedule and for conducting the survey. Then the survey results are analysed to infer the elements and characteristics of the indigenous churches, and the 'original form' of the indigenous Kerala church is 're-constructed', simultaneously. It then states the procedure followed in selecting the sample churches to be thoroughly documented for further investigation on the reconstructed model. Further, this architectural documentation part is discussed and finally the metamorphosis of an indigenous church is also evolved at the end of this chapter.

However, a detailed discussion of the outcome of the survey results, that's the original form of indigenous church architecture of Kerala before European influence, is attempted only in the next chapter along with the comparison of the deduced original form to Western church architecture and temple architecture of Kerala.

3.2 Aim of the Survey and Selection of Variables

In the West, church buildings built even in c.500 AD exist in their original form, whereas in the study area (Kerala State), not only that the oldest church buildings do not exist but even the ones built in the 15th century were also demolished completely or modified beyond recognition, mainly to accommodate

the European architectural style. Therefore, it is now not possible to point out even a single church building, which can be taken as a complete and pure example of the original, indigenous church building of Kerala. At the same time, it can be observed that, there also exist today many pre-European church buildings which still retain some of their 'original' architectural elements and characteristics, although with many alterations of a later period. The main aim of this primary survey is to study and infer those original architectural elements and characteristics, of the pre-European church buildings of Kerala, so that using those elements and characteristics, the 'original form' of the indigenous church building of Kerala can be re-constructed.

The architectural variables used in the questionnaire were selected with utmost care, out of the literature review as well as from the results of a pilot survey, conducted on some of the oldest churches, to make sure that each variable, contribute substantially by giving an architectural characteristic or element, which can be used in re-constructing the original church building 'form' in Kerala. The variables, 31 in number [given as Annexure I] were broadly of two categories; (i) the ones that gives clue towards the orientation of certain elements and (ii) ones that give clue about the presence or absence of certain architectural elements.

It is observed that, some of the elements present in the indigenous churches of Kerala were not at all present in Western, as well as Post-Europeanchurches of Kerala. Therefore, putting together those elements as variables a preliminary survey schedule is initially made. For example, it is common

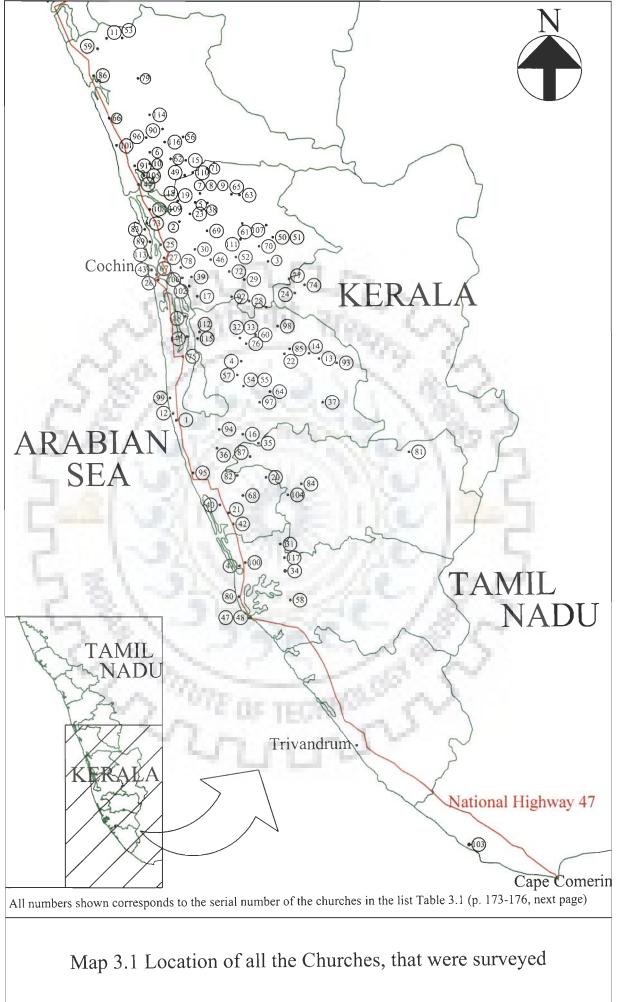
knowledge that some directional rules govern the orientation of traditional Jain, Buddhist and Hindu temples of Kerala, so it would be useful, in reconstructing the original pre-European church building form, to find out whether any such rules governed the design of indigenous churches also. Similarly, the presence of certain architectural elements, that were compulsory in the traditional temples^{bxiv} of Kerala, which all came up from the same socio-cultural base, like a high compound wall surrounding the premises, traditional gateway, flag post, granite oil lamps, etc., was followed in indigenous churches also. Above all, as stated earlier, though these 117 churches were established (originally built) before the European influences over the indigenous Kerala church architecture started, all of these churches were renovated, some totally rebuilt beyond recognition. So another major objective of this survey was to infer the 'year of construction' of the 'major part of the present building' because, if it was a much later constructed/ or totally renovated building, then, naturally, it will not give any inference on the pre-European characteristics of the Kerala church architecture. The survey schedule was prepared with all these in mind, and a preliminary survey was conducted, in October/ November 2002, to develop a plausible schedule, which can be used for conducting the survey in the selected samples (churches) and also to see whether the characteristics/ elements are being repeated again in more and more samples. Finally, based on the results of pilot survey, the questionnaire was improved and finalized as given in Annexure III.

^{bxiv} By the word temple, the Investigator means Jain, Buddhist and Hindu temples, unless otherwise specified.

3.3 Methodology of the Survey

The starting point of the Investigation was a list of 117 churches, which had been taken from sources written some 500 years ago. The name of most of these places had changed over these years; but, the Herculean task of identifying the corresponding names of those places, was already done by Pius Malekandathil (2003), the translator of '*Jounada*' (written in 1599 AD), from which most of the names were extracted for the present investigation. However, it was found that 3 churches, (Karunagapalli, Kodumgaloor and the second church at Chendamangalam) could not be located because, although the place name was identified, that church building is lost or ceased to exist today, or some mistake would have occurred while identifying the corresponding place to the name mentioned in the old record. Therefore, the available 114 churches were considered for further investigation.

The survey was then conducted in all the 114 churches, scattered all over the study area [Map 3.1], over a span of 6 months, during July to September 2003 and January to March 2004. To reach some churches, like Nilaykkal, one has to trek through forest and some, like Turithipuram, can be approached only by boat. Other than filling up the schedule, photographic survey and examining the present church building for the oldest parts of the building, if any (which was one of the important objectives of the survey), the store rooms, as well as the premises of the church compound, have also been combed to look for stone/ wooden parts of old building, which in some cases was successful [Photo 3.1, 3.2, 3.3]. In some churches old records were made available to the Investigator,



which also helped, along with the visual survey, in dating the later additions/ alterations to the original building and in identifying the year of construction of the 'major part of the present building'. Another thing, which needs special mention is that of some parish Priests who had shown special interest in the investigation and had shared their knowledge in this subject, in terms of where to look for, etc. At every church, some senior citizens of the place was interviewed, who had in many cases given not only a lot of insight on how the church had looked like 70-80 years ago but also they shared what their grandparents had reveled to them, which have all contributed greatly to this investigation.

3.4 Analysis of the Survey

3.4.1 Classification of Churches into Groups

On the basis of the year of the construction of the 'major part' of the 'present' building, deduced from the analysis of the survey results, all the 114 churches were classified into 4 groups [Table 3.1]; Group I consists of the churches, where the major part of the present building was constructed before 1599 AD, the year of Synod of Udayamperoor, which, as stated earlier, started many sweeping changes in Kerala Christianity. Group II consists of the churches, where the major part of the present building was constructed between 1600 and 1790 AD. The rationale for selecting the year 1790 was that, in that year, as stated earlier, the ruler of Mysore had waged a war with the Kings of the then Kerala, and had destroyed many churches (as well as temples), which eventually lead to a major reconstruction program of many church buildings. Group III consists of the churches, of which the major part of the present building was constructed buildings.

| | e major part of the present of | Originally | Year of const. of major part of the | | |
|-----|--------------------------------|------------------------------------|-------------------------------------|-------|----------------------|
| No. | Church Name | Estd. | present building | Group | Remarks |
| 1 | Aalapuzha | 1400/1408 | 1832 (?) /1992 | 3 | |
| 2 | Aalengad | 1300 | after 1790 | 3 | |
| 3 | Aarakkuzha | 999 | c. 1780 | 2 | |
| 4 | Aathirampuzha | 835 | 1966 | 4 | NEW BUILDING |
| 5 | Akaparambu | 825 | after 1790 | 3 | |
| 6 | Ambazhakkad | 300 | 1971 | 4 | NEW BUILDING |
| 7 | Angamaali 1 (Padinjare) | 450 | after 1790 | 3 | |
| 8 | Angamaali 2 (Kizhakke) | 1540 | after 1790 | 3 | |
| 9 | Angamaali 3 (Yakoba) | 9th Cent | after 1790 | 3 | |
| 10 | Arimboor | 900 | 1991 | 4 | NEW BUILDING |
| 11 | Arthaat | N/A | 1807 | 3 | |
| 12 | Arthungal | 1581 | 1590 | 1 | |
| 13 | Aruvithura | 301 | 1952 | 4 | NEW BUILDING |
| 14 | Bharanamganam | 1004/1100 | 1914 | 3 | |
| 15 | Chalakkudi | 600 | 1987 | 4 | NEW BUILDING |
| 16 | Changanassherry | 1117 | 13th-18th Cent. | 1 | |
| 17 | Chempu | /1306 | 1981 | 4 | NEW BUILDING |
| 18 | Chendamangalam 1 | 1577 | 1581 | 1 | |
| 19 | Chendamangalam 2 | 1201 | and the second | 1.50 | Could not be located |
| 20 | Chenganoor | 92/ 12th Cent. | before 1599 | 1 | |
| | N. C.L. | 12 th /13 th | e - / . | ST 1 | |
| 21 | Cheppad | Cent | 1952 | 4 | NEW BUILDING |
| 22 | Cherpungal | 1096 | 1112 (?) | 1 | |
| 23 | Chowara | N/A | after 1790 | 3 | |
| 24 | Chungam | 1579 | before 1599 | 1 | |
| 25 | Eanammavu | 500 | 1795 | 3 | Old Madbaha remain |
| 26 | Eda Kochi | 1199 | 1709 | 2 | |
| 27 | Edapalli | 593 | 1911 | 3 | |
| 28 | Elanji | 13th Cent. | 1680 | 2 | |
| 29 | Kaarakkunnam | 1065 | 1300/ | 3 | |
| | TZ 1 (A | 864/ 10th | -01700 | 2 | |
| 30 | Kadamattom | Cent. | after 1790 | 3 | |
| 31 | Kadambanad | 325 | 1822 (?) | 3 | |
| 32 | Kadathuruthy 1 (Kanaya) | 500 | 1456 (?) | 1 | |
| 33 | Kadathuruthy 2 (Catholic) | 1009 | 1924 | 2 | |

Table 3.1 Grouping of Churches into 4, as per the year of construction of the 'major part' of the present building.

| 34 | Kallada | N/A | 1930+ | 4 | NEW BUILDING |
|-----------|---------------------------|--------------------------|-------------|-----|----------------------|
| 35 | Kallooppara | N/A | 1339 | 1 | |
| | Kalloorkad | | | _ | |
| 36 | (Chembakkulam) | 427 | 1720 | 2 | |
| 37 | Kanjirapalli | 1450 | 1842 | 3 | |
| 38 | Kanjoor | 863/1001 | after 1790 | 3 | |
| 39 | Karingachira | 722 | after 1790 | 2 | |
| 40 | Karthikapalli | 13th Cent. | 1581 | 1 | |
| 41 | Karunagapalli | 100 B | The second | | Could not be located |
| 42 | Kayamkulam | 824 | 1972 | 4 | NEW BUILDING |
| 43 | Kochi (Fort Cochin) | 1503 | 1898 | 4 | NEW BUILDING |
| 44 | Kodumgalloor | 52 | 1.119.00 | | Could not be located |
| 45 | Kokkamangalam | 52/ re- 1897 | 1930+ | 4 | NEW BUILDING |
| 46 | Kolancherry | 7th Cent. | 1963 | 4 | NEW BUILDING |
| 47 | Kollam 1 (Port Church) | 52 | 1930+ | 4 | NEW BUILDING |
| 48 | Kollam 2 (Tharisha Palli) | 825 | after 1790 | 2 | 3. 7. 1. |
| 49 | Koratty | 1381 | 1987 | 4 | NEW BUILDING |
| | 14-1-4 | 4th Cent./ | | | |
| 50 | Kothamangalam 1 (Valiya) | 1343 | 1823 (?) | 3 | 100 million (1990) |
| F1 | Kothamangalam 2 | 1461 | 0 1000 | | 0.4 |
| 51 | (Cheriya) | 1451 | after 1790 | 3 | |
| 52 | Kothanelloor | 1220 | 1895 | 3 | |
| 53 | Kottapadi | 14th Cent. 9th Cent./ | after 1790 | 3 | |
| 54 | Kottayam 1 (Valiya) | 1550 | 1550 | 1 | 25 84 |
| 55 | Kottayam 2 (Cheriya) | 1579 | 1579 | 1 | |
| 56 | Kottekkaad | 1000 | 1975 | ÷ 4 | NEW BUILDING |
| 57 | Kudamaalloor | c.1125 | c.1500 | -7 | INE W DOILDING |
| 58 | Kundara | N/A | 1930+ | 4 | NEW BUILDING |
| 59 | Kunnumkulam | 10th Cent. | after 1790 | 3 | INE W BUILDING |
| 60 | Kuravilangad | 345 | 1663 | 2 | |
| 61 | Kurupumpadi | 13th Cent. | after 1790 | 3 | |
| 62 | Maamalassherry | c.1113 | after 1790 | 3 | |
| 63 | Malayattoor | N/A | after 1790 | 3 | |
| 64 | Manarkaad | 920 | 1949 | 4 | NEW BUILDING |
| 65 | Manjapara | 943/1401 | 2001 | 4 | NEW BUILDING |
| 66 | Mattam (Kurishu Palli) | 140/900 | before 1599 | 1 | |
| 67 | Mattancherry | N/A | after 1790 | 3 | |
| 68 | Mavelikkara | 943 | 1930+ | 4 | NEW BUILDING |
| 69 | Mayilakkombu | 686 | 1930 | 4 | NEW BUILDING |
| | | 000 | 1930 | * | |

| 71 72 73 74 75 76 77 78 79 80 | Moozhikkulam Mulakkulam Mulamthuruthy Mundenveli Muthalakkodam Muttam Muttuchira (<i>Kochu Palli</i>) Naagapuzha Nadamel Nediyashala Neendakara Nilaykkal Niranam Njarakkal Omalloor | 601 1134 1225 N/A 1312 1023 550 900 1175 999 1580 54 54 1341/1451 | after 1790 1599 1225 (?)/ 1575 1868 1973 16th Cent. before 1599 1930+ after 1790 1930+ 1930+ 1930+ 1930+ 1930+ 1930+ 1930+ 1930+ 1930+ 1930+ 1930+ 1930+ 1930+ 1930+ 1930+ | $ \begin{array}{c} 3 \\ 1 \\ 1 \\ 3 \\ 4 \\ 1 \\ 1 \\ 4 \\ 2 \\ 4 \\ 4 \\ 4 \\ 3 \\ \end{array} $ | NEW BUILDING NEW BUILDING NEW BUILDING NEW BUILDING NEW BUILDING |
|---|--|--|--|--|--|
| 72 73 74 75 76 77 78 79 80 | Mulamthuruthy Mundenveli Muthalakkodam Muttam Muttuchira (<i>Kochu Palli</i>) Naagapuzha Nadamel Nediyashala Neendakara Nilaykkal Niranam Njarakkal Omalloor | 1225 N/A 1312 1023 550 900 1175 999 1580 54 54 | 1225 (?)/ 1575 1868 1973 16th Cent. before 1599 1930+ after 1790 1967 1930+ 1930+ 1930+ | $ \begin{array}{c} 1 \\ 3 \\ 4 \\ 1 \\ 1 \\ 4 \\ 2 \\ 4 \\ 4 \\ 4 \\ 4 \end{array} $ | NEW BUILDING NEW BUILDING NEW BUILDING |
| 73 74 75 76 77 78 79 80 | Mundenveli Muthalakkodam Muttam Muttuchira (<i>Kochu Palli</i>) Naagapuzha Nadamel Nediyashala Neendakara Nilaykkal Niranam Njarakkal Omalloor | N/A 1312 1023 550 900 1175 999 1580 54 54 | 1868 1973 16th Cent. before 1599 1930+ after 1790 1930+ 1930+ 1930+ 1930+ | 3 4 1 1 4 2 4 4 4 | NEW BUILDING NEW BUILDING NEW BUILDING |
| 74 75 76 77 78 79 80 | Muthalakkodam Muttam Muttuchira (<i>Kochu Palli</i>) Naagapuzha Nadamel Nediyashala Neendakara Nilaykkal Niranam Njarakkal Omalloor | 1312 1023 550 900 1175 999 1580 54 54 | 197316th Cent.before 15991930+after 179019671930+1930+ | 4 1 1 4 2 4 4 4 | NEW BUILDING NEW BUILDING NEW BUILDING |
| 75 76 77 78 79 80 | Muttam Muttuchira (<i>Kochu Palli</i>) Naagapuzha Nadamel Nediyashala Neendakara Nilaykkal Niranam Njarakkal Omalloor | 1023 550 900 1175 999 1580 54 54 | 16th Cent. before 1599 1930+ after 1790 1967 1930+ 1930+ 1930+ | 1 1 4 2 4 4 4 | NEW BUILDING NEW BUILDING NEW BUILDING |
| 76 77 78 79 80 | Muttuchira (<i>Kochu Palli</i>) Naagapuzha Nadamel Nediyashala Neendakara Nilaykkal Niranam Njarakkal Omalloor | 550 900 1175 999 1580 54 54 | before 1599 1930+ after 1790 1967 1930+ 1930+ | 1 4 2 4 4 4 | NEW BUILDING NEW BUILDING |
| 77 78 79 80 | Naagapuzha Nadamel Nediyashala Neendakara Nilaykkal Niranam Njarakkal Omalloor | 900 1175 999 1580 54 54 | 1930+ after 1790 1967 1930+ 1930+ | 4 2 4 4 4 4 | NEW BUILDING NEW BUILDING |
| 78 79 80 | Nadamel Nediyashala Neendakara Nilaykkal Niranam Njarakkal Omalloor | 1175 999 1580 54 54 | after 1790 1967 1930+ 1930+ | 2 4 4 4 | NEW BUILDING NEW BUILDING |
| 79 80 | Nediyashala Neendakara Nilaykkal Niranam Njarakkal Omalloor | 999 1580 54 54 | 1967 1930+ 1930+ | 4 | NEW BUILDING |
| 80 | Neendakara Nilaykkal Niranam Njarakkal Omalloor | 1580 54 54 | 1930+ 1930+ | 4 | NEW BUILDING |
| | Nilaykkal Niranam Njarakkal Omalloor | 54 54 | 1930+ | 4 | |
| Q 1 | Niranam Njarakkal Omalloor | 54 | | | NEW BUILDING |
| | Njarakkal Omalloor | the second s | 1912 | ~ 1 | |
| | Omalloor | 1341/1451 | | | |
| 83 | | | 1824 | 3 | |
| 84 | | 1573 | 1971 | 4 | NEW BUILDING |
| 85 | Pala | 1002 | 1701(?) | 2 | |
| 86 | Palayoor | 54 | 1792 | 3 | |
| 87 | Paliyekkara | N/A | 1814 | 3 | |
| | Pallippuram (Kurishu | | 1 0 1000 | | |
| 88 | Palli) | 3rd Cent. | before 1599 | 1 | |
| 89 | Palluruthy | N/A | 1870 | 3 | Only old Madbaha |
| 90 | Derenneeldere | 400 | 1380/1980 | 1 | remains |
| 90 | Parappookkara Pazhuvil | 883/960 | after 1790 | 2 | |
| 91 | Piravam | 2nd/3rd Cent. | after 1790 | 2 | |
| | the second se | 14th Cent. | 1937 | 4 | NEW BUILDING |
| 93 | Poojaar Pulinkunne | N/A | 1830+ | 3 | |
| 94 95 | the second se | N/A | after 1790 | 2 | |
| | Purakkad | 400 | 1915 | 3 | |
| 96 | Puthanchira | 14th Cent. | 1302/2001 | 1 | Badly renovated |
| 97 | Puthupalli | 14th Cent. | 1302/2001 | 1 | Alter backdrop of |
| 98 | Ramapuram | 15th Cent. | 1450/1599 | 1 | 1450 |
| 99 | Tangi | 1538 | 1709 | 2 | |
| 100 | Thavalakkara | 4th Cent. | 1965 | 4 | NEW BUILDING |
| 100 | Thazhekatt | N/A | 1930+ | 4 | NEW BUILDING |
| 101 | Thekkan Paravoor | 802 | | 4 | NEW BUILDING |
| 102 | Thiruvithamcode | 63 | before 1599 | 1 | |
| | | N/A | after 1790 | 2 | |
| | | 1531/1533 | after 1937 | 4 | NEW BUILDING |
| 106 | Udayamperoor | 510 | | 2 | |
| 104 105 | Thumpamon Thuruthipuram | 1531/1533 | after 1937 | 4 | NEW BUILDING |

| | | 10th/11th | | | |
|-----|---------------------|------------|------------|---|--------------|
| 107 | Vadakara | Cent. | after 1790 | 2 | |
| 108 | Vadakkan Paravoor 1 | 54 | 1304/1560 | 1 | |
| 109 | Vadakkan Paravoor 2 | 1566 | 1566 | 1 | |
| 110 | Vadakkan Puthukkad | 400 | 1971 | 4 | NEW BUILDING |
| 111 | Vadayaar | 997/1001 | 1932 | 4 | NEW BUILDING |
| 112 | Vaikkom | 1309 | 1890 | 3 | |
| 113 | Vaipin | 1503/1560 | 1605 | 2 | |
| 114 | Valappaad | 1500 | 1890 | 3 | |
| 115 | Vechoor | 1463 | 1870 | 3 | |
| 116 | Veliyanaad | 900 | 1971 | 4 | NEW BUILDING |
| 117 | Venmani | Aug. 10.00 | 1930+ | 4 | NEW BUILDING |

constructed between 1791 and 1930 AD. The year 1930 was selected because it was more or less after 1930 that Reinforced Cement Concrete (RCC) became popular as a building material in Kerala, and many old church buildings were reconstructed by using this material. Finally, Group IV consists of churches, where the major part of the present building was constructed after 1930 AD. It has been arrived at on the basis of the grouping that the first, second, third and forth groups comprise of 24, 18, 37 and 35 churches respectively [Table 3.2 and Figure 3.1].

It has been observed that the churches in Group IV, i.e., churches re-built completely after 1930, were mostly modern RCC buildings and were renovated/ reconstructed beyond recognition of the original form, and it did not reflect any indigenous architectural character, and therefore those churches in Group IV were excluded from further analysis.

3.4.2 Analysis of Architectural Characteristics

The survey data of the remaining 79 churches, which confined in Group I, II and III, were considered for further analysis. They were then reviewed thoroughly to deduce the architectural characteristics of the 'original' indigenous church buildings of Kerala, from them.

Table 3.2 Classification of churches into groups according to the year of construction of the major part of the present building

| SI. No. | Group | No. | Percentage | Total selected for Investigation |
|------------|-------------------------|-----|------------|-------------------------------------|
| 1 | Group 1: before 1599 AD | 24 | 21.05 | 1.1.106 |
| 2 | Group 2: 1600-1790 AD | 18 | 15.79 | 79 nos. (69.30%) |
| 3 | Group 3: 1791-1930 AD | 37 | 32.46 | |
| 4 | Group 4: after 1930 AD | 35 | 30.70 | |
| | Total | 114 | 100.00 | |
| Ę | | | | roup 1: before |

Figure 3.1 Number of churches in each group

The survey results were first compiled in detail, in a chart form, as shown in Table 3.3, 3.4 and 3.5. Then, the summaries of the final results were tabulated, as shown in Table 3.6. Finally, it was converted into percentage, for further analysis and shown in Table 3.7.

| | | | | | | | | | | | | | | | | | Varia | | | | | | | | | | | | | | | | | | |
|--|-----------------------|-------------------|--------|----------------|-----|-----|----------------------|---------|-------------------|---------------------|-----------------------|----------------|-----|-------------------------------------|------------|--------|----------------------|----------------------------|-------|----------------------------------|------------------------------|--------------------------|------------------------|----------------------|-------------------------------------|----------------------------|-----------------------|----------------------|-------------------------|---------------------|--------------------------|----------------------|-----------------------|-----------------------------|-----------------|
| 오 전 づ Churches | Year of Establishment | Present Building | | Gateway facing | Is | Ē | Church façade facing | 2 | Old Compound Wall | Padippura (Gateway) | Kodimaram (Ftag Post) | Deepa Stambham | - 1 | with provision for oil lamp on base | Kottu pura | Belfry | Well inside compound | Natural water body near by | Lupoo | Built in oil lamp stand on walls | High External roof for alter | Sopaanam (Entrance Step) | Mukha Mandapam (porch) | Foreign Front Façade | Inreshold on doors Ralconvincida | Frescos/ paintings on wall | Pushpa Koodu (pulpit) | Baptism font in rock | Hanging oil lamp inside | Nila-Vilakku inside | Decorated alter-backdrop | Window to alter area | Vault over alter area | Arch between alter and nave | Sculptures |
| 1 Arthungal | | 1590 (?) | 0 | | _ | 0 0 | | | 0 0 | _ | <u> </u> | 0 | 0 | | | | | 4 | 0 | _ | 2 <u> </u> | S S | 2 | u ! | - [@ | | | | _ | | | | > | <u>< C</u> | N N |
| 2 Changanassherry | 1117 | 13-18 C. | 0 | | _ | 0 0 | | _ | 0 1 | | 1 | 0 | 1 | | 0 | | | - | 0 | 0 | | 0 | 0 | 1 | 1 | 1 1 | 0 | 1 | 0 | | 0 1 | 1 0 | 1 | 1 | 1 1 |
| 3 Chendamangalam 1 | 1577 | 1581 | 1 | 0 | ō i | | | 0 | 0 0 | U U | 0 | 0 | 1 | | - | | 1 1 1 1 1 1 1 | 1 | 0 | 1 | 1 1 | 0 | 0 | 1 | 1 | 1 0 | <u> </u> | | 1 | | 1 1 | 1 0 | 1 | 1 | $\frac{1}{0}$ 1 |
| | 92/12th C. | | 0 | 0 | 1 (| 0 0 | | | 0 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 0 | _ | 0 | 0 | 1 | 1 1 | 1 | 1 | | 4 | | Ť | <u> </u> | 1 | | 11 1 | | | · · | <u> </u> |
| 5 Cherpungal | | 1112(?) | 0 | 0 | 1 (| | | - | | | | 1 | 1 | 1 | 0 | 0 0 | <u> </u> | 1 | 0 | 0 | 1 1 | - | | 1 | 1 | | | | -1 | - | ++ | | | | 0 0 |
| 6 Chungam | 1579 | | 0 | 1 | 0 (| 0 0 | | - | 0 0 | - | | o | 1 | _ | _ | | | ol | 0 | 0 | 1 1 | 0 | 0 | 1 | 1 | | | | 1 | | ╬╤ | | 1 | | 1 0 |
| 7 Kadathuruthy 1 (Kanaya) | 500 | | | 1 | 0 0 | | 1 | _ | 0 1 | 0 | 1 | 1 | 1 | | 0 | 0.0 | | 1 | Ő | 1 | 1 1 | 1 | 1 | 1 | 1 | 1 1 | + | | 1 | 井 | ++- | | 1 | | |
| | N/A | 1339 | | 0 | 1 (| 0 0 | 1 | 0 | 0 1 | 0 | 1 | 1 | 1 | | - | 0 0 | | 0 | 0 | 0 | 1 1 | 0 | 1 | 1 | 1 | | | | | | ╬ | | - 1 | - | + + |
| 9 Karthikapalli | 13th Cent. | 1581 | 0 | 0 | 1 (| | 1 | _ | 0 1 | 1 | 0 | 0 | 1 | | 0 | 0 0 | | 0 | 0 | 0 | 1 1 | 0 | 1 | 0 | 1 | 1 1 | | · · · | 1 | ŏ | ++ | | - 1 | 1 | |
| 10 Kottayam 1 (Valiya) | 9thC/1550 | 1550 | 1 | 0 | 0 0 | 0 0 | 1 | 0 | 0 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 0 | Ó | 1 | 0 | 1 | 1 1 | Ō | 1 | 1 | 1 | 1 1 | | | 1 | 0 | ╬ | | 1 | + | |
| 11 Kottayam 2 (Cheriya) | 1579 | 1579 | 0 | 1 | 0 (| 0 0 | 1 | 0 | 0 1 | 1 | 1 | 0 | 0 | | 0 | 0 0 | 1 | 0 | 0 | 1 | 1 1 | 0 | 1 | 1 | 1 | 1 1 | ŏ | | 1 | ō | 1 - | | 1 | 1 | 1 0 |
| | | c.1500 | 0 | 1 | 0 0 | 0 0 | 1 | 0 | 0 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 0 | 0 | 0 | 0 | 0 | 1 1 | 0 | 1 | 1 | 1 | 1 1 | ŏ | | 1 | 0 | 1 1 | | 1 | 1 | |
| 13 Mattam (Kurishu Palli) | | N/A | 0 | 1 | 0 0 | 0 0 | 1 | 0 | 0 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 0 | 0 | 0 | 0 | 0 | 0 0 | 0 | 1 | 1 | 1 | 0 0 | Ō | ō | Ó | 0 | | | 0 | <u> </u> | |
| 14 Mulakkulam | 1134 | 1599 | 0 | 1 | 0 0 | 0 0 | 1 | 0 | 0 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 0 | 1 | 0 | 0 | 0 | 1 1 | 0 | 0 | 1 | 1 | 1 0 | | | 1 | 0 | 1 1 | | 1 | 1 | 1 0 |
| 15 Mulamthuruthy | | 1225/1575 | 0 | 1 | 0 0 | 0 0 | 1 | 0 | 0 1 | 0 | - 1 | 0 | 0 | 0 | 0 | 0 0 | 0 | 0 | 0 | 0 | 1 1 | 0 | 1 | 1 | 1 | 0 1 | 0 | 1 | 0 | 1 | 1 1 | 11 | 1 | 1 | 1 0 |
| 16 Muttam | | 16th Cent. | 0 | | 0 0 | 00 | 1 | 0 | 0 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 0 | 0 | 0 | 0 | 0 | 1 1 | 0 | 1 | 1 | 1 | 0 1 | 0 | 0 | 0 | 0 | 0 1 | | 1 | 1 | 0 1 |
| 17 Muttuchira (Kochu Palli) | 550 | | 0 | _ | 0 1 | 1 0 | 1 | - | 0 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 0 | 0 | 0 | 0 | Ō | 1 1 | 0 | 0 | 1 | 1 | 0 0 | 0 | 0 | 0 | 0 | 0 1 | 1 | 1 | 1 | 1 0 |
| 18 Pallippuram (Kurishu Palli) | | N/A | 0 | _ | 0 0 | 0 0 | 1 | - | 0 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 0 | 0 | 1 | 0 | 1 | 1 1 | 0 | 0 | 1 | 1 | 0 0 | 0 | 0 | 0 | 0 | 0 1 | 1 0 | 1 | 1 | 1 1 |
| 19 Parappookkara | | 1380/1980 | | | 0 0 | | | ~ | 0 1 | 1 | 1 | 0 | 1 | | 0 | 0 1 | 1 | 0 | 0 | 0 | 1 1 | 0 | 1 | 1 | 1 | 0 1 | 0 | 0 | 0 | 0 | 0 1 | 1 0 | 1 | 1 | 0 1 |
| 20 Puthupalli | | 1302/2001 | | - | 0 0 | 0 0 | | - | 0 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 0 | 1 | 1 | 0 | 0 | 1 1 | 0 | 1 | 1 | 1 | 0 1 | 0 | 1 | 1 | 0 | 1 1 | 1 0 | 1 | 1 | 1 0 |
| | 15th Cent. | | 0 | _ | 0 0 | | | | 0 1 | 1 1 | 1 | 0 | 1 | 1 | 1 | 0 0 | 1 | 0 | 0 | 1 | 1 1 | 0 | 0 | 1 | 1 | 1 1 | 0 | | 0 | - | 0 1 | 1 0 | 1 | 1 | 1 1 |
| 22 Thiruvithamcode 23 Vadakkan Paravoor 1 | | bfr. 1544 | 0 | | 0 0 | | | - | 0 1 | 1 | 0 | 0 | 0 | | 0 | 1 0 | 1 | 0 | 0 | 1 | 1 1 | 1 | 1 | 0 | 1 | 1 0 | | | 1 | 0 | 1 0 | · · | 0 | 1 | 1 0 |
| 24 Vadakkan Paravoor 2 | 1566 | 1304/1560 1566 | 0 | | | _ | | - | 0 1 | 1 | 1 | 1 | 1 | _1 | - | 0 0 | 0 | 0 | 0 | 0 | 1 1 | 1 | 1 | 1 | 1 | 0 0 | 0 | | 0 | 0 | 1 1 | 1 0 | 1 | 1 | 1 1 |
| | 1900 | Total | 0 2 | | 0 C | | | | 0 1 | <u> </u> | 0 13 | 0 | 19 | 1 19i | ~ | 0 0 | 1 | 0 | 0 | 0 | 1 1 | 0 | 1 | 1 | 1 | | 0 | | 0 | 1 | $\frac{1}{1}$ | | 1 | 1 | 1 0 |
| ource: Primary Survey | | i otari , | - | 11 | - 1 | 1 0 | 241 | <u></u> | 0110 | 110 | 13 | 5 | 19] | 191 | 4 | 4 | [12] | 1 | 0 | 9 2 | 3 23 | 4 | 16 | 21 2 | 24 1. | 2 12 | 2 | 18 | 13 | 3 1 | 6 22 | 2 7 | 22 | 23 1 | 8 14 |

Table 3.3 Tabulation Sheet of Church Survey (Group 1: present church building built fully or mostly before 1599 A.D).

| | T | | | | | | | | | | | | | | Varia | bles | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---|----|------------------|-----|-----|------------------------|---------------------|---------------------|-----------------------|----------------|--------------------|-------------------------------------|------------|----------------------|-------|----------------------------|-------------|---|------------|----------------|------------|----------------------|--------------------|----------------|----------------------------|-----------------------|----------------------|---------------|---------------------|---|--------------------------|----------------------|-----------------------|---------------|---------------------------|---------------|------------------------|
| 2 īz īz Churches | Year of Establishment Present Building | EV | ≥ Gateway facing | | EN | Z Church façade facing | S Old Compound Wall | Padippura (Gateway) | Kodimaram (Flag Post) | Deepa Stambham | Open Granite Cross | with provision for oil lamp on base | Kottu pura | Oottu pura Belfry | | Natural water body near by | Water bodry | Built in oil lamp stand on walls Chorder width for other | ternal roo | anam (Entrance | idapam (pi | Foreign Front Façade | Threshold on doors | Batcony inside | Frescos/ paintings on wall | Pushpa Koodu (pulpit) | Baptism font in rock | <u> </u> | Nila-Vilakku inside | either one oil lamp inside | Decorated alter-backdrop | Window to alter area | Vault over alter area | ween alter a | Division of nave into two | | Stained/ Colored glass |
| 1 Aarakkuzha | 999 c.1780 | 0 | 1 | 0 0 | 0 0 | 1 0 | 0 | 0 (| 0 1 | 0 | 1 | 1 | 0 | | 0 0 | 0 | 0 | 1 | 1 | 1 C | 0 0 | 1 | 1 | 1 | 1 | _1 | 0 | <u> </u> | | | | 0 | 1 | 1 | 1 | 1 | - |
| 2 Eda Kochi | 1199 1709 | | 0 | 0 0 | 0 0 | 1 0 | 0 | 1 (| 0 0 | 0 0 | 1 | 1 | 0 | 0 | 1 1 | 1 | 0 | 0 | 1 | 1 0 | 1 0 | | 1 | 0 | _1 | 0 | 0 | | | 0 | | | | -1 | 쒸 | 井 | 0 |
| 3 Elanji | 13th C. 1680 | 0 | 1 | 0 0 | | 1 0 | 0 | - | | 0 0 | 1 | 1 | 0 | | D 1 | 0 | 0 | 0 | 1 | 1 0 | 0 | 0 | 1 | 0 | 1 | 0 | | 0 | | ⊢귀 | 귀 | | 1 | $\frac{1}{4}$ | -# | + | -씱 |
| 4 Kadathuruthy 2 (Catholic) | 1009 1924 | 0 | 1 | 0 0 | 0 0 | 1 0 | 0 | 0 0 | | 0 0 | 1 | 1 | 0 | - | 0 0 | 1 | 0 | 0 | 1 | | | 1 | 1 | 0 | _1 | 0 | | | <u> </u> | 느儿 | ⊢귀 | 님 | | | -# | <u>-</u> +- | |
| 5 Kalloorkad (Chembakkulam) | | 1 | 0 | 0 0 | 0 0 | 1 0 | 0 | 1 | D 1 | 0 | 1 | _1 | 1 | 0 | 11 1 | 1 1 | 0 | 1 | 1 | 1 0 | 1 | 1 | 1. | 1 | 1 | 1 | | 0 | | 느낌 | 귀 | | | | -++ | -+ | 0 |
| 6 Karingachira | 722 N/A | 0 | 1 | 0 0 | 0 0 | 1 0 | 0 | 1 | 1 1 | 1 | 1 | _1 | 0 | 0 | 0 0 | 0 | 0 | 0 | 1 | 1 0 | 1 1 | 1 | 1 | 0 | | 0 | 1 | $\frac{1}{4}$ | 닏끧 | μIJ | ⊢늰 | | 1 | | | 0 | 븻 |
| 7 Kollam 2 (Tharisha Palli) | 825 N/A | 0 | 0 | 0 1 | 1 0 | 1 0 | 0 | | 0 0 | · · · | 0 | 0 | _0 | 0 | 0 1 | 0 | 0 | 0 | 1 | 1 0 | 1 1 | 1 | 1 | 1 | _1 | 0 | 1 | $\frac{1}{2}$ | 느낌 | 느낌 | 0 | | 0 | 井 | -# | 4 | - |
| 8 Kuravilangad | 345 1663 | 0 | 1 | 0 0 | | 1 0 | 0 | 1 1 | - | 0 | 1 | _1 | 1 | 0 | 1 1 | 0 | 0 | 0 | 1 | 1 0 | 1 | 1 | 1 | 1 | 1 | 0 | | | \square | ⊢IJ | 1 | 0 | 1 | 井 | 井 | _] | 4 |
| 9 Nadamel | 1175 N/A | 0. | 1 | 0 0 | | 1 0 | 0 | 0 | 0 0 | 1 | 1 | 1 | 0 | 0 | 0 1 | 0 | 0 | 1 | 1 | 1 0 |) 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | L 및 | | 1 | 1 | -11 | 井 | <u>-</u>] - | 늰 |
| 10 Pala | 1002 1701(?) | 0 | 0 | 1 (| 0 0 | 1 0 | 0 | 1 | 1 (|) 0 | 1 | 1 | 0 | 0 . | 0 1 | 1 | 0 | 1 | 1 | 1 0 | 0 | 1 | 1 | 1 | 1 | 1 | | | | 느낌 | <u>⊢</u> .] | 0 | 1 | -11 | 井 | + | 0 |
| 11 Pazhuvil | 883/960 N/A | 0 | 1 | 0 0 | 0 0 | 1 0 | 0 | 1 | 1 0 | 0_0 | 1 | 1 | 0 | | 0 1 | 0 | 0 | 1 | 1 | 1 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | · · | ⊢븻 | <u>⊢</u> .] | | 1 | -11 | | 井 | - |
| 12 Piravam | 2nd/3rd C. N/A | 1 | 0 | 0 0 | 0 0 | 1 0 | 0 | 1 | 1 0 | 0 0 | 1 | _ 1 | 0 | _ | 0 1 | 1 | 0 | 0 | 1 | 1 1 | 1 1 | 1 | 1 | 0 | | 0 | 1 | 0 | · · | μ | 1 | | 1 | -1 | -1 | | - |
| 13 Purakkad | N/A N/A | 0 | 1 | 0 (| 0 0 | 1 0 | 0 | 1 | 1 1 | 0 | 0 | 0 | 0 | 0 | 0 0 | 0 | 0 | 0 | 1 | | 0 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | | $\begin{bmatrix} 1 \\ -1 \end{bmatrix}$ | | 0 | | _1 | | -1- | 4 |
| 14 Tangi | 1538 1709 | 0 | 1 | 0 0 | 0 0 | 1 0 | 0 | ~ | 0 1 | 0 | 1 | 1 | 0 | 0 | 0 1 | 0 | 0 | 0 | 1 | 0 0 | 0 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | - | $\begin{bmatrix} 1 \\ -1 \end{bmatrix}$ | | | L! | _1 | 1 | 井 | - |
| 15 Thumpamon | N/A N/A | 0 | 1 | 0 0 | | 1 0 | 0 | - | 0 0 | 0_0 | 1 | 1 | 0 | 0 | 0 1 | 0 | 0 | 0 | 1 | 1 0 | 1 | 1 | 1 | 1 | | 0 | | $\frac{1}{1}$ | 0 | | | 0 | | 1 | 井 | 0 | -위 |
| 16 Udayamperoor | 510 N/A | 0 | 1 | 0 (| 0 0 | 1 0 | 0 | 0 | 0 1 | 0 | 1 | 1 | 0 | 0 | 0 1 | 1 1 | 0 | 0 | 1 | 1 0 | 0 0 | 1 | 1 | 1 | 0 | 1 | | 10 | 0 | | 1 | | 0 | _1 | | 1 | -쒸 |
| 17 Vadakara | 10th/11th (N/A | 0 | 1 | 0 0 | 0 0 | 1 0 | 0 | 0 | 0 (| 0 0 | 1 | 1 | 0 | 0 | 0 1 | 0 | 1 | 0 | 1 | 1 (| 1 1 | 1 1 | 1 | 1 | 1 | 1 | | 1 | | $\begin{bmatrix} 1 \\ -1 \end{bmatrix}$ | <u>–</u> 1 | 0 | | _] | 1 | -0 | -쒸 |
| 18 Vaipin | 1503/1560 1605 | 0 | 1 | 0 0 | 0 0 | 1 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 C | 1 | 0 | 0 | 1 | 0 0 | 0 0 | 1 | 1 | 1 1 | | 1 | | 10 | $\frac{1}{10}$ | | 1 | | | 1 | 1 | + | 4 |
| | Total | 3 | 13 | 1 | 1 0 | 18 0 | 0 1 | 1 | 5 7 | 2 2 | 16 | 15 | 2 | 0 | 4 13 | 7 | 1 | 5 | 18 1 | 6 1 | 1 11 | 17 | 18 | 12 | 15 | 8 | 10 | <u> </u> | 10 | 14 | 17 | 8 | 15 | 18 | 17 | 14 | |

A DITE OF TECHNER

States -

二十二十二

Table 3.4 Tabulation Sheet of Church Survey (Group 2: present church building built fully or mostly between 1600 to 1790 A.D).

