

## TRANSFORMATION OF THE GANJURAN CHURCH COMPLEX: A TYPOLOGICAL STUDY

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### ABSTRACT

The Ganjuran Church, a parish church located in South of Yogyakarta, is an interesting object related to typological studies. This study reveals that since its first establishment, Ganjuran Church has experienced three phases of development. From those phases, buildings in Ganjuran complex can be compiled into five types: kampong, limasan and joglo houses, Javanese Hindu-Budhism temple and Roman basilica. Meanwhile, architectural transformations occurs in the monument and church areas. This study also interprets that typological analysis is not only able to reveal architectural transformations, but also cultural transformations. In this context, typology is not only related to technical matters such as form and construction but also non-technical matters such as cultural perception and symbolism.

**Keywords:** Transformation, church, typology.

### ABSTRAK

*Gereja Ganjuran, sebuah gereja paroki yang terletak di selatan Yogyakarta, merupakan sebuah obyek yang menarik terkait dengan studi tipologi. Tulisan ini membuktikan bahwa semenjak pertama kali didirikan, Gereja Ganjuran telah mengalami tiga fase perkembangan. Dari fase-fase tersebut, bangunan-bangunan di komplek Ganjuran dapat dikompilasikan ke dalam lima tipe: rumah kampong, limasan dan joglo, candi Hindu-Budha Jawa and basilica Roma. Sementara itu, transformasi arsitektural terjadi pada area monumen dan gedung gereja. Studi ini juga dapat memberikan interpretasi bahwa analisis typology tidak hanya dapat membuktikan transformasi arsitektural, tetapi juga transformasi cultural. Dalam konteks ini tipologi tidak hanya terkait dengan perkara-perkara teknis seperti bentuk dan konstruksi tetapi juga perkara-perkara non-teknis seperti persepsi budaya dan simbolisme.*

**Kata kunci:** Transformasi, gereja, tipologi.

### BACKGROUND

Ganjuran Jesus Sacred Heart Church (Ganjuran Church) is a parish church complex which is interesting to be chosen as the case to examine a typological study. Since its first establishment in the early twentieth century, Ganjuran Church has experienced some renovations. However, it always maintains its basic forms, materials and structures referring to local architectural values. On the other side, transformations occur as an adaptation of the social and environmental contexts.

As Rafael Moneo wrote (1978:79), ‘type is a concept which describes a group of objects characterized by the same formal structure’. Further he explained that ‘the concept of type is in itself open to change insofar as it means a consciousness of actual facts, including, certainly, recognition of the possibility of change’ (Moneo, 1978:83). Study on typology, referring to Moneo, is not just studying stagnant objects. Therefore, a typological study can be

employed to reveal a transformation process as well as revealing its result. For Ganjuran Church case, to detect the architectural transformations of its buildings, the discussions were divided into some steps: the development of Ganjuran Church, compilation of the building typology, typological classification, typological comparison, and architectural transformation.

### The Development of GJSHC

Ganjuran Church is located around 20 km southern of Yogyakarta City, Central Java. This church was founded in 1924 by two Dutch relatives, Joseph Schmutzer and Julius Schemutzer. This church is claimed as the first and the only church in Indonesia which was established by the spirit of *Rerum Novarum*, a Papal teaching which teaches social justice and prosperity for the poor. Pope Leo XIII established this encyclical in 1891 as the reaction to the negative impacts of industrial revolution and

capitalism. This Papal teaching influenced Joseph and Julius Schemutzer since they have become Catholic student activists during their study in Delft Poly-

technic. After graduation, Julius Schemutzer came back to Indonesia and ran his family sugar factory in Ganjuran village, namely Gondang Lipuro Sugar

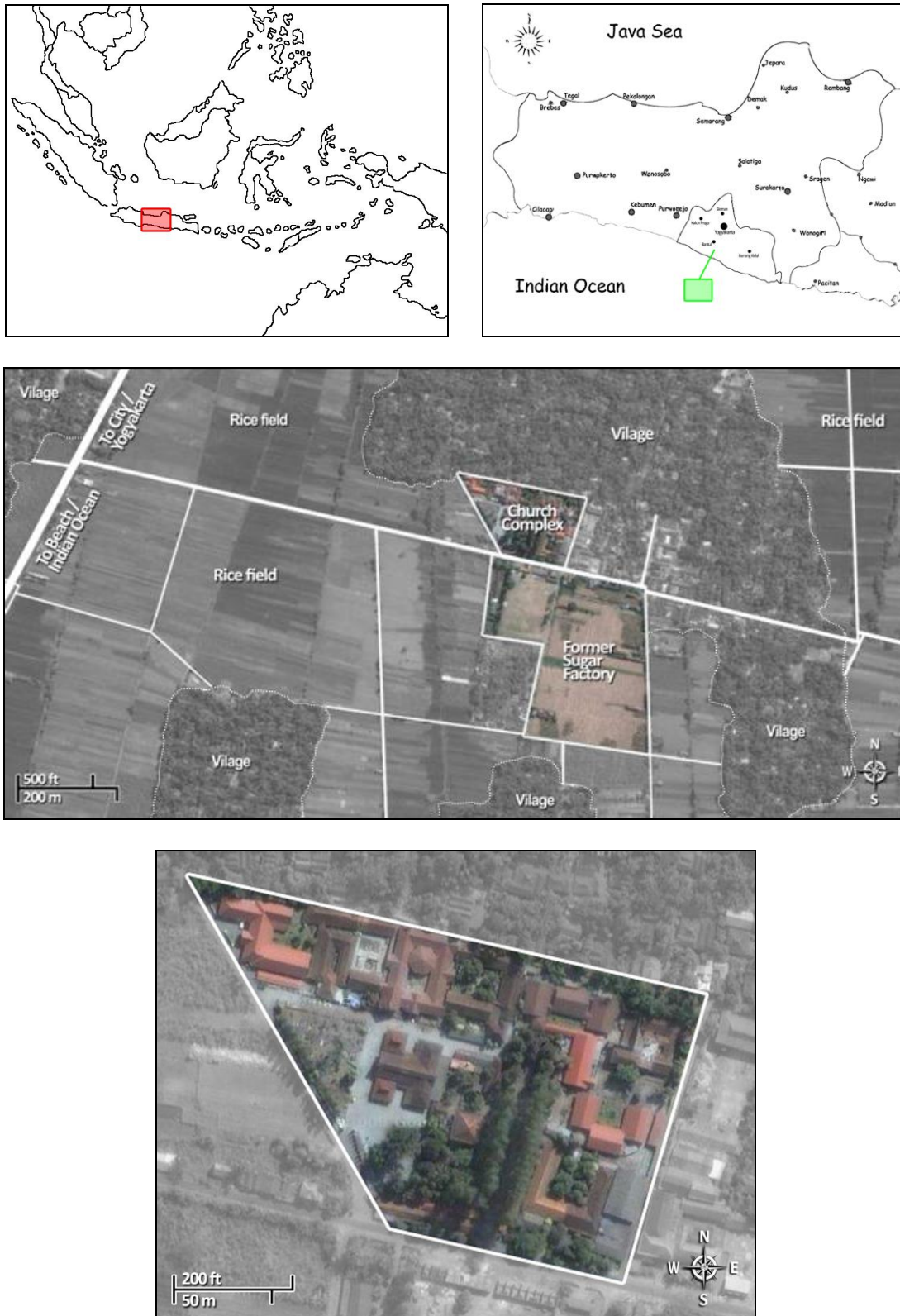
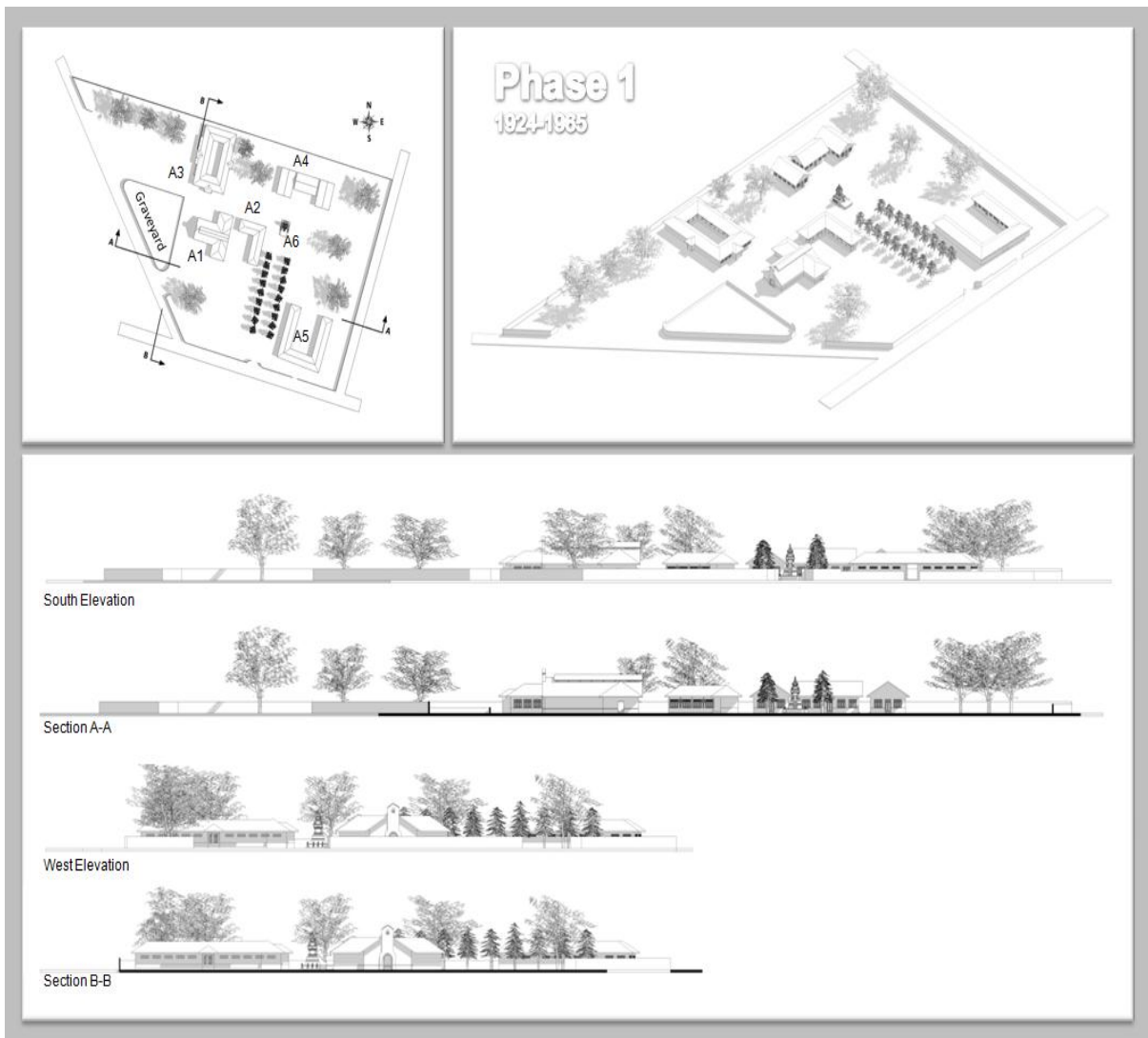