Source: Primary Survey

| | | | | | | | | | | | | | | | | | | /arial | bles | - | | | | | | | | | | | | | | | | | |
|--------|----------------------------|------------------|----------------------|-----|----------------|-----|-----|----------------------|---|-------------------|---------------------|-----------------------|----------------|---|------------|------------|--------|----------------------|----------------------------|--------------------------------|----------------------------------|---|--------------------------|------------------------|----------------------|--------------------|----------------------------|-----------------------|----------------------|-------------------------|--|--------------------------|----------------------|-----------------------|---------------------------|------------|------------------------|
| | | | 7 - | | | | | | | | 1 | | | 0 | Τ. | 1 | | | | _ | | | 1 | | | | | | | | | | | | | | |
| | | of Establishment | Present Building | | Gateway facing | 5 | | Church façade facing | d | Old Compound Wall | Padippura (Gateway) | Kodimaram (Flag Post) | Deepa stambnam | Upen Granite Cross with provision for oil lamp on base | 0 | ņ | | Well Inside compound | Natural water body near by | Artificial Water bodry near by | Built in oil lamp stand on walls | Shorter wruth for alter High External roof for alter | Sopaanam (Entrance Step) | Mukha Mandapam (porch) | Foreign Front Façade | Threshold on doors | Frescos/ paintings on wall | Pushpa Koodu (pulpit) | Baptism font in rock | Hanging oil lamp inside | Nila-Vilakku inside with either one oil lamp inside | Decorated alter-backdrop | Window to alter area | Vault over alter area | Division of nave into two | | Stained/ Colored glass |
| No. | | of 1 | ut . | | tev | | | oin | | E I | al | arg | 0 | 5 2 | Kottu pura | Oottu pura | | sic | 3 | a | io i | × v | nai | Σ | 2 | ž i | s l | | Ē | ğ i | eitl | ate | 1×1 | Nel 4 | | Sculptures | 5 |
| Ż | | Year | ese | 1.1 | Ga | 100 | 1. | ч | | 2 D | d b | Ë | e b | h p | 뮾 | 를 | Ę | | LCL C | ilici | | | paa | 4¥ | eig | est | 3 0 | 믍 | 1 St | jā j | ž ž | 1 S | ĝ | 4 4 | si i | 1 D | ne |
| ы Т | Churches | | | | NN | | | | S | õ | Ра | \$ 0 | 3 6 | RT C | 1× | 8 | Belfry | Ň | R | Art | Bu | 키운 | Sol | Mu | E O | Ē 3 | 8 8 | - Bu | Bai | Far | z | Dě | Š | 2 ar | | ្ត្រ | Sta |
| | Aalapuzha | 1400/08 | 1832 | 0 | | 0 0 | | 1 0 | | 1 | 0 | 1 | | 0 0 | | 0 0 | 1 | 1 | 1 | 0 | 1 | 1 0 | 0 0 | 0 | 1 | 1 | 1 1 | 1 | 1 | 0 | 1 | 1 1 | 1 | 1 | 1 1 | 1 | 1 |
| | Aalengad Akaparambu | | 0 af. 1790 | 0 | | 0 0 | | 1 0 | | 1 | 1 | 1 | 0 | 1 0 | | - | 1 | 1 | 1 | 0 | 0 | 1 1 | 0 | | 1 | | 0 1 | 0 | | 0 | 0 0 |) 1 | 1 | 1 | 1 0 | 1 | 1 |
| | Angamaali 1 (Padinjare) | 825 | 5 1790 2 af. 1790 | 0 | | 0 0 | | 1 0 | - | 1 | 1 | 1 | 0 | 1 1 | 1 | · · · | 0 | | 0 | 0 | 0 | 1 1 | 0 | | 1 | 1 | 0 1 | 0 | 0 | 0 | 1 1 | 1 1 | 0 | 1 | 1 1 | 0 | 0 |
| | Angamaali 2 (Kizhakke) | |) af. 1790 | 0 | | | | 1 0 | _ | 1 | 0 | 1 | 0 | 1 1 | 0 | I | 0 | | 0 | 0 | 0 | 1 1 | 0 | | 1 | 1 | 1 1 | 1 | 0 | <u> </u> | 0 0 | 1 | 0 | 1 | 1 1 | 1 | 0 |
| 6 | Angamaali 3 (Yakoba) | | af. 1790 | | | | 0 | 1 0 | - | 1 | 0 | 1 | 0 | 1 1 | 0 | | 0 | | 0 | 0 | | 1 1 | 0 | <u> </u> | 1 | _ | 0 C 0 1 | | 0 | 0 | $\frac{1}{1}$ | | 1 | 1 | 1 0 | · · | 0 |
| 7 | Arthaat | N/A | 1807 | | | 0 0 | | 1 0 | | 1 | 1 | 0 | 0 | 1 1 | - | | 0 | | 0 | 0 | 0 | | | 1 | 1 | 1 | | 0 | 0 | 1 | 井 | | 0 | 1 | $\frac{1}{1}$ | 0 | 0 |
| 3 | Bharanamganam | 1004/1100 | 1914 | 0 | 0 | 0 1 | 0 | 1 0 | | | 0 | | _ | 0 0 | _ | _ | 0 | | 0 | | 0 | 1 1 | - × | 0 | -1 | 1 | 1 0 | | 1 | 0 | | | | + | 1 0 | 0 | 0 |
| | Chowara | N/A | af. 1790 | 0 | | 0 0 | 0 | 1 0 | 0 | 1 | 0 | 1 | 0 | 1 1 | 0 | | 0 | 0 | 0 | 0 | 0 | 1 1 | 0 | 0 | 1 | 1 | 1 0 | | o | | | | | + | 1 1 | 1 | 0 |
| | Eanammavu | 500 | | | | 0 0 | | 1 0 | 0 | 1 | 0 | 1 | 0 | 0 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 1 | 0 | 1 | 1 | 1 | 1 1 | 0 | o | _ | | _ | 0 | 1 | 1 1 | 0 | ŏ |
| | Edapalli | 593 | | | _ | 0 0 | | 1 0 | | 0 | 0 | _ | 0 | 1 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 1 | 0 | 0 | 1 | 1 | 0 1 | 0 | 1 | 0 | 1 1 | 1 | 1 | -1 | 1 1 | 1 | 0 |
| | Kaarakkunnam Kadamattom | 1065 | | ~ 1 | _ | 0 0 | | 1 0 | | 0 | 0 | | 0 | 1 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 1 | 0 | 1 | 1 | 1 | 1 1 | 0 | 0 | 0 | 1 1 | 1 | 0 | 1 | 1 1 | 0 | 0 |
| | Kadambanad | | af. 1790 | - | | 0 0 | - 1 | 1 0 | | 1 | 0 | | 0 | 1 1 | 0 | | 0 | | 0 | _ | 0 | 1 1 | 0 | 1 | 1 | 1 | 1 0 | 1 | 1 | 1 | 1 1 | 1 | 1 | 1 | 1 1 | 1 | 0 |
| | Kanjirapalli | 1450 | 1822(?) | 0 | _ | 0 0 | | 1 0 | | _ | 1 | _ | - | 0 0 | | | 0 | 0 | 0 | 0 | 1 | 1 1 | 0 | 1 | 1 | 1 | 1 1 | 0 | 1 | 1 | 1 1 | 1 | 0 | 1 | 1 0 | 0 | 0 |
| | Kanjoor | 863/1001 | af. 1790 | | | | | 1 0 | | 1 | 0 | | 0 | 1 1 | 0 | | 0 | 0 | 1 | | | 1 1 | 0 | 1 | 0 | | 0 0 | | 1 | <u> </u> | 0 1 | 1 | 0 | 1 | 1 1 | 1 | 0 |
| | | 4th C./134 | | _ | 1 0 | | | 1 0 | | 1 | 0 | - | 0 | 1 1 | 0 | _ | 1 | 0 | 0 | - | 0 | 1 1 | 0 | 1 | 1 | | 0 1 | 1 | 1 | <u> </u> | 1 1 | 1 | 0 | 1 | 1 0 | 1 | 0 |
| 18 | Kothamangalam 2 (Cheriya) | 1451 | | - | | 0 0 | _ | 1 0 | | 0 | 0 | | 0 | 1 1 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | -11 | 1 | 1 | 0 1 | 0 | | 0 | 1 1 | | 1 | 1 | 1 1 | 1 | 0 |
| 19 | Kothanelloor | 1220 | | - | | 0 0 | | 1 0 | 1 | ō | 0 | _ | _ | 0 0 | | | 0 | 1 | 0 | - | 0 | 1 1 | 0 | -11 | 1 | 1 | 0 1 | | 井 | 1 | 11 | 1 | 1 | 1 | 1 1 | 0 | 0 |
| | Kottapadi | 14th C. | af. 1790 | 0 | | 0 0 | | 1 0 | | 1 | o | _ | 0 | 1 0 | | | 0 | 0 | 0 | _ | 0 | 1 1 | 0 | 1 | 1 | 1 | 1 0 | <u> </u> | -++- | 0 | | | | 1 | | | -4 |
| | Kunnumkulam | 10th C. | af. 1790 | 0 | 1 (| 0 0 | 0 | 1 0 | 0 | 1 | 0 | _ | | 0 0 | | | 0 | 0 | 0 | | 0 | 1 1 | Ō | 1 | 1 | 1 | 1 1 | | -++- | 1 | | 1 | 0 | 1 | | 0 | - |
| | Kurupumpadi | 13th C. | af. 1790 | | _ | 0 0 | 0 | 1 0 | 0 | 1 | 1 | 1 | 0 | 1 1 | 0 | 1 | 1 | 1 | 0 | | 0 | 1 1 | 0 | 1 | 1 | 1 | 0 1 | ŏ | 1 | 1 | 1 1 | | 1 | 1 | 1 0 | 1 | - |
| 23 | Maamalassherry | c.1113 | af. 1790 | _ | | 0 0 | ~ | 1 0 | 0 | 0 | 0 | 0 | 0 | 1 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 1 | 0 | 1 | 1 | 1 | 0 1 | 0 | Ö | 1 | 0 1 | 1 | ō | 1 | 1 1 | 1 | ŏ |
| 24 | | N/A | af. 1790 | | | 0 0 | - | 1 0 | 1 | 1 | 1 | | 0 | 1 1 | 0 | | 1 | 1 | 1 | 0 | 1 | 1 1 | 0 | 1 | 1 | 1 | 1 1 | 1 | 1 | 0 | 0 0 | 1 | 1 | 1 | 1 1 | 1 | Ō |
| 23 | Mallancherry | N/A | af. 1790 | | | 0 0 | | 0 0 | | 1 | 1 | | | 0 0 | | | 1 | 0 | 1 | | | 1 0 | | 0 | 1 | 1 | 1 1 | | 0 | 0 | 0 0 | | 1 | 0 | 1 0 | 1 | 0. |
| Source | e: Primary survey | | Total . | 1/2 | 22 (| 2 | 1 | 24 0 | 0 | 19 | 8 | 18 | 0 1 | 8 16 | 1 | 6 | 8 | 13 | 5 | 0 | 5 2 | 5 23 | 1 | 20 | 24 : | 25 1 | 19 | 7 | 15 | 10 1 | 5 17 | 25 | 14 | 23 2 | 4 16 | 16 | 3 |
| 00010 | or reading survey | | | | 14 | | | | | | 01 | | | | | | | | | | | | | | | | | | | | | | (cont | inued. |) | | _ |
| | | | | | | 18 | | 100 | | | | | | | | | | | | Ъ. | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | 6 | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Table 3.5 Tabulation Summary Sheet of Church Survey- Group 3: present church building built fully or mostly between 1791 to 1930 A.D.

| | | | | - | | | | | | _ | _ | _ | _ | | | V | aria | bles | ; | | | _ | | | | | | | | | | | | | | | |
|------------------------------|-----------------------|------------------|-----|------------------|-----|-----|------------------------|---|-----------|----------------|-------|----------------|--------------|--------|------------|--------|--------------|----------------------------|-----|---------------|----------------|----------------|------------------------|---------------------|--------------------|-------|-----------|-----------------------|----------|-------|----------------------------|--------------------------|----------------------|---------|--------------|---|------------------------|
| 2 z z z Churches | Year of Establishment | Present Building | EIW | Z Gateway facing | Is | ETW | Z Church façade facing | | 1 Compour | dippura (Gatew | odima | Deepa Stambham | th provision | u pura | Oottu pura | Belfry | ide compound | Natural water body near by | 늘 문 | in on lamp su | temal roof for | anam (Entrance | Mukha Mandapam (porch) | oreign Front Façade | Threshold on doors | nside | / paintii | Pushpa Koodu (pulpit) | 5 5 | insid | either one oil lamp inside | becorated alter-backdrop | Window to alter area | er area | ween alter a | Ulvision of nave into two Sculptures | Stained/ Colored glass |
| 26 Moozhikkulam | | af. 1790 | 0 | 1 0 | - | | 1 0 | 0 | 1 | 0 | 1 | 0 | 1 1 | 0 | 0 | 0 | 0 | 1 | | 0 | | 0 | - | 1 | 1 | 4 | 4 | | | · 1 ~ | | 밑 | | ~ | 4 6 | 2 0 | 0 |
| 27 Mundenveli | N/A | 1868 | 0 | 1 0 | | 0 | 1 0 | 0 | 1 | 1 | 1 | 0 | 1 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 0 | | 0 | 1 | | | 0 | | 岩 | | 1 - | | 1 | | | 0 | |
| 28 Niranam | 54 | | | 1 0 | 0 | 0 | 1 0 | 0 | 1 | 0 | 1 | 1 | 1 1 | | 0 | - 01 | 1 | 0 | 0 | n | 1 1 | 0 | | -1 | 1 | 0 | 1 | 0 | | 1 0 | | 1 | | - | + | | |
| 29 Njarakkal | 1341/1451 | 1824 | | 11 0 | - | 0 | 1 0 | 0 | 0 | 0 | 1 | 0 | 0 0 | l õ | 0 | 1 | 1 | 1 | 0 | 0 | 1 0 | | | | 1 | 1 | + | 1 | 1 | + - | | ┝┤ | | | _ | | |
| 30 Palayoor | 54 | 1792 | | 1 0 | 0 | 0 | 1 0 | 0 | 0 | 0 | 1 | 1 | 1 1 | 0 | 0 | 1 | 1 | 1 | 1 | ň | 1 1 | 0 | 1 | 1 | 1 | -1 | 1 | | 1 | | + | + | 1 | | - | | <u>+</u> |
| 31 Paliyekkara | N/A | 1814 | | 1 C | 0 0 | 0 | 1 0 | 0 | 1 | 0 | 1 | Ö | 1 1 | 0 | 0 | 1 | 0 | 0 | 0 | ŭ l | 1 1 | 0 | 1 | 1 | | 1 | | | 1 | | | ┝╣ | | | 1 | 1 1 | + - |
| 32 Palluruthy | N/A | 1870 | | 0 0 | 0 0 | 0 | 1 0 | 0 | 0 | 0 | 1 | 0 | 0 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 1 | | 0 | 1 | -1 | 1 | - | Ň | ╁ | | | <u>⊢ ¦</u> | 1 | | | | 1 0 |
| 33 Pulinkunne | N/A | N/A | 0 | 1. 0 | 0 | 0 | 1 0 | 0 | 1 | 0 | 1 | 0 | 1. 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 1 | | 1 | 1 | 1 | 1 | 1 | 0 | <u> </u> | | 1 | ⊢ ¦ | - 1 | -1 | | 1 | |
| 34 Puthanchira | 400 | 1915 | 0 | 1 0 | 0 | 0 | 1 0 | 0 | 0 | 0 | 1 | 0 | 1 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | 1 1 | | 1 | 1 | 1 | ń | 1 | | <u> </u> | | + | ⊢ ¦I | | -11 | ╬ | 1 | 1 |
| 35 Vaikkom | 1309 | | | 1 0 | 0 | 0 | 1 0 | 0 | 1 | 0 | 0 | 0 | 0 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 1 | | 1 | 1 | 1 | 0 | 1 | 0 | · | | + | ⊢¦ | -+ | | | | 1-6 |
| 36 Valappaad | 1500 | 1890 | 0 | 0 0 | 1 | 0 | 0 0 | 1 | 1 | 0 | 1 | 0 | 0 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 1 | \pm | | | 1 | 1 | 1 | |
| 37 Vechoor | 1463 | 1870 | | 1 0 | 0 | 0 | 1 0 | 0 | 1 | 1 | 0 | 1 | 1 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 0 | | 1 | - | 1 | 1 | | |
| | | Total . | 1 1 | 0 0 | 1 | 0 1 | 1 0 | 1 | 8 | 2 | 10 | 3 | 8 7 | 1 | 0 | 6 | 8 | 6 | 1 | 1 1 | 2 10 | Ō | 8 | 12 | 12 | 7 | 8 | 4 | 9 | | +7 | 11 | -7 | 10 | 11 | 5 1 | |

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"北京大部门 一下城林城市。

| T-11 2 5 / / / C | evious page) Tabulation Sheet of Church Survey (Group 3: present church building built fully or mostly between 1791 to 1930 A.D. |
|----------------------------|--|
| 1 able 1 21 contribution r | evious page) (abulation Sheet of Church Survey (Group 3: present aburch building built fully or mostly between 1701 (* 1020 (* D)) |
| | evidus page) rabulation sheet of church survey (ofoub 5, present church building built hilly of mostly between 1791 to 1930 A 1) |
| | |

Source: Primary Survey

| SI. | Variables | Group 1 | Group 2 | figures are num Group 3 | Total |
|-----|----------------------------------|-------------|-------------|----------------------------|-------------|
| No. | Vallables | (out of 24) | (out of 18) | (out of 37) | (out of 79) |
| | Gate way facing- East | (000 01 24) | 3 | 1 | (out of 73) |
| | Gate way facing- West | 17 | 13 | 10 | 40 |
| | Gate way facing- West | 4 | | 0 | 40 |
| | Gate way facing- South | | | 1 | 3 |
| | Church façade facing East | 0 | 0 | 0 | 0 |
| | Church façade facing- West | 24 | 18 | 11 | 53 |
| | Church façade facing- West | 24 | 0 | 0 | |
| | Church façade facing- South | 0 | 0 | 1 | 1 |
| | Old Compound Wall | 16 | 11 | 8 | 35 |
| | Padippura (Gate way) | 10 | 5 | 2 | |
| | Kodimaram | 13 | 7 | 10 | 30 |
| | DeepaStambham | 5 | 2 | | |
| | | 19 | | 3 | 10 |
| | Open air Granite Cross | | 16 | 8 | 43 |
| | with provision for oil lamp | 19 | 15 | | 41 |
| | Kottu-pura | 2 | 2 | 1 | 5 |
| _ | Oottu-pura | 2 | 0 | 0 | 2 |
| | Belfry | 1 | 4 | 6 | 11 |
| _ | Well inside compound | 12 | 13 | 8 | 33 |
| | Natural water body nearby | 7 | 7 | 6 | 20 |
| | Artificial water body nearby | 0 | 1 | 1 | 2 |
| | Built in oil lamp on wall | 9 | 5 | 1 | 15 |
| | Shorter width for alter area | 23 | 18 | 12 | 53 |
| | High roof for alter from outside | 23 | 16 | 10 | 49 |
| 24 | Sopaanam/entrance step | 4 | 1 | 0 | 5 |
| 25 | Mukhamandapam(front porch) | 16 | 11 | 8 | 35 |
| 26 | Foreign Front Façade | 21 | 17 | 12 | 50 |
| 27 | Threshold on doors | 24 | 18 | 12 | 54 |
| | Balcony inside | -12 | 12 | 7 | 31 |
| 29 | Frescos/ paintings on wall | 12 | 15 | 8 | 35 |
| 30 | Pushpa Koodu (pulpit) | 2 | 8 | 4 | 14 |
| 31 | Baptism font in rock | 18 | 10 | 9 | 37 |
| 32 | Hanging oil lamp inside | 13 | 6 | 4 | 23 |
| | Nila-Vilakku inside | 3 | 10 | 4 | 17 |
| 34 | with either one oil lamp inside | 16 | 14 | 7 | 37 |
| 35 | Decorated Alter back drop | 22 | 17 | 11 | 50 |
| 36 | Window in alter area | 7 | 8 | 7 | 22 |
| 37 | Vault over alter area | 22 | 15 | 10 | 47 |
| 38 | Arch between alter and nave | 23 | 18 | 11 | 52 |
| | Division of nave into two | 18 | 17 | 5 | 40 |
| | Sculptures | 14 | 14 | 11 | 39 |
| | Stained glass | 3 | 1 | 2 | 6 |

Table 3.6 Summary of Tabulation Sheets of Church Survey

| S1. | Variables | | Churc | (All figures are hes in | |
|-----|----------------------------------|---------|---------|-------------------------|-------|
| No. | | Group 1 | Group 2 | Group 3 | Total |
| 1 | Gate way facing- East | 8.33 | 16.67 | 5.41 | 8.80 |
| 2 | Gate way facing- West | 70.83 | 72.22 | 86.49 | 78.4 |
| | Gate way facing- North | 16.67 | 5.56 | 0 | 6.3 |
| | Gate way facing- South | 4.17 | 5.56 | 8.19 | 6.3 |
| | Church façade facing East | 0 | 0 | 2.7 | 1.2 |
| | Church façade facing- West | 100 | 100 | 94.59 | 97.4 |
| | Church façade facing- North | 0 | 0 | 0 | |
| | Church façade facing- South | 0 | 0 | 2.7 | 1.2 |
| | Old Compound Wall | 66.67 | 61.11 | 72.97 | 68.3 |
| | Padippura (Gate way) | 41.67 | 27.78 | 27.03 | 31.6 |
| | Kodimaram | 54.17 | 38.89 | 75.68 | 60.7 |
| | DeepaStambham | 20.83 | 5.56 | 8.11 | 12.6 |
| | Open air Granite Cross | 79.17 | 88.89 | 70.27 | 77.2 |
| | with provision for oil lamp | 79.17 | 83.33 | 62.16 | 72.1 |
| | Kottu-pura | 8.33 | 11.11 | 5.41 | 7.5 |
| | Oottu-pura | 8.33 | 0 | 16.22 | 10.1 |
| _ | Belfry | 12.5 | 22.22 | 37.84 | 26.5 |
| | Well inside compound | 50 | 72.22 | 56.76 | 58.2 |
| | Natural water body nearby | 29.17 | 38.89 | 29.73 | 31.6 |
| | Artificial water body nearby | 0 | 5.56 | 2.7 | 2.5 |
| | Built in oil lamp on wall | 37.5 | 27.78 | 16.22 | 25.3 |
| | Shorter width for alter area | 95.83 | 100 | 100 | 98.7 |
| | High roof for alter from outside | 95.83 | 88.89 | 89.19 | 91.1 |
| | Sopaanam/entrance step | 16.67 | 5.56 | 2.7 | 7.5 |
| | Mukhamandapam(front porch) | 62.5 | 61.11 | 75.67 | 68.3 |
| | Foreign Front Façade | 87.5 | 94.44 | 97.3 | 93.6 |
| | Threshold on doors | 100 | 100 | 100 | 10 |
| | Balcony inside | 50 | 66.67 | 56.76 | 56.9 |
| | Frescos/ paintings on wall | 50 | 83.33 | 72.97 | 68.3 |
| | Pushpa Koodu (pulpit) | 8.33 | 44.44 | 29.73 | 26.5 |
| | Baptism font in rock | 75 | 55.56 | 64.86 | 65.8 |
| | Hanging oil lamp inside | 54.17 | 33.33 | 37.84 | 41.7 |
| | Nila-Vilakku inside | 12.5 | 55.56 | 51.35 | 40.5 |
| 34 | | 66.67 | 77.78 | 64.86 | 68.3 |
| | Decorated Alter back drop | 91.67 | 94.44 | 97.3 | 94.9 |
| | Window in alter area | 29.17 | 44.44 | 56.76 | 45.5 |
| | Vault over alter area | 91.67 | 83.33 | 89.19 | 88.6 |
| | Arch between alter and nave | 95.83 | 100 | 94.59 | 96 |
| | Division of nave into two | 75 | 94.44 | 56.76 | 70.8 |
| | Sculptures | 58.33 | 77.78 | 72.97 | 69.6 |
| | Stained glass | 12.5 | 5.56 | 13.51 | 11.3 |

Table 3.7 Summary Tabulation of Church Survey in Percentage Wise

It has been observed during the analysis of survey results that some indigenous architectural elements/ characteristics are present as high as 60 per cent and above, and some are found to be below 60 per cent. The elements/ characteristics that showed its presence, with as high as 60 per cent and above, are presented in Table 3.8, and elements/ characteristics, which showed its presence, below 60 per cent are presented in Table 3.9.

Table 3.8 Elements/ characteristics, which showed its presence

| SI. | NOTIECO | Percentage |
|-----|------------------------------------|-------------|
| No. | Variable | of presence |
| 1 | Threshold on doors | 100 |
| 2 | Shorter width for Madbaha | 99 |
| 3 | Church building facing West | 97 |
| 4 | Arch between Madbaha and Hykala | 96 |
| 5 | High roof for Madbaha from outside | 91 |
| 6 | Vault over altar | 89 |
| 7 | Open Air Granite Cross | 77 |
| 8 | with provision for oil lamp | 72 |
| 9 | Division of nave into two | 71 |
| 10 | Oil lamp inside | 68 |
| 11 | Mukha-mandapam (porch) | 68 |
| 12 | Old compound wall | 68 |
| 13 | Kodi-maram (flag post) | 61 |
| | | |

with as high as 60 per cent and above.

Table 3.9 Elements/ characteristics, which showed its presence below 60 per cent.

| | | presente de le per cent. |
|-----|--|---------------------------|
| SI. | Variable | Percentage |
| No. | | of presence |
| 1 | Well inside compound | 58 |
| 2 | Balcony inside | 57 |
| 3 | Padi-ppura (gate way) | 32 |
| 4 | Built in oil lamp on wall | 25 |
| 5 | Deepa-sthambham (oil lamp post) | 13 (in Group 1 alone, 21) |
| 6 | Oottu-pura (feeding room) | 10 |
| 7 | Kottu-pura (room for playing music) | 8 |
| 8 | Sopaanam (traditional style entrance step) | 8 |

3.5 Re-construction of 'Original Church Form' from the Survey Analysis

In this part, an attempt is made to reconstruct the 'original church form' of indigenous Kerala church, as it existed at the time of the arrival of Europeans, in 16th century. The entire reconstruction process is strictly based on the results of the primary survey analysis. The sequence used for reconstruction starts from the site planning; that is orienting the building on the site, it then goes on to the plan form; that is arranging spaces within, then the built form, with roof form and finally other architectural elements and certain details. This order is used for reconstruction work because it was found to be the most logical sequence for the purpose of reconstruction.

For this re-construction process, the elements/ characteristics, which are present as high as 60 per cent and above are considered as elements that 'were definitely present' in the indigenous Kerala church buildings. Where as, those architectural elements/ characteristics that are present in the range of below 60 per cent are considered as, 'were present only in a few' indigenous Kerala church buildings.

3.5.1 Placing the Building on the Site

A church building, of today is mostly a rectangular building, placed on a site of any shape, with its front façade facing the direction from which the road approach is available, irrespective of what cardinal direction it faces. The Architect's first task in designing any church building, on a given site would be,

Jain, Buddhist or Hindu temple in Kerala is concerned, it was always placed

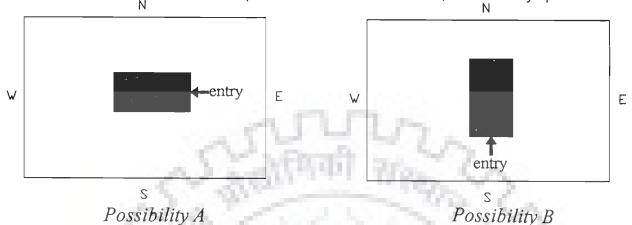


Figure 3.2 Different possibilities now, in orienting a Church building in any given site

according to strict directional rules, so that the idol, and therefore, the temple also, should face East. The side/ orientation of the approach-road to the site, etc. did not play any role when it came to the orientation of the building. The Investigator's first task was to see whether any such guidelines were followed in the indigenous church buildings of Kerala also. The survey results were quite astonishing; 100 per cent of churches in Group I and II were built with the church facing the West; that is the church building had its *Madbaha* on the East and 'front façade'^{box} on the West. Only in Group III, it was slightly less (with 5 per cent churches facing other directions). This was irrespective of the direction in which the site has the road approach to it [Table 3.10, Figure 3.3 and Table 3.11, Figure 3.4].

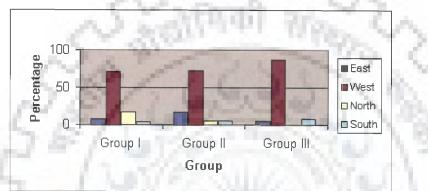
^{lxxv} The word 'front façade' is used in this work in its conventional sense. Factually it would be wrong to use the word 'front façade' or 'main entry' to the 'West entry' of the indigenous churches because it was observed from the survey that, in many churches the door on the North or South had been conceived and treated as the main entrance of the church, and no importance at all was given to the treatment of Western façade.

| SI.No. | Variable | Churches in | | | |
|--------|----------|-------------|----------|-----------|--|
| | | Group I | Group II | Group III | |
| 1 | East | 8.33 | 16.67 | 5.41 | |
| 2 | West | 70.83 | 72.22 | 86.49 | |
| 3 | North | 16.67 | 5.56 | 0 | |
| 4 | South | 4.17 | 5.56 | 8.19 | |

Table 3.10 Direction church premises faces (side on which gateway is present)

all figures are in percentage

all figures are in percentage





| | | o which the church. | | | | |
|--------|-----------|---------------------|-------------|-----------|--|--|
| SI.No. | Variable | | Churches in | | | |
| 100 | 10. N. C. | Group I | Group II | Group III | | |
| 1 | East | 0 | 0 | 2.7 | | |
| 2 | West | 100 | 100 | 94.59 | | |
| 3 | North | 0 | 0 | 0 | | |
| 4 | South | 0 | 0 | 2.7 | | |

Table 3.11 Direction to which the church faces

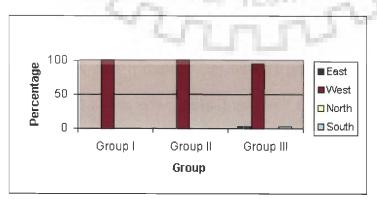
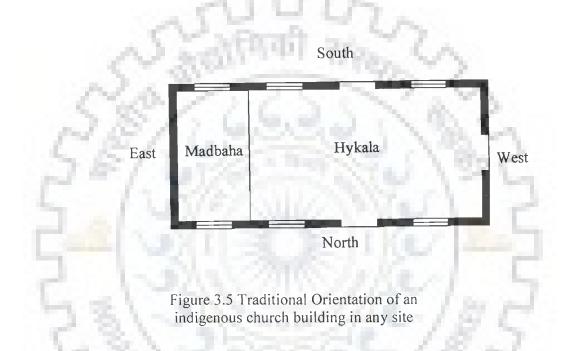


Figure 3.4 Direction the church building faces

So it was deduced that, the indigenous Kerala church buildings were always placed, traditionally, on East-West axis, with its *Madbaha* facing East, so that, as was the custom then, the people and the Priest faced the same direction, East, while praying. As is evident from the survey, this was done irrespective of the way the site was oriented or the road/ river^{lxxvi} access to the site [Figure 3.5].



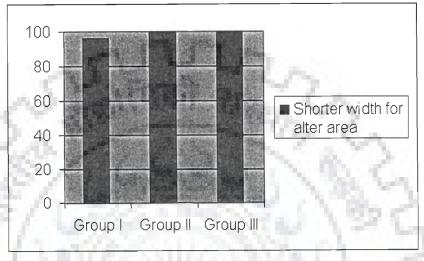
3.5.2 Madbaha (Chancel)

As far as whether the indigenous church plan was basically a rectangular building, as of today, it was observed from the survey that traditionally, the overall plan was not strictly a rectangle, but the width of the *Madbaha* (chancel) was always shorter than that of the *Hykala* (nave area) [Photo 3.4]. In Group I and II, all (100 per cent) churches had this feature, whereas in Group I, 96 per cent of the churches had this feature [Table 3.12 and Figure 3.6].

^{lxxvi} Some times the main access to the church premises may not be from a road, but from a river also. Example: Chambakkulam church, Malayattoor church, Cherpukkal church, etc.

| | | | | Group |
|--------|------------------------------|---------|----------|-------|
| SI.No. | Variable | Group I | Group II | 111 |
| 1 | Shorter width for alter area | 95.83 | 100 | 100 |

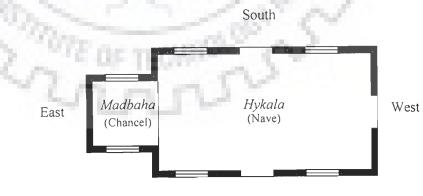
Table 3.12 Churches with shorter width for Madbaha, than Hykala width



all figures are in percentage

Figure 3.6 Number of churches with shorter width for Madbaha

So it was concluded that the *Madbaha* of the indigenous churches were always conceived, traditionally, with a shorter width, than that of the *Hykala*, thus making the plan like, as shown in Figure 3.7.



North

Figure 3.7 Indigenous church buildings always had a shorter width for *Madbaha* (altar area)

The windows and doors shown in the above church plans [Figure 3.5 and 3.7] were based on conventional plans, but the survey results have again shown a different trend. It was seen that, in Group I only 30 per cent of the churches had windows to *Madbaha*, and in Group II and III only 44 and 57 per cent churches respectively had a window to *Madbaha*, thus showing an increasing trend in having a window to the *Madbaha* to later periods [Table 3.13 and Figure 3.8].

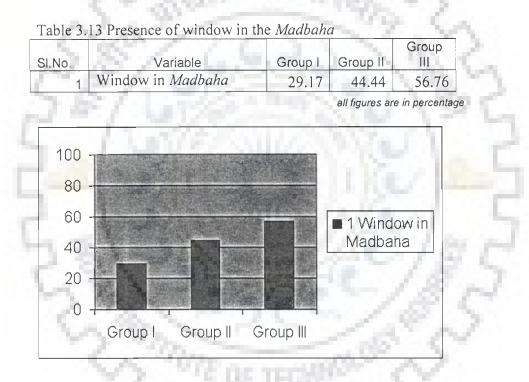


Figure 3.8 Number of churches with windows in the Madbaha

It has been inferred from the literature survey (see Chapter II, p. 74) that the interiors of indigenous Kerala churches were very dark because it had no windows to the *Hykala* thus making the plan of the building as shown in Figure 3.9. Further, it was also observed, while conducting the survey, that even

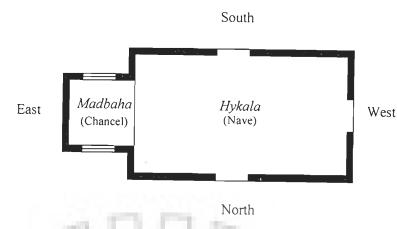
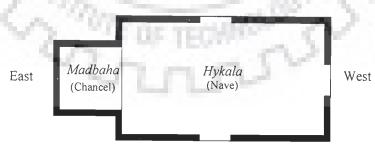


Figure 3.9 Indigenous church buildings had no windows in the *Hykala* (nave)

in the available old churches, having a window present in the *Madbaha* now, many were actually added in a later period, to bring in more light to the chancel, like in Puthupalli Church [Photo 3.5], Chendamangalam church [Photo 3.6], etc. So it has been concluded that, in the pre-Portuguese period, windows were not present in the *Madbaha*. Therefore, traditionally, the indigenous Kerala churches were conceived with no windows at all in the building and the only openings into the church interiors were the doors, three in number, one from West and one each from the longer sides. Therefore it was concluded that the plan of the indigenous church was more like as shown in Figure 3.10.

South



North

Figure 3.10 Indigenous church buildings had no windows to the *Madbaha*, nor in the *Hykala*

3.5.3 Triumphal Arch

It was observed that an arch, equivalent to the triumphal arch seen in the Western and Eastern churches, always separated the *Madbaha* from the *Hykala* of the indigenous Kerala churches [Photo 3.7]. In fact, the survey results had shown that, this feature was always present in 96, 100 and 95 per cent of the churches in Group I, II and III, respectively [Table 3.14 and Figure 3.11]. Therefore, with this addition, the plan of the indigenous church was as shown in Figure 3.12.

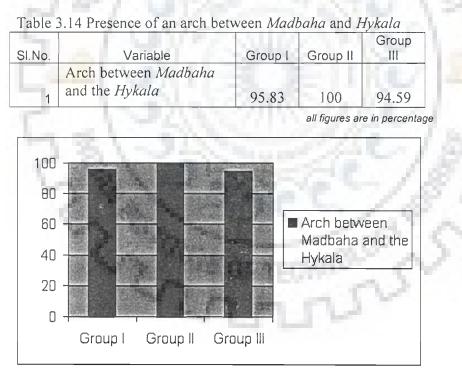


Figure 3.11 Number of churches with arch between Madbaha and Hykala

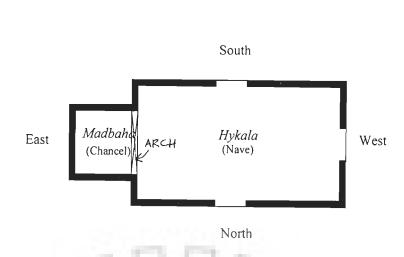


Figure 3.12 An arch always separated the *Madbaha* from the *Hykala* in an indigenous building

The Investigator would like to add here that, the making of an arch or even vault was not at all unknown to the traditional builders of India. In fact, most Buddhist *Chaithas* had a vaulted roof even in the pre-Christian era. Further, it was also observed during the survey that, almost all the churches in Group I, II and III had their door openings spanned by an arch [Photo 3.8, 3.9]. The doors were also found to be small in size, the concept of giving a huge main door in the West façade, called '*Aana-vaathil*' (literally, elephant door), which is very common in Kerala churches at present, is a post European addition to Kerala church architecture, following the architectural style of the Western churches.

3.5.4 Vault over Altar

Another element often present in the indigenous churches of Kerala was a vault, in the *Madbaha*, over the altar [Photo 3.10]. It was inferred from the survey that, 92, 83 and 89 per cent of the churches in Group I, II and III, respectively, had this feature [Table 3.15 and Figure 3.13]. These vaults were constructed in laterite or even in wood, as in Purakkad church [Photo 3.11]. So it is concluded that, giving a vaulted roof for *Madbaha*, over the altar, was a characteristic feature in the indigenous churches of Kerala, as shown in Figure 3.14.

| Table 3.15 Presence of a vault over the altar, in Madbaha | | | | |
|---|----------------------|---------|-----------------|-----------------|
| SI.No. | Variable | Group I | Group II | Group III |
| 1 | Vault over the alter | 91.67 | 83.33 | 89.19 |
| | | | all figures are | e in percentage |

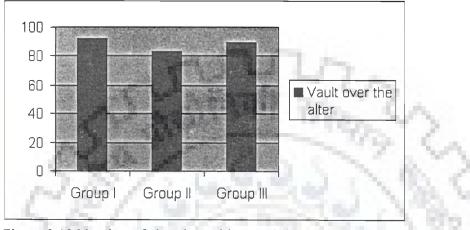


Figure 3.13 Number of churches with a vault in Madbaha

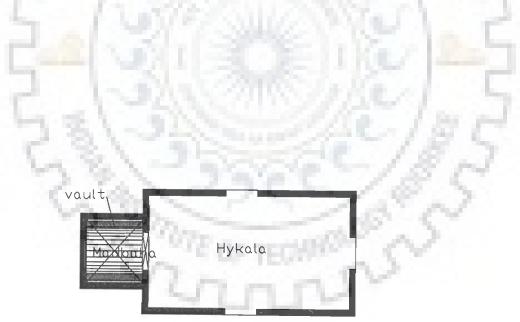


Figure 3.14 A vault was mostly present in the *Madbaha* over the altar in the indigenous church building

It is also observed that, presently the space above the vault is, in most cases, left without any apparent use [Figure 3.15], occasionally using it only to hang the church bell or as a strong room. These strong rooms were mostly added in the post-European period, when a side room was built on the side of *Madbaha* for the priest to stay.

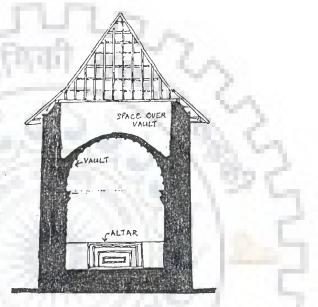


Figure 3.15 Section through the vault in Madbaha

3.5.5 Hykala (Nave)

Today in Kerala, the interior of the church is mostly divided longitudinally into two, as shown in Figure 3.16.a (conventional), with one side for ladies and the other for gents. It was observed, during the survey, that in the indigenous churches this separation for men and women was in a different way. There was always a space left between the *Madbaha* and the *Hykala*, sets apart as a "less holy space", called '*Kestroma*', where initial part of the 'Holy Mass' was held [Figure 3.16]. This element is still present in many churches and the rest of the nave itself was divided cross-sectionally into two sections as shown in Figure

3.16.b (traditional), with the front space, the area near the *Kestroma* for the men and the rear area for ladies [Photo 3.12]. It was observed that originally 75 per cent of the churches in Group I, 95 per cent in Group II and 57 per cent in Group III had this feature [Table 3.16 and Figure 3.17].

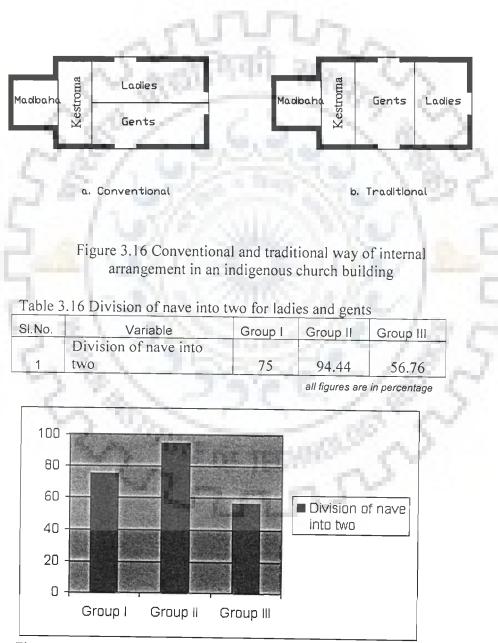


Figure 3.17 Number of churches with traditional division of nave into two for ladies and gents

A railing, in wood, was also installed to separate the portion for gents from that of the ladies, leaving a gap in the middle, probably for the ladies to take Holy Communion. These wooden railings have a height of about 80 cm usually, and up to 1.5 meters in some cases. For example, the railing in Chungam church was, though now has only 1 meter height [Photo 3.13], it was evident from observation, as well as through interview with senior citizens of the parish, that it was at least 1.5 meters in height earlier. Therefore, it is inferred that the plan of an indigenous church was as shown in Figure 3.18.

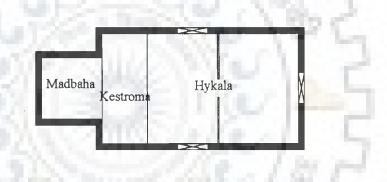


Figure 3.18 The deduced plan of an indigenous church

Another element, which showed its presence in indigenous church buildings of Kerala with an astonishing 100 per cent presence in all three study Groups, was the presence of a threshold on doors [Photo 3.14]. It was present in all the churches in Group I, II and III, mostly of granite, but sometimes it was made even in wood. The doors openings, not door frames, as stated earlier, had an arch spanning over it. Therefore, it was inferred that the indigenous church had looked like as shown in Figure 3.19.

3.5.6 Foreign Front Façade

Today when anyone imagines about a church building the first picture that comes to his mind is the imposing decorated front façade, but as already established from the literature review (see Chapter II, p. 74), the concept of a 'front facade' in itself was a foreign addition to the indigenous church architecture of Kerala. However, the effect of this foreign influence was so great that almost all churches, had been added at present with a foreign façade. It was seen in the survey that 88 per cent of the churches in Group I, 94 and 97 per cent of churches in Group II and III, respectively, had a foreign front façade at present. At the same time, in many cases the Investigator could easily make out during the survey that the front façade was a later addition, as was evident from the way it was joined to the side walls of the nave, for example in Thumbamon church [Photo 3.15]. In some cases the front facade was built above the original front wall which stopped at the sloping roof, which, the addition, could be easily be identified in some churches, like Kallooppaara church [Photo 3.16] as this line of joint between old and new has now, after many years, become more evident. Also in some churches, like Mulakkulam church [Photo 3.17] and Vadakara church [Photo 3.18] the new façade is built in front of the old one, with out demolishing it and now both could be easily make out.

At the same time, there did existed till recently some churches with out the foreign front façade. The old Kallada, Kundara and Kayamkulam old churches (all demolished now) can be taken as an example of this future [Photo 3.19, 3.20, 3.21], although some decorations had been done on these facades at later

stages, when these photographs were taken. This type of façade can be still seen in the Karthiyapalli (but with additional decorations on it), Thiruvithamcode and Kanjirapalli churches [Photo 3.22, 3.23, 3.24]. Therefore it was inferred that the very concept of treating the West façade as 'front façade' was not there in traditional Kerala churches and the West façade was traditionally left as was, like in Thiruvithamcode church or Kanjirapalli church.

3.5.7 Madbaha Roof Form

Another traditional element, which made the indigenous Kerala church drastically different from that of the West, as well as the post-European-churches in Kerala, was that, the roof of the *Madbaha*, of the indigenous churches were purposely made higher than the roof of the nave [Photo 3.25]. It was observed in the survey that 96, 89 and 89 per cent of the churches in Group I, II and III, respectively, had this feature [Table 3.17 and Figure 3.20].

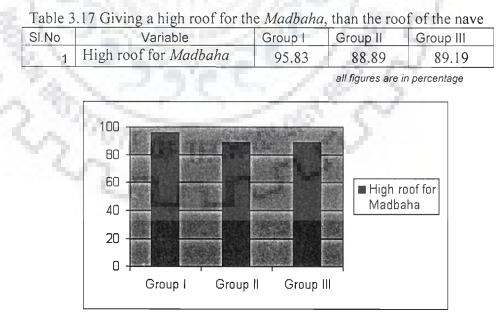


Figure 3.20 Number of churches with a high roof for the Madbaha

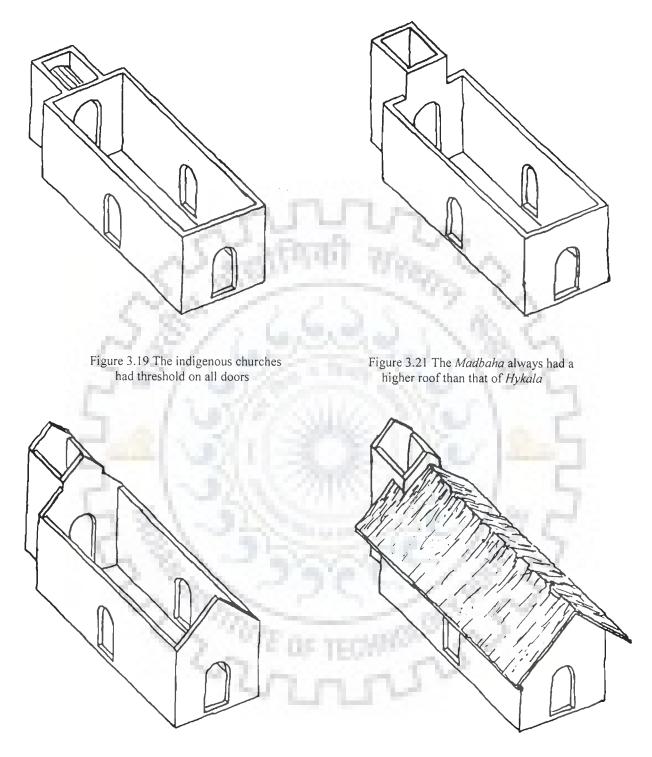


Figure 3.22 The indigenous churches always had a sloping roof

Figure 3.23 The *Hykala* always had a two sided sloping roof, with thatch

This means that the structure of the traditional church was like as shown in Figure 3.21. It was observed from the survey that 100 per cent of the churches in Group I, II and III had a sloping roof for *Hykala* [Photo 3.26], which will make the traditional church like as shown in Figure 3.22. Further, as seen in the literature survey, the roof was only thatch in 15-16th centuries, thus making the building structure looks like as shown in Figure 3.23, with two sided slope for its *Hykala*. The Madbaha had two, three or four sided sloping roof; two sided as in Tharissa church [Photo 3.27], three sided as in Mattam church [Photo 3.28], and four sided as in Angamaali Jacobite church [Photo 3.29], thus making the church look like as shown in Figure 3.24, in case of two sided slope or like as shown in Figure 3.25, in case of a four sided slope.

3.5.8 Mukha-Mandapam (Entrance Porch)

Another unique feature of the indigenous churches of Kerala, which was absent in any other church architecture, was the presence of a porch like structure added mostly to the West façade [Photo 3.30]. It seems to occur also in the Northern or Southern side also [Photo 3.31], or sometimes even in the West as well as on any one of the longer sides, of the church. It is called *Mukhamandapam*. It was observed in the survey that 63, 61 and 76 per cent of the churches in Group I, II and III, respectively had this feature [Table 3.18 and Figure 3.26].

Therefore, it was inferred that, though not always present, the *Mukha-mandapam* was also an element, at least in 61 per cent of the indigenous

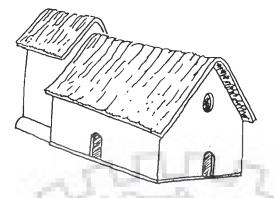


Figure 3.24 Indigenous church with two-sided roof for Madbaha

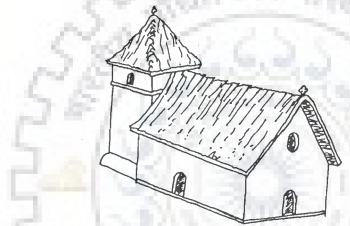


Figure 3.25 Indigenous church with four-sided roof for Madbaha

| Table 3.18 Presence of Mukha-mandapan (entrance porch) | | | | | | | |
|--|----------------|------|-------|-----------|--|--|--|
| SI.No. | Variable | | | Group III | | | |
| 1 | Mukha-mandapam | 62.5 | 61.11 | 75.67 | | | |

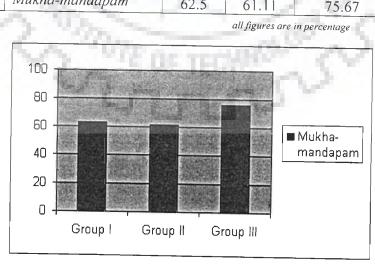


Figure 3.26 Number of churches with a Mukha-mandapan present

churches existed, thus making two different typologies of indigenous church architecture in Kerala; one without and the other with *Mukha-mandapam*. Thus making the indigenous church looks like either as shown in Figure 3.24 or Figure 3.25, with out *Mukha-mandapam* or like Figure 3.27 that is with *Mukha-mandapam*. In a very few cases, as stated earlier, the *Mukha-mandapam* was present in front as well as on side, thus making the church looks like as shown in Figure 3.28.

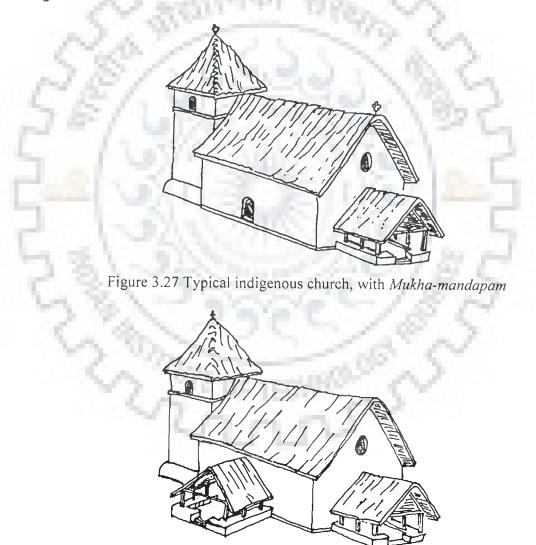


Figure 3.28 Typical indigenous church, with *Mukha-mandapam* present in the West as well as on the longer side

3.5.9 High Compound Wall

The construction of a high compound wall, with exposed laterite blocks, was another feature present in the indigenous churches of Kerala [Photo 3.32]. In fact, the survey has shown that 67, 61 and 73 per cent of the churches in Group I, II and III respectively, had a traditional high compound wall [Table 3.19 and Figure 3.29].

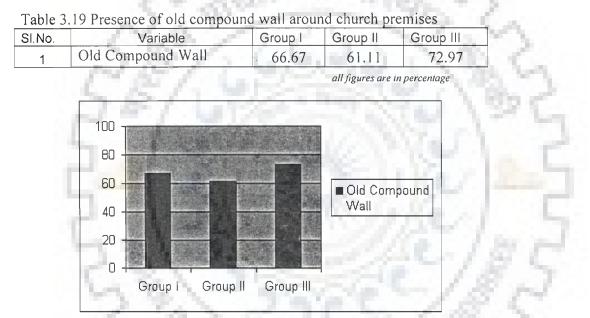


Figure 3.29 Number of churches with old compound wall around church premises

Thus, with this addition, the church premises would look like as shown in Figure 3.30. As stated earlier, the church building was always oriented in the East-West axis, irrespective of the entry to the church premises, thus making the church premises look even like as in Figure 3.31. These compound walls also had, in many cases provision for built in oil lamps on them [Photo 3.33], on inside as well as on outside.



Figure 3.31 Indigenous church with compound wall, entry from side

3.5.10 Padi-ppura (Entrance Gateway)

The high compound wall also had a formal traditional '*Padi-ppura*' (gate way to the compound) in many cases [Photo 3.34], The survey results shown that 42, 28 and 27 per cent of the churches in Group I, II and III respectively had this feature. The survey clearly shows a decreasing trend in the use of a *padi-ppura* over the centuries. Further, it is inferred from interviews that the *padi-ppura* was originally present in many more churches and was demolished in later years, because it was found to be blocking the view to the newly constructed 'front façade' of the church, as in the case of Kanjoor church where it was demolished in 1970's [Photo 3.35 and 3.36]. Therefore, it was inferred that, although it was not always present, 42 per cent of initially, and later at least 27 per cent of the indigenous churches, had a *Padi-ppura* present at the entry point to the church premises, thus making the church looks like as shown in Figure 3.32.

3.5.11 Kottu-ppura (Room for Playing Music)

The presence of a *Kottu-ppura* (room for playing music) was another feature that was present in indigenous churches [Photo 3.37, 3.38]. Although now only 8, 11 and 5 per cent of the churches in Group I, II and III, respectively, has this feature, it was deduced from the interviews that in many of the churches this element was present and it got deteriorated and dilapidated with time. Some churches, like Ramapuram church, had two *Kottu-pura* [Photo 3.39]. So it was inferred that, though not a common feature, a few churches also had a *kottu-pura* present, making the church premises looks like as shown in Figure 3.33.

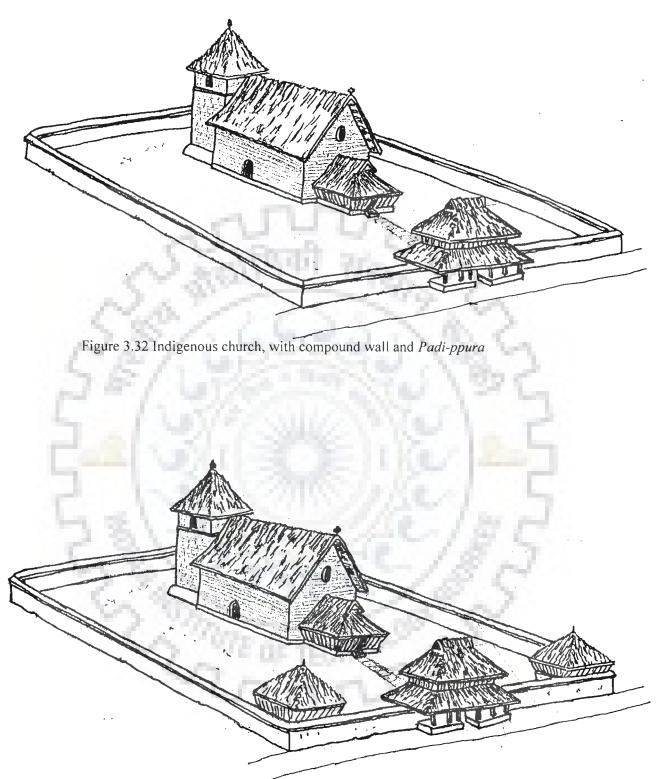


Figure 3.33 Indigenous church, with two Kottu-pura added

3.5.12 Open Air Granite Cross

Another feature common to the indigenous churches was the presence of an open air granite cross within the church premises, or immediately outside it [Photo 3.40, 3.41]. This is another unique element present in the indigenous Kerala church unlike any other church architecture. Some of them were as high as 12 Meters [Photo 3.42]. Many of these granite crosses also had a provision to light oil lamps in them [Photo 3.43]. The survey results shows that 79, 89 and 71 per cent of the churches, in Group I, II and III, respectively, had a granite cross in them and 79, 83 and 62 per cent of these churches, in the same order, had provision for oil lamp also in them [Table 3.20 and Figure 3.34]. As is evident from the survey results, initially the open air granite crosses always had a provision for oil lamp in them and later, probably after the introduction of candles, the practice of attaching oil lamp to the granite cross base decreased.

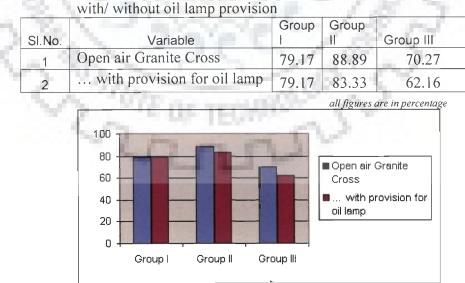


Table 3.20 Presence of open air Granite cross

Figure 3.34 Number of churches with an open air Granite cross with/ without oil lamp provision

3.5.13 Deepa-stambham (Oil Lamp Post in Front of Church)

At the same time, it was seen that some indigenous churches also had a separate provision for oil lamps in front of the church building. It was a post, in granite or wood, to light oil lamps and was known as *Deepa-stambham* (oil lamp stand) [Photo 3.44, 3.45]. It was also observed that 21, 6 and 8 per cent, of the churches in Group I, II, III respectively, had this feature, which means this trend decreased later. It is only natural that, at a period when no other sources of light were available to light up the church premises in night, some oil lamps were used for this purpose. It has been already stated that the high traditional compound walls sometimes had a provision for built in oil lamps in them. However, since the presence of this element is only 21 per cent in Group I itself, it is concluded that very few churches had this feature.

3.5.14 Oil Lamps Inside the Church

It was observed that an oil lamp is usually kept in the *Kestroma* of indigenous Kerala churches, which seems to be the only light source, other than the natural light that comes through the three doors and a small opening on the West wall above the door (see, Figure 3.14). It was either '*Nila-vilakku*' (floor lamp) [Photo 3.46, 3.47] or '*Thookku-vilakku*' (hanging lamp) [Photo 3.48, 3.49] but either way there always was present an oil lamp. In fact the survey results show that Group I, II and III were having either one of the oil lamps, in the order of 67, 78 and 65 per cent respectively [Table 3.21 and Figure 3.35].

Therefore, it was inferred that the use of an oil lamp inside the church was a common feature in the indigenous churches of Kerala.

| Table 3.21 Presence of a on famp inside the church | | | | | |
|--|--------------------------|-------|-------|-------|--|
| | | Group | Group | Group | |
| SI.No. | Variable | I. | | | |
| 1 | Nila-Vilakku inside | 12.5 | 55.56 | 51.35 | |
| 2 | Hanging oil lamp inside | 54.17 | 33.33 | 37.84 | |
| | with either one oil lamp | | | | |
| 3 | inside | 66.67 | 77.78 | 64.86 | |

Table 3.21 Presence of a oil lamp inside the church

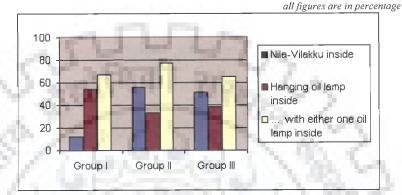


Figure 3.35 Number of churches with oil lamp inside the church

3.5.15 Kodi-maram (Flag-Post)

The provision of a traditional style '*Kodi-maram*' (flag-post), to hoist the church flag during the festival period, was another indigenous feature of Kerala churches [Photo 3.50]. As per the survey 54, 39 and 76 per cent of the churches in Group I, II and III respectively, had this feature.

It has been observed, and also known from interviews, that almost 100 per cent of the churches had some sort of a provision, in some cases temporary, to hoist a festival flag. It must be stated here that, even now, most churches in Kerala has a flag-post in front of the church, to hoist the flag of the church, during festival period, which is made either in the traditional style or with just steel pipes. It has been also inferred from the survey that the position of the flag-post was not always strictly in the front of the church, as it is done today, nor traditionally any directional rules guided in its placement, as in the case of temples of Kerala where it was always placed in front of the temple. It was placed mostly near the approach road/ river to the church, irrespective of its cardinal direction, so that the general public would also know that festival of that church was going on. As stated earlier, since the church was oriented in East-West axis, the church may not always face the approach road/ river. For example, in Chempakulam church, where the main entry is from the river on East side, the flag post is placed near the entry, which is behind the church building [Photo 3.51].

3.5.16 Oottu-pura (Feeding Hall)

A room/ space that could be used as a dining space, called *Oottu-pura*, was another feature that was present in some indigenous churches. Although it is not a common feature, a few churches had this element. The survey results show that 8, 0 and 16 per cent of churches in Group I, II and III, respectively, had this feature. It is customary that at least during festivals and on Good Friday, food was provided to the Parishioners in the church premises itself. This structure must have been used for this purpose [Photo 3.52]. This space was also used as a class room for the children of the locality for their schooling, taught by only one teacher, known as '*Guru*', as was the tradition in those days. It was observed during the survey that in some churches there was a separate provision for this teaching facility, which was its main purpose and this space was also used as dining space during festivals. However, due to a very low percentage of its presence, as per the survey, it can be only considered that this element was present only in very few cases.

In the Chungam church, it was deduced through the survey^{lxxvii}, that such a room was present and classes were held by a 'Nair *Ashaan*' means 'Nair teacher' (Nair is a Hindu sub caste). It is interesting to note that the respondent himself was a student of this 'school', but this structure is no longer exists at present.

3.5.17 Belfry

It became evident during the survey that, Belfry in itself, was another foreign addition to the indigenous church architecture of Kerala. In fact, none of the churches in Group I has this element. In Group II it was 22 per cent, i.e. 4 churches out of 18 churches, and further all these 4 belfries showed clear European architectural influence in its construction. In Group III, 38 per cent of the churches had this feature. This increasing trend of the presence of a belfry in survey results clearly show that, in later periods this element became popular and accepted by Kerala Christians. Later, after it had become accepted, the design for Belfry was also adjusted to suit the local architecture [Photo 3.53].

At the same time, it does not mean that there were no bells present at all in Kerala churches, to call the faithful to the holy mass or to announce other matters like the death of a parish member. '*Kootta-mani*' (continuous-bell) from the church is, traditionally, a symbol to call the parishioners to the church. In many churches this bell was hung inside the *Madbaha*, in the space above the vault and a string, to pull the bell, would hang into the *Hykala*, through a hole in the wall. The bell in Tharissaa-*palli* at Kollam is an example for this type. In many cases it was a medium (30-50 cm) high bell. Parappookkara church had this bell

^{hxvii} Interview with Joseph Kandathil, a former employee of this church, now (2004) 85 years old.

at the top of the *Madbaha* roof [Photo 3.54], which is but a later addition, as was deduced from the survey.

3.5.18 Balcony Inside the Nave

Another feature common to many indigenous Kerala churches was the presence of a balcony inside the church [Photo 3.55, 3.56, 3.57, 3.58]. However, it was not an extra space for the parishioners to attend the Holy Mass, but for the parish Priest to stay. These balconies were always built in wood. From the survey it was found that 50, 67 and 57 per cent of the churches in Group I, II and III, respectively, had this feature. The Investigator would like to put it on record that, the undersides of all of these wooden balconies have exquisite carvings, which are one of the finest specimens of wooden carvings in Kerala [Photo 3.59, 3.60]. The bracket, which supports these balconies, was also usually highly carved with faces of animals, etc. [Photo 3.61, 3.62].

3.5.19 Sopaanam (Traditional Style Entrance Steps)

The plinth level of the indigenous churches were always 45-60 centimeters high from ground level, and the doors were in some cases approached through a traditional Kerala style step, with traditional granite side slabs as shown in Photo 3.63 and 3.64. It was found from the survey that 16, 6 and 3 per cent of the churches in Group I, II and III, respectively, had this feature, but because of the low percentage of the presence of this element in Group I itself, it cannot be said that it was always present. At the same time, the survey result proves that *Sopaanam* was an element present in Christian churches also.

3.5.20 Well Inside the Compound Wall

Another element present in many of the indigenous churches was the presence of a well inside the compound wall. It was found from the survey that 50, 72 and 57 per cent of the churches in Group I, II and III, respectively, had this feature. Since the presence of this element was only 50 per cent in Group I itself, it can be only inferred that at least half of the churches in 16th century had this element [Photo 3.65]. In most cases (62 percent) it was found to be on Northeast corner of the church premises.

3.5.21 Baptism Font in Stone

It was found from the analysis of the survey results that 75, 56 and 65 per cent of the churches in Group I, II and III, respectively, had a baptism font carved entirely of rock. At the same time, as it was inferred from literature survey, (see, Chapter II, p. 79) fixed baptism fonts were not used before 1599 AD. Therefore, it was deduced that these baptism fonts in granite were built only after the Synod of Udayamperoor (1599 AD). At the same time, the Investigator would like to put it on record that some of these baptism fonts, though made after 1599 AD, were exquisitely carved and are one of the best examples of the exquisite stone carving of Kerala [Photo 3.66, 3.67]. Stone baptism fonts, mostly monolithic pieces, had a hole drilled in its centre to let water flow to ground, these holes, some 50-60 centimeters in length, were drilled by hand through granite, and were a wonder in itself. Similarly, carved are the cases of many stone monolithic crosses in stone, like the one in Kottayam church [Photo 3.68], all called Persian crosses.

3.5.22 Decorated Altar Back-drop

The presence of a decorated altar back drop, built of latarite or wood, was observed in most of the churches surveyed, which had provision for placing the statues. However, from the architectural style and detailing of these altar backdrops, it has been conclusively deduced that it was definitely of post-Portuguese period. The influences of Western architectural details were present in all of them, except one. This sole survivor, of pre-Portuguese style alter back-drop, is in Ramapuram church [Photo 3.69]. This old altar, though not in use any more, is still preserved in a side room of the church. It belongs to the church built in 1450, which was demolished later to build a bigger church. This altar back-drop clearly shows; altar back drop decoration was present in pre-Portuguese period also and how it was done in those periods. It was not influenced by any Western details, but clearly reflect the pure Kerala style motif decoration, coloured with vegetable oil paints for its drawing. The style used is similar to the decoration given in many Hindu temples, around the main idols, which is locally called 'prabha'. It seems that this type of Kerala style motif decoration, of using the traditional style prabha around the tabernacle^{lxxviii}, was completely replaced after the Portuguese influence and died off later. At the same time, since, the centre-piece of this Ramapuram altar back-drop is the tabernacle around which the prabha like decoration is given, it cannot be of the oldest possible way of altar decoration, because many scholars are of the view that the very idea of keeping Eucharist for later use, is of a late origin (8th - 9thcenturies) in Christianity. It was meant for using in case of an urgent need, like the giving to a person who's death is approaching and if there is no priest available. Originally, in most churches, it was not given the primary importance, which was always given to the altar itself, and in many cases the tabernacle was kept outside the *Madbaha*, some times in the *krestroma*. However, it seems that in Kerala, in the post-Portuguese era, the tabernacle has gained more importance and has become the centrepiece of most altar backdrops. Today the Portuguese style altar back-drops [Photo 3.70] have penetrated to such an extend that, 92, 95 and 97 per cent of the churches in Group I, II and III, respectively, have got it.

3.5.23 Pulpit

Another element seen in many churches was a pulpit, known locally as *Pushpa-koodu* [Photo 3.71]. It was made in such a way, that the priest could stand at a height of above 2-3 meters to give the sermon, so that all in the church could hear him. *Pushpa-koodu* is present in 8, 44 and 30 per cent of the churches in Group I, II and III, respectively. It may be noted here that its presence was only 8 per cent in Group I, which shows an increasing trend in using this element. In fact, the size of pre-Portuguese churches was much smaller than the churches of today because the number of parishioners was less, and they needed a building only to accommodate that crowd, therefore they could hear the sermon without a high pulpit. Further, many of these *pushpa-koodu* carvings, like the one at Mattam church, also clearly show the Portuguese influence [Photo 3.72]. All this proves that it was not an original Kerala element, but introduced here by the Portuguese. The literature survey also supports that pulpits are an imported element by the Portuguese to Kerala.

Ixxviii It is an ornamental receptacle for keeping the reserved Eucharist, now usually seen in the altar.

3.5.24 Built in Oil Lamp on Wall

In some churches it was seen that provision for lighting oil lamps, in granite, were fixed to the wall of the church building [Photo 3.73]. As stated earlier it was present in the compound wall also. It was inferred from the survey that 38, 28 and 16 per cent of the churches in Group I, II and III, respectively, had this feature. It may be deduced from the decreasing order of its presence that this practice was in vogue during earlier periods and was scraped later, probably after the introduction of candles.

3.5.25 Construction Materials and Techniques

It is observed from the survey that laterite was the main construction material, in almost all the churches, for the foundation, basement and the walls. Only one church, Thiruvithamcode church, had its foundation and walls were constructed with stone blocks. This is attributed to the fact that stone was abundantly available in that area. In a few churches wood was used as pillars and partition material. As far as the roof is concerned, it was observed that all the churches had wooden rafters and clay tile as roofing material. Only one church, the second church in Vadakkan Paravoor, had on its roof covering material in copper sheet, instead of clay tiles. However, as inferred from the literature review, in 15/16th centuries most churches were covered with thatch roof.

As deduced from the literature review, there are references about many wooden churches, that is churches completely built of wood, in many old literature. However, no specimens of this type of churches have survived to the present time. This aspect is being dealt separately.

3.6 Churches Built Using Wood as the Walling Material

In Kerala, traditionally, one of the most popular building material was wood. The traditional houses were always built for years with wood as the main walling material. In fact, wooden houses, known as '*Arayum-nirayum*', were more common especially in central Travancore, where the concentration of pre-European churches were more. Therefore, it is only natural that some of these churches, the main walling material used for construction was wood.