Figure 1: Map of the Ganjuran Church complex (Author, 2009 referring Digital Globe, 2009)

Factory. Inspired by *Rerum Novarum* and supported by his brother, Julius Schemutzer applied a better salary system for his employees and put them as partners. Besides, for social responsibility, he opened a hospital, schools and an orphanag (PAM, 2008:48-49). As a result, many of his employees were interested in joining Catholicism; and to fulfill the need of mass celebration for the new parishioners, he established a chapel – later become a church – on his land.

A global economy crisis stroke Indonesia in the late 1920's. Nevertheless, Gondang Lipuro Sugar Factory was safe, even gained success during the crisis. As a loyal Catholic and an adorer of the Sacred Heart of Jesus, Julius Schemutzer believed that his success was because of the protection of the Sacred Heart of Jesus. To thank God, he built a monument of Jesus Sacred Heart in the backyard of the church

building in 1927-1930. At that time, Jesus Sacred Heart Monuments were commonly built by Catholics in Netherlands. Nevertheless, it was the first and the only monument which has ever been built in Java. Therefore, to support his idea, Batavia Bishop Mgr. van Velken appointed this monument to become the national monument to symbolize that Java has been dedicated to the Sacred Heart of Jesus. From the above history it can be inferred that under Julius Schemutzer, the complex of Ganjuran Church contained five building elements: hospital, school, orphanage, church and monument. Based on the Parish archives, field inspections, and interviews with local parishioners by the author during survey form May until July 2009, it can be illustrated that situation in the site of Ganjuran Church complex under Julius Schemutzer was as follows:



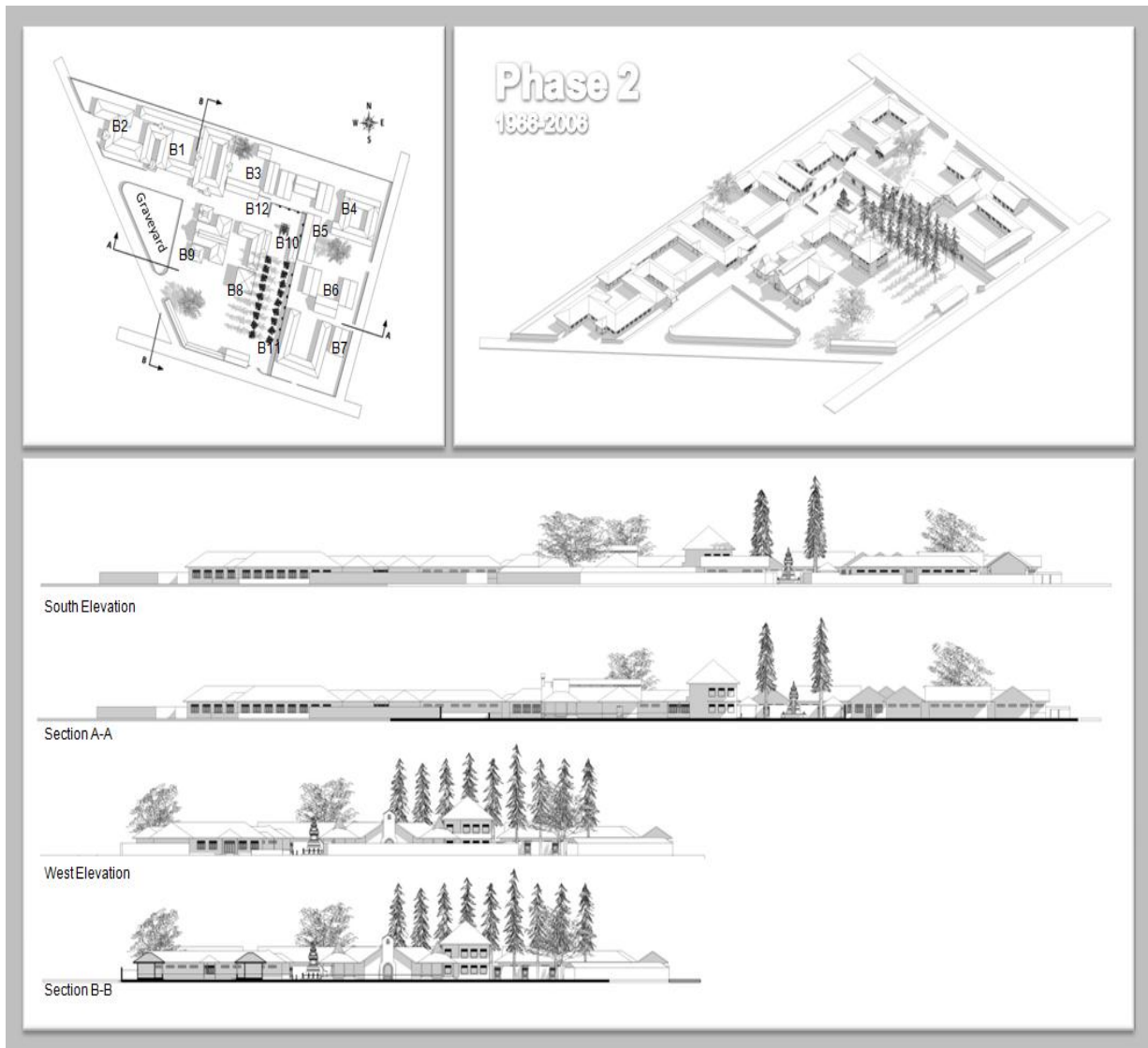
Notes: A1: Church, A2: Parish House, A3: Hospital, A4: Orphanage, A5: School, A6: Monument

Figure 2: First phase of the GJSHC complex development (author, 2009)

After Indonesian independence until the Second Vatican Council, Ganjuran Church has become an autonomous parish. All Schemutzer legacies were kept by local parishioners and priests. Developments after 1965 were simultaneous with the Second Vatican Council and the beginning of the New Order of Suharto era. A better economy during Suharto era enabled this parish to develop many new buildings in Ganjuran Church complex. Related to the Second Vatican Council, in liturgy, many local elements including Javanese language, gamelan music instrument, folk songs, traditional dances and rituals were evolved to enrich the mass celebrations in Ganjuran Church.