Fr. James Fenicio, a Jesuit missionary, who worked in Kerala between 1600 and 1607, have obtained permission from the local king to erect churches in the king's territory. He has later written about the construction of a church in the village Palur in a letter, "the stone church, which I begin two years ago [enclosing, apparently, within it the primitive building] had risen to the height of windows. At this stage no one would dare to pull down the old wooden building",²⁵⁵ This explicitly proves about the existence of wooden church buildings that existed then. In fact when the Portuguese built their first church in Kerala, St. Francis church, which is the first 'European style' church building in Kerala, between 1505 and 1515, which is now known as the St. Francis church, as the records say, originally this church was also built in wood, but soon it was replaced by the present building, built of laterite and lime mortar in Portuguese style of architecture as it stands today [see, Photo 2.6]. Even after that wood continued to be used for all decorations inside, like highly decorated and gold painted '*raathaal*' (back-drop to alter), '*pushpam*' (highly carved and often gold

painted pulpit), usage of 'ramsenthi' (flower decorations) on the alter, all carved on wood. Even the statues of saints were all carved in wood.

Carmelite missionary Paulinus also writes in 1796, "the great part of the houses in Malabar are built of teak wood, which in weight and durability excels oak. This wood is imperishable. I have seen many houses built 400 years back, which shows no signs of decay". ²⁵⁶ In fact the Padmanabhapuram palace, the palace of the Travancore kings still has many 'complete wooden structures' that are some 800 years old. The foundation and basement of these structures used to be laterite.

The Investigator, therefore comes to the conclusion that, in 16th century, there were also some churches, and centuries before that probably all churches, were completely built using wood as the walling material, as well as the roofing material. In fact, the roofing material continued to be wood till around 1930's and over these wooden rafters the final covering used to be mostly thatch in 15/16th centuries (thatch was replaced by tiles later). Although there are no surviving examples of using wood as walling material, except in a small portion in Mattam *kurishu palli*, as seen earlier, the written documents by Fr. James Fenicio, in early 1600's, attest to this fact. Therefore, it may be concluded that, other than the above said two typologies of indigenous church architecture, a third one also prevailed in 16th century, where the walling material of the church was completely of wood. It probably looked like as shown in Figure 3.36, following the constructions techniques of traditional *Arayum-nirayum* residences. As far as whether those churches had *Mukha-mandapam*, etc., the Investigator could not

attempt such a study, because in absence of any sample specimen or any literary evidence to support it, it would only be a speculation.

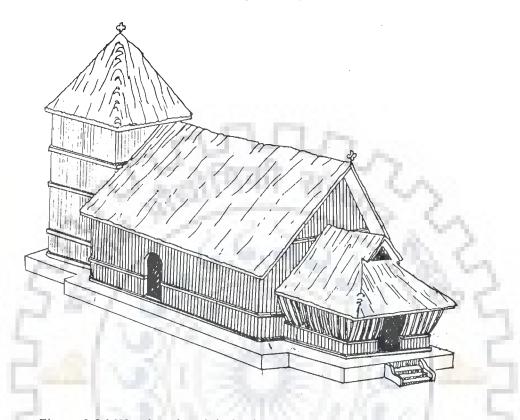


Figure 3.36 Wooden church built like 'Arayum-nirayum' houses

3.7 Inferences from the Reconstruction of Original Kerala Church Form

The Investigator has come to the conclusion that, basically the indigenous churches of Kerala were conceived in a different way, not withstanding the peripheral similarities, from the European churches. In plan the indigenous Kerala church was always oriented strictly in the East-West axis, with *Madbaha* on the East side [Figure 3.3]. In plan, the *Madbaha* was always designed with a shorter width, than that of the *Hykala*. There was an arch, separating the *Madbaha* from the *Hykala*, and a vault in the Madbaha, over the altar. The roof of the *Madbaha* was always projected up, than the roof of the *Hykala*, thus making

it drastically different from any other church architecture. The *Hykala* was divided in to two as shown in Figure 3.8.b (traditional), for ladies and gents, by a handrail. The *Madbaha*, as well as the *Hykala*, did not have any windows. Three doors, with arched doorways, were the only entries to the building. It was also the only light source to the interior spaces, other than the circular hole provided over the door in the West wall and the oil lamps kept inside. Inside the *Hykala* there was a balcony space, for the priest to stay, which were always built of wood and were usually exquisitely carved. There was no imposing 'front' façade in the West side, as in European churches and also the West side was not always treated as the main entry or 'front' side. There was an entrance porch, *Mukha-mandapam*, present in many churches, which was another unique feature of indigenous Kerala church. While all the architectural characteristics and elements stated above were all common features of the indigenous churches, the last element, *Mukha-mandapam* was not present in all the churches.

Thus, it was deduced from the investigation that, the churches that existed at the arrival of the Europeans, in the 16th century, can be classified under three basic types, based on its built form; (i) the churches without *Mukha-mandapam* as shown in Figure 3.15 and (ii) the churches with *Mukha-mandapam* as shown in Figure 3.16 and (iii) the churches built entirely of wood as shown in Figure 3.22. Of these churches under the third typology had ceased to exist. Therefore, the entire 79 churches, which were considered for analysis, belong to either of the rest two types. It was found that 24 churches belong to the type without *Mukha-mandapam*. The churches which fall under this type are:

Churches without Mukha-mandapam

- 1. Aalapuzha
- 2. Aarakkuzha
- 3. Arthungal
- 4. Bharanamganam
- 5. Chendamangalam 1
- 6. Cherpungal
- 7. Chowara
- 8. Chungam
- 9. Eda Kochi
- 10. Edapalli
- 11. Elanji
- 12. Mattancherry

- 13. Mudenveli
- 14. Mulakkulam
- 15. Muttuchira (Kochu Palli)
- 16. Niranam
- 17. Njarakkal
- 18. Pala
- 19. Pallippuram (Kochu Palli)
- 20. Palluruthy
- 21. Ramapuram
- 22. Tangi
- 23. Udayamperoor
- 24. Vaipin

The churches fall under the other typology, that is churches with out Mukha-

mandapam, 55 in number, are:

Churches with Mukha-mandapam

- 1. Aalengad
- 2. Akapparambu
- 3. Angamaali 1 (Padinjare)
- 4. Angamaali 2 (Kizhakke)
- 5. Angamaali 3 (Yakoba)
- 6. Arthaat
- 7. Changanassherry
- 8. Chenganoor
- 9. Eanammavu
- 10. Kaarakkunnam
- 11. Kadamattom
- 12. Kadambanad
- 13. Kadathuruthy 2 (Catholic)
- 14. Kaduthuruthy 1 (Kanaya)
- 15. Kallooppara
- 16. Kalloorkad (Chembakkulam)
- 17. Kanjirapalli
- 18. Kanjoor
- 19. Karingachira
- 20. Karthikapalli
- 21. Kollam 2 (Tharisha Palli)
- 22. Kothamangalam 1 (Valiya)
- 23. Kothamangalam 2 (Cheriya)
- 24. Kothanelloor
- 25. Kottapadi
- 26. Kottayam 1 (Valiya)
- 27. Kottayam 2 (Cheriya)

- 28. Kudamaalloor 29. Kunnumkulam 30. Kuravilangad 31. Kuruppumpadi 32. Maamalassherry 33. Malayattoor 34. Mattam (Kurishu Palli) 35. Moozhikkulam 36. Mulamthuruthy 37. Muttam 38. Nadamel 39. Palayoor 40. Paliyekkara 41. Parapookkara 42. Pazhuvil 43. Piravam 44. Pulinkunne 45. Purakkad
- 46. Puthanchira
- 47. Puthupalli
- 48. Thiruvithamcode
- 49. Thumpamon
- 50. Vadakara
- 51. Vadakkan Paravoor 1
- 52. Vadakkan Paravoor 2
- 53. Vaikkom
- 54. Valappaad
- 55. Vechoor

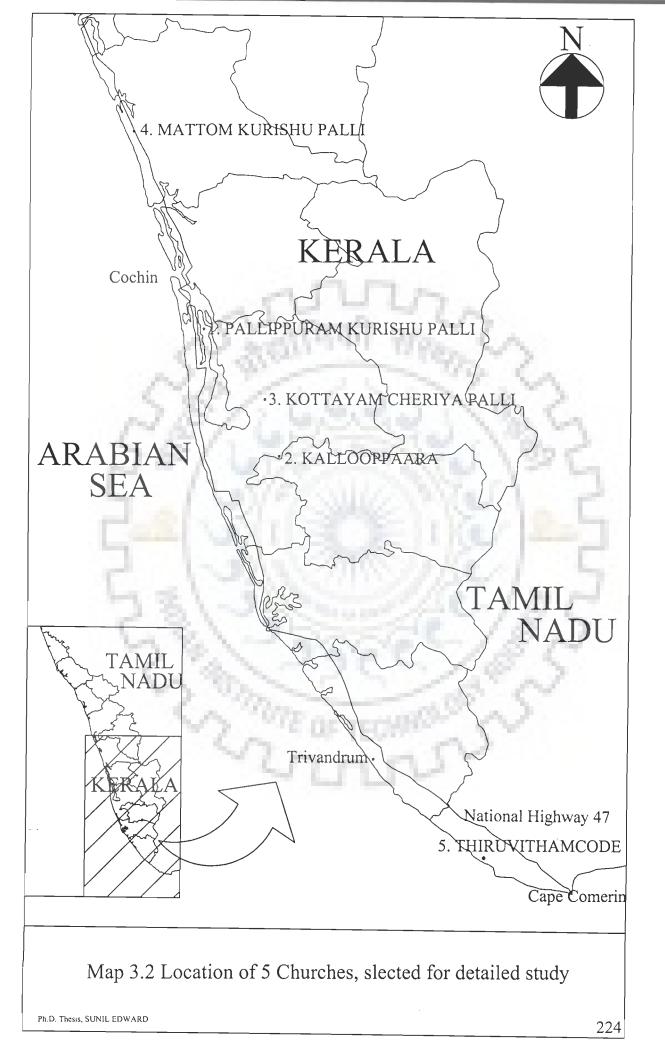
3.8 Detailed Study and Documentation

An attempt is made in this section to validitate the authenticity of the 'reconstructed' model and to analyze the model further. To achieve this, five churches, belonging to Group I, were purposely selected for conducting thorough case study and detailed architectural documentation, to verify the authenticity of the reconstructed 'original form'. They were documented in detail and the plans, sections and elevations were made, using AutoCAD software, for further analysis.

3.8.1 Identified List of Churches for Case Study

The five churches selected for detailed study are Pallippuram *kurishu palli*, Kallooppaara church, Kottayan *Cheriya palli*, Mattom church and Thiruvithamcode church [Map 3.2]. The basic criteria for selection of the five churches were that; (1) the churches should be from Group I, that is the present building, or most part of it was built before 1599 AD, (2) the five sample churches should be scattered evenly over the study area, to understand on influence of locational aspects.

Another feature which helped in selection of these churches was that, each church helped in bring out certain new architectural characteristics. For example Pallippuram *kurishu palli* was selected because it would demonstrate the charecteristic features of a 'small' church and further it is an example of a typical 'church without *Mukha-mandapam*'. Kallooppaara church and Kottayan *Cheriya palli* were selected because these two churches are typical examples of 'churches with *Mukha-mandapam*', first one an example for church with *Mukha-*



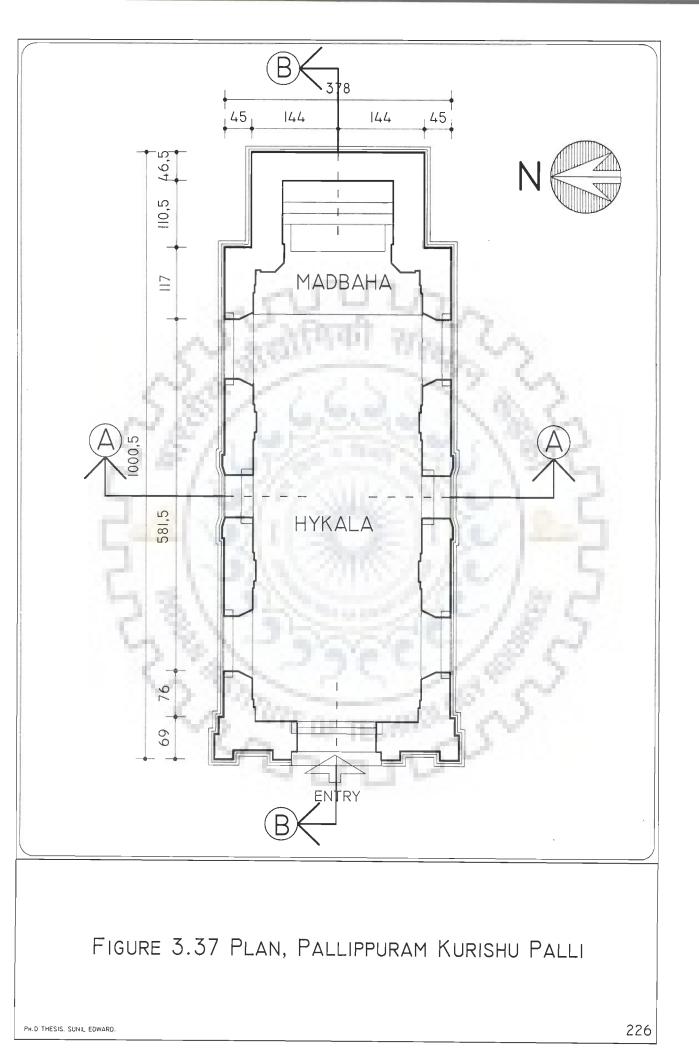
mandapam on side and other is an example for church with *Mukha-mandapam* on front side.

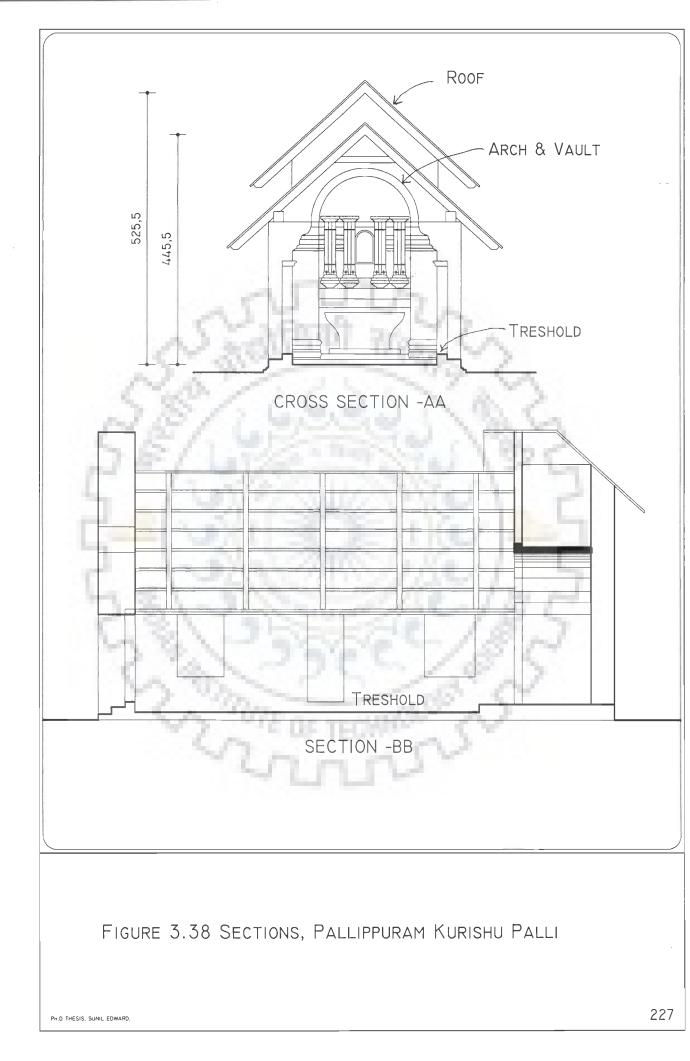
The last two churches, Mattom church and Thiruvithamcode church, were selected with a specific intention, because it was observed that they belong to a slightly different typology, or a sub or older category of 'churches with *Mukha-mandapam*' as can be seen in the Case study 4 and 5.

3.8.2 Case Study 1, Pallipuram Kurishu-palli

The Pallippuram church, situated some 20 KMts North of Cherthala, is one of the oldest churches in Kerala, the establishment of it is integrated with the early history of Christianity in Kerala. This church still holds a wooden cross [Photo 3.74], which is claimed to be of 1st century AD. The present main church was built in 1960, but there is a *Kurishu-palli* (small church) near this church, which is quite old, claimed to be of early 1500's [Photo 3.75]. Although the Investigator's attempt to date it exactly remains futile, its size and characteristics make it look very old. It does now have a foreign façade. It is built of laterite blocks and the roof is with wood and tiles [Photo 3.76].

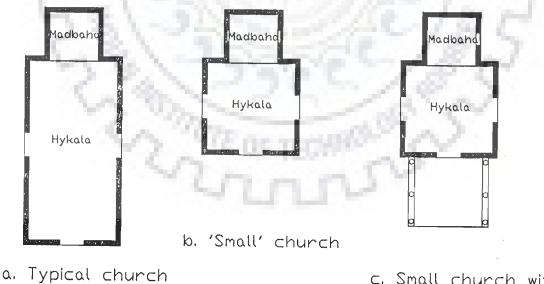
It is a very small church, with out *Mukha-mandapam*, measuring 10 by 3.75 meters outside [Figure 3.37]. The small size of this church is because in those periods the number of Christians in a parish were very less, and they need a building to accommodate only that small crowd. In fact, during those periods the situation was so in many other churches in Kerala also. The size of the building gives some clue as to its age. There are also windows present in the





Hykala, which again is not an original indigenous feature, it is there because the church was built in the post-Portuguese period. It is possible that, as told to the Investigator by an old Parishioner, the building was built later on an old foundation, when the original building was in a dilapidated stage, but again the *Madbaha* details; like the vault over alter [Figure 3.38], the use of an arch to separate the *Madbaha* from the *Hykala* [Photo 3.77], a shorter width given to the *Madbaha* [Photo 3.78], the projection of *Madbaha* roof higher than that of the *Hykala*, [Photo 3.79] the presence of stone threshold, all of these are proof that the influence of traditional church architecture was still high, when it was built.

The main purpose of documenting this building, other than as a typical example of the type of indigenous church without *Mukha-mandapam*, was to reinforce the theory that before European period, the size of some of the churches was very small, as the number of Christians in that particular locality



c. Small church with Mukha-mandapam

Figure 3.39 Small church means smallness of the nave area

was very less. Particularly to emphasis the point that, small church means 'smallness' of the *Hykala* length, which would make the plan most probably like as shown in Figure 3.39.b and it will look like Figure 3.39.c, if a *Mukha-mandapam* is added.

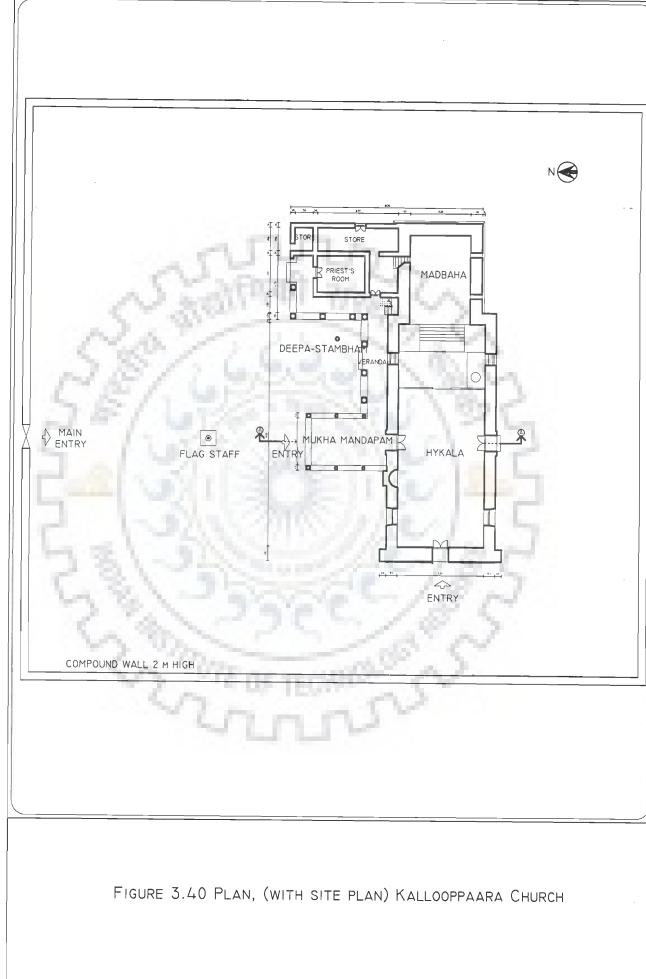
The church is placed on the East-West axis, with its entry from the West as was the tradition. Except the fact that it has a foreign front façade, even the doors designs confine to the indigenous style, of having small arched door openings, with rectangular doors. Windows are present in the *Hykala*, four in number and are of two types of design, making it clear that they were of a later addition. The projection of the roof, with a three sided sloping roof, protruding only slightly above the *Hykala* roof, is a proof that it was built at a time when the belief that, the *Madbaha* roof has to be higher than that of *Hykala*, was still very strong. Therefore, except for the fact that there is a foreign front façade present, this church can be taken as a typical example of the type of indigenous church with out *Mukha-mandapam*,.

3.8.3 Case Study 2, Kallooppaara Church

Kallooppaara church, situated some 6 KMts East of Thiruvalla, is one of the oldest existing original indigenous church buildings of Kerala [Photo 3.80]. It is claimed to be built in 1339 AD, although it was obvious from the documentation that, the building was built in many stages. Probably, the oldest part of the building was constructed in that year. It is a typical example of the indigenous Kerala church with *Mukha-mandapam* on the side. It is built of laterite blocks and the roof is with wood and tiles. It is placed on an almost square site, surrounded by a high compound wall, 2 meters in height. The main entry to the site is from the North^{boxix}, with a formal Kerala style gate [Photo 3.81]. The church building is but oriented on the East-West axis, with its *Madbaha* on the East, as was the tradition with indigenous churches [Figure 3.40]. The width of the *Madbaha* is shorter than that of the *Hykala*. The roof of the Madbaha is higher than that of the *Hykala* [Figure 3.41]. An arch separated the *Madbaha* from the *Hykala* [Photo 3.82] and a vault is present in the *Madbaha*, above the altar [Photo 3.83]. It has a decorated alter back drop in wood, which is evidently a later addition. The *Hykala* was divided into two, and has got granite thresholds on all doors. A balcony was also present, though now demolished, which acted as the place where the parish Priest could stay. There is also a baptism font in granite, big enough to accommodate a grown up person inside.

Originally, the North entry to the church was conceived and treated as the main entry to the church, with a *Mukha-mandapam*, of exquisitely carved pillars [Photo 3.84] and roof rafters [Photo 3.85]. There was also a room for the priest to stay on the Northern side, which was added in a later period than that of the *Mukha-mandapam*, probably built after the synod of Udayamperoor (1599 AD) that insisted on such a room. This addition is evident from the architectural details and the type of pillars used in this corridors and that of the *Mukha-mandapam*. The windows in the Madbaha, as well as in the Hykala, 90 cm in width and with iron bars used as security grill, was evidently of a later addition to

^{lxxix} The present main entry to the compound is from West side, in fact the plot on the West side was not a part of the church till recently. It was only after the purchase that plot the main entry was changed to West.





bring in more light to the interiors. A granite *Deepa-stambham*, more than 500 years old, is also present [Photo 3.86], the design detail of which is exactly similar to the one in Kandiyoor Shiva temple, except that the latter is higher in size [Photo 3.87]. The granite cross present now, in the West side, is, however, evidently a new addition.

A *Kodi-maram* is present [Photo 3.88], in the North side, in the axis of the gate in the compound and the entry to the *Mukha-mandapam*. A well is also present inside the compound in the South-East corner. This church can be taken as a typical example of the type of indigenous church with *Mukha-mandapam*. It is also an example of indigenous Kerala church where the West façade is not treated as the 'main entry' as of today.

3.8.4 Case Study 3, Kottayam Cheriya Palli

Kottayam *cheriya palli* (literally small church), situated in the outskirts of Kottayam town, was built in 1579 AD, and it is one of the few churches in Kerala that is conserved in its near original condition [Photo 3.89]. At the same time, since it was established and built afresh only in 1579, by then the Portuguese had gained considerable power and established well in Kerala, and their architectural outlook is very evident in the character of this building. It is again built of laterite blocks and the roof is with wood and tiles.

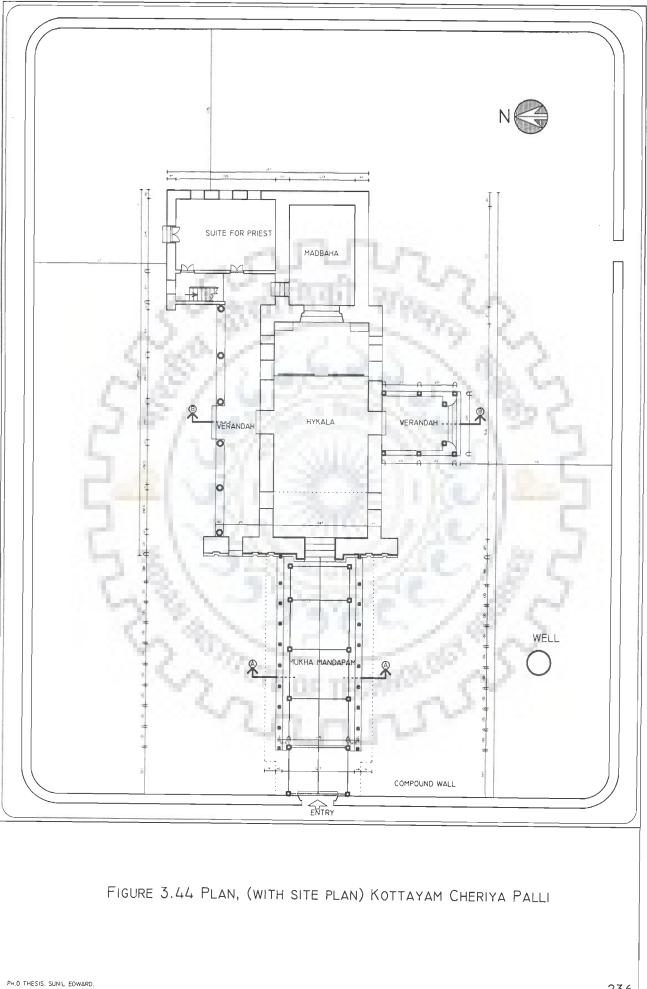
An elaborately detailed front façade is present in the Western wall. While there is no doubt that the Western wall is a part of the original building, the Investigator is, however, not very certain about the entire front façade, with its decoration, being a part of the original building. The generation of this doubt is

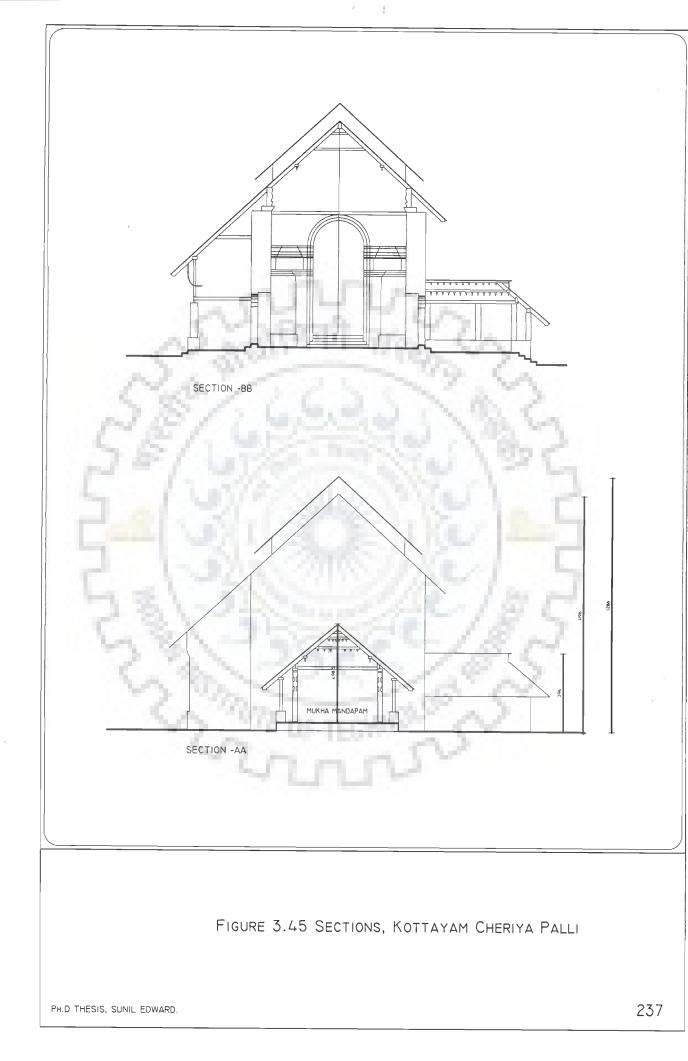


Figure 3.43 Kottayam Cheriya palli, as of present, with foreign facades

mainly because of the way the Mukha-mandapam is added to the façade, in a very hasty manner [Photo 3.90]. The designers of such a marvelous building could have definitely come up with a better option, unless of course, the Mukhamandapam was of a later addition. The possibilities of that are also high because by that time St. Francis church^{box} had already come up in Cochin [see, Photo 2.6], and the designers of Kottayam cheriya palli could have tried to imitate that, thus making the present façade part of the original building. The other possibility is that there was no imposing façade, as was the tradition, and the decorated façade was a later addition. The thickness given to the Western wall (front façade) is 1.55 meters, that is with 1.20 meters thick wall and 35 centimeters further for the decorative niches, etc. Whereas the side walls, which actually takes the complete load of the sloping roof, was given a thickness of only 1 meter. Therefore, the Investigator puts forward another possibility, based on the above evidence, that, the Mukha-mandapam was actually a part of the original design, but the Western wall was originally built with no imposing façade, as per the architectural tradition of Kerala [Figure 3.42]. Later to get a 'better look', the decorative façade was added to the Western wall [Figure 3.43]. The Western wall could have been only some 60-80 centimeters originally, because it is not carrying any other load than the self weight. Then to add the façade, the thickness of this wall was increased by another 60 centimeters, thereby making it the present 1.20 meters, plus another 35 centimeters for niches etc., to accommodate the increasing load of the self-weight of the new structure.

^{1xxx} As stated earlier, it is the first European style church to be constructed in Kerala, it was completed in 1515 AD.





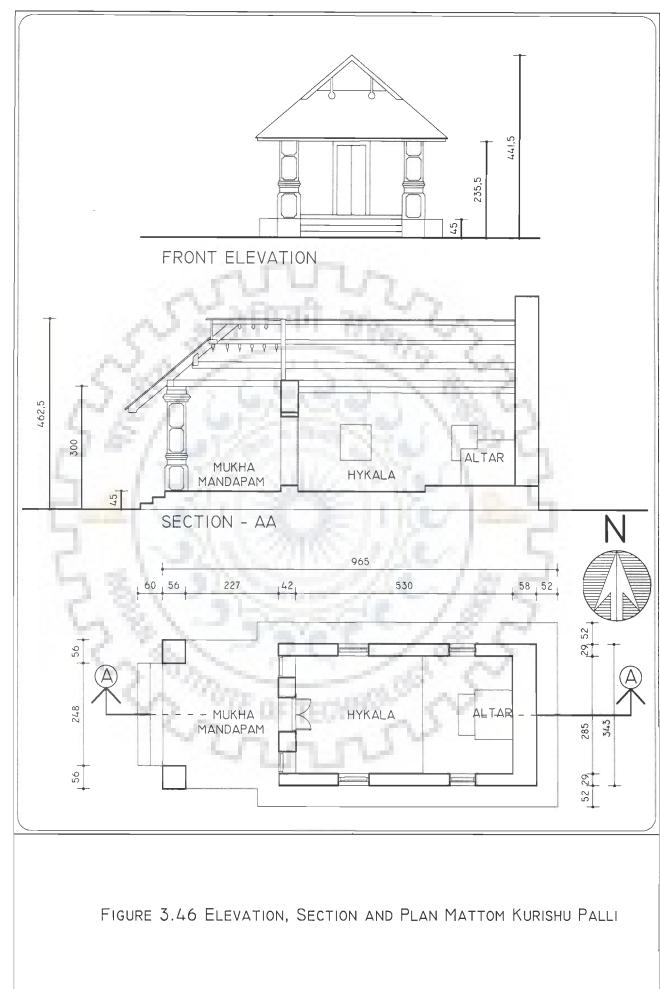
It is also possible that the corridor and the Priest's room on the Northern side [Figure 3.44] could be of a later addition probably along with the front façade addition. To support this view, other than the architectural evidence of improper joining, at the time of the Synod of Udayamperoor (1599 AD) there was no separate room for the Parish Priest to stay, as inferred from literature review, in the churches in Kerala, as is clear from the proceedings of the Synod.

A high compound wall, with a height of 2.30 meters, encloses the entire compound [Figure 3.44]. There are built-in oil lamps fixed in this wall, inside as well as outside, placed at a gap of 1.2 meters each [Photo 3.91]. The church building is placed in the East-West axis, with the *Madbaha* in the East as per the tradition. The roof of the *Madbaha* is also raised above the roof of the *Hykala*, following the tradition [Figure 3.45]. The *Hykala* is separated from the *Madbaha* with an arch and a vault is present in the *Hykala*, above the altar. There are stone thresholds on all door openings. There is also a well inside the compound wall on the Southern side.

The church, without the foreign façade, is completely as per the architectural style followed by the indigenous churches in Kerala, and can be taken as a typical example of the one 'with *Mukha-mandapam*' type.

3.8.5 Case Study 4, Mattam Kurishu-palli

The Mattam church is again one of the oldest churches in Kerala, claiming to have been established in 140 AD, (another view pushes this date to 900 AD). However, the present church is not more than 300 years old. There is, but, a *Kurishu-palli* to this church which seems quite old [Photo 3.92]. It is built of



laterite blocks for walls and wooden screens for partition [Photo 3.93] and the roof is of wood and tiles. However, a façade was added at a later period, to give it a 'Christian church' look, in the rear side of the building since there was no wall in the front that could be converted into 'façade' [Photo 3.94].

As was deduced from the survey, there were three basic types of church forms in indigenous church architecture of Kerala; one with Mukha-mandapam and the other without Mukha-mandapam, and the third follows either of these forms, but built completely in wood, with other common architectural elements present in all. At the same time, if it is asked whether these three forms were always the only forms used for Kerala churches, or was it the original form conceived by the Kerala artisans when they had to build a church from what they had conceived of a religious building in early Christian age, following the style and form of local religious buildings that prevailed in the land then, the Investigator can only answer that, the above mentioned forms had become the most accepted types by '16th century'. As to the question of how a church looked before that, it is highly possible that the forms deduced may not be the only forms present. Further, in the absence of any written records, or presence of a representative sample church building, it is difficult to trace the origins of these two models. Perhaps if church buildings of much older periods are explored, other typologies could be found. This case study and analysis of Mattam kurishu palli, as well as the next case study, will throw some light in this direction.

The year of construction of the Mattam *kurishu palli*, as is deduced from architectural study, as well as from interviews from old people of the parish, is

very vague. The architectural study of the building attests that it was done before many of the earlier stated features of the indigenous church architecture became the accepted norm. It is also possible that, the church was built in a much later period, but faithfully following the model of an even older church style.

The church building, very small in size, 9.65 meters by 3.43 meters, is oriented in the East-West direction, with its altar on the East end [Figure 3.46]. The width of the *Madbaha* is but the same as that of *Hykala* and the *Madbaha* roof is not projected up either. The width of the *Mukha-mandapam* is also the same as that of the *Hykala* and *Madbaha*. However, the overall architectural treatment of this building is more like that of Jain/ Hindu temples of Kerala. The roof is also very typical of the temples of Kerala, to the extent that, at the first glance, it could be mistaken for a temple [Photo 3.95]. There were two windows on the West wall, on both sides of the door, to light up the interiors, which evidently was of a later addition.

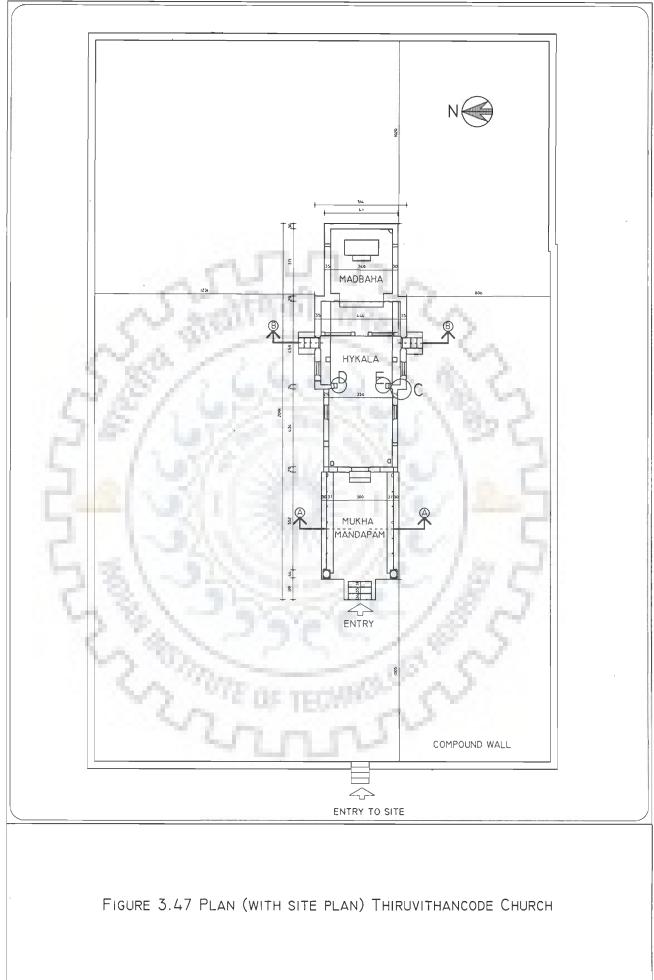
There was also a hanging oil lamp inside [Photo 3.96], following the tradition, with a pit on the floor to collect the spilling oil [Photo 3.97], which is again a crude stage, or rather like a formulate stage, of big oil lamps of later periods. Over all, though this church building has almost all features of indigenous church architecture of Kerala, everything seems to be in an evolutionary stage, a forerunner for later forms. This aspect becomes clearer with the analysis of the next case study.

3.8.6 Case Study 5, Thiruvithamcode Church

The Thiruvithamcode church, presently in Tamilnadu state, near Marthandam, is a claimant of the 'half church' in the original 'seven and a half churches' established by St. Thomas. Thiruvithamcode was once the capital of the bygone Kerala kingdom of Thiruvithamcoor (anglicized Travancore), till the capital was shifted to Kalkulam (better known as Padmanabhapuram), which is just 4 KMs away from Thiruvithamcode, in 1544 AD. It became part of Tamilnadu state in 1956 when the state boundaries of India were redefined on linguistic basis. It lies today in the Kanyakumari district of Tamilnadu state, at a distance of about 20 KMts from Kerala State's border.

The Investigator, after conducting a survey of all the pre-European churches, is of the opinion that, this church is the oldest existing indigenous church building of Kerala, although considerable modifications have been done on that, which will be discussed later in this chapter. The superstructure of this church is done entirely in granite blocks [Photo 3.98], and it has wooden and tile roof. Granite is exposed outside as well as inside [Photo 3.99].

The church is placed on a rectangular plot, with its entry from the West. The building is oriented in the East-West axis, with *Madbaha* on the East [Figure 3.47]. The width of the *Madbaha* is less than that of the *Hykala* and there is also a crude arch [Photo 3.100] separating the *Madbaha* from the *Hykala*, but there is no vault. The *Hykala*, rather unusually had its width reduced from its middle, (marked C, in Figure 3.47) thus making the *Hykala* of odd shape. There are two doors to the *Hykala* with the typical *Sopaanam* type steps to it [Photo 3.101].

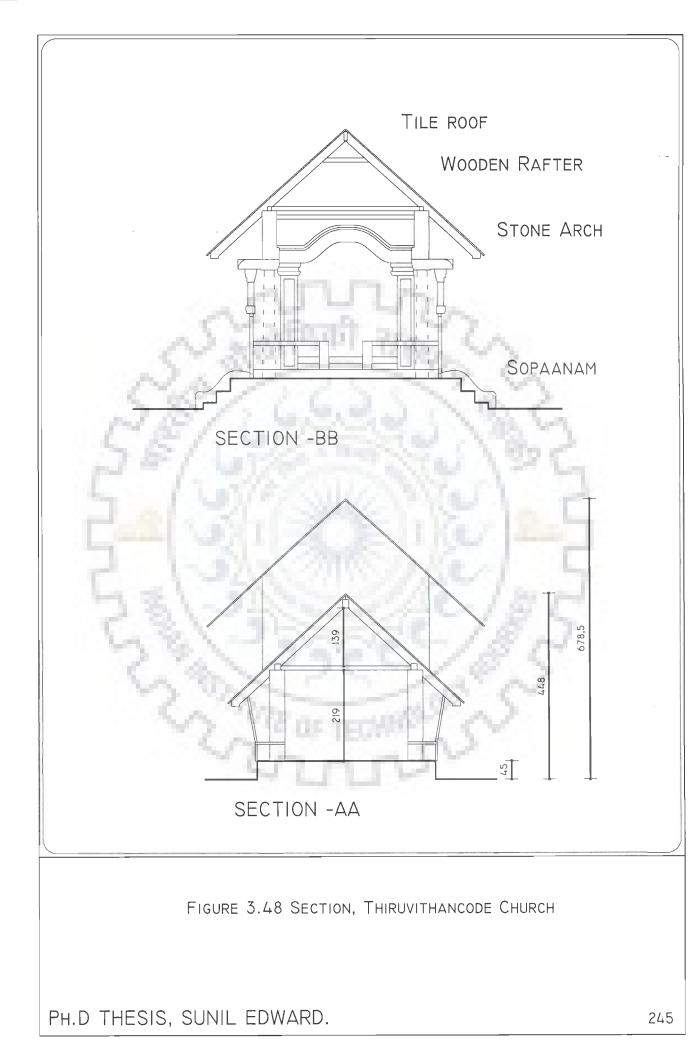


There are windows in the Hykala, clearly a later addition, for bringing in more light to the interiors. There are built in provisions to light oil lamps, even on the pillars of the church [Photo 3.102]. There are stone slab thresholds on all doors [Figure 3.48]. There is also a balcony present inside the Hykala, where the parish priest used to stay till 1940's. There are also two baptism fonts inside, one of which seems to be very old [Photo 3.103]. A well is present inside the compound on the Northern side.

This church, together with Mattam church seems to follow a different typology than the two extracted earlier. This aspect would be more clear, once more studies are done into the metamorphosis of this church, which follows.

3.9 Metamorphosis of Kerala Church Architecture

Here, an attempt is made to study the origin and development of Thiruvithamcode church, probably the oldest indigenous church of Kerala, known to us. As stated earlier, the earliest church buildings in Kerala could only be, either the existing temple itself of the local people, after they got converted to Christianity, or a newly constructed building for this purpose. If the latter was the case, since there was no model church existing anywhere to follow the architectural character, form and other elements, the Kerala Christians had to evolve a new style of religious building for worship. Besides, the designers, as well as the craftsmen who worked on the new church building, could only have been members of the prevailing religions of that period or just converted Christians, who were used to the construction of religious buildings in the



traditional way. Either way they ended up adopting a vernacular style of religious architecture as the model for new church building.

3.9.1 Thiruvithamcode Church: An Evolutionary Model of Kerala Church Buildings

This church is today called as St. Mary's Orthodox Syrian Church. This church is a granite structure of 13.75 X 5.15 meters. The year of its construction is not accurately determined yet. It is completely built of granite pillars and granite blocks [Photo 3.104], as thick as 38 centimeters. The side walls have a height of 4 meters. In plan it has a small altar space, then the assembly hall with small doors on sides and a bigger door in the West, and a Mukha-mandapam in front built of wooden pillars [Figure 3.47]. The whole structure roofed with tiles on wooden rafters [Figure 3.48]. There is no façade, in its conventional sense. The granite pillars inside are carved and also have built-in provision for oil lamps. The granite walls also have carvings (bas-reliefs) of bread and chalice, angles with wings worshipping the Eucharist, cross etc. There is also a Hindu temple and a mosque nearby, again of the same period, and built by the very same techniques and architectural style as that of this church. According to local tradition, all these three structures were built by the same king, in the hey days of Thiruvithamcode, and the foundation stone of these three structures were laid by him on the same day, though there are no unanimity on who that king was.

Fr. Koottumkal V. Gevarghese Ramban was the parish priest of the church from 1942 till his death in 1970. As per the history of the church published by him, after he had taken over, he had the church renovated by one engineer Kuruvila in the 1940's. The records published by Fr. Ramban clearly say that, the *Mukha-mandapam* that is present there today [Figure 3.49] was constructed only



Figure 3.49 Present form of Thiruvithamcode church



Figure 3.50 Form of Thiruvithamcode church, with out Mukha-mandapam

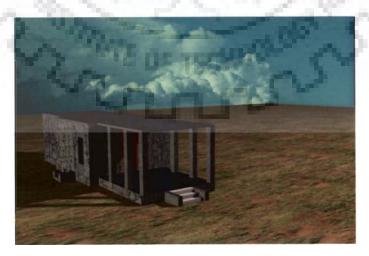
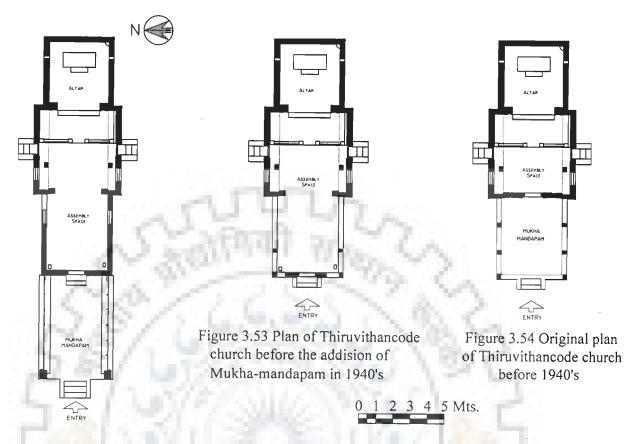


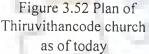
Figure 3.51 Form of Thiruvithamcode church with flat roof

during this renovation. The reason of its construction was that, according to the present parish priest, the size of the church being too small, it couldn't accommodate all people, especially during the festivals. This means that the form of the building was like what is shown in Figure 3.50, before the addition of *Mukha-mandapam* was done. The record also says that, while the *Mukha-mandapam* was added it was not the only renovation work that was done then. In fact, the very reason to start the renovation work was that "A Pipal tree grew on the roof and caused many damage to the building" ²⁵⁷. The literature further explicitly says where the tree grew, "the roof of the church was built with stone slabs, put over a stone beams supported by stone pillars" ²⁵⁸. This means that the form of the church was something like what's shown in Figure 3.51, when it had flat granite slabs as roofing material. It is also possible that the roof covering with flat granite slabs could have been done either completely, or only partially^{boxi}. The church document, further says, the engineer "made use of it (the removed granite flat slabs) to wall the open part" ²⁵⁹.

Although it is not clearly mentioned by this church document, as to which open part was 'walled', it can be understood, even today, if one studies the building closely from the structural point of view. It can be seen in this church plan that the nave of the church, rather unnecessarily, has its width reduced at around the middle of the nave length [Figure 3.53]. On a close study of the part with shorter width, it can be seen that there are full granite pillars embedded

^{lxxxi} That's either the complete building could have a flat roof, or only some part of the building had flat roof and rest had a sloping roof.





The metamorphosis of an indiginous church in Kerala (Thiruvithancode church)

inside the granite wall [Photo 3.105]. It can be very well seen on a closer look that these columns are complete in itself even with proper capital [Photo 3.106]. Any one, with a little structural engineering background, can say that the placement of these pillars there was totally unnecessary because such thick granite walls can take all the load, and even much more of whatever load that will be transferred on to that wall. Further, it can be seen that these columns also carry a huge stone beam over it, so in the first place, hardly any load will be transferred to the stone walls. Connecting this with the statement in the document, that the engineer "made use of" the flat granite roof slabs "to wall the open part", it will be clear that the part of the nave with a shorter width was the 'part' that was walled off. Therefore, originally, before that period, it was the open pillared *Mukha-mandapam*. This means that the plan of the church was like what's shown in Figure 3.54. Now the question arise is that of the main door which is present now, given into this area, definitely an open pillared hall wouldn't need such a door, that too fixed into a huge granite door frame. The exquisite carving on this granite door frame also makes it clear that it was not a 1940's addition, but was a part of the original building.

Answer to this can be further deduced, if one studies the plan closely. Inside the nave, there can be seen a projection of a protruding wall into inside, (marked D & E, in Figure 3.47) where the nave meets the original Mukha-mandapam. It can be also seen in this projection that its internal edges (on both sides) are not at all finished, and it stands there as a total mismatch for the otherwise exquisitely carved building. The projection in itself is a mismatch and structurally unnecessary, but more so is its edge, which clearly states that something was removed from there. More over, when the Investigator tried, in the documented AutoCAD drawing, to move the main granite door from its present position and fix it into this gap inside, it got fixed there exactly, not only length wise but even widthwise. Further in the interview the Investigator had with the present Parish Priest, he remembers an old person, who had seen the original structure telling him that the main granite door was originally inside the present building. Therefore. the original plan and form of the church before

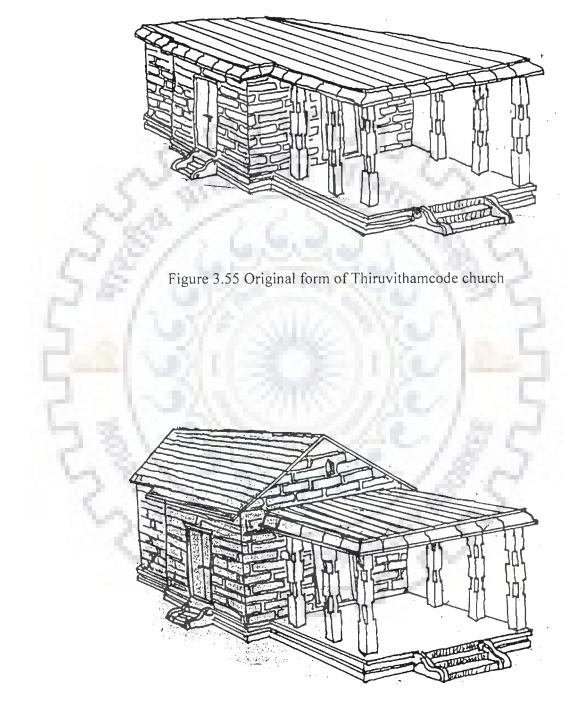


Figure 3.56 Form of Thiruvithamcode church with sloping roof

engineer Kuruvila's renovation must have looked like what is shown in Figure 3.55. Thus making it the fourth type of 'church form' [Figure 3.56] in existence in 16th century, other than the three typologies extracted earlier. It could even very well be the forerunner of the three typologies identified earlier or could have developed after type III, the wooden church, when there was a transition from wood to a more permanent structure. However, the Investigator classifies this model as the fourth type of indigenous Kerala church, other than the three typologies extracted earlier. The Investigator would like to further add here with the extraction of this original plan of Thiruvithamcode church, the earlier extracted plan of a 'small' church, as shown in Figure 3.39, is further reinforced.

Coming back to the problem of whether the building had a complete flat roof or a partial one; the Investigator is of opinion that, originally it must have been completely flat, because if they had gone for sloping roof they would have gone for it completely as was the architectural tradition of Kerala. This deviation, it itself could only be a result of the availability of long slabs locally and the construction technology that was prevailing at that time in that region.

At the same time it can be deduced from the study, that the church must have had a partially sloping roof when engineer Kuruvila got it for renovation. The rationale for the formulation of this theory is as follows: The Synod of Diamper (1599 AD) mentions in its proceedings that "the Thiruvithamcode church is in a dilapidated condition (now) and it has to be rectified" (Action VIII, Decree VI)²⁶⁰ and "later a (foreign) Jesuit priest was sent (there) and he has done the maintenance". ²⁶¹ If one takes a close look in the eastern wall (wall behind the

altar) from inside, there can still be seen the some impressions, from the remains of an earlier plastering work done [Photo 3.107], which (the type of impression) can only be formed when plastering is done near angled rafters when the building had a slope roof [Figure 3.56]. Further, in the top of beams of the altar and original nave area (but not in the original *Mukha-mandapam* area) there can still be seen that some crude niches are carved into it in a hasty manner to fix a sloping roof to it [Photo 3.108]. It is very clear from these two details that the altar and nave were added at a later stage, (most probably by the foreign Jesuit priest in early 1600's) a sloping roof of wood and thatch, and later when tiles were introduced it was changed to tiles. Although Rajendran (2000) states, "The original roof was also of rock sheets. At a later date, this roof was dismantied and a vaulted roof of brick and mortar was built" ²⁶², but in spite of a detailed search, there does not seem to be any document to support that view.

3.9.2 Inferences from Metamorphosis Study

It is clear from this study that plan of the Thiruvithamcode church was like the typical plan of a 'small' church deduced earlier (see Figure 3.39, p. 228). The plan of Pallippuram church, Mattom *kurishu palli*, Thiruvithancode church, etc., are examples for 'small' church. Therefore, it may be further deduced that, since there were many small churches in pre-Portuguese era, they had a plan similar to the plan form like that of Mattom *kurishu palli* or of the original Thiruvithamcode church. [However, it may not be proper to infer from this that all churches were built of the same material (stone). The construction material could be laterite or wood, as per what was available at the particular area]. In later periods, (pre-Portuguese periods) it must have been developed from 'small' church to big church, as and when, the number of parishioners increased. Naturally, the length of *Mukha-mandapam* also increased to accommodate more un-baptized people, wherever the availability of Bishops to baptise was less and wherever baptisms could be easily done, *Mukha-mandapam* were avoided.. Therefore, the metamorphosis of indigenous churches of Kerala could be as shown in Figure 3.57.

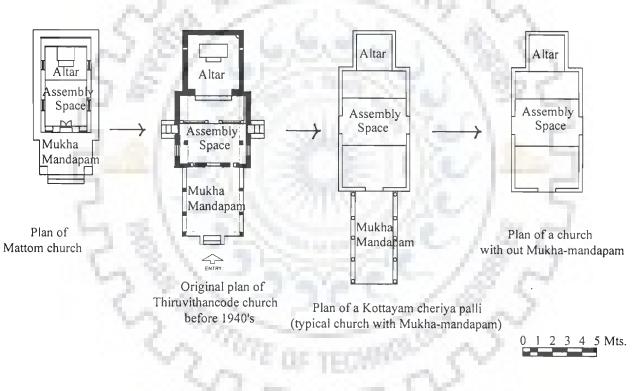


Figure 3.57 Probable metamorphosis of indigenous church buildings of Kerala

3.10 Deduced Architectural Characteristics of Indigenous Kerala Church

The following characteristics were deduced out of the analysis of the primary survey;

- The indigenous churches were always placed in the East-west axis, with the *Madbaha* in the Eastern side.
- The *Madbaha* part of the indigenous church was shorter in width than that of the *Hykala*.
- Many pre-Portuguese indigenous Kerala churches were very small in size because the number of parishioners being less, they needed only a space to accommodate that small crowd.
- Small' church means the size of Hykala is small, making the plan closer to the plan of a Jain temple.
- The roof of the Madbaha was always raised than that of the Hykala.
- Windows to the *Madbaha* and *Hykala* were purposely avoided.
- The Madbaha and the Hykala were always separated by an arch in the indigenous churches.
- The indigenous church had their roof cover in thatch before the 16th century.
- At least 61 per cent of the indigenous churches had a porch in front, called 'Mukha-mandapam'.
- The indigenous churches were always provided with a threshold on all the doors.
- In most of the indigenous Kerala churches, there was present a vault over the altar, in the Madbaha.
- Most of the indigenous churches also had provision to light oil lamps inside the church building.

- Most of the indigenous churches had an open air granite cross, mostly with a provision to light oil lamps in them, in the front of the church.
- Most of the indigenous churches had a *Kodi-maram* (traditional style flagpost) in the church premises
- Most of the indigenous churches had a traditional high compound wall surrounding the church premises.

3.11 Deduced Architectural Typologies of Indigenous Kerala Church

It is concluded from this study that the Investigator could deduce four different types of church buildings, which prevailed in the pre-European period. However, as stated earlier, it could be only two forms, with the last two, being a forerunner of the former two, most popular architectural forms. Three of these forms could be deduced from the survey. As for the forth one, the one with wood as the construction material, since there are no sample buildings in existence today, one can make only surmises based on the oldest existing churches. The forms deduced are as shown in Figure 3.24 or Figure 3.25 (without *Mukha-mandapam*), Figure 3.27 (with *Mukha-mandapam*), the third either like Figure 3.36 (wooden Church, with out *Mukha-mandapam*) or the same one with a *mukha-mandapam* added, again in wood and the forth one like as shown in Figure 3.55 (which could be the form, from which the form shown in Figure 3.27 has evolved).

The plan forms of these models, except the one built of wood, are given together below in Figure 3.58.

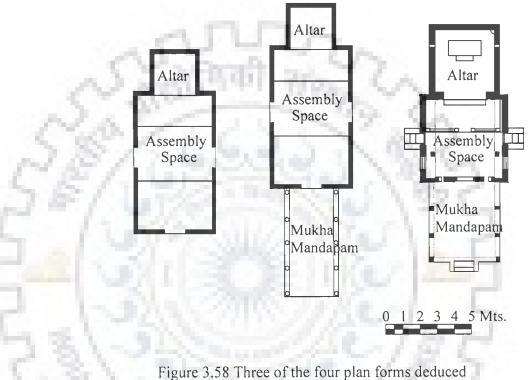


Figure 3.58 Three of the four plan forms deduced of pre 16th century indigenous Kerala church building

3.12 Conclusion

This study, based on the evidence of the development of church architecture, especially the data of morphology, clearly shows that, the changes in the character of church architecture which have taken place in the course of its evolutionary process, had taken a clear deviation in the process of architectural development, after the Portuguese arrived. The foreign influences have totally dismissed the carefully nurtured and cultivated regionalism, which developed over centuries of improvement, in favor for an all pervading 'international' style obliterating the geographical identity, a broader religious outlook, indigenous architectural character and historical heritage of Kerala.





Photo 3.1 Ruins lying unattended in Akapparambu Church



Photo 3.2 Ruins lying unattended in Angamaali Kizhakke palli



Photo 3.3 Ruins lying unattended in Kadambanad church



Photo 3.4 Smaller width for Madbaha in Paliyekkara church



Photo 3.5 Later added windows in Puthupalli church



Photo 3.6 Later added windows in Chendamangalam Church



Photo 3.7 Triumphal Arch in Arthaat church



Photo 3.9 Arch doorway in old Kanjirapalli Church



Photo 3.11 Wooden vault over altar in Purakkad church



Photo 3.8 Arch doorway in old Chungam Church



Photo 3.10 Vault over altar in Chowwara church



Photo 3.12 Separation of men & women in the traditional way



Photo 3.13 Railing that separated men & women in old Chungam church



Photo 3.15 Joint of façade in Thumbamon church



Photo 3.14 Stone threshold in Mattam church

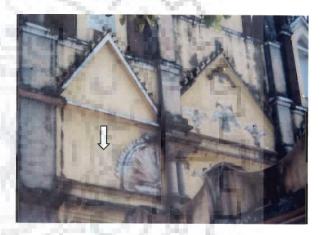


Photo 3.16 Façade of Kallooppaara church, addition above is evident



Photo 3.18 Façade of Vadakara church, old façade can also be seen inside



Photo 3.17 Façade of Mulakkulam church, old façade can also be seen



Photo 3.19 Kallada old church



Photo 3.21 Kayamkulam old church

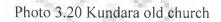




Photo 3.22 Karthikapalli church



Photo 3.23 Thiruvithamcode church



Photo 3.24 Kanjirapalli church





Photo 3.26 Sloping *Hykala* roof of Kothamangalam *cheriya pallii*

Photo 3.25 Kothamangalam Valiya palli with Madbaha higher than Hykala roof





Photo 3.27 Two sided *Madbaha* roof in Kollam Tharissa *palli*

Photo 3.28 Three sided *Madbaha* roof in Muttam church



Photo 3.29 Four sided Madbaha roof in Angamaali Jacobite church



Photo 3.30 *Mukha-mandapam* of Pambakuda church





Photo 3.32 High compound wall in Arthaat church

Photo 3.31 *Mukha-mandapam* of Chenganoor church on Northern side





Photo 3.3**4** Padi-ppura at Chenganoor church

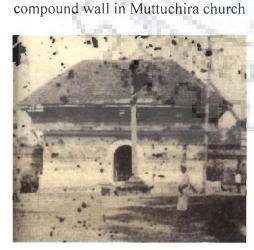


Photo 3.33 Provision for oil lamp in

Photo 3.35 Original *Padi-ppura* in Kanjoor church (now demolished)



Photo 3.36 View of Kanjoor church in 1960's, roof of *Padi-ppura* removed but part of church façade can be seen on back of the *Padi-ppura*



Photo 3.37 Kottu-pura in Kuravilangad church



Photo 3.39 *Kottu-pura* in Ramapuram church (two numbers)



Photo 3.41 Open air granite cross in Arakkuzha church



Photo 3.38 *Kottu-pura* in Aruvithura church



Photo 3.40 Open air granite cross in Angamaali *padinjare palli*

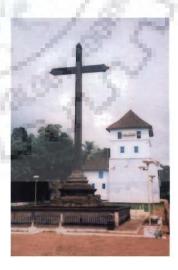


Photo 3.42. 12 Mts high granite cross in Kaduthuruthy *Valiya palli*



Photo 3.43 Base of cross in Chembu church with provision to light oil lamp



Photo 3.45 *Deepa-stambham* in Chenganoor church



Photo 3.44 *Deepa-stambham* in Niranam church





Photo 3.47 Oil lamp inside Kurupumpadi church

Photo 3.46 Oil lamp inside Arthaat church



Photo 3.48 Oil lamp inside Niranam church



Photo 5.49 Oil lamp inside Chenganoor church



Photo 3.50 Flag post in Paliyekkara church



Photo 3.51 Chembakkulam church, flag post can be seen on right side



Photo 3.52 Office cum dining space in Kadamattom church



Photo 3.53 Belfry with Kerala style roof in Punnathara church



Photo 3.54 Belfry in the roof of Parappookkara church



Photo 3.55 Balcony in Kunnumkulam old church



Photo 3.56 Balcony in Njarakkal church



Photo 3.57 Balcony in Aarakkuzha church



Photo 3.58 Balcony in Paliyekkara church



Photo 3.59 Balcony in Pala cathedral



Photo 3.60 Balcony in Pazhuvil church





Photo 3.61 Balcony bracket in Karthikapalli church



Photo 3.63 *Sopaanam* in Kaduthuruthu Valiya palli



Photo 3.65 Well inside the compound in Venmani church

Photo 3.62 Balcony bracket in Kottapadi church



Photo 3.64 *Sopaanam* in Kothamangalam church



Photo 3.66 Stone baptism font on Kanjoor church



Photo 3.67 Stone baptism font in Kothamangalam church



Photo 3.69 Pure Kerala style altar decoration in Ramapuram church



Photo 3.71 *Pushpa-koodu* at Pazhuvil church



Photo 3.68 Stone 'Persian' cross in Kottayam valiya palli



Photo 3.70 Portuguese style altar backdrop in Chalakkudi church



Photo 3.72 *Pushpa-koodu* at Mattam church



Photo 3.73 Built-in oil lamps fixed on Vadakkan Paravoor church



Photo 3.75 Pallippuram kurishu palli



Photo 3.74 Old wooden cross preserved in Pallippuram church





Photo 3.77 Triumphal arch in Pallippuram *kurishu palli*

Photo 3.76 Interior of Pallipuram *kurishu palli*



Photo 3.78 Shorter width given to *Madbaha* in Pallipuram *kurishu palli*



Photo 3.79 *Madbaha* roof higher than *Hykala* roof in Pallippuram *kurishu palli*



Photo 3.80 Kallooppaara church



Photo 3.81 Gate to Kallooppaara church



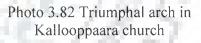




Photo 3.83 Vault over altar in Kallooppaara church



Photo 3.84 *Mukha-mandapam* on North in Kallooppaara church



Photo 3.85 Roof of the *Mukha-mandapam*, Kallooppaara church



Photo 3.87 *Deepa-stambham* in Kadiyoor Shiva temple



Photo 3.89 Kottayam cheriya palli



Photo 3.86 *Deepa-stambham* in Kallooppaara church



Photo 3.88 Kodi-maram in Kallooppaara church



Photo 3.90 *Mukha-mandapam* in Kottayam cheriya palli



Photo 3.91 Compound wall with oil lamp provision, Kottayam *cheriya palli*



Photo 3.92 Mattam kurishu palli



Photo 3.93 Wooden partition used in Mattam kurishu palli



Photo 3.94 Rear 'façade' of Mattam kurishu palli



Photo 3.95 Mattam *kurishu palli*, front view like a traditional temple



Photo 3.96 Mattam *kurishu palli* had a hanging oil lamp





Photo 3.98 Thiruvithamcode church

Photo 3.97 Mattam *kurishu palli*, provision to collect spilling oil from hanging lamp





Photo 3.100 Thiruvithamcode church, triumphal arch

Photo 3.99 Thiruvithamcode church, granite exposed on interiors too



Photo 3. 101 *Sopaanam* in Thiruvithamcode church

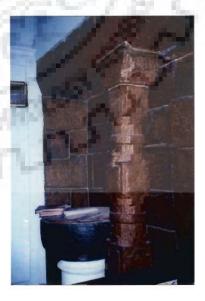


Photo 3.102 Thiruvithamcode church, pillars with oil lamp provision



Photo 3.103 Old baptism font in Thiruvithamcode church

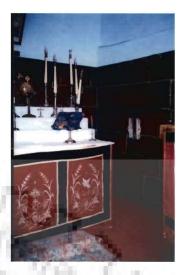


Photo 3.104 Granite walls in Thiruvithamcode church



Photo 3.105 Granite pillars embedded inside the wall



Photo 3.106 Capital of embedded pillar, Thiruvithamcode church



Photo 3.107 Impression of an earlier plastering work, Thiruvithamcode church

Photo 3.108 Grooves cut over beams, Thiruvithamcode church

CHAPTER 4. COMPARATIVE STUDY BETWEEN WESTERN CHURCHES, KERALA TEMPLES AND INDIGENOUS CHURCHES OF KERALA

4.1 Introduction

This chapter deals with two important parts of the investigation; (1) It discusses and analyses in detail, the outcome of the survey, namely, the deduced original form of the indigenous church architecture of Kerala, before the influence of European architecture on it. (2) To infer the possible architectural influences that moulded the deduced original form, it is compared to the architecture of Western churches, as well was the Jain, Buddhist and Hindu temple architecture of Kerala. These both analysis and comparative study are done simultaneously.

4.2 Comparative Analysis

4.2.1 Lay out of the Church Building on the Site

The land slopes from the hills in the East, to the sea in the West, throughout the Kerala state. Therefore, most settlements are not entirely on a level ground. It has been observed from the survey that many of the indigenous Kerala churches were built on the highest possible location in the town/ village to occupy a commanding position. Kottayam *Valiya Palli* and Kadamattom church can be taken as typical examples of this [Photo 4.1]. This feature is seen also in the placement of Jain/ Buddhist/ Hindu temples in Kerala [Photo 4.2]. Steps are provided, to reach these religious buildings in granite slabs or laterite blocks. In some *Shastha* temples like Shabari-mala, these steps had acquired a special

importance in itself. This feature can be observed even today, in the placement of Jain temples, an example is the Kallil cave temple, near Perumbavoor, which historians consider, was a "centre of Jainism in the past" ²⁶³, as well as in many Hindu temples. So this feature can be taken as a typical feature of religious buildings of Kerala. However, neither all churches, nor all temples are on top of the hills. There are many churches and temples built on river banks [Photo 4.3], since waterways was the main route of travel in those days.

As deduced from the survey analysis, the typical indigenous church building was usually placed on the middle of a rectangular plot, always laid down along the East-West axis with the *Madbaha* in the East. The orientation of the building, and entry into the church, remained the same even if the main access (gate way) to the church premises was from North, South or East [Figure 4.1]. The altar was built flushing the Eastern wall so that the Priest and the people could do the prayers facing the East. This is very similar to the placement of temples of Kerala, except that temples always faced East, so that the deity faces the East, while the churches faced West so that the people could pray facing East. Also, as inferred from the literature review, the concept of deity was never there in pre-Portuguese Christian churches, nor was there any statues in those periods. This could be attributed to the fact that, the idea of sunrise acquired a special meaning in India since ancient times and East was considered the most auspicious direction. Actually not only temples, but even for the construction of houses, whether Hindu or Christian, strict orientation-al rules were followed.

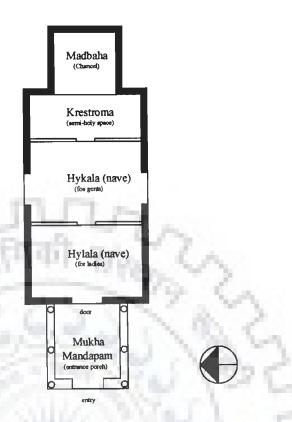


Figure 4.1 Typical basic plan of an indigenous Kerala church

This belief in auspicious orientation had penetrated to such an extent that, the local people still follow rules regarding the orientation to place oneself even for sleeping. Therefore the orientation-al rules, which were strictly followed in indigenous churches of Kerala, could also have their root in the Kerala culture, which always considered East as an auspicious direction. As inferred from the literature review, in the Western churches there were no such strict rules, regarding the orientation of a church building, neither in the early periods nor later. Therefore, the strict following of directional rules for orienting an indigenous church building is of a pure Kerala input, resulting out of its architecture, which could be religious or secular.

4.2.2 Water Body

A well was also sometimes present inside the church compound wall, usually on the Northwest corner of the plot. The washing of feet and hands before entering the church was customary in olden days, in the indigenous churches of Kerala. In Kerala, it seems, this custom was there till the sixteenth century. Venmani church, situated near Kallada, for example, had a old kulam (big pond for bath) in its front [Photo 4.4], and it was inferred by the Investigator, during the survey, that in olden days, some people even used to take bath before entering the church and at least washing the feet and hands was compulsory before entering the church building. Though not all, most of the old Kerala temples have such an element in the form of a tank, besides the well inside the temple complex and it was customary that one must purify himself before entering the temple. It seems that similar element was present in churches also, like for example in Manarkaad church [Photo 4.5], Venmani church, etc. In Western churches also, as inferred from the study, such an element was present to wash ones hand and legs before entering the church in early periods, but it was abolished later, in around 8/9th century and water stoups were introduced in their place. After that period the presence of a water body was not at all there in Western churches. Therefore, the presence of a water body in the premises of indigenous church buildings of Kerala, could have either come from local religious architectural influence or from early (pre 8/9th century) Western church architecture. However, since the 'church form' of a Western church, with its imposing front façade, was well developed by 9th century and has not been seen

reflected in Kerala church architecture till 16th century, it may be concluded that, the presence of water body must have come from indigenous religious architectural influence itself.

4.2.3 Compound Wall

Another element present in indigenous churches was the presence of a high compound wall all around the church premises (see Photos 3.32, 3.91). Other than the obvious aspect of safety, these high compound walls provided interior spaces with more calmness, and seclusion, giving a perfect ambience for spiritual activities. Also during the night, the oil lamps, built-in on the walls, lit up the whole place. In fact, in those periods the church premises acted as a secure shelter, in case of any emergency or attack. Further, the church itself had lot of paddy fields, given to it by kings and devotees, so the yield was stored in the church premises itself for sale, etc. Similarly a high compound wall is a quite common feature in the Hindu temples of Kerala. However, it is totally absent in Western Churches. Therefore, it may be concluded that the presence of a high compound wall is an indigenous input to the indigenous church architecture.

4.2.4 Padi-ppura (Entrance Gateway)

As deduced from the survey, the compound wall had, in many churches, its entry defined by a traditional gateway, called '*Padi-ppura*', to the compound [Photo 4.6]. It was always located in the middle of the compound wall, facing the cardinal directions, mostly West, it was present in other sides also in some cases. In fact, this was a common feature of the traditional architecture of Kerala, right from small houses to palaces. Many traditional houses in Kerala,

irrespective of the religion of its owner, still has this feature [Photo 4.7], and so is the case of palaces [Photo 4.8]. It was present also in old Jain temples, some are still surviving in ruins in the Wynad district of Kerala, as well as in many indigenous Kerala temples [Photo 4.9, see also Photo 2.33]. It is equivalent to the typical Dravidian 'Gopuram' (see Photo 2.34). In fact, it can also be seen in some old mosques in Kerala, like Thalashery mosque [Photo 4.10], popularly known as the Oodathil palli (note the use of word palli for mosque). The churches mostly had only one 'padi-ppura,' while many old temples had Padi-ppura on all four cardinal directions. The compound wall and the Padi-ppura of Arthatu church near Kunnumkulam [Photo 4.11] and Kundara church [Photo 4.12] can be cited as examples of a church Padi-ppura. As stated earlier, the church Padi-ppura was always not on the Western side, and in some case it was on other sides also. In Chenganoor church, for example, the Padi-ppura is on the Northern side (see Photo 1.6), it then had a paved entry to the Mukha-mandapam on the same side [Photo 4.13]. The Western churches, as stated earlier not even had a compound wall, let alone a gateway to enter the compound.

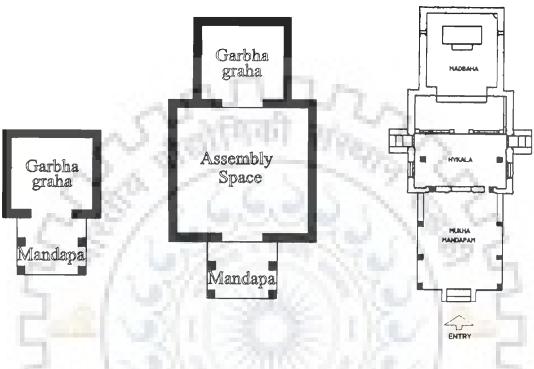
4.2.5 Plan Form

As deduced from the literature survey, traditionally the term used to denote the place of Christian worship was *Palli* probably because of the functional similarity of an indigenous church building with a traditional Jain *palli*. It has been also inferred, from the analysis of the primary survey, how the plan of a 'small' indigenous church would look like (see, Figure 3.25, p.233). The inferred

plan form was reinforced even further when the 'original' plan form of Thiruvithamcode church was extracted (see, Figure 3.40, p.254).

Looking from the functional point of view, universally the Christian 'Holy Mass' in a church was conceived, traditionally, as a community gathering to celebrate the Eucharist and so, the plan form of the church building was designed basically as a space to accommodate this function. This is totally unlike a Hindu temple which, as stated earlier, was designed more as an 'abode of God' and so, thereby, making the basic functional aspect of a church building and a Hindu temple building, two different things. In fact, this visual similarity would have been more so, if one compare the traditional church architecture with a Jain or Buddhist temple, of which it had a more common functional base. This unknown aspect will be clear if one examines closely the elements that constitute a indigenous church building of Kerala, built before foreign influence and early Jain temples.

Such an attempt is made here by comparing the plan form of a typical *Srikovil* (Kerala Hindu temple) and the plan of Kidanganad Jain *palli* in Wynad with the deduced original plan of the Thiruvithamcode church [Figure 4.2]. This comparative sketch clearly demonstrates the similarity of a Jain *palli* and an indigenous church plan and the basic difference both have with a Hindu temple. Mainly, the Jain *palli* and the church have a similar hall like space for the assembly of the faithful, a sacred space (the 'cella' in Jain palli and a the 'Madbaha' in church) both conceived similarly as the holiest space, and finally a porch, the *Mandapam*, in the front. Even the construction materials, construction technology and the architectural details used are very similar.