Until economy crisis in 1998 and the collapse of Suharto regime, Ganjuran Church has only been

known as a traditional parish. Nevertheless, since 1998, many people from many cities in Indonesia have started to recognize Ganjuran Church as a pilgrimage destination because they believed some miracles that appeared there. The discovery of a water fountain underneath of the Jesus Sacred Heart Monument in 1998 and prayer services that were believed can cure illness have attracted visitors to come to Ganjuran Church. In the same time, 15 sacrifice route stops were built surround the monument. By this development, the Jesus Sacred Heart Monument has transformed from just a monument to become a sacred place for devotional activities. Situation in the site of Ganjuran Church complex in this phase can be illustrated as follows:

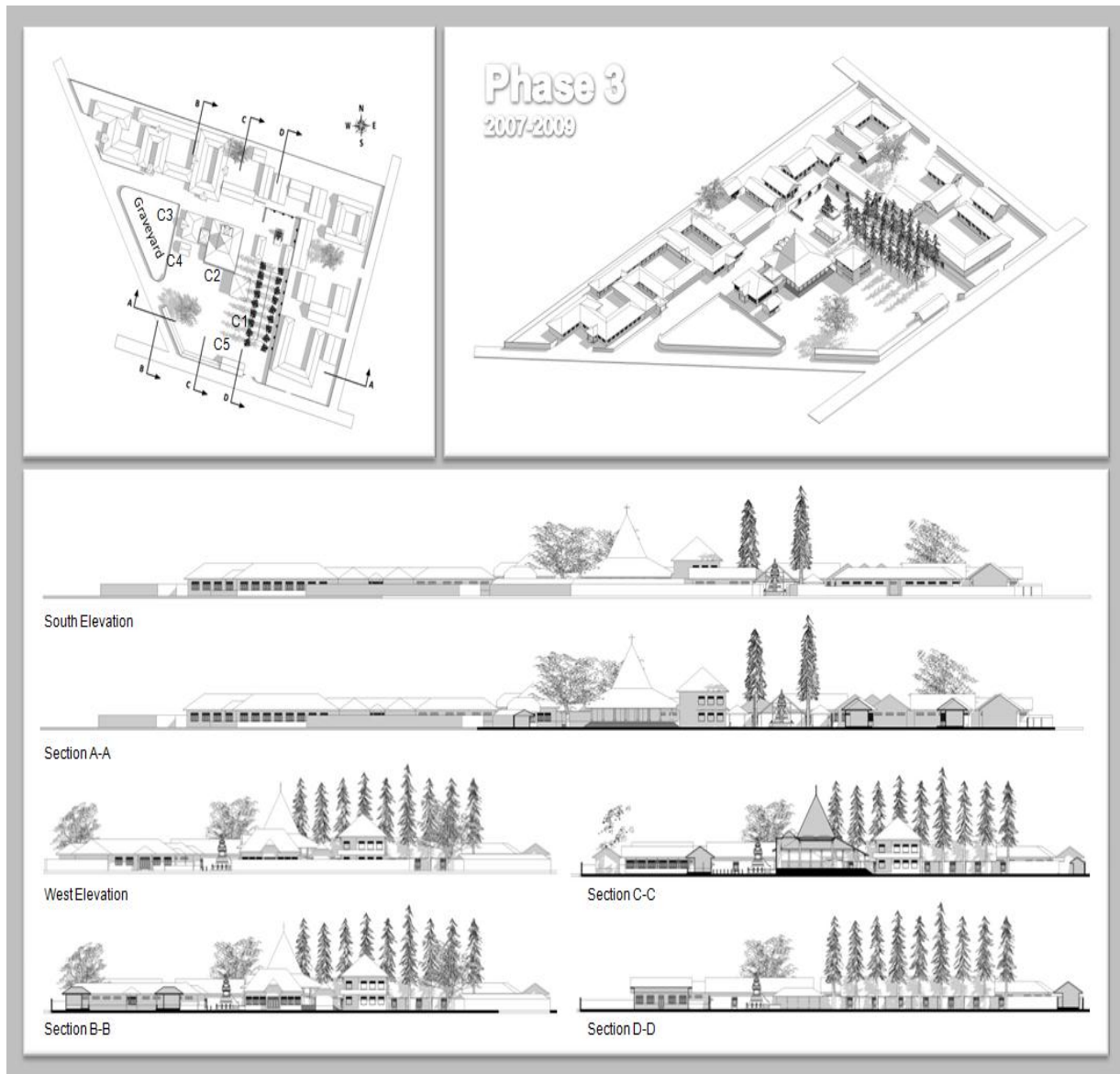


Notes: B1, B2: Hospital (expansion), B3, B4, B5: Orphanage (expansion), B6: School (expansion), B7: School Staff Office, B8: Parish House (expansion), B9: Parish Hall, B10: Gamelan House, B11: Sacrifice Route Stop, B12: Water Fountain Outlet

Figure 3: Second phase of the Ganjuran Church complex development (author, 2009)

In May, 27<sup>th</sup>, 2006, when a 5.9 Mw earthquake stroke Yogyakarta and caused the façade of the church building to collapse, a temporary church was established in the yard in front of the monument. Later a new permanent church and a parish hall were established on the former site; on the other hand, the

timber material of the former church was used to erect the same form church in Ngirengireng Parish. The new church erection finished in August 2009. Therefore, the recent situation in the site of Ganjuran Church complex can be illustrated as follows:



Notes: C1: Church (temporary), C2: Church (replacement), C3: Parish Hall (replacement), C4: Parish Secretariat, C5: Public Toilet

Figure 4: Third phase of the GJSHC complex development (author, 2009)

By the above explanations and illustrations, it can be inferred that since its establishment in 1924, Ganjuran Church complex has developed progressively. There are many new buildings which have been completed or replaced the former ones.

**Compilation of the Building Typology**

As revealed by the above discussion, building types in Ganjuran Church can be compiled based on those three phases thus:








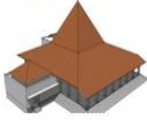





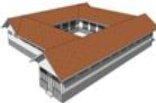









PHASE	1926-1965	1966-2006	2007-2009	
<b>BUILDING TYPES</b>	A1: Church 	B1: Hospital (expansion) 	B7: School Staff Office 	C1: Church (temporary) 
	A2: Parish House 	B2: Hospital (expansion) 	B8: Parish House (expansion) 	C2: Church (replacement) 
	A3: Hospital 	B3: Orphanage (expansion) 	B9: Parish Hall 	C3: Parish Hall (replacement) 
	A4: Orphanage 	B4: Orphanage (expansion) 	B10: Gamelan House 	C4: Parish Secretariat 
	A5: School 	B5: Orphanage (expansion) 	B11: Sacrifice Route Stop (15 units) 	C5: Public Toilet 
	A6: Temple Monument 	B6: School (expansion) 	B12: Water Fountain (9 units) 	

Figure 5: Building types compilation per phase (author, 2009)

The beginning of the first phase (1924-1934) is the time when Julius Schemutzer was handling Gondang Lipuro Sugar Factory. All the buildings in this phase were also built under his command. For the church, parish house, hospital, orphanage, and school buildings, he appointed architect Th. van Oyen. This church was his first church design project before he designed the other churches in Java: Pugeran Jesus Sacred Heart Church (1934), Bintaran St. Joseph Church (1934), and Semarang Cathedral (1937). In general, van Oyen's design is characterized by the adaptation of the social and environmental context. On the other hand, he tended to modernize the design with technological improvements like the employment of concrete and steel construction. Those were the way van Oyen implemented the New Dutch Indies architecture principles. For the church in Ganjuran, he minimized those technological improvements by employing timber construction. Concrete construction was applied in parish house, hospital and orphanage buildings. Whereas, adaptation to the social and environmental context for the last three buildings was applied in the form of building which adopted kampong and *limasan* types. The Sacred Heart of Jesus Monument was the most unique building in Ganjuran Church complex. Julius Schemutzer himself designed it by studying models of Hindu temples in Java, especially Prambanan Temple. For the Jesus Sacred Heart statue in Javanese-Hinduism version which was laid in the center of the monument and the other statues which were laid in the church altar, he employed two Sundanese artists and a Chinese artist.

During the second phase, many new buildings have been established to complete the former ones. Nevertheless, the identity of the architects is unknown. Most of the buildings were built by local craftsmen and followed the former models. Parish Hall and Gamelan House have different characters compared to the others. Basically their type is same as the former buildings; that is *limasan* type. Nevertheless, they are different in the construction and the wall treatment. The former *limasan* buildings employed concrete construction and plastered brick wall, while these two buildings employed timber construction and bamboo plaited mat.

In the third phase, a temporary and four permanent buildings were built. The temporary building functioned as a church while the permanent church was being built. It was made from bamboo construction and was built spontaneously by local parishioners

by employing kampong type. The permanent church was briefly designed by Atmajaya University architects team based on the idea of *Bangsai Kencana* (primary hall) of Yogyakarta Sultanate Palace by a local priest Gregorius Utomo Pr. Referring to his opinion, the employment of *Bangsai Kencana* was to deliver an imagination of the God's Palace from Javanese point of view. The other buildings were designed by following the former buildings in Ganjuran Church complex which was based on kampong and *limasan* types.

### Typological Classification

By compiling all building types based on the chronological phases, it can be revealed that there are some typologies in each phase, and there are some similarities between building typologies in a phase to those in the other phase. Therefore, the next analysis classifies the buildings based on their typology. This classification found five different typological groups as follows:

#### 1. Kampong House Typology

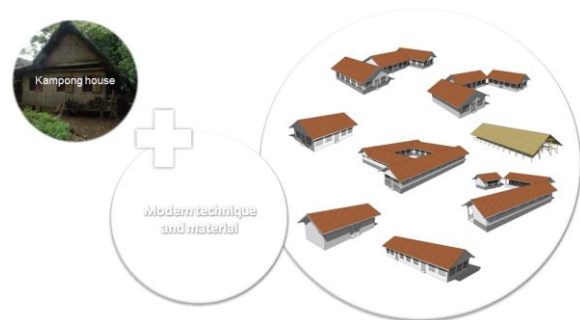


Figure 6. Kampong house based typology (author, 2009)

This group includes orphanage and school buildings, and a temporary church building. General characteristic of kampong house can be seen from its triangle form of the roof. Basically, kampong house building is constructed by timber framework construction system. Therefore, the structure is light and elastic. Traditionally, bamboo plaited mats for the wall and palm fiber or sago palm for the roof is the most suitable materials to balance the lightness and the elasticity of the construction. Nevertheless, buildings in Ganjuran Church complex have improved this type with modern technique and material. Timber construction was replaced by concrete construction, bamboo material was replaced by plastered brick material, and palm fiber material was replaced by roof tile material.

2. *Limasan* House Typology

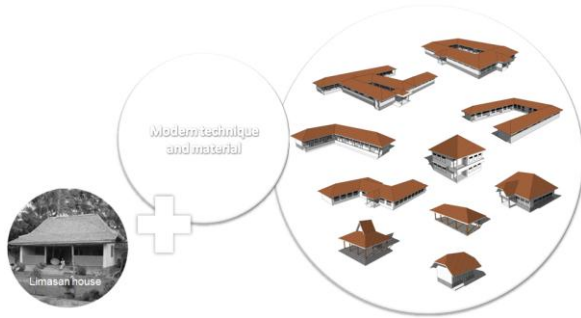


Figure 7. *Limasan* house based typology (author, 2009)

This group includes hospital, school, parish house, parish hall, parish secretariat, and gamelan house buildings. General characteristic of *limasan* house can be seen from its trapezoid form of the roof. Traditionally, basic construction system and materials of this type are the same as the kampong house. Improvements for this type in the buildings in Ganjuran Church complex were also same as the improvement for kampong buildings: concrete construction, plastered brick and roof tile material.

3. Central Java Hindu-Budhism Temple Typology

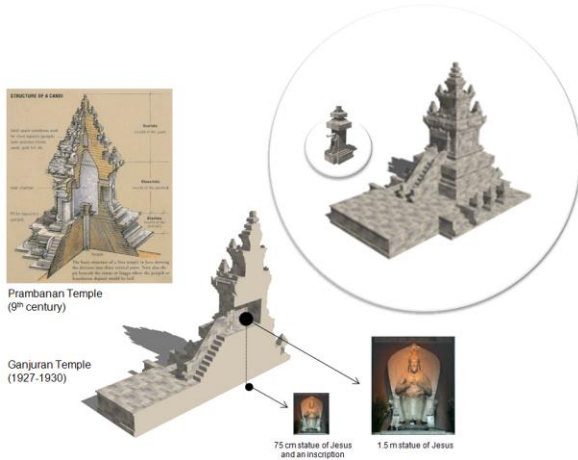


Figure 8. Javanese classical based typology (author, 2009)

This group includes Jesus Sacred Heart Monument building and water fountain outlets. Based on the form, this building follows the ninth century Javanese classical building type. General characteristics of this type are: rectangular and symmetrical plan, natural stone material, Hindu-Buddhism icon and symbolism. Almost all those characteristics were copied onto this monument. Lotus flower symbol was applied on the exterior ornament, and idol icon was applied on the interior statue. Nevertheless, the icon is not Hindu Gods but Jesus who is seated on the Hindu Gods’ throne and wearing Hindu Gods’ accessories.

Moreover, a small statue of Jesus and an inscription were put in the bottom of the monument. This manner followed the tradition of Hinduism to put something sacred in the bottom of the temple.

4. Roman Basilica Typology

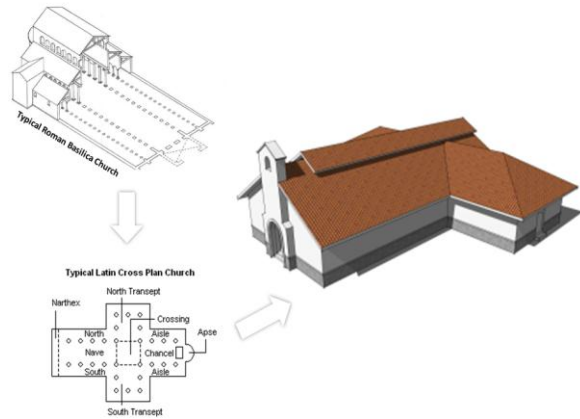


Figure 9. Roman basilica based typology (author, 2009)

This group only includes the church building of Ganjuran Church (former ones, before 2006 earthquake). Originally, the word “basilica” was used to describe the Roman public building. It was a large roofed hall supported by colonnades in its interior. The colonnades divide interior space and give aisles or arcaded spaces at one or both sides. Besides, a basilica used to have “clerestory” - an upper level of the walls above the rooflines of the lower aisles - to give light to the inner space of a large building. Since Christianity was legalized as Roman religion, basilica has been converted to become church model. Later in Romanesque and Gothic era, basilica was developed by adding “transept” - an area set crosswise to the nave - to become cruciform building.

Seen from the basic plan of the former church of Ganjuran Church, it seems to be equal to the basilica model. Extension space which crosses the axis at the rear can be comparable to the transept. Nevertheless, the colonnades were constructed by timber which directly connected to the roof as a whole structure. Therefore, the colonnades were not connected by the existence of entablature. Consequently, no clerestory can be shored up over the colonnades. Instead of that, the heightening of the upper roof was made by extending the roof timbering to create a slot along the axis for ventilation. Although the basic form of this church can be rooted from basilica, this church has been developed with innovation in its structure by employing timber construction to perform lightness and elasticity. The truth of this technical concept has been proven. When a 5.9 Mw earthquake stroke in 2006, only the brick wall façade collapsed.



### 5. Joglo House Typology

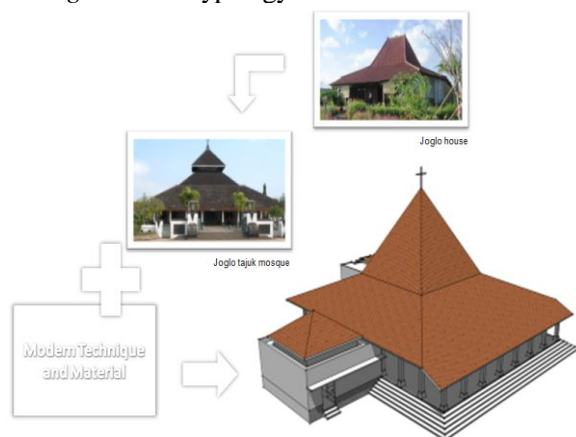


Figure 10. Joglo house based typology (author, 2009)

This group only includes the church building of Ganjuran Church (new ones, after 2006 earthquake). General characteristic of *joglo* house can be seen from its double or triple trapezoid form of the roof. Basically, *joglo* house building is also constructed by timber framework construction system. Nevertheless, compared to *kampong* and *limasan* houses, *joglo* house has a special timber framework construction system which is called “*tumpang sari*”. It is a rectangular beam structure with four columns at the four corners. The four columns are called “*saka guru*” which means “principal columns”. The *saka guru* is laid in the center of building. Originally, the wall is made from solid wood board and the roof is made from shingle. The wall is fit-loose designed, so for other purposes this building can become an open-end building which is called “*pendopo joglo*” and it can function as a lobby of a house or as a public building. This *pendopo* house type has been developed and employed as religious building by modifying its roof to become pyramidal. This new type is called “*joglo tajug*”. Later when Islam came to Java, this type was employed as mosque building by putting a pulpit in one of its borders and turning the orientation to the west to face Mecca.

At Ganjuran Church, *joglo tajug* typology is employed as the model for the new church. Nevertheless, the construction system was totally replaced by concrete construction. Furthermore, wood panels were installed resembling *tumpang sari* and *saka guru* structures. Lavish ornaments copied from Yogyakarta Sultanate Palace were carved in those panels.

#### Typological Comparison

Based on the five typologies which have been found in Ganjuran Church complex and after they

were compared with the building typology in Ganjuran village, there are only three of them which are also widely employed in this village: *joglo*, *kampong* and *limasan* houses. This fact implies that for daily life, those three typologies are the most suitable. By this fact it can also be inferred that the other typologies including: Javanese classical temple, Roman basilica, and *joglo tajug* are more suitable for religious life. Therefore, the next analyses focused on these last three typologies to reveal architectural transformation in Ganjuran Church.



Figure 11. Typological comparison (author, 2009)

#### Architectural Transformation

There are two most important areas in Ganjuran Church, monument area and church area. Monument area was located at the eastern part of the church. In the past, before Ganjuran Church are popular as a pilgrimage destination, monument area was only the back yard