(not to same scale)

Figure 4.2 Plans of a typical Hindu temple, Jain palli and Thiruvithamcode church

Therefore, the Investigator deduces that, in the past, Jain *palli* and Christian churches, while showing creedal distinctions in worship forms, retained a common plan, elevation, technique of construction and basic underlying principle and theory of architectural design. It is possible that, at the time of evolution of the 'earliest' Christian churches, perhaps the Buddhist and Jain *palli*'s were the only model that those church builders could look into. Therefore, if at all a Christian church form is accused to be 'copied', it would be logical to

assume that it has to be from those Buddhist and Jain structures, of which it had more common plan and functional similarity, than a Kerala Hindu temple.

At the same time, at later stages, that's after 8th century, when Hindu structural-temples were started to be built in a big scale in Kerala, (with the rise of Kulashekhara dynasty) things seems to have changed because a lot more common architectural elements seems to be present in both, as deduced from the analysis of the primary survey. The Investigator is of the opinion that, since the indigenous churches and Hindu temples evolved further, that's after 8th century, in the same socio-cultural and architectural environment these similarities might have occurred. However, the Investigator would like to add here that, the Jain and Buddhist temples seem to have almost wiped out, except for a very few Jain temples, after 8th century, which is the main reason why, in the first place, those 'architectural elements' and 'characteristics' were termed as 'Hindu' temple style. Perhaps, if more Jain and Buddhist temples were in existence, these features and characteristics could also have existed there and then the similarities with Jain and Buddhist temples could also have been there. Logan has pointed that "Hindu temples and even Muslim mosques of Malabar (Kerala) have been built in the style peculiar to the Jains". 264

However, it may be deduced that, since the Jain and Buddhist architecture is considered older than the Hindu temple architecture, whatever similarity that are today observed between the 'structure' of a Kerala style Hindu temple and an indigenous Christian church of pre-Portuguese period, was not because one copied from the other, but because both evolved from the common cultural base and the same indigenous architectural tradition of the land, which in turn evolved from the social and climatic needs. Therefore, in the light of the discovery of this similarity of Jain *palli* and indigenous pre-Portuguese church, the Investigator is of opinion that, calling the pre-Portuguese churches of Kerala as 'Hindu architecture', as is done by many foreign and Indian authors, would be wrong, and the correct and more appropriate term would be 'indigenous architecture' or 'Kerala architecture'.

However, comparing the indigenous churches with the Western churches, apart from the obvious peripheral similarities because both were designed for the same purpose, they were of two different architectural characteristics, in terms of size, plan form, treatment given to interiors and exteriors and decoration used, right from basilican churches to Renaissance churches. They were two different architectural expressions of two different cultures based on two different socioclimatic and technological circumstances. Therefore, it may be concluded that the plan form of the indigenous churches were more similar to Jain *palli*'s than Hindu temples or Western churches.

4.2.6 Madbaha (Chancel)

It is often stated that, in Kerala, the 'Christian mass' was traditionally looked upon more as a mystery, than just a community gathering to celebrate the Eucharist. The *Madbaha*, where the major part of the Eucharist is held, was traditionally, considered a very sacred area in Kerala, and therefore allowing only the Priest who presided over the ceremony to enter there and it was strictly forbidden for the public. In fact, even today, while performing some part of the

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Holy Mass, a curtain is drawn to close the *Madbaha* from the public. This is very much like the similar practice in a temple, where, while the temple priest does some parts of the *pooja* (worship), the door of the temple is kept shut for devotees. However, in the Eastern churches, the practice of drawing the curtain, during some parts of Eucharist celebration, is followed. In the *Madbaha*, the most important element is the altar. Many old churches also have a 'ciborium', a separate and permanent canopy roof, just for the altar, inside the *Madbaha*. It is called '*Ku*: *Dush kudh sheen*', the Syriac word for 'holy of the holies'. The one at Chenganoor church is an example of this element [Photo 4.14].

If one analyses the plan of these churches, it can be seen that the creation of an atmosphere, which is suitable for contributing to the feeling of mystery, was taken care of during the design stage itself. As deduced from survey analysis a vault was always given above this area. It was to symbolise heaven.

Another peculiar aspect, deduced from the survey analysis was that of providing no windows to the *Madbaha*, which can be seen in all the churches in Kerala built before European influence. The curtain, mentioned earlier, is usually kept closed, after the Holy Mass, so that the *Madbaha* is kept in the mystery, opening only at necessary times. This is again like the Jain/ Hindu temple doors that is opened only at particular times and is otherwise kept closed.

The *Madbaha* with its dark interiors, without windows, has a striking similarity with the rock-cut 'cellas' in the Buddhist *viharas* and Jain *palli* and the 'Garbha-graha' or sanctum sanctorum of a Hindu temple, which are all always small cells, with no windows, however big the temple complex is. The windows

were purposefully avoided to get the sacred feeling. This is a unique church architectural feature, found only in the indigenous church architecture of Kerala, and in most of the early Kerala churches one can still see that there is no window in the Madbaha area. The windows that one sees today in the Madbaha of many existing old churches are all later additions, after the influence of Portuguese style over indigenous Kerala churches. Therefore, another typical feature of Kerala's indigenous churches, unlike European churches, was that, the sanctum was conceived in plan, that is in the designing stage of the building itself, as a small cubicle cell and the character and treatment were given accordingly. Likewise windows were avoided even in the nave area. The only opening into it was the doors, three in number, one each on the longer sides and one on the shorter side. Later, the Portuguese tried to do away with the idea of this mystery so that "as a result, the small dark sanctum chamber becomes now the centre of light, the manifestation of risen Christ". 265 Many old indigenous churches with windows now, present were of later additions to bring in more light to the interiors. In fact, one of the decree of the Synod of Udayamperoor of 1599 AD (Action VIII, Decree XXVIII) observes that most of the churches are "extremely dark" and further orders that "they shall take care to have windows opened ... to let in air and light". 266 It must be after the influence of the Synod that many churches adopted using what's locally called 'globe-vilakku' (a hanging lamp shade in glass) inside the churches to light oil lamps [Photo 4.15]. It can be still seen preserved in many churches like, Arthat, Thavalakkara, Punnathara,

Chungam, etc., in Chungam church it is still used as a 'keda-vilakku' (ever burning lamp).

The *Madbaha* was also made purposefully smaller in width than that of the *Hykala*, unlike a Western church, where such a feature was never in vogue. This practice of making the sanctum smaller in width than the nave is another unique character of Kerala's indigenous church architecture [Photo 4.16, see also Photo 3.4]. This was also done to achieve the above said purpose of creating mystery feeling in the Madbaha area. Sometimes, the width of the *Madbaha* was equal to depth, which made the *Madbaha* pure square in plan, again similar to the *Garbha-graha* of a Hindu temple, which is always square in plan, whatever the shape of the shrine be (see Figure 2.21, p.158). However, *Madbaha* is not always square in plan. In Western churches there was no such width difference between nave and altar area. Therefore, the idea of a shorter chancel than the nave is of pure Kerala architectural feature.

4.2.7 Decorative Elements

The Western churches had highly decorated interiors from very early periods. Even the catacombs used to have pictures painted in their walls [Photo 4.17]. The practice of using paintings grew further after Constantine's time and later periods it increased further, along with highly decorated statues, to fill up the entire wall area of church interiors. Where as, in the indigenous churches of Kerala no pictures were used inside, for veneration or otherwise. Like wise, as deduced from literature review, the Kerala churches had no statues either inside the church, other than a plain cross, till the arrival of the Portuguese. So the interior spaces of Kerala churches were always plain without any pictures, or statues, totally unlike their counter parts in the West.

4.2.8 Altar Back Drop

Similarly introduced by the Portuguese, and later a common feature of all churches, was the very highly decorated altar back drop wall for altar, in wood, with niches made into it for statues and other decorations. During the pre-Portuguese period, altar was kept touching the wall on the Eastern side, and the altar back drop was very simple, with some niches on the wall itself and some pilasters, made of laterite (the walling material) itself. It was most probably introduced by the Persian immigrants and a few old churches still maintain these. At the same time, or even before that, there also existed a pure Kerala style of decoration for altar backdrop, as stated earlier, the sole survivor of this type can be seen in the Ramapuram church [see, Photo 3.69]. Later after the Portuguese influence, the practice of decorating altar backdrops to a maximum, in gold paint and exquisite carvings started and even today this variegated altar backdrops can be seen in many churches built between 16th and 18th centuries.

4.2.9 Vault Over Altar

Another typical feature of the indigenous Kerala church deduced from the survey was the presence of a vault inside the Madbaha, over the altar [Photo 4.18]. This feature was commonly present in Eastern churches and in the Buddhist *Viharas* (see Figure 2.16, p.131). The Investigator could not confirm, from the present study, whether this feature came from Persian Christians, who migrated to Kerala at a much earlier period, or it was another indigenous feature

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developed out of the common base, with Buddhist *Viharas*. It is possible that the Persian immigrants could have introduced this vault to church architecture from very early stages. However, the possibility of the vault coming from indigenous sources is also strong, from the early Buddhist *Viharas* or Buddhist/ Jain temples. As seen in the literature review, the roof of Buddhist temples were always vaults even before the beginning of the Christian era. However, as stated earlier the early Buddhist structures in Kerala exist no longer. At the same time, since Buddhism was introduced here from the North at a time when its architecture was already developed in the North, it can be assumed, in the absence of any contradictory evidence, that the early Buddhist temples in Kerala, for which there are many literary evidence, were vaulted structures like the *viharas* in North India. Therefore, the possibility of the indigenous church taking it from Buddhist *viharas*, at its fomulative stages itself is also high.

There is a mention about Kerala temples being called '*Mukal-vattam*' (literally top-round) in *Sangam* literature (see, Chapter II, p. 145.). It is worth investigating in the light of the fact that, there were indigenous 'church buildings' in those periods, which apparently had a vault as its roof, and also that the 'structural Hindu temple buildings' came up at much later period, to see whether the 'temple' mentioned was 'Hindu', 'Buddhist' or 'Christian'.

In some cases, this vault was built entirely of wood. Example for this can be still seen in Chembakulam, Chungam, Purakkaad and Kottayam *Valiya palli* [Photo 4.19, 4.20, 4.21]. The presence of wooden vault will also prove that the

builders were particular that they wanted a vault shape above the altar. Also in most cases the space above this vault was left unused [Photo 4.22].

At the same time, Gouvea (1603) repeatedly says that, in the Malabar churches, while the holy mass was going on "at the time of consecration they (the holy bread) were thrown through a hole which there was in the floor of the tower (above) the altar, placed in a small basket of fresh palm fronds", ²⁶⁷ but there is, at present, no existing evidence for this. However, this literary evidence suggests that, since vaulted roofs were made of laterite, it is not probable to have such a system, the early indigenous churches may have had a flat wooden mezzanine space at the place where the vault is observed at present. The Investigator would like to point out that, there also existed another architectural method, other than the vault roof, of giving a flat wooden roof, usually highly carved above the altar area, mostly with the nine-mandala grid pattern. Examples of this type are Tharissa palli, which is still there above the altar [Photo 4.23]. It was also present in Kolancherry church, where this roof was removed, when the old church was rebuilt and now kept in the parish hall [Photo 4.24]. However, it could also be the roof of the Ku: Dush kudh sheen, stated earlier. It may be possible that, before starting the practice of giving a vault over the chancel, the flat wooden nava-kanda-mandala (nine grid) roof was in vouge, which also had a hole in it for bringing down the holy bread at the time of the holy mass. Remains of such a roof can be seem also in the museum attached to Niranam church [Photo 4.25]. The size of this roof clearly is proof that it was not another Ku: Dush kudh sheen roof.

4.2.10 Exterior Form of the Madbaha

The extra importance, given through architectural treatment and character, to the Madbaha in plan was followed also in the exterior form. It is very evident from the comparative analyses of indigenous church building, with a Jain, Buddhist or Hindu temple that, at the design stage, a conscious attempt was made in architecturally incorporating the traditional cultural/ religious outlook, of conceiving the religious building always as a 'Devaalayam' or 'abode of God'. This was achieved by giving more importance architecturally, to that part of the building, which was supposed to be the part where 'God resides'. Architecturally, as stated earlier, this was achieved in a temple by projecting the height of the Garbha-graha, in elevation, to accentuate its importance in form from outside. Similarly in a church building, the Madbaha was traditionally always built by projecting the height of its roof, higher than the roof of the nave, so as to give utmost prominence to the Madbaha in the overall form of the building from outside. This element, called Thora (Syriac for 'tower'), is another peculiar feature of indigenous Kerala church, that makes it drastically different from that of a European church [Photo 4.26]. In Western churches, the sanctum was not given any prominence from outside in the early Byzantine Basilican churches, nor in later periods. When this practice of constructing a dome was given over the nave, or at the junction in a cross shaped plan, it was done more as a structural and architectural necessity, to give more elegance to the building as a whole, as well as to bring in more light to inside through the bottom ring, or top hole, of this dome. Further, most importantly, in all these churches with a dome present, the altar area was not placed under this dome. Therefore, this dome was never meant for accentuating the position of sanctum from outside, so that it may be given an extra importance in form. Whereas, in the indigenous churches of Kerala, the roof of the sanctum was always projected up, and was made the highest part of the church because it was considered the 'most holy part' of the church. It was done for no other apparent reason and in fact, in many churches, as stated earlier, the portion above the vault was left as it was, that is not flattening it for using it as floor, even though the roof over the vault, the final tiled roof, was very high. There are many theories on the rationale for this projection over *Garbha-graha* in a Hindu temple [Figure 4.3] but it is beyond the scope of this investigation.

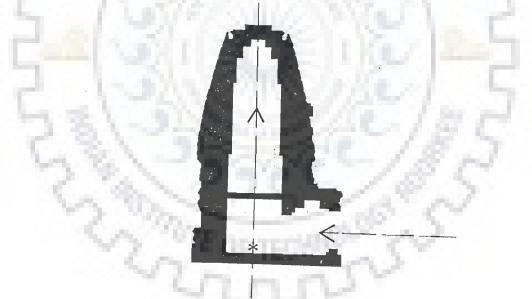


Figure 4.3 Section through the sanctum (*Garbha-graha*) of a typical Indo-Aryan temple

As stated, the only parallel of this feature in indigenous churches can be again seen only in the Jain/ Hindu temples of India, and especially Kerala. The tower over the cella of a Jain *palli* or the *Sri-kovil* (the entire sanctum sanctorum block of the Kerala Hindu temple), was always projected up in elevation than any other structural part and was made the highest part of the Kerala temple complex, and it was given most exquisite treatment because as it was considered the 'abode of God'. This is a unique feature of Kerala temples and is unlike the Dravidian temple style of later periods, where the '*Gopurams*' or the entrance gateways, were the highest structure in the temple complex was the *Sri-kovil* [Photo 4.27]. Whereas in Kerala, the highest structure in a temple complex was the *Sri-kovil* [Photo 4.28]. Even people living in near a temple, don't construct a house higher than the roof of the *Sri-kovil*. There was an unwritten rule, a psychological byelaw, that no one should build any house taller than the highest roof of the religious building in the locality. It is a traditional belief among the common people of Kerala that the highest structure of any place should be the roof of the religious building.

The Investigator has come to the conclusion that, the only rationale for the development of this high *Thora* is from the common architectural base, of giving more prominence for the sanctum sanctorum in indigenous religious buildings from outside, to the viewer. This traditional and unique feature, developed out of Kerala people's traditional belief, was followed in the indigenous Kerala churches also, so as to give the sanctum sanctorum area the utmost importance, prominence and sacredness in the overall form of the building. So, the indigenous Kerala churches, even while conceiving the building as a place for community gathering for Eucharist celebration, rather than as an 'abode of God',

and designing a plan form basically to suit that objective, the built form also followed the local spirit and architectural character, by giving more importance in architecturally treating the *Madbaha*, where the Eucharist is kept, so as to give that 'sacred' feeling befitting to the 'abode of God'. This is an unique feature of incorporating local religious spirit into a different plan form can also be seen in the indigenous Jain *pallis*, as in the indigenous churches of Kerala. It must be due to the influence of the indigenous religious outlook on architectural form.

This feature of projecting the roof of the sanctum upwards was always followed, while making any church building in the past, even if the cost factor reduced the height of this projection. In those cases, the roof was made just a little higher than the roof of the nave with two/ three sided slopes [Photo 4.29]. In affluent churches, it was a perfect four-sided roof, projecting well up. The Paliyekkara, Kaduthuruthy, Kuravilangad, etc., churches show a perfect square four-sided sloping roof for the *Madbaha*, projected well up [Photo 4.30]. As stated earlier, it was not followed in Western countries and in fact, the Investigator likes to stress here the fact that when the Portuguese built the first European style church in India, the St. Francis church at Cochin (completed in 1518 AD), it was built with the roof of the *Madbaha* at a lower height than that of the nave [Photo 4.31]. In fact, this church was built totally ignoring the architectural tradition of church construction in Kerala, with its front façade facing more to North-West, so as to align it to the front road, unlike the Kerala tradition of strict orientation of the church building on the East-West axis, with *Madbaha* on East. It also had an

imposing façade, projecting the front façade wall up than nave roof, first of its kind in India, unlike the indigenous style.

The floor of the sanctum of the indigenous Kerala churches was also kept higher than the main body of church and was approached by steps. However, this feature was present in the Western churches also from very early periods, even the pre-Christian basilicas had this feature. The temples of Kerala also had this feature. Further, this practice of rising the floor of the *Madbaha* is still in vogue today.

4.2.11 Triumphal Arch

Another feature deduced out of the survey was that, in the indigenous churches of Kerala, an arch, exactly like the 'triumphal arch' seen in Western churches, always separated the Madbaha and the Hykala (see Photo 3.7). This element was again present in the pre-Christian Roman basilicas, and was the product of a structural necessity. It was faithfully followed as and when Western church architecture progressed through different stages. It was also present in Eastern churches from very early periods. The presence of this feature in Kerala churches could be an addition when the Persian Christians immigrated to Kerala. However, it could not be so concluded because, there is a possibility of this feature developing indigenously from Buddhist *Chaithya* halls, which also haveing a vaulted roof, that ended in an arch like shape (called '*kudu*' in Malayalam). The entrances of Buddhist *Chaithya* halls had always, as stated earlier, of this particular this shape, even in pre Christian era (see Figure2.16, p.131).

It seems in olden days the triumphal arches in indigenous churches were built of stone, sometimes carved out of one stone block. These single stone arches can be still seen, but re-fixed at another place, in Kottayam *Valiya palli* [Photo 4.32]. It has exquisite stone carvings of elephant figures, etc. [Photo 4.33]. Similarly, in the ruins of old Kayamkulam church, lying outside the present new building, such an arch can be seen, still intact and with its exquisite carvings [Photo 4.34, 4.35]. When the new Aruvithura church was built, the parish committee had decided that, as told to the Investigator, in order to preserve such a single piece stone arch, they had incorporated this old triumphal arch, on the outside of the basement stone work, so that it can be still seen from outside [Photo 4.36]. However, the Investigator would like to state that, it could not be conclusively proved from which source this arch came into indigenous Kerala church architecture.

4.2.12 Hykala (Nave)

In Kerala, the *Hykala* was always wider than the *Madbaha*, as stated earlier. Traditionally, a fence usually divided it into three parts as deduced from the survey, the space near to the altar was again a holy area and a part of the church service was held here, and it is called *Kestroma*. This area usually has two altars, though it came at a much later date, at the Northeast and Southeast corners. Its floor level is lower than the *Madbaha* and is usually at least one step higher than the rest of the *Hykala* [see, Figure 4.1]. In Jacobite churches, in later periods (post-Portuguese period), two rooms were added on both sides of this space; the *Bes Sahaden* (room for relics) on the North and *Bes Amodo*

(baptistery) on the South. The rest of the *Hykala* is divided again into two, with the space near *Kestroma* allocated for men and the rear part for women. Some Scholars term only the space where people gather, that is the space excluding the *Kestroma*, as *Hykala*. Again, as stated earlier, the Kerala churches did not have chairs or long benches, in nave and in most cases people sat cross-legged on the floor.

In Western churches, the most impressive element used to bring in elegance to the church interiors was to decorate them with paintings, frescos, sculptures and other decorations. It became evident, from this investigation, that in the indigenous churches of Kerala, the internal decorations inside (as well as outside) the church were minimum, with no paintings or statues. It was only later, with the advent of the Portuguese, and with more foreign influence, there came the habit of decorating the interiors with paintings. As brought out from the literature survey, in most indigenous churches the interior was not even plastered. The churches did not have any pictures on the walls, which made "viewers express sorrow for the appearance" of traditional churches from inside. It was also the practice in pre-15th/16th centuries (but it filtered even after that even till 19th century) that, the Parishioners were buried inside the church building itself, and the stone slabs on the floor had names written on them of those who were buried there^{boxii}. In fact, even today many of these stone slabs can be seen lying in many old churches. For example, in Kottayam Valiya palli, they can be seen scattered all around the church premises and are also used as

^{lxxxii} It seems in those days a particular family members stood for the Holy Mass exactly in that spot where their ancestors were buried.

steps and even, unfortunately, as cover-slabs for water drain in nearby houses [Photo 4.37].

Although there were no paintings on the walls or statues inside the church, the wooden elements used inside, as beams, rafters, pillars, etc., were highly decorated with motifs in most cases [Photo 4.38, 4.39, 4.40, 4.41, see also Photos 3.59 to 3.62]. Especially the wooden doors were highly ornamented with carvings, with floral studs of brass and opening to the main body of the church, as in Chenganoor, Kadamattom, Pazhuvil churches [Photo 4.42, 4.43, 4.44]. *Dwara-paalakas* (literally door guards) can be seen carved on plaster above the door-ways in some old churches [Photo 4.45, 4.46], much similar to the same practice in temples of Kerala [Photo 4.47]. Laterite seems to be the only major material, along with wood and stone, used for the construction of these churches. Some churches had a Varandah on both sides. Some churches also had entrance porches on both sides. Kottayam *Cheriya palli* can be cited as an example for this [Photo 4.48].

The *Hykala* also contains an oil lamp, either a *Nila-vilakku* (floor lamp) or *Thookku-vilakku* (hanging lamp) inside. This lamp always remains lit in Kerala churches and the worshippers attend to this lamp and see to it that it is kept burning all the time. Placid (1976) in his study on early Christianity says "*Keda-vilakku* (ever burning lamp) was compulsory in old churches (of Kerala)". ²⁶⁸ The oil used in this lamp is often given away as *Prasadam* (offering) to devotees, who applied it on their forehead. This practice is still in vogue in many old churches, Niranam, Chenganoor churches can be taken as examples of this practice. This

practice also must have come from the common cultural base, and is present in some Hindu temples also. However, in temples this ever-burning lamp is kept inside the *Grarbha-graha*. In the Western church it was again not customary to have an ever-burning lamp, except in early Coptic churches, where "a little niche (was provided) in the wall (behind the altar) for an ever burning lamp". ²⁶⁹

The Hykala some times had a wooden balcony on the Western side, facing the Madbaha (see Photos 3.55 to 3.60). It was, however, not used to accommodate more people during Holy Mass, but for the priest to stay. The beams used for this balcony, as well as the stair to it from inside the Hykala, were usually highly carved with motifs and are one of the best examples of the exquisite carving skills of the carpenters of Kerala. In fact, the construction of a separate building, mostly detached and rarely attached to the church building, for the priest to stay is a later phenomenon, as stated earlier. Similarly on one side of the altar is the later addition of the sacristy, the peripheral room for keeping the sacred items and clothes to be used by the priest during the Holy Mass. The early churches in Rome did have a balcony, but not as a residence for the Parish Priest, but to accommodate more people, especially women.

The roof of the nave of the indigenous Kerala church had a two sided slope roof, built in wood and finally covered with tiles. However, it is also clear that before tiles came into use as a roof covering material (pre 15th century) it was covered with thatch. Later *'Kurod'* or small tiles replaced thatch [Photo 4.49], and after that 'company tiles' replaced *Kurod*.

As inferred from the literature survey, the elements like pulpit, baptism font and belfry were absent in traditional churches and added by the Portuguese by decrees of the Synod of Udayamperoor. However, these have all become now common features of the churches of Kerala. The pulpit, known as the '*Pushpakoodu*' or just '*Pushpam*' (literally flower), is carved out of wood and generally is highly carved and decorated and become another place where the exquisite carpenters of Kerala could show their carving abilities, its base was usually carved in the shape of an elephant's trunk. Other than the examples already stated, the Pulpit at Palai, Chambakkulam churches are examples of this [Photo 4.50, 4.51].

4.2.13 Front Façade

As stated earlier, many Europeans like Monserratte (1579), Gouvea (1599), etc., have written that the traditional Kerala churches looked like the "pagodas of the Hindus". The rationale for this view was mainly the fact that the traditional church did not have a 'church façade', in its conventional sense, or it looked totally different from, the churches of today. It was simple, mostly with no pilasters, with the thatch roof projecting further over the front wall so as to protect the front wall from the heavy rainfall of Kerala. As stated earlier, the old Kallada, Kundara and Kayamkulam old churches (all demolished now) can be taken as an examples of this [see, Photos 3.19, 3.20, 3.21]. This type of façade can be still seen in the Karthiyapalli, Thiruvithancode and Kanjirapally churches, but again with additional decorations on it [see, Photo 3.22, 3.23, 3.24]. The Investigator is of opinion that Western facades were not adopted in Kerala before the

Portuguese period, say by the Persian emigrants at an early stage, since the Kerala builders understood clearly that, in the climatic conditions of Kerala, with its heavy rainfall, it is not ideal to take up the front wall, that is façade, open to rain with out a roof protection over it, especially when the cementing material was mud or lime. So they provided the necessary roof projection over the front wall, so as to protect it from rain, similar to the residential and other traditional buildings in Kerala, were the walls where always given a roof projection to protect it from the rain.

During later periods, when the Portuguese wanted to impose their style over Kerala church architecture, they, instead of demolishing the entire church building and constructing a new one, (may be because of the expenses it would involve) they "succeed(ed) only in building facades. They constructed facades for the *shala* (entrance porch) as well was the nave". ²⁷⁰ This intervention caused an irreparable break in traditional architecture and introduced an alien façade to traditional church building character. In later periods, this imported façade took over as the most important architectural feature of a church building, increasing in size, form and scale forcing the traditional style of church architecture of Kerala to be completely wiped out.

4.2.14 Mukha-mandapam (Entrance Porch)

Mukha-mandapam, also called *'shala'* was, as stated earlier, a porch like hall on the front, standing on pillars, without a walled enclosure [Photo 4.52]. In fact, the main reason why the Europeans described the indigenous Kerala churches as "pagodas of the Hindus" was because most of those churches had this front *Mandapam* (open pillared space with roof), some of these *Mandapams* were designed in a way, which made them to look much similar to a Kerala temple [Photo 4.53, 4.54]. However, it was a prominent and unique feature of the indigenous churches of Kerala. The roof of the *Mukha-mandapam* was always lower than that of the *Madbaha* and the *Hykala*. This is roughly equivalent, in shape, to a similar element, also called *Mukha-mandapam* of a Kerala temple (see Photo 2.20). It is an open hall, sometimes with wooden trellis work, in front of the temple, but as in the case of an indigenous church it was not a common feature, but was found in many important temples. In many cases, in church as well as in temple, it had highly carved nose gable on the roof [Photo 4.55].

The origin and purpose of the *Mukha-mandapam* in churches is still a matter of dispute amongst Scholars. Some Scholars like Thomas (1990)²⁷¹ and Andrews Athapilly (2000)²⁷² are of opinion that it was 'meant for the accommodation of additional worshippers during festivals when pilgrims or the faithful from other Parishes attended the church'. However, the Investigator does not see a valid rationale in this argument. Although the *Mukha-mandapam* accommodates more people during over-crowded festival Holy Mass, for one thing, the festival happens only once a year and lasts for a week or so. It would be more reasonable to assign a more frequent use for this space.

Another School of thought is that, *Mukha-mandapam* just "serves the purpose of the porch in a church". ²⁷³ It can be logically assumed that it originated from the need to protect the main door from the heavy rains of Kerala. Since the roof projecting over the front wall is so high, as stated earlier, a

projection, like a portico, over the door would definitely help in protecting the front door from the heavy rainfall of Kerala. So it can be logically assumed that this feature must have been incorporated as such, in smaller size, for this purpose even at an early period. Even otherwise it would be appropriate to assume that the skilled carpenters/ craftsmen of Kerala famous for making proportionate and beautiful buildings, would not have liked a plain façade in the front of early churches. So this small portico in front would have been the most visible aesthetic element for a church. The very term '*Mukha-mandapam*' implies that, it was a *mandapam* for a better *mukham* (literally face). In later periods, this portico must have grown into an elaborate *Mukha-mandapam*.

Some Authors are of opinion that *Mukha-mandapam* developed as a place for the noble Christians to leave their arms while they entered the church. In Britain it was customary in olden days to go to the Sunday mass 'fully dressed' or wearing full honours and medals one earned. ^{Ixxxiii} Similarly, the noble Kerala Christians also had the practice of going to the church wearing full honours. One of the special honours they had acquired was the privilege to go fully armed. ²⁷⁴ A privilege they shared with the royal families and because of this rare and coveted privilege they took pride in going to the church fully armed. Vincent Maria (1672) had this to say about noble Kerala Christians: "They were always well armed; ... on going to the church they leave their guns or spears in the porch outside". ²⁷⁵ Also another seventeenth century European traveller says, "when they entered the church they deposited all their arms in the porch which then presented the appearance of a guard house". ²⁷⁶ So it is evident that the *Mukha-mandapam* was also used as a place for the noble Christians to leave their arms while they entered the church. The Investigator is of the opinion that if this structure 'originated' as a place for the noble to leave their arms, it would have taken a wholly different shape because it is obvious that this structure is conceived, and built, as if it were meant to accommodate people with proper seating arrangement [Photo 4.56, 4.57, 4.58], meaning it was developed to accommodate people, and not as storage room/ space. Therefore it was built for some other purpose and leaving of arms there was a process that just happened to be.

A more logical explanation could be that, in earlier periods the Christian mass, or a major portion of it, was meant strictly for the faithful, and 'baptism' was the only way one was admitted into the list of the faithful. In fact, in the Syrian Christian Holy mass of Kerala, till recently, there was a statement in the middle of the ceremony, that "those who had not baptised may now leave the (church) hall". ²⁷⁷ In pre-Portuguese days, but, only the Bishops were allowed to give baptism and in Kerala Bishops happen to come from Persia only in between long intervals. So it is quite possible that there would be a lot of 'Christians' who could not get baptised because of the lack of a Bishop to do so, even though' they were willing and ready. So there will be always a section of Christian population waiting for some Bishop to come and baptise them. It can happen even inside a family where the husband is baptised but not the wife and vice versa, or children are not baptised or so. Further, in those days, the Christians used to go to church travelling long distances in boat and otherwise. So,

Ixxxiii From which the term Sunday dressing originated.

naturally, it was possible, in those days, that, from a family or a group that had gone to attend a mass, some would have to leave the church nave, during the mass, after a certain stage, because they were not baptised, irrespective of their social status, age, etc., and wait outside for their family or group members to join them after the mass, to go back together. A structure for them to stand outside, escaping from the sun and heavy rains of Kerala, and still could 'hear' the service, would now become a necessity. The Investigator is of the opinion that *Mukha-mandapam* was originally conceived as an answer to this problem.

4.2.15 Kodi-maram (Flag post)

As deduced from the survey, another common element present was the placement of a huge flag staff, *Kodi-maram* (see Photo 3.50) used to hoist the flag during festival occasions. They were placed, in some cases, in the front of the church, that is on the Western side, along the East-West axis. At the same time, in many cases, as stated earlier, when the main entry to the church compound was not from the West, then the position of *Kodi-maram* was changed to a position near the main gate. It meant that, unlike a Hindu temple where the *Kodi-maram* is always placed in front of the temple, on the East-West axis, no such directional rules were followed in the placement of *Kodi-maram* in a Christian church. It was always made of wood and sometimes coated with copper or brass sheet. While the church had a cross, mounted on the top of the *Kodi-maram*, the temple had symbols connected to the main deity of the temple on top of the flag. Except for this, there was virtually no difference between the

two. The height of these *kodi-maram*'s is usually from 30 to 40 feet. The Chembakkulam (Kalloorkadu) church is an example for this (see Photo 3.51).

This element is still in vogue today and almost all of the Kerala churches have today a flag post, whether old or new, where the flag is hoisted ceremoniously before the starting of the church festival. This function done by the Parish Priest in front of all parishioners, and is called '*perunnal- kodi-yettu'* ^{*lxxxiv*}. It is accompanied by special prayers and some times ringing of the church bells. The Western churches had no such parallel elements.

4.2.16 Deepa-stambham (Post for Oil Lamp)

As stated earlier, *Deepa-stambham*, also called *'Vilakku-maram'* is a post with provision for lighting oil lamps seen in front of some churches, but out-side in the open (see Photo 3.44). It was another feature common to both traditional churches and temples. This usually had five to nine levels for lights, but there are posts with up to fourteen rows of lamps. Earlier, it was made of wood with small brass lamps fixed permanently with nails over the wooden framework, covered with brass to prevent them from catching fire or otherwise deteriorating. In some cases it was carved in stone, for both churches as well as temples. There is little difference between the one in churches and temples. The granite *Deepastambham* at Venmani church and Kandiyoor Shiva temple in Mavelikaara [Photo 4.59, 4.60], for example, have virtually the very same design in every detail. Similar is the case of *Deepa-stambham* in Vechoor church and Mannaar temple [Photo 4.61, 4.62]. Incidentally, the Investigator would like to put it on record that,

lxxxiv Literally 'hoisting the flag for the festival'.

the brass *Deepa-stambham* at Koothattukulam church, though built only in 2001 AD, is claimed to have the highest brass lamp in the world.

4.2.17 Kurishum-thotti (Granite-Cross Pillar)

Putting a big granite cross outside in front of the church, erected on a granite base was another feature of indigenous Kerala churches, that made them different from any other church architecture [Photo 4.63]. It is called '*Kurishum-thotti*' (literally 'cross with cubic base (crest)'). It is basically a huge cross, of size ten feet and above, placed over a highly carved granite platform, mostly rectangular in shape [Photo 4.64]. It is built with provision for lamps carved into it, to pour oil in, so that the wick keeps burning, to light the crest that can be seen from a long distance. These 'Open air granite cross on a crest' can be seen even today in front of many of the ancient churches of Kerala.

A rectangular crest called '*bali-kkal*' is present in front of many old Hindu temples like Kandiyoor Shiva temple in Mavelikaara and Kallil Jain temple [Photo 4.65]. *Bali-kkal* literally means 'sacrificial altar'. Though there are no sacrifices, this portion, in temples, always contains a table-like crest or big granite stone with carvings, some do imitate a sacrificial altar. The base of the *Kurishum-thotti* has been connected by some Authors to the '*bali-kkal*' seen in Kerala temples, because of its much similar architectural form. They have connected the sacrificial idea of 'sacrificial-altar' to the 'ultimate' sacrifice of Jesus Christ on cross. In fact the base of the *kurishum-thotti* always has a granite base, which was conceived and designed much like the *bali-kkal* of Hindu temples, (see Photo 2.29) with a huge cross was put on the top. Another School of thought connects this structure to the *Stambhas* (literally pillar) of ancient religious architecture of India. In early centuries of Christian era *Stambhas* were a common feature of Indian religious architecture. In those periods, in front of most religious buildings there used to be a *Stambha* with a symbol on top. Two typical examples, still existing, are the one at Jain temple in Moodabadri and the Column of Heliodorus at Besnagar, near Vidisha in Madhya Pradesh [Figure 4.4 a & b]. Fergusson (1876), who did not assign any purpose to it says "these pillars are common to all the styles of Indian architecture. With the Buddhists they were employed ... with emblems (mostly Buddhist wheel) or animals on their capitals. With Jains they were ... (with) sometimes supporting quadruple figures of a Jaina; with Vaishnavas they generally bore statues of Garuda or Hanuman; with the Saivas they bore the *thrishoola* symbol ... whatever their destination, they were always among the most original and frequently the most elegant of production of Indian Art". ²⁷⁸

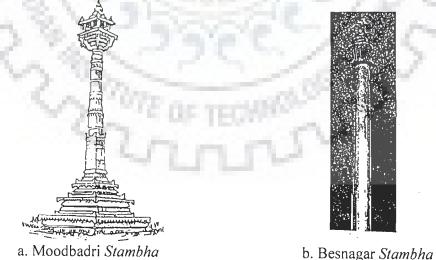


Figure 4.4 Stambha at Moodbadri and at Besnagar

Brown, while, studying the Buddhist architecture concludes that its "purpose was solely monumental" ²⁷⁹ but also mentions that "in no instance do the pillars appear merely as isolated monuments, as in the vicinity of each of them are remains of stupas and other buildings showing that they formed part of the structural accompaniments of an extensive Buddhist settlement". ²⁸⁰

Percy Brown, again, while studying the Jain temples of South India says "There is one other architectural feature, common to the temples of this Southern type ... This is the *Mana-stambha*, or free-standing pillar". ²⁸¹ Srinivasan, K.R., (1972) after studying the excavations in Nagarjunakonda, in Andrapradesh, which belongs to 2nd century, states that these "have revealed the existence of Hindu temples side-by-side with Buddhist monument of second century or older. One cannot fail to notice here the close similarity in architectural traditions between Buddhist and non-Buddhist types". ²⁸² These relics also reveal the fact that the temples or shrines had a common plan, design and mode of construction, irrespective of the creeds to which they belonged, in the formative period of 'architectural form'. He further states, "the creedal difference was marked only by the idols or objects that were installed for worship and appropriate symbols or the plastic representations that formed the decorative elements of such temples". ²⁸³ This finding would make one wonder, how a devotee would make out a Hindu temple from, say a Jain temple.

The Investigator is of the opinion that these *Stambhas* acted more like name boards to these religious buildings. To distinguish a similar looking Jain temple from a Buddhist temple and both from a Hindu temple, the *Stambhas*

were erected in the front. The 'cross-*stambhas*, or '*Kurishum-thotti*', again served the purpose of a distinguishing symbol, outside and in front of the indigenous Christian church building of Kerala which, as is evident from this study, also must have looked very similar to the temple building (see Photos 4.53, 4.54). Therefore, *Stambhas* are more like the name boards that are seen today in front of modern churches to differentiate an orthodox church from, say, a Catholic church. Of course, all the churches did not have this feature, and may be it was because of the absence of such a *Stambha* that, as stated earlier, Vasco-De-Gama had entered a Hindu temple and worshipped, thinking that it was a Christian church.

The Investigator would like to put it on record that, in many churches these granite crosses have fallen, and lying down unattended in the church premises, as in Angamaali '*Kizhakke Palli*' (see Photo 3.2), Muttam, Pulinkunne, etc., [Photo 4.66, 4.67] and in Chowwara church a piece of the old granite cross is used as a step [Photo 4.68].

4.2.18 Kottu-pura (Room for Music)

Kottu-pura, room for a music band, to be used especially at the time of church festival, where *Pancha-vadya*, *Naga-swara*, etc., (musical forms of Kerala accompanied by musical instruments) that are still in vogue are performed. Kuravilangad and Palai [Photo 4.69, see also, Photo 3.37, 3.38] are among the many churches that still preserve this element, though in other churches this element is either absent or vanished. This feature is present in some Hindu

temples also. Such an element was never present in Western churches and therefore, it was purely a Kerala architectural input.

4.2.19 Belfry

Belfry in itself, as stated earlier, was a foreign input to the Kerala church architecture scenario. At the same time, the Synod of Udayamperoor (1599) decrees that, "they (those churches) have no bells, the Synod grants licence ... as they can procure some", ²⁸⁴ implies that there were also churches with bells already existing at that time. However, in those churches these bells were hung inside the church, inside the Madbaha, but above the vault over the altar, as is still there in some old churches like Kollam Tharissa Palli. One of the Synod decrees (Action VIII; Decree XXIX) states that the Kerala churches "shall also put bells in their Steeples to be rung at meet times, ... which shall not be hung within the church", proves this point. The small belfry at Kuravilangad church and Punnatra church [Photo 4.70, see also, Photo 3.53] are examples of Kerala style version, which developed after the Synod of Udayamperoor. It is a tiled roofed structure and stands on laterite pillars. It has monthaya or 'nose gabled projection on roof' that makes it a typical Kerala style structure. Also came much later, in big churches that can afford extra expenses, there were separate belltowers on the side of the hall as seen in Muttuchira church [Photo 4.71], while in small churches, the bell used to be hung at a suitable height in a hole on the West wall. However, in pre-Portuguese churches these bells were hung inside the churches, above the vault over the altar.

4.2.20 Kurishu-Palli (Small Church Near a Main Church)

In Kerala, in pre-Portuguese days "it was a common practice among Christians who live far away from a church to build 'Kurishu pura' (literally crosshall, but means a small church) and use it for prayers on Sundays. They used to go to the church only on important days of the year". ²⁸⁵ This building was functionally and architecturally different from what is understood of it today. Today, it acts more like a grotto on road side, where the devotee can offer prayers from outside. At the same time, the kurishu-palli of earlier period, was in itself a complete church, with an altar and an assembling space [Photo 4.72]. The size of this structure was small and depended on the population of the Christian community there. A few of these churches have survived the ravages of time. Kunnumkulam Ambala-palli, Pallippuram kurishu-palli and Mattam kurishupalli (the last two are studied in detail in the third chapter) are good specimens for this type (see Photos 4.53, 3.75, 3.92). The church was small, means the nave was smaller compared to today's churches. In fact, even in 1788 AD, when the Kottayam Putten palli was built it was built to accommodate only 64 families, so in 1500's, many Christian communities must have had only a very small population among them, and so naturally would have built a church building, in the appropriate size to accommodate only that crowd, which means the church plan would have looked much similar to the plan of a Jain/ Buddhist palli (see Figure 2.19). The written records kept in many churches, as well as the old annual festival souvenirs of many churches attest to this fact. A souvenir says, "The Mayilakkombu church demolished recently looked like a Buddhist vihara".

²⁸⁶ The writing about old Pala church also says uses the same words, 'small and temple-like'. In fact the word 'temple-like' is another common word that was used, mostly after 19th century, by old people to describe the old churches in a souvenir or book, after it was demolished, the churches of Muttam, Aruvithura, etc., has records attesting this fact. The Investigator is of the opinion that the small size of those churches was a factor in describing it 'temple-like'. A comparison of Ambala-palli of Kunnumkulam, and Kunnilappan temple would make this obvious (see Photo 4.53, 4.54).

4.2.21 Adaptation of Vaasthu-Vidya Principles

It has been not established since when '*Vaasthu-vidya*' rules or codified system of traditional constructional practices started to be used in Kerala. To build any new structure the traditional Kerala *Aaashari* (literally carpenter, but equivalent to the modern architect) till recently used to look into the prevailing '*Vasthu-vidya*' rules. It is an ancient science that developed and perfected through ages from the experience of builders of any particular climate, based on the socio-cultural background and the locally available materials there. It actually belongs to the particular geographical region it develops, and not to a religion as some Authors have written. Ganapati Sthapati^{bxxxv} (1997) says: "there has been a feeling among many that Vaastu Shastras are religious, sectarian, ... This is absolutely wrong". ²⁸⁷ In fact the Manasara Vaastu Shastra written by Manasara contains 'exclusive and extensive details of iconography of Jain and Buddhist images'. ²⁸⁸ It has not been established since when were these rules started to

^{bxxv} Dr. Ganapati Stapati is an authority on *Vaasthu-Shastra*, presently living in South India, one of his books is titled; "*Vaastu Shastra* – A scientific treatise-not a religious document" (1997).

be used in Kerala. However, it can be safely assumed that it was in vogue in the Sangam period, because 'Slilappathikaram' a Sangam work written by Chera prince Elango, mentions about these tradition. He states that '*Shilpins* (architects) of his days "followed the principles of the hoary tradition established by great Mayan". ²⁸⁹ To build any new structure, the traditional Kerala *Aaashari* (literally carpenter, but playing the role of modern architect) till recently, used to look into these rules. So if these rules were prevailing in the early years of Kerala Christianity, it is only natural that, when the early churches were designed and built, the designers looked into the local '*Vasthu-vidya*' rules and took many elements of the prevailing indigenous architecture, especially for the religious buildings. These churches "usually faced West, so that the priest could perform the ritual facing East, the congregation too obviously faced East, the point of rising sun, traditionally considered auspicious by mankind from time immemorial".²⁸⁰

Traditionally the temples of Kerala, and India in general, are designed using a *mandala* (square grid pattern) as the base. The plan of any traditional temple can be easily inscribed in a grid pattern as shown in Figure 4.5.

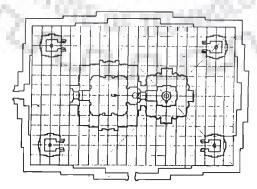


Figure 4.5 A temple plan inscribed in a square grid

An exercise undertaken by the Investigator of inscribing the plans of some indigenous churches on a similar square grid, resulted in the church plans fitting exactly on the grid. For instance when the church plan of Thiruvithancode and Kalloorppaara churches were inscribed in a grid pattern it was found that not only the church plan lines, but even the compound wall, as well as the position of *kodi-maram*, etc., are also fitting exactly in the grid [Figure 4.6, 4.7]. However, to probe further on these lines a detailed documentation of the site plans and floor plans of all the 79 surveyed churches are necessary, and it is beyond the scope

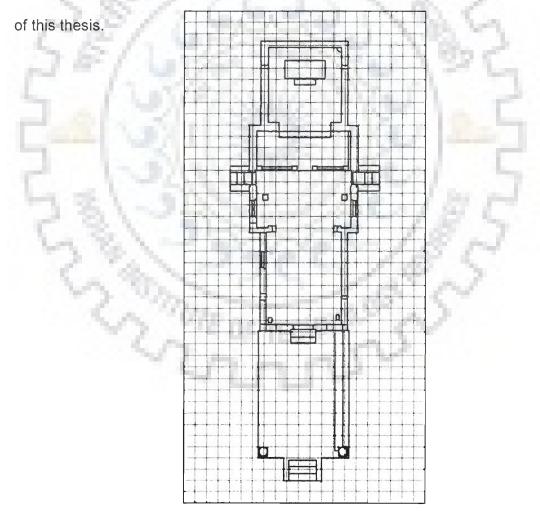
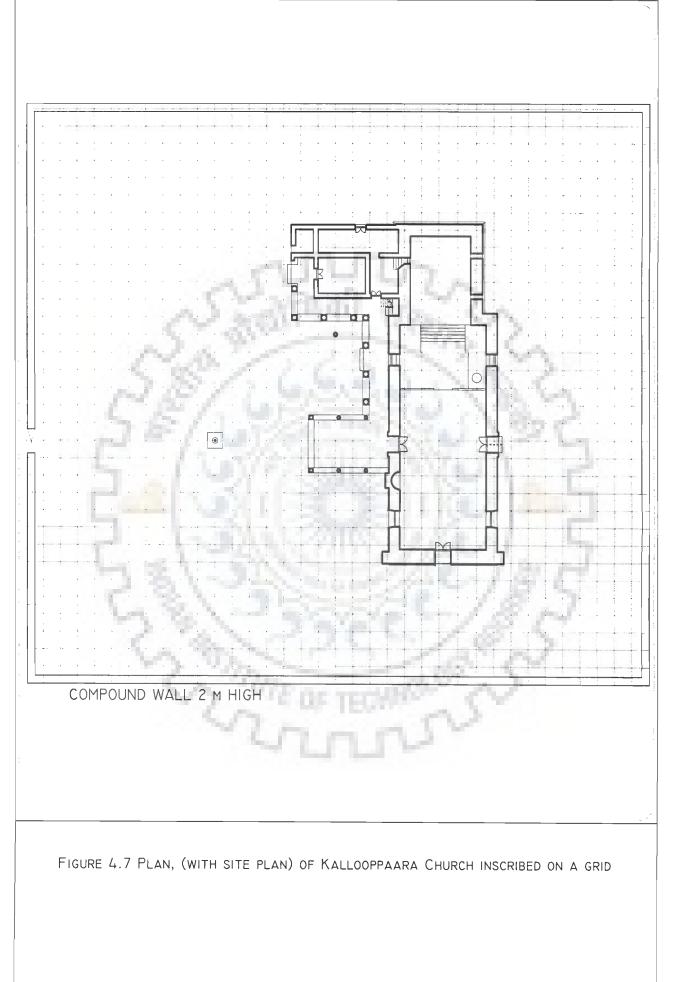
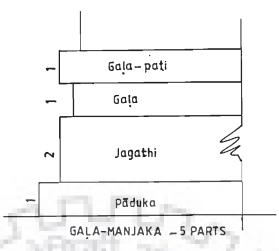


Figure 4.6 Plan of Thiruvithamcode church inscribed on a grid





(Source: Temples of Kerala, Directorate of Census Operations, Kerala)

Figure 4.8 Basement (Adi-Stana) of a Hindu temple as prescribed

Similarly the construction details of the basement of the Thiruvithancode church was found to be exactly the same as one of the type (*gala- manjaka*) prescribed in the traditional *Vaasthu-shasthra* texts for temple basement construction [Photo 4.73 and Figure 4.8].

4.3 Inferences from the Comparative Analysis

The following inferences are made from the comparative analysis between indigenous church architecture of Kerala, the architecture of the Hindu, Jain and Buddhist temples, and the Western church architecture:

- The indigenous churches were always oriented strictly in the East-West axis similar to the architecture of Jain, Buddhist and Hindu temples. Orientation-al rules were strictly followed in the residential architecture of Kerala also. In the Western churches orientation-al rules, though rarely seen followed, it was never very a strict norm.
- Compound walls, with Padi-ppura (gateway), were present in many indigenous churches, again similar to the traditional architecture (religious as well as secular) of Kerala.

- Plan form of indigenous churches were more like that of a Jain *palli*, than that of Hindu temples, because of the functional similarity. Plan form was definitely different from the Western churches.
- Madbaha was architecturally treated in a way similar to the cella in a Jain temple and the Garbha-graha in a Hindu temple and windows were purposefully avoided in this space to achieve the required sacred character. This feature was totally unlike the treatment of altar spaces in Western church architecture.
- The indigenous churches of Kerala did not have an imposing 'front façade' in its conventional sense (that's as of the façade of Western churches with its façade projecting much higher than the roof of the nave), but the roof of the nave, mostly thatched, was extended beyond the Western wall acting like a shade to the wall, probably because of climatic reasons.
- The interior spaces of indigenous churches were not at all decorated, unlike the Western churches, which were always highly decorated. This feature is again similar to the Jain and Hindu temples of Kerala.
- The vault present in the *Madbaha* could have come either from the Buddhist *viharas* or from the Eastern churches, both of which had a similar feature.
- In indigenous churches, the roof of the Madbaha was always taken up higher than the roof of the Hykala to accentuate the position of Madbaha in the overall architectural built form. This feature was again similar to the

same practice in Jain and Hindu temples but such a treatment was never there in the Western churches.

- The triumphal arch always present in indigenous churches of Kerala could either have come from the Buddhist *viharas* or from the Eastern churches.
- Ever burning oil lamps were always provided inside the indigenous churches of Kerala, as in the Jain and Hindu temples. This feature is not present in the Western churches but it was present in the Coptic churches.
- A porch, *Mukha-mandapam*, was present in many indigenous churches, much like the similar element in Jain and Hindu temples, though they had a different function. The porches were present in the early (Basilican) churches but were not there in later Western churches.
- *Kodi-maram* (flag post) and open-air granite-cross-pillar were present in front of most indigenous churches of Kerala like the similar elements in Jain and Hindu temples. This feature was absent in Western churches.
- Deepa-sthambham, a well inside the compound, Sopaanam and Kottupura were present in some indigenous churches. This feature is similar to the local religious architecture of Kerala.
- It is certain that Vasthu-vidya principles were followed in the placement and the construction of indigenous church buildings of Kerala.

The result of the comparative analysis is presented in chart form, for easy understanding, as Table 4.1:

Table 4.1 Summary of comparative analysis between Western church, Indigenous Kerala churches and Jain/Buddhist/Hindu temples

| SI. | Variable | Western | Indigenous | Jain/ Buddhist |
|-----|--|----------------|----------------------|--|
| No. | | Churches | Churches | Hindu temples |
| 1. | Orienting the building | Not | Compulsory | Compulsory |
| | according to directional rules | Compulsory | | |
| 2. | Presence of water body in | Not present | Sometimes | Sometimes |
| | the building premises | | present | present |
| 3. | Presence of a compound wall | Not present | Mostly present | Mostly present |
| | around the building | | | |
| 4. | Padi-ppura (gateway) | Not present | Sometimes present | Sometimes present |
| 5. | Plan form | 1.1.1.1.1 | The second | Hindu |
| | 1 | P | (| |
| | s sacred space(altar | S A | S A | SM |
| | S=sacred space(altar or Garbha-graha) | 5 | | harment and the second se |
| | | | | 1. 3 m |
| | A= assembly space | | 1.00 | Jain/Buddhist |
| | the second s | | | |
| | M = porch (Mukha- mandapam) | S A | G A M | S A M. |
| | mandapam | La parad | | |
| | | | | |
| 6. | A smaller width for the | No | Yes | Yes |
| 7. | Sanctum sanctorum | N | | |
| 1. | Vault over altar | Not present in | Present | Not present in |
| | 1 44 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Western church | 1.1.1 | Hindu temples |
| | 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1 | Present in | the second second | Present in |
| 8. | Higher roof for Sanctum | Eastern church | X7 | Buddhist palli |
| 0. | sanctorum than that of the | No | Yes | Yes |
| | rest of the building | - 3 C * | 1 1 10 | 1.3 |
| 9. | An arch separates the | Yes | Yes | NL 1. 111 1 |
| 7. | Sanctum sanctorum from the | 1 05 | res | No in Hindu |
| | rest of the building | Crisc Yearshi | 10° - 10 - 1 | temple |
| | rest of the building | and the second | 100 | Yes in Buddhist |
| 10. | Windows in the building | Yes | No | palli No |
| 11. | Decorated front façade | Yes | No 'façade' | No 'façade' |
| 12. | A porch given in the front/ | No | Yes | Yes |
| | side of the building | | | 100 |
| 13. | Presence of Kodi-maram | No | Yes | Yes |
| | | | | |
| 14 | Presence of Granite-cross | NO | Yes | Similar |
| 14 | Presence of Granite-cross Stambham in the building | No | Yes | Similar structures are |

| 15. | Presence of <i>Deepa-</i> stambham in the building premises | No | Yes | Yes |
|-----|---|-----|-----|---------------------|
| 16 | Presence of <i>Kottu-pura</i> in the building premises | No | Yes | Yes |
| 17. | Presence of a Belfry | Yes | No | No |
| 18. | Use of Vastu-vidya rules for design and construction | No | Yes | Yes |
| 19. | Decorated interior spaces | Yes | No | Comparatively No |

4.3.1 Discussion on the Inferences from the Comparative Analysis

As stated earlier, universally the Christian 'Holy Mass' in the church was conceived traditionally as a community gathering to praise the Lord, and therefore the church building was designed, basically, as a space to accommodate this function. This is totally unlike a Hindu temple which was designed more as an 'abode of God' and the devotee just worship the God, through the idol/ image, kept inside the shrine, from outside. This act of seeing the God, through idol, from outside when the doors of sanctum is opened for this purpose is called 'darshanam' and it is one of the important activities, a worshipper hopes to accomplish while going to any Hindu temple. For example, as stated earlier, a Hindu temple, say, a Shiva temple, is not built for the devotees of Shiva to sit and pray but to install (or the more correct word would be 'Prathisthta', loosely meaning the same) the idol, or some other symbol, of Shiva. The devotees would only assemble outside the sanctum to worship Shiva, through the idol, when the doors of the sanctuary are opened for this purpose. So basically the functional aspect of a church building and a Hindu temple building are two totally different things. Whereas, in a Jain palli, as seen in Kidanganad Jain *palli*, there is a space provided between the cella and the porch (*Mandapam*) for devotees to assemble. Therefore, if at all one has to look for any similarity between an indigenous church and other religious structures of Kerala, it has to be with a Jain *palli*, and most probably even Buddhist *Viharas*. The rationale is that, functionally, because in all these communities collective worship was prevailing, a gathering space provided for this purpose, and so they (Christian churches, Jain *palli* and Buddhist *Viharas*) all can have a common plan for their buildings. Therefore, it may be concluded that, as seen in the literature review, as well as it is realised from the comparative analysis, traditionally the indigenous Christian churches and the Jain *palli* were conceived architecturally in a much similar way and used the 'same plan-form'.

It is quite common, as stated earlier, to see foreign and Indian Authors describing a pre-Portuguese Kerala church building as 'pagodas of the Hindus'. In fact, it was the foreign Authors who first used it. ^{boxvi} The rationale for using this term was only that, they had used 'their style' as the yardstick to define the form of a church building. Later, however, the Indian Authors, mainly, and unfortunately, Christian Authors, also started adopting the same term. The reason for this was mainly that in later periods, the Kerala Christians, unaware of their cultural base, like the foreigners before them, misunderstood the 'Kerala' style as 'Hindu' style. Joseph, M. O. (1968) says, "to the viewer the only difference between a temple and a Christian church (before Portuguese period) could be only the cross in front. The form, shape and elements of a church were

^{lxxxvi} The earliest to use this term, that it 'looked like the pagodas of the Hindus', was Monserratte S.J., a Spanish priest who visited Kerala in 1579, and later written an account about his travel.

the same as that of a temple. This setup changed only after the arrival of the Portuguese". ²⁹¹ While writing "the form, shape and elements ... were same as that of a (Hindu) temple", he is actually trying to convey that is that, those early Kerala churches did not have the character and style of a church building 'compared to' European church. 'The Verapoly Archdiocesan Centenary Souvenir (1886-1986)', an official publication of the Catholic Archdiocese of Ernakulam states: "in middle ages the church construction took many things from temple style ...this existed before the arrival of the Portuguese and till the end of 16th century". ²⁹² In fact, in many such statements, of taking architectural elements/ characteristics from 'Hindu temple', though there is no evidence to substantiate it exists, were actually using the term 'Hindu temple' architecture as a substitute for the term 'Kerala' architecture. In the light of the new evidence brought out by this investigation, it would be appropriate to state that, by making such statements those Authors, made the Kerala Christians lose even the claim for their heritage, which they rightfully own. Further, it also resulted in making those styles/ elements inappropriate, even 'un-legitimate', to church architecture.

However, statements like these, that of 'adopting', 'copying', etc., from Hindu temples, without substantiating it with any evidence for such activity, literary or otherwise, are common wherever the architecture of pre-Portuguese Kerala church is described, unfortunately even by archaeological experts of Archaeological Survey of India. For example, Sarkar, H., (1978), 'concludes' his study about the beginning of structural temples of Kerala that "thus the inscriptional evidence suggests that the temple-architecture must have had its beginning at least by early part of ninth century". ²⁹³ Later, on the same book, he mentions that "Kerala had some churches in sixth century (as) is testified by Cosmos Indicopleustes" (Ibid. p.44), and finally concludes on church architecture that "on the other hand, Kerala (churches) adapted, by and large, a temple plan comprising a four-sided sanctuary fronted by a larger pillared hall, which, in Christian tradition, became chancel and nave respectively" (Ibid. p. 45). By this statement, he is arguing that the church buildings which existed at least from 6th century, "adopted" the temple plan, which as per his own argument, "had its beginning ... by the early part of ninth century".

It would be helpful, in the present investigation, to ask, on what basis are those architectural characteristics termed as 'temple style'? Is there any proof to substantiate that at some period of time there was an 'adoption' or 'coping' of style? Which would of course happen only if one existed prior to another. For one thing, the archeological evidence so far dates the first 'built' temple (not hypaethral) in Kerala to 7th, 8th centuries, whereas the statement of Cosmos Indicoleustes (522 AD) in '*Topographia Indika Christiana*', clearly substantiates the church buildings of those periods. However, the Investigator would like to stress here that, just because of the lack of archaeological evidence or of some ruins, to conclude that there were no temples before 7th, 8th centuries definitely won't be correct. The other possibility, which seems to be more logical to the Investigator is that, the development of both styles started from a common cultural and architectural base, (which could be secular buildings or the 'structural-temples' of Jain and Buddhists that seems to be older), which in turn

developed from the socio-climatic conditions and the availability of construction materials in Kerala.

The most popular traditional upper class house in Kerala was the '*Naalu-kettu'*, that's a house with a central court and rooms on all four sides. Although both Christians, and Hindus commonly used this type of houses it was never classified as a Hindu style. Of course, it wouldn't be 'wrong' to classify it as so, but the point the Investigator likes to discuss is the reason, of it never been classified as such. The rationale for not calling a *Naalu-kettu* house as Hindu style, is simply because, it is a common practice and 'knowledge' even today that such houses are being used by both the communities. Whereas, its is an 'unknown' fact that a very same 'common' style was used/ shared by the temples as well all the churches, before the Portuguese imposed their style over Kerala churches. This means that, the ignorance of indigenous church architectural history is one of the main reasons of this misunderstanding. Therefore, the results of this investigation, it is hoped, will be useful in changing this misunderstanding.

The Christian Encyclopedia (1972) describes the Kerala church building before Portuguese period as this: "the worshiping places of the Christians looked like that of non-Christians except the crosses kept on the roof and in the front of the building. The floors of the churches were plastered with cow-dung as was the common practice in any Kerala residence of those days." ²⁹⁴ Here the practice of using cow-dung plastering on the floor is termed as 'Kerala style', whereas the building in itself is termed as 'looked like that of non-Christians'. This is again because the intended readers are familiar with the fact that the use of cow-dung plastered floors were a common practice both by Hindus and Christians in traditional Kerala residential architecture, whereas it is not commonly known 'how worshipping places of pre-Portuguese Christians looked like'. The investigator is of the opinion that this unintentional sub-conscious imposition, or acquisition, of a 'copying of Hindu style' by all Authors had caused the Christians the loss of an inheritance to which they were rightly and equally eligible.

It can be concluded that, the very fact that this similarity is not on account of the early Christians copying the form or style from Hindu temples, but both getting it from a common climatic and socio-cultural base, which the Christians carried over even when they accepted the new 'path'. Many Authors have, unfortunately, kept this fact in dark intentionally or unintentionally, in their attempt to disassociate Christian architecture from anything that appear as 'Hindu'. It started during the Portuguese period when some Christians preferred to be identified with the Portuguese for obvious trade profits it implied. It is but a fact that, the pre-Portuguese Christians were totally of a different 'breed' in their culture and practices from the foreign Christians, and their church buildings also looked totally different from, what one imagines today of a church building, in form and character, as deduced from the primary survey and presented in the previous chapter.

The Investigator is of the opinion that lack of knowledge pertains to the resemblance of pre-European church buildings of Kerala to the Kerala temples, has lead to several misunderstandings and misinterpretations. This opinion has

been framed after many personal experiences, which the Investigator has encountered many times, during the time of primary survey of old churches. In many churches, stone pillars, which had carvings on them were seen defaced [Photo 4.74], scattered unattended on ground (see Photos 3.1 to 3.3), and sometimes buried under the soil (example Akaparambu church) because of the misunderstanding of the parishioners/ parish committee that "in earlier period their church was a temple". In the ruins of the old Enammaavu church, there was a water out-let [Photo 4.75], that looks like a 'Pranaalam' (water outlet from the Garbha-graha of a Hindu temple). One Parish Committee member told the Investigator that the particular structure was 'originally a temple'. The rationale for the statement was just the presence of this carved water outlet, which in fact was nothing more than an indigenous decorated version of a steel/ PVC out let from a wash basin. (The placing of a provision for washing hands in the Madbaha was very common in those days, as, for example, it can be still seen in Udayamperoor [Photo 4.76] and Ramapuram [Photo 4.77] churches). Actually, anyone with a basic understanding of the architecture pre-Portuguese churches, or even a Hindu temple, can clearly understand that the particular structure, which holds the above said Pranaalam in Enammaavu church, was the Madbaha part of an old church [Photo 4.78] and further, that structure can never be the architectural design of a temple. It has an in-built altar, the vault over the altar, the arch separating Madbaha from Hykala, the projecting up of the Madbaha roof, etc., on this structure from which it can be clearly understood that it was the alter portion of an indigenous church of bygone era. Further, a *Pranaalam* was also present in Arthaattu church.

Similar is the case of the Ambala-palli, in Kunnumkulam [Photo 4.79]. This structure has, again, the looks of a traditional Kerala temple. At the same time, when one observes the plan, as well as the carvings on wood of this structure [Photo 4.80], it would become very clear that, it was 'designed' and 'built' as a Kurishu-palli for the Christian community who migrated and settled there. It had a built in altar, raised platform for altar area and Krestroma, and assembly space for Parishioners to gather, all common to an indigenous church building of Kerala. Further, the way this building was conceived and built, was totally inappropriate to be used as a Hindu shrine. It does not have any Garbha-graha or any other architectural features or characteristics associated with a Hindu temple. However, in later periods, since the public (irrespective of their religion) was unaware of how an indigenous church building looked like in the bygone era, assumed it to be a Hindu shrine. Above all, this structure had wooden 'trellis work' present in it, which is not at all an 'accepted' feature of a Christian church building, but mostly seen only in Hindu temple, as well as other secular Kerala buildings. Therefore, only because of its 'looks', this structure was 'thought of' as a Hindu temple in olden days and started to be called 'Ambala-palli' (literally temple-church). The Investigator likes to confirm, that this study has conclusively proven that, if at all there was a temple building there in a period earlier to this church building, it is very evident that, architecturally, 'the present building standing there' was not a temple at any point of time, but it was 'conceived'.

'designed' and 'built' as a building suitable for a church building. The most unfortunate part was that, subsequently the parish committee decided to remove this exquisite trellis work in 2001 AD, thus making the building presently look as in Photo 4.81 and 4.82. However, the exquisitely carved '*charu-padi*' (wooden trellis work) are still, fortunately, lying in the backyard [Photo 4.83, 4.84].

Another point the Investigator to put on record is that, '*Al-thar*a' (banyan tree with a stone platform built around it), which is another typical feature of Kerala religious architecture, that is now connected only with the Hindu temple building, was also present in some old churches. For example, the Akapatmbu church had such a feature as late as till 1960's in its premises.

Srinivasan, K.R., (1972) after studying the Hindu temples and Buddhist shrines of South India of second century AD, which stood side-by-side, observed that "one cannot fail to notice here the close similarity in architectural traditions between Buddhist and non-Buddhist types" and he concludes that "these relics, therefore, also reveal the fact that the temples or shrines had a common plan, design and mode of construction, irrespective of the creeds to which they belonged in the formulate period of 'built form'. The creedal difference was marked only by the Gods or objects that were installed for worship and appropriate symbols or the plastic representations that formed the decorative elements of such temples" ²⁹⁵. All these indicate, as Nilakanta Sastri (1952) says, in those periods the "temple form were common to all creeds". ²⁹⁶ The investigator likes to add that not only Hindu and Buddhist temples had a common design and mode of construction but even the indigenous church buildings of

Kerala also shared the same, and further that it was only in a later period the compartmentalization of religious architecture into different creeds, as seen today, occurred.

It becames clear from the above comparative analysis that the impact of Western church architecture over the development of indigenous churches were very less, compared to the influence of local religious buildings of Jains, Buddhists and Hindus. In fact, it was found that the influence of Western church architecture was almost nil, except, perhaps, for the presence of the vault over the altar in Madbaha and the triumphal arch present between the chancel and the nave. All other architectural elements like the laying of church building always in the East-West axis, the construction of a high compound wall around the church building, the addition of a Padi-ppura on the compound wall at the cardinal point, the conceiving and construction of the church plan with a smaller width for chancel than that of the nave, the projection of the chancel roof higher than that of the nave, the absence of an imposing typical church façade, the addition of a Mukha-mandapam in front of the church building, the presence of an open-air granite-cross-pillar, the presence of typical traditional elements of Kerala religious buildings like Kodi-maram, Deepa-stambham, Kottu-pura, the presence of a water body near some church building, etc., were clearly the input of Kerala traditional architecture.

While there is no doubt that some of these elements like the projection of the chancel roof higher than that of the nave and the presence of *Kodi-maram and Kottu-pura* are typical elements present only in religious architecture, it is not

so about most of the deduced elements. For example, the orientation-al rules regarding the placement of a building in a given site, the presence of a high compound wall with Padi-ppura at cardinal points, absence of a high façade (that's projecting of any end wall up without appropriate roof protection to the wall), providing a porch (Mandapam) in front of the building, giving a provision for Deepam (oil-lamp) in front of the building, presence of a well in the premises of the building, etc., are also present in most residential as well as other secular architecture of Kerala. Therefore, it must be also understood that, many of these influences could be from those secular buildings of Kerala. The Vernacular architecture of any place evolves based on its socio-cultural background, availability of materials and expertise on technology of that particular geographical area. Therefore, it would be appropriate to state that a substantial factor that influenced the style of indigenous church architecture of Kerala (as well as the vernacular religious architecture of Jain, Buddhist and Hindu temples) must have also evolved, at an early period, from the vernacular architectural traditions of Kerala arising out of geo-climatic and socio-cultural factors.

This investigation clearly shows that the development of Jain, Buddhist, Hindu and Christian religious architectural styles started from a common sociocultural and architectural base, which in turn evolved from the same geo-climatic conditions and the availability of resources like construction materials and craftsmanship in Kerala. This, at the outset, would have helped in molding and developing a structural-temple for Jain and Buddhist. Later, from this common architectural base, or from the already developed Jain and Buddhist structural temples, the elements, character and form of indigenous church architecture of Kerala also developed. The plan form, especially, was much similar to the Jain *palli*, which could have adopted from it, because it must have been prevailing even in pre-Christian era. Then the church architecture would have taken its own course of an evolutionary process which culminated in the indigenous church building forms which existed prior to 16th century, as revealed through this Investigation.

However, after the Portuguese arrival there was a clear deviation in the process of architectural evolution of church buildings in Kerala. The main reason for this departure was the misunderstanding, by the Portuguese, in differentiating the cultural part and religious part of the Kerala Christians, which resulted in misinterpreting the typical vernacular architectural features of indigenous church buildings as 'Hindu'. As a result, they made a conscious attempt to alter everything, which they considered inappropriate, and this intervention caused an irreparable break in the system, introducing a totally alien style of architecture. This, eventually, had altogether dismissed the carefully nurtured and cultivated indigenous architecture, which developed over centuries of improvement, in favour of an all pervading 'international' style obliterating the geographical identity, a broader religious outlook, indigenous cultural heritage and architectural style of Kerala.

Thomas (1990) states, "the acceptance of Christianity (in Sangam period) does not appear to have involved any revolutionary change in the life of individual as 'conversion' in European period did. Hinduism has always

recognised the liberty of individual worship and, in ancient times, seldom took notice of a man's beliefs as long as he followed the social practices appropriate to his caste. The king, as a rule, was expected to respect the religious faith of all his subjects. Hence, Kerala Christians were, in all probability, considered a sect like the Jains and Buddhists, who were numerous in South India in early centuries of Christian era". 297 Therefore, it is only natural that, the local traditional architecture, especially the religious ones, was looked upon as the model for Christian worship too. Probably when the 'earliest' churches were built, Buddhist and Jain palli could be the only 'structural' religious building where the church builders could look into as a model. In fact, this was later repeated in Kerala when the first Muslim mosques were required to be built. There do still exist examples in Kerala of early mosques that have more features of the traditional architecture, than the typical elements one should expect in a mosque building [see Photo 2.3]. So it can be concluded that when the earliest church buildings were built, the designers must have looked upon the then prevailing architecture, especially religious architecture of Kerala as its model, and it caused the formulation of a totally different and original church architectural style. 4.4 Conclusion

The 'early' church architecture of Kerala is shrouded in obscurity, and therefore one can only make, or deduce, plausible theories and conjectures based upon the existing old churches and temples. However, the original architectural form of the indigenous church deduced out of this study was not based on any conjectures but every architectural element used for the reconstruction of the original church form was purely deduced out of the primary survey conducted on pre-Portuguese churches. However, since it was deduced from the analysis of the churches that were built mostly between 15th and 17th centuries, except perhaps for some churches like Thiruvithamcode, which could be of an earlier century, the deduced model could only reflect how the indigenous church looked in those centuries, and not much before that.

The Investigator is of the opinion that, since Christianity has a very ancient origin in Kerala, when the earliest Christian community grew in size and spread over the years, independent of the Christian communities in other parts of the world, the need for church buildings were met in Kerala, by following the architecture of other contemporary religious buildings that prevailed in those periods. It can be very well seen from the surviving early religious buildings of Kerala that, a conscious attempt to achieve a homogeneous regional architectural identity, between buildings of different religions, was the norm in the historical past, in Kerala. Therefore, it is concluded from this study that in the past, buildings of different religions in Kerala were all conceived as a part of a common cultural fabric, and not as isolated structures constituting different architectural typologies, and further, that in Kerala, the compartmentalization of religious architecture, and according a different style to each religion, was a phenomenon that must have happened only much later.



Photo 4.1 Kadamattom church built on a hill, with steps to approach it



Photo 4.3 Chembakkulam church built with waterway as the main approach to it



Photo 4.2 Kallil Jain *palli*, built on a hill, with steps to approach it



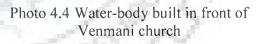




Photo 4.5 Water-body in the front of Manarkad church



Photo 4.6 *Padi-ppura* of Thavalakkara church



Photo 4.13 Paved pathway from Padi-



Photo 4.14 Second roof under vault in Chenganoor church





Photo 4.15 Old hanging lamps are still kept in Arthat church

Photo 4.16 Smaller width for Madbaha in Kuruppumpadi church



Photo 4.17 Ceiling of Calixtus catacomb of early 3rd century AD.



Photo 4.18 Vault over the altar in Angamaali church



Photo 4.19 Vault built of wood in Chembakkulam church

Photo 4.20 Wooden vault in Chungam church





Photo 4.21 Wooden vault in Kottayam Valiya palli

Photo 4.22 Space over the vault in Kunnumkulam church

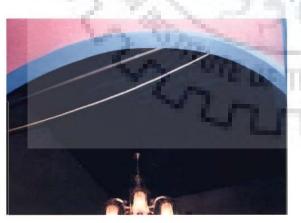


Photo 4.23 Flat wooden work above altar in Tharissa *palli*



Photo 4.24 Old roof over altar in Kolamcherry church



Photo 4.25 Old flat roof kept in the museum of Niranam church



Photo 2.26 High roof for Madbaha (Thora) in Muttam church



Photo 2.27 *Gopurams* seen from a distance in Maduhrai temple



Photo 4.28 Typical Kerala temple with high roof for Garbha-graha



Photo 4.29 Madbaha roof projected just a little in Purakkad church



Photo 4.30 Perfect square *Thora* in Palyekkara church



Photo 4.31 Madbaha roof lower than Hykala roof in St. Francis church



Photo 4.32 Single piece stone arch in Kottayam Valiya palli



Photo 4.33 Detail of stone arch in Kottayam Valiya palli

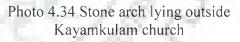




Photo 4.35 Detail of stone arch at Kayamkulam church



Photo 4.36 Old stone arch embedded in the foundation of Aruvithura church





Photo 4.38 Carved roof of Mukhamandapam in Chenganoor church

Photo 4.37 Stone slabs with letters used to cover drain in Kottayan Valiya palli





Photo 4.39 Carved nose gable in Kadamattom church



Photo 4.41 Carved roof of *Mukha-mandapam* of Kallooppaara church

Photo 4.40 Carved wooden pillar in Kadamattom church



Photo 4.42 Carved door at Chenganoor church



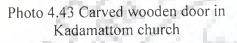




Photo 4.44 Carved wooden door in Pazhuvil church



Photo 4.45 Relief's of two angels put over the doors in Arakkuzha church

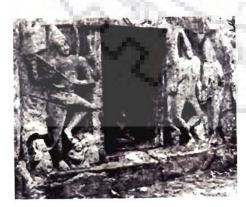


Photo 4.47 Dwara-paalas in front of Vizhijam cave temple



Photo 4.46 Relief's of two angels put over the doors in Ramapuram church



Photo 4.48 Kottayam cheriya palli, Mukha-mandapam on side



Photo 4.49 Kurod (old small tile) kept in Vadavathoor seminary



Photo 4.51 Pushpa-koodu at Chembakkulam church



Photo 4.50 Wooden *Pushpa-koodu* at Palai church



Photo 4.52 Mukha-mandapam in front of

Arthattu church



Photo 4.53 Porch in front of *Ambala* palli, Kunnumkulam

Photo 4.54 Front view of Kunnilappan temple



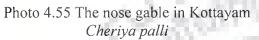




Photo 4.56 Seating arrangement in Arthat Mukha-mandapam



Photo 4.57 Seating arrangement in Chenganoor church *Mukha-mandapam*



Photo 4.58 Seating arrangement in Kottayam church *Mukha-mandapam*



Photo 4.59 Granite *Deepa-stambham* at Venmanichurch



Photo 4.60 Granite *Deepa-stambham* at Kandiyoor temple



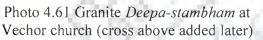




Photo 4.62 *Deepa-stambham* at Mannaar temple





Photo 4.63 Granite Open air cross at Chenganoor church

Photo 4.64 Base of Granite open air cross at Angamaali church



Photo 4.65 Bali-kal at Kallill Jain palli



Photo 4.66 Ruins of Muttam cross



Photo 4.67 Ruins of the Pulinkunne granite cross

Photo 4.68 Piece of old granite cross used as step in Chowwara church





Photo 4.69 *Kottu-pura* in Ramapuram church



Photo 4.71 Belfry at Muttuchira church

Photo 4.70 Belfry at Kuravilangad church



Photo 4.72 Kurishu-palli of old Kunnumkulam church



Photo 4.73 Basement of Thiruvithamcode church



Photo 4.74 Woman's figure with face defaced in Niranam church





Photo 4.75 *Pranaalam* like water outlet in the existing part (Madbaha) of old Eanammaavu church

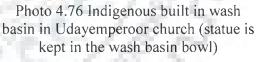




Photo 4.77 Indigenous built in wash basin in Ramapuram church



Photo 4.78 Existing part (Madbaha) of old Eanammaavu church

XXXVIII





Photo 4.79 *Ambala-palli* at Kunnumkulam

Photo 4.80 Carvings of cross etc. on the nose gable of *Ambala-palli*





Photo 4.81 Present view of Ambala-palli with the wooden trellis work removed ...

Photo 4.82 ... and steel grill installed in its place



Photo 4.83 Removed, exquisitely carved trellis work from *Ambala palli* ...



Photo 4.84 ... are still lying in the backyard of church

CHAPTER 5. CONCLUSION

5.1 Introduction

In this chapter, an attempt has been made to present the major findings and summary of the investigation, and also the policy recommendations for the conservation of indigenous church architecture of Kerala. The recommendations could be employed as guidelines for the conservation of this precious indigenous architecture.

The investigator was faced with the task of re-constructing the indigenous church architecture of Kerala and its original built-form, before the Europeans changed it in 16th century. Since no complete 'sample' of it exists today, the reconstruction was done with the aid of some much distorted samples as indicators. In fact, the absence of enough literature and the non-availability of complete sample buildings, because of its demolition, numerous face-lifts, etc., which happened in the last 500 years, were the real obstacles in the investigation. However, the Investigator has made tremendous efforts to rediscover this lost world of the indigenous church architecture, by surveying (i) the available literature and more importantly, (ii) the physical remains of the pre-Portuguese churches of Kerala.

A large number of questions do still remain unanswered, like, what was the 'first' form of church building in Kerala when the Kerala Christians developed one, what changes it absorbed when it was first exposed to the influence of church architecture of outside, when did this first architectural change occur, etc. Some conclusions about architectural typologies could be tentative, for example

there was definitely an even older phase of church architectural style in Kerala, which was lost in time, which can come out even now, if un-deciphered documents like inscriptions at Chenganoor, Chendamangalam churches, or disappeared documents like 'Kanai Thomman Copper plates', or new evidences on 'Vallarvattom kingdom', or unknown written documents on indigenous church architecture of Kerala, which could be of Sangam period or one written by, or drawn by, any unknown European traveler in 15-16th century, would come out one day. However, this Investigation has helped in bringing out the fact that the indigenous church architecture of Kerala was totally a different breed of architecture than, which is seen and understood as church architecture today. It has been also understood that the main reason of changing this indigenous church architecture to European style church architecture was due to the misunderstanding by the Europeans, in differentiating the cultural part from the religious part of the Kerala Christians which resulted in misinterpreting the 'typical vernacular architectural features of Kerala' present in the indigenous church buildings as 'Hindu'.

However, it is interesting to put on record the fact that though most European ecumenists constituted a conscious attempt to alter the indigenous church architecture of the Kerala Christians, declaring that it was Hindu, which caused an irreparable break in architectural traditions, some exceptions were also observed. An example is the name of Fr. John Ernestus Hanxldon, better known as Arnos Padiri, a Hungarian missionary who came to Kerala in 1699. He first learned Sanskrit and Malayalam, and then wrote many reputed Sanskrit and

Malayalam works of poetry and prose, as well as a Malayalam-Portuguese dictionary, a Malayalam Lexicon and Grammar. In 1724, he built the Veloor church, where he stayed for a long time. His love for the local language and culture is reflected in adopting the vernacular style of architecture for its construction [Photo 5.1]. It was built using all the traditional architectural characteristics followed for the construction of an indigenous church in Kerala [Photo 5.2].

5.2 Major Findings

The present investigation has brought some interesting facts to surface, which were hidden so far. These are presented in thesis as major findings in two parts, i.e., Part A and B. Part A deals with observations deduced based on careful analysis of the literature. Part B deals with observations deduced based on the analytical work of the primary survey. These observations are presented in sequel:

Part A

1. The early Christians in Kerala were called '*Mappila*', which was an amalgamation from the local words '*Margam*' and '*Pillai*', meaning 'one who has chosen 'another way'. The investigator is of the opinion that the word *Mappila* itself is relevant in the investigation of architectural outlook of the early Christians of Kerala because, whoever has coined this word, it reveals the thinking of the people – those who coined the word and those who accepted it – that through conversion they are just taking a new path, or way, and not a new goal. It is relevant to state that the people who

coined the word, in their eternal wisdom, knew that they were only taking a new 'path' to the same old goal and not a new 'goal' in itself and so give more emphasis to the word 'way'. This vision, as was obvious from the study, is reflected in their architectural outlook also.

- 2. As the excavations in Nagarjunakonda, in Andrapradesh reveal, in the formulating periods of built form, Hindu temples and Buddhist 'pall' had a common plan, design and mode of construction, irrespective of the creeds to which they belonged, expect for the Gods or objects that were installed for worship. This investigation shows that the situation was similar in Kerala also, not only between Buddhist and Hindu religious buildings but also between Jain and Christian religious buildings.
- 3. Cosmos Indicoleustes observed existence of a Christian church in 522 AD in Kerala (at Kollam).
- 4. In the pre-Portuguese period, the number of Christians in a place were less and so they built churches smaller in size, because they need a building to accommodate only that small crowd. This small size was another reason for it being called 'temple-like', because the smallness means small nave, which makes the church looks more like a Jain *palli*.
- 5. The indigenous church architecture of Kerala is very much rooted on the vocabulary, style and character of traditional Kerala architecture, religious as well as secular.

- 6. The basic plan of an indigenous church was more similar to that of Jain and Buddhist temples, than Hindu temples, because it had more functional similarity with them.
- 7. The overall similarity the indigenous church had with Hindu temples was because both styles evolved from a common cultural base. This base could be secular residential architecture or Jain/ Buddhist temples, which Historians credit as more older. The fact that, not many Jain and Buddhist temples survived to later days also resulted in not recognizing the similarity between them and indigenous churches.
- 8. It has been observed that that there are many similarities between an indigenous Christian church and Jain/ Buddhist/ Hindu temple in terms of (i) layout of the building on the site, (ii) usage of a *Padi-ppura* (traditional entrance gateway), (iii) conceiving the most sacred space as a small cubicle space, (chancel of a church, *Garbha-graha* of a Hindu temple and 'Cella' of Jain/ Buddhist *palli*), (iv) providing a *Mukha-mandapam* (entrance porch), (v) providing a *Kodi maram* (flag post), (vi) providing a *Deepa-Stambham* (post for oil lamp), (vii) providing a *Stambha* in front of the building (*Kurishu-maram* or granite-cross pillar in church, similar pillars in other temples).
- 9. From the existence of similar architectural elements between the indigenous churches and the traditional Jain, Hindu temples of Kerala, it could be deduced that there was also a strong likelihood of similarity in rituals, customs and values, despite differences in religious faith.

- 10. The architectural elements like *Pranaala*, (water outlet usually seen in the *Garbha-graha* of a Hindu temple) which is present in Enammavu church, wooden trellies work at *Ambala-palli* at Kummumkulam, Stone/ wood carvings at Chenganoor church, etc. are very much the traditional elements of indigenous church architecture of Kerala, as it is in any other temple.
- 11. The indigenous church buildings of Kerala did not have an imposing front façade, mainly because of the climatic reasons.
- 12. It has been deduced that, the strongly prevailing theory that some old churches, such as *Ambala-palli* at Kunnumkulam, Eanammavu church, etc., were Hindu temples in early periods, based purely on its architectural form, is unfounded and is only the outcome of a common architectural heritage.
- 13. A clear deviation was observed in the process of architectural evolution of church architecture in Kerala, after the Portuguese period, due to the misunderstanding by the Portuguese in differentiating the cultural part and religious part of the Kerala Christians.
- 14. The result of their failure, in understanding the building holistically, was that, they constituted a conscious attempt to alter everything, which they thought inappropriate in a church building. This intervention caused an irreparable break in the system, introducing a totally alien style of architecture. This, eventually, had totally dismissed the carefully nurtured and cultivated vernacular architecture.

<u>Part B</u>

The following observations are made based on the analytical work of the primary survey conducted by the Investigator:

- 1. Almost all the early indigenous churches were oriented towards cardinal directions, in the East-west, with the *Madbaha* on the East. Of the total churches surveyed, 97 per cent of churches had its *Madbaha* on the East, so that the people, as well as the Priest (both faced the same direction, as was the custom then) could make their prayers facing East, because East direction was considered to be an auspicious direction.
- 2. Most of the early churches of pre-Portuguese Kerala had no windows to the altar area. Of the total churches surveyed, only 29 per cent had windows in the altar area. This was purposely done to create a darker interior, so as to give a more sacred character to the *Madbaha*, similar to the 'sanctum sanctorum' in a Buddhist, Jain or Hindu temple.
- 3. Almost all the early indigenous churches built, had the roof of the *Madbaha* projected up than the roof of the nave. Of the total churches surveyed, 91 per cent of churches had this feature. This is a traditional feature of Kerala's religious architecture that is followed by all religious buildings (Jain, Hindu, Christian) in Kerala. The objective of this element was to give the sanctum sanctorum area the utmost importance, prominence and sacredness in the overall form of the building, from outside.

- 4. Almost all the early indigenous churches had, in plan, the *Madbaha* part was given a shorter width than that of the nave. Of the total churches surveyed, 99 per cent of the churches had this feature.
- 5. Almost all the early indigenous churches had an arch opening (triumphal arch) between the *Madbaha* and the nave. Of the total churches surveyed, 96 per cent of churches had this feature.
- 6. Almost all the early indigenous churches had a vault in the *Madbaha* (built of either laterite or wood) above the altar, symbolizing heaven. Of the total churches surveyed, 88 per cent of the churches had this feature.
- All the doors of indigenous churches had thresholds either of granite or of wood.
- 8. Majority of the indigenous churches had a *Mukha-mandapam* (front porch) in its front. Of the total churches surveyed, more than two-third (68 per cent) of the churches had this feature.
- Majority of the indigenous churches also had the traditional style compound wall all around the church premises. Of the total churches surveyed, more than two-third (68 per cent) of the churches had this feature.
- 10. A large number of the indigenous churches had a granite open air cross in the church premises, (not following any strict directional rules). Of the total churches surveyed, more than three-forth (77 per cent) of the churches had the granite cross, and about 72 per cent also had a provision for oil lamp in them.

- 11. A large number of indigenous churches also had a *Kodi-maram* (flag post) in the church premises. Here, again, no directional rules were followed regarding its placing (like in temples the *Kodi-maram* is always built on the Eastern side, directly in front of the idol). Of the total churches surveyed, about two-third (61 per cent) of the churches had a *Kodi-maram*.
- 12. Many of the indigenous churches also had a traditional *Padi-ppura* (traditional gate way). Although at present, only 32 per cent of the churches have this feature. Most of them were destroyed during the alterations, especially when the imposing front facades were added, since the *Padi-ppura* was found to be blocking the view of the new 'façade'.
- 13. It has been observed that *Vaasthu-vidya*' rules have been employed in the design and construction of the indigenous church buildings of Kerala.
- 14. It was deduced from this investigation that, there were mainly four architectural typologies prevailing at the time of the arrival of the Portuguese in 16th century, in the indigenous church buildings of Kerala. All these forms have been re-discovered through this investigation, and are shown in Figure 3.24, 3.25, 3.27 and 3.36.
- 15. The probable metamorphosis of an indigenous church architecture is shown in Figure 3.57.

5.3 Summery

The main aim of this investigation was to re-discover the original form of the indigenous Kerala church building, before it was influenced and changed by the European church architecture, in 16th century, with the arrival of the

Portuguese there. Although no complete sample building of that architectural style exists now, the form of the pre-European Kerala church building, which was deduced from this investigation, was not based on surmises, but completely and purely out of the analysis of the primary survey conducted, amongst the surviving parts of the existing pre-Portuguese church buildings of Kerala.

Firstly, from the review of literature, as well as from a pilot survey, the original architectural elements and characteristics of indigenous Kerala church building and those elements added later by the Europeans were differentiated. Subsequently, by using those elements and characteristics as variables, a survey schedule (questionnaire) was prepared. Then a detailed primary survey was conducted, in purposely-selected 114 sample churches, to deduce the original architectural characteristics of the pre-Portuguese Kerala church building.

The results of the primary survey revealed that some indigenous architectural elements/ characteristics present were as high as 60 per cent and above, and some below 60 per cent. For re-constructing the original form of indigenous Kerala church, those elements/ characteristics, which were present in 60 per cent or more of the churches were considered as 'were definitely present' in the indigenous Kerala church buildings and those architectural elements/ characteristics that were present in the range of less than 60 per cent were considered as, 'was also present, though not in all' category of indigenous Kerala church buildings.

Also, from the analysis of the primary survey, it was found that there existed four typologies of church model. All these four models were

reconstructed; three based purely on the survey results, and the other was based partly on survey results and partly on surmises. The reconstructed model was validated by conducting detailed case studies of purposely chosen five examples.

Subsequently, the reconstructed model was compared to the church architecture of the West and the temple architecture (Hindu, Buddhist and Jain) of Kerala, to deduce the similarities and dissimilarities. It was deduced from this comparative study that architecturally, the original indigenous church architecture of Kerala was purely based on the vernacular architecture, not only religious, but even secular architecture. It was also found that the plan form of indigenous churches were very similar to the Jain *palli* than any other religious building.

Finally, a set of policy guidelines are evolved to conserve this rich architectural heritage of Kerala State for the benefit of the future generations.

5.4 State-of-the-Art

Before evolving the guidelines to conserve this precious indigenous architecture of Kerala, an attempt has been made here to briefly present the state-of-the-art of church building in Kerala. Today, many new church buildings are designed and constructed as 'just a hall', where the faithful can gather together and pray. Some Authors have called it the 'auditorium church', featuring a prominent stage from which rows of pews radiated. The difference between a church building and an auditorium is becoming less and less pronounced, except for the 'icing' or decoration done behind the alter and on the front façade. Even the front façade design of many new church buildings in Kerala could be mistaken for an auditorium or a cinema theater (eg.: Koratti church) [Photo 5.3]. It has been demonstrated clearly from this investigation that, the traditional church buildings were of totally a different breed. The main objective of the Architect (*aashaar*i) who designed those buildings were not to design a space and ambience of a good quality auditorium, but more than that – sometimes even at the cost of that – to design a space with the quality and ambience of a good prayer space. To design a space, where the devotee would feel that he/ she was in a holy space, which would subconsciously accentuate the mind to a mood of prayer/ meditation.

The traditional church interiors were purposely designed as a dark space, in sharp contrast to today's church design, lit only by small doors (windows were purposely avoided) and oil lamps. The altar area was also designed in sharp contrast to today's church design, with more as an 'abode of God', than an elevated stage for performing the Eucharist. The idea of dark small *Madbaha*, with no windows to it, and '*Ku: Dush kudh sheen*' (holy of the holy) inside it, covered with a vault, representing heaven, have given an appropriate ambience to the *Madbaha* from inside and a high roof which project over the *Madbaha*, to accentuate its importance from outside. However, all these were later replaced by a stage like *Madbaha*, with a decorated backdrop to it. Although it can be claimed that the new arrangement would make it easier for the people assembled to see the *Madbaha* better, it is extremely doubtful that whether they would 'feel' better.

5.5 Recommendation

A set of recommendations made, based on the analytical work done, are presented as below;

- 1. The Government should declare this unique indigenous church architecture of Kerala as an integral part of the rich historical, cultural and architectural heritage of the State. The list of all churches built fully or partially before the 16th century can be graded on the basis of 'exceptionally interesting' and/or 'historically important' and the government can take steps to add these buildings into the 'list of the heritage-buildings' of the State. The most important churches, which have distinct characteristic features are selected and are recommended to be added to the list of heritage buildings of the State and are presented in Table 5.1.
- 2. This being a religious building, imposing conservation rules by the Government without taking into confidence the Church Curia^{Ixxxvii} and the Parishioners may not meet the desired objectives. Adding to this is a reality that, unlike a temple, a church building ceases to function well, the moment the number of Parishioners outnumber the holding capacity of the church building. This condition usually results in demolishing of the church building for a bigger church, especially in places where there is no space available to construct another church building, preserving the older one.

^{kxxvii} By the word church curia, the Investigator means the governing bishop/body/office of the concerning sect, whether its Catholic [Syrian or Latin], Jacobite [Bava kakshi (group)or Methran kakshi], etc., who presently controls the particular Christian sect.

| SI. | | |
|-----|---|---|
| No | Church | Distinctive feature |
| 1 | Thiruvithamcode | Only specimen left of granite church building, in a totally different and old style |
| 2 | Ramapuram | Only specimen left of pure Kerala style church-altar back-drop |
| 3 | Kallooppaara | Best example of indigenous Kerala style church architecture |
| 4 | Mattam <i>Kurishu</i> palli | Good specimen of different and older church typology, with clear influence of Kerala architecture |
| 5 | Kottayam Cheriya palli | Typical example of the indigenous church with Mukha- mandapam |
| 6 | <i>Ambala palli,</i> Kunnumkulam | Good example of pure Kerala style, but must be brought back to the originals form, from the modifications done two years back |
| 7 | Chenganoor <i>palli</i> | Contains many good stone carvings and open air granite oil lamp posts. Also has a Padi-ppura |
| 8 | Kadamattom | Maintains highly carved wooden Mukha-mandapam, as well as door carvings |
| 9 | Karthikapalli | An example for indigenous churches without front- façade |
| 10 | Kundara (<i>Padi<mark>-ppur</mark>a</i> part) | <i>Padi-ppura</i> still exists in its near original state with wooden carvings. |

Table 5.1 Churches to be added in the list of Heritage buildings in Kerala State

This reality creates a very difficult situation even to the few people who want to conserve the old building. This problem can be only solved when the Parishioners are made very proud of their traditional inheritance and aware of the importance of the old building.

3. Public awareness campaigns should be conducted so as to inculcate in the church Curia and the Parishioners a sense of responsibility for their own heritage and to understand the importance of this indigenous church architecture. Conservation will be possible only after this basic realization, by the Parishioners, who are usually the major decision makers in the conservation or demolition of these churches. In fact, it was observed that, the practice of demolishing this precious unique architectural tradition of Kerala, in spite of Government's interference occur very commonly^{boxxviii}.

- 4. The first step of making a conservation policy is to make an inventory of the buildings to be conserved. The list all the churches in Kerala, built partially or fully before the 16th century, along with their present condition, etc., has been formulated originally by the Investigator as a part of this study, which forms an information base in itself and will help in this case.
- 5. The Government should work along with the church Curia, with the curia taking the lead, to work out a conservation policy.
- 6. The conservation policy should be beneficial for the Parishioners as well as the visitors. The Government and the church Curia should workout a comprehensive mechanism for raising the financial resources, which could be made more financially rewarding by incorporating the tourism potential. Parishioners should be convinced that at no point of time the control of the church will go away from them.
- 7. The Government of Kerala has a plausible tourism policy, which covers all tourism destinations in the State. Linking these precious church buildings along with the existing tourist destinations will yield more results. Therefore, developing an integrated tourism policy by comprising these sites as one of the components would be more beneficial.
- 8. Financial assistance may be given to those churches, which are willing to accept a 'maintenance-policy' of old church building, in spite of it not being

^{1xxxviii} The latest in this list is the demolition of St. Mary's church at Kalparambu on 15th November 2004. Ref: The Editor, The Hindu, Dated November. 16, 2004. p.5. The Padinjare church at Angamaaly is also to

of any use. Execution of the maintenance may be supervised by Indian National Trust for Arts and Cultural Heritage (INTACH) or such other organizations.

- 9. The traditional characteristics of the facades should be maintained, in the very few churches were it is still preserved in the original form, at any cost.
- 10. It may be necessary to remove later added structures that hamper indigenous look, but this being a very sensational issue, it has to be done on a church by church case, in consultation with the Parishioners. In any intervention, great care shall be taken to use only traditional or compatible material that match the character and quality of the original building. Consideration shall be given for intervention, which may vary from scientific restoration to controlled renovation, according to specific guidelines.
- 11. Immediate steps may be taken, by a combined effort of the Government and the concerned church curia, to conserve the *Ambala-palli* at Kunnumkulam, *Kurishu-palli* of Kunnumkulam church, remains of the old church at Eanammaavu, old church at Chungam, Mattam *kurishu palli*, as they are among the churches which needs urgent attention, to take it to the future. The first two churches can be still brought to its original shape, because the alteration happened to it, through an intervention which happened only in the last two years, can still be reversed. (As stated earlier, the wooden trellis work that was removed from the *Ambala-palli* are still lying in the premises of the church.)

be demolished soon.

- 12. Steps may be taken to conserve the Thiruvithamcode church, which although today lies in Tamilnadu State, as it may be the oldest and the only specimen left today for a particular style of indigenous church architecture of Kerala of a bygone era.
- 13. Immediate steps may be taken, by a combined effort of the Government and the concerned church Curia, to decipher the old inscriptions, mostly in old '*nanam-monam*' (old Malayalam script) written in stone slabs, walls and in wood work, like in Chendamangalam, Kottayam (*Valiya-palli*), Thumpamon, Manarkad, Piravam and Chenganoor churches.
- 14. Steps may be also taken to read the old '*Thali-oola*' (document written in palm leaf) kept in many churches like Alangad [Photo 5.4], Mulakkulam churches.
- 15. Steps may be taken by the church Curia of the concerned churches to collect and keep the old stone slabs with writings on them as well as parts of old *Kurishum-thotti* (granite cross pillar) which are still lying scattered all over the church premises as in Kottayam Valiya palli, where most of the steps are built using such slabs, even used to cover drains in the nearby houses. Unattended stone slabs with figures and writings are there also in Akapparambu, Angamaali (*kizhakke-palli*), Chowwara, Kadambanad, Kayamkulam, Muthalakkoodam, Muttam, Niranam, Pallippuram, Pulinkunne and Thumbamon churches.
- 16. Steps may be taken (mainly by the Church Curia) to highlight the Alter back-drop at Ramapuram church, as the indigenous type of altar back-

drops that existed before the European alternative style, that are still prevailing today, were established. High priority may be given to preserve it in a better way because it is only specimen left to understand the original indigenous Kerala style altar back-drop looked like in the pre-Portuguese period.

- 17. Steps may be taken by the Church Curia to preserve the ruins of old Nediyashala church altar [Photo 5.5], which is in the verge of distruction.
- 18. Steps may be taken by the Government to highlight the stone carvings present in many indigenous churches, like Chenganoor church [Photo 5.6], by including the photographs, write-ups of them in the official tourist/ other publications about the exquisite stone carving tradition of the Kerala State.
- 19. As per the custom of Kerala Christians, photographing the wedding couple in front of the church building was a common practice. It was observed during the investigation, there exists a few old photographs, belonging to the end of 19th century and early 20th century, which showed the original façade of many churches that were demolished and rebuilt subsequently. If church Curia take conscious and 'official' steps to collect, copy and digitize those photos from the people who hold them, it would be of great help in future. Otherwise those irrecoverable photos, which are not conserved properly, will be lost forever.
- 20. Government or church Curia should take initiative to construct a church, putting together all the common architectural features of the indigenous

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style of church architecture of Kerala, as a specimen of how the pre-Portuguese churches looked like.

5.6 Further Scope

The present investigation has brought a few hidden facts into light pertaining to the indigenous church architecture of Kerala before 16th century. Further, it has been observed that there is a scope for further investigation in this field in the following areas:

- 1. As mentioned earlier, it was observed that *Vaasthu-shastra* rules seem to have been applied in placing the church building in a given site and also in orienting the building. '*Vimana*', the common word used to designate temple, means 'well-proportioned', also traditional test books on temple building devote long chapters to the proportional connection between temple parts, placing the building on site according to certain dimensions so as to align the *Garbha-graha* to the centre of the site (*bramma-sthana*). It could be found that into what depths the applications of *vaasthu* rules were incorporated in deciding the dimensions of church parts, proportion of the parts and elements, placing the church building on site, etc., but detailed measurements of all churches would be needed for this.
- 2. The base of the *kurishum-thotti*, (granite open air cross) always has elaborate carvings and stepping with proportional connections between layers, and is much similar to the *bali-kallu* (sacrificial alter) design in temples, suggesting the use of the same principles used in Jain and Hindu *bali-kallu*. A detailed study would shed more light on this unknown aspect.

3. It became evident from this study that many a typical feature of today's mosques, like minars and domes were totally absent in older periods. Therefore, a similar study is possible about the indigenous mosque architecture of Kerala, which again is on the verge of extinction.

5.7 Conclusion

Architecture of a particular historical period is often referred to as a 'mirror' to the civilization of that period. Thus, from a study pertaining to any historic architecture, which had brought out a new interpretation, it is also expected that a new and different picture about the civilization is also reflected in that mirror. This study, of the traditional church architecture of Kerala up to the sixteenth century, had indeed brought out some new facts about this 'long lost' indigenous style. Therefore, it is naturally expected that it will give new interpretations in Kerala history and bring out new facts about the society and culture that prevailed in Kerala then.

In that sense, the most important result of this investigation is that the religious buildings in the historic past of Kerala were built by a society who had consciously made an attempt to see that all religious buildings must have this unique quality in it, of being built in a way, so as to be woven well amongst other religious buildings around. The very awareness of such a society and culture is of great consequence, which is much relevant in today's world of turmoil, which should also strive to achieve such qualities. They teach us that religious buildings of different 'man made divisions' can be conceived in a similar architectural manner, as was the case in the study area of this investigation. Therefore, this

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study about the history of architecture will be important not only to Architects but also to the Historians and the society.

It was clear from this investigation that in the past buildings of different religions in Kerala were always conceived as a part of a comprehensive fabric, and never as isolated structures with different architectural typologies. It seems that achieving a homogeneous regional identity between buildings for spiritual purposes was the norm of the past in Kerala and the demarcation line between Hindu, Muslim, Christian, Jain or Buddhist edifices was imperceptible. This was very evident through out the investigation and many a typical feature of today's mosques, like minars and domes were totally absent in older periods. Similarly, the façade that comes to one's mind when visualizing a church was totally different then and the façade exits today is imported after 16th century with the advent of the Portuguese. Further, the Investigator would like to stress here that the aforesaid church façade was not much different from the façade of other religious buildings in Kerala in those period.

After the arrival of the Portuguese, or more precisely after 'Synod of Udayamperoor' called by Portuguese initiative to bring Kerala church closer to Western church, this traditional fabric was disrupted, the sense of wholeness and parallelism among religions vanished together with the physical coherence of religious buildings to the environment. The Europeans constituted a concerted attempt to alter the religious architecture of traditional Malabar Christians, declaring that it was Hindu by nature. Their intervention caused an irreparable break in the system, and it introduced a totally new and alien style to the traditional church building character, form and scale, forcing the traditional church architecture of centuries to be wiped off for ever.

This Investigation has brought out new evidence which conclusively attests that the bygone generations of Kerala have constructed religious buildings, by conceiving them in a way so as to integrate them well with other religious buildings of the locality, probably because they have realized that all religions take "different path to the same goal", by giving importance not to those buildings to look 'different' but for it to look 'similar', This understanding will pave way in giving a direction to Architects to design religious buildings in future, so that it will be truly a 'religion'+ous ('religion' from Latin word, meaning 'to bind together') building, that will operate as a link between the world of man and that of God.





Photo 5.1 Indigenous church building at Veloor, Kerala



Figure 5.3 Façade of Koratti church



Photo 5.2 *Padi-ppura* (entrance gateway) of Veloor church, Kerala



Photo 5.4 *Thali-oola* documents kept at Alengad church



Photo 5.5 Remains of old Nediyashaala church altar



Photo 5.6 Granite carvings at Chenganoor church

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ANNEXURE I

Parameters considered for studying the architectural characteristics

- 1. Direction the church gateway faces.
- 2. Direction the church building façade faces.
- 3. Presence of traditional compound wall.
- 4. Presence of gateway.
- 5. Presence of flag post.
- 6. Presence of granite oil lamppost.
- 7. Presence of open air granite post, with or with out provision for oil lamp.
- 8. Presence of room for music.
- 9. Presence of room for serving food.
- 10. Presence of belfry.
- 11. Presence of well inside the compound.
- 12. Presence of natural water body, nearby.
- 13. Presence of artificial water body, near by.
- 14. Presence of built in oil lamp/s on church wall.
- 15. A shorter width for altar area in plan.
- 16. A high roof for altar from outside.
- 17. Presence of entrance steps.
- 18. Presence of front porch.
- 19. Presence of front façade.
- 20. Presence of threshold on all doors.
- 21. Presence of balcony inside.
- 22. Presence of frescos/ paintings on wall.
- 23. Presence of baptism font in rock.
- 24. Presence of hanging oil lamp or floor oil lamp inside.
- 25. Presence of decorated altar backdrop.
- 26. Presence of windows to altar area.
- 27. Presence of vault over the altar area.
- 28. Presence of an arch between altar and nave.
- 29. Division of nave into two.
- 30. Presence of sculptures.
- 31. Presence of stained glass.

ANNEXURE II Chronology of events in Kerala Christianity

| <u>B.C.</u> 970 | King Solomon's trade with Malabar |
|---|---|
| <u>A.D.</u> 45 52 (?) 135-150 325 | Hippalus founds sea route to Kerala St. Thomas lands in Kerala Ptolemy writes about Muziris, Kerala Bishop John signs in the proceedings of the Council of Nicea as the Bishop of Persia and Great India. |
| 345(?) | Thomas of Cana arrives at Cranganore with 400 Christians from Bagdad |
| 522 | Cosmas Indicopleustes, visits Kerala, and later writes about the church 'building' present in Kollam, & about the Persian bishops who rule them. |
| 650-660 825 848 883 | Patriarch Jesujabus Adjabenus writes bishop of Quilon, Kerala. Bishops, Mar Sapor & Mar Proth arrives in Quilon from Persia Tharissa <i>palli</i> copper plate |
| 1283 | King Alfred of England sends a bishop to the tomb of St. Thomas in Mylapore with offerings. Marco polo visits Mylapore |
| 1291 1295 1302 | John of Monte Corvino visits Kerala and later (1306) writs about it. Lithograph of this year found in Niranam church Jordanus Catalani visits Kerala and later writes about his visit |
| 1328 1348 1498 | Jordanus appointed Bishop of Quilon, Kerala, by Pope John XXII John de Marignoli arrives at Quilon, and later writes about his stay. Vasco de Gama arrives at Calicut, Kerala. |
| 1500 | Muttuchira church open-air cross consecrated of as per lithograph on it. |
| 1502 1523 1533 1541 | Vasco de Gama returns with missionaries. Portuguese excavate St. Thomas tomb at Mylapore tomb Diocese of Goa established Francis Xavier (later saint) arrives in Goa. |
| 1544 1550 1588 1599 | Aruvithura church holy water font erected, as per lithograph on it. First Thazhathangaadi church built. Diocese of Cochin established. Synod of Udayamperoor |
| 1600 | Roz S.J. appointed successor of Mar Abraham, the Persian bishop, and becomes the first Latin Bishop of Kerala Christians. |

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ANNEXURE III **Church Survey Schedule**

| No: | Place: | | | | | |
|----------|--------|--|-------|--|--|--|
| Address: | | | | | | |
| | | | Sect: | | | |

Year of Construction:

| Estd.: | Renovations: (Yrs) | |
|-------------------|--------------------|--------------|
| Present Building: | Constructed | by: |
| Present Façade: | | |
| Parts are Older? | Yes / No | Data Source: |
| Oldest Parts: | 10 FT FT | |
| Rank for documen | tation: 1 2 | 3 4 |

| ite (Gateway on) | East | Wes | t North | South | Other: |
|--------------------|-------------|-----|--------------|--------|--------|
| Church (Façade on) | East Wes | | t North | South | Other: |
| Location | Top of hill | | Near a river | Other: | |

| | position | Contraction of the second second | position |
|----------------------------------|----------|----------------------------------|----------|
| Old Compound Wall | | Foreign Front Façade | |
| Padi-ppura (Gate way) | | Threshold on doors | |
| Kodi-Maram | | Balcony inside | |
| Deepa-Stambham | | Frescos/ paintings on wall | |
| Open air Granite Cross | | Pushpa Koodu (pulpit) | |
| with provision for oil lamp | | Baptism font in rock | |
| Kottu-pura | | Hanging oil lamp inside | |
| Oottu-pura | | Nila-Vilakku inside | |
| Belfry | | Decorated Alter back drop | |
| Well inside compound | | Window in alter area | |
| Natural water body nearby | | Vault over alter area | |
| Artificial water body nearby | | Arch between alter and nave | |
| Built in oil lamp on wall | | Division of nave into two | |
| High roof for alter from outside | | Sculptures | |
| Sopaanam/entrance step | | Stained glass | |
| Mukhamandapam(front porch) | | Number of steps to alter | |

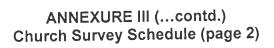
Construction Materials used:

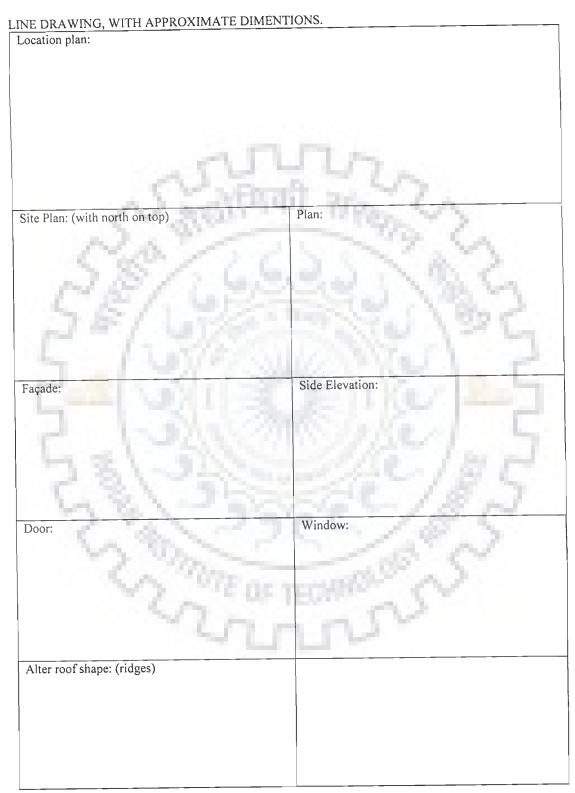
| Basement: | Roof: | |
|---------------|--------|--|
| Walls: | Floor: | |
| Baptism Font: | | |

Presence of Stone:

| Basement | Steps | |
|----------|--------|--|
| Walls | Lintel | |
| Pillar | Other | |

(continued...)





ANNEXURE IV Acknowledgements

Since there have been a large number of persons who have helped me with this effort and I have not been able to name them personally in the formal acknowledgement, therefore, I am doing that here. Special thanks are due to the persons mentioned here for their contributions to this Thesis as discussions, advices, accompanying me in many of my site visits, giving me accommodation and food during my survey period, helping me with measure-drawings and drafting or just being good friends.

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- Sr. Carmal Paul, Canossa Convent, Vettuthura, Trivandrum.



Annexure V Papers published (related to Ph.D. research)

- 1. Edward, Sunil, R. Shankar, V. Devadas, Traditional Church Architecture of Kerala, Proceedings of the National Conference on Traditional Knowledge Systems, Indian Institute of Technology Kharaghpur, January 9-11, 2004, p.74.
- 2. Edward, Sunil, R. Shankar, V. Devadas, An Anatomy of Indigenous Church Architecture of Kerala State, Journal of Indian Institute of Architects, Volume 69, Issue 05, May 2004, p.46-50.
- Edward, Sunil, R. Shankar, V. Devadas, The Evolution of Indigenous Church Architecture of Kerala, Architecture plus Design (A+D), A journal of Indian Architecture, May-June 2005. (confirmation received)
- Edward, Sunil, R. Shankar, V. Devadas, Origin and Development of Indigenous Church Architecture of Kerala, Journal of the Society of Architectural Historians, Cambridge. (communicated)

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ADDENDUM

<u>Clarifications/ Modifications which were incorporated in the thesis text as suggested</u> <u>by Foreign Examiner</u>

The clarifications sought were:

11.10.0

A. That the candidate has the entire thesis document proof read and edited to ensure consistency in the use of language, and to ensure that all typographical. grammatical and spelling errors are removed.

Action taken: The thesis has been proof read completely again and corrections sought have been made, spelling errors removed.

B. Make changes to the text of certain issues raised by **Examiner** A as indicated in the candidate's 'Clarifications and Explanations' text with regard to the some points.

<u>Action taken:</u> The necessary corrections have been made and the text revised according to the 'Clarifications and Explanations' given earlier by the candidate.

C. Carefully checked the bibliography to ensure that all works cited are included in the *list*.

<u>Action taken: The bibliography has been thoroughly checked and ensured that all</u> reference books cited in the bibliography have been made use of in the thesis text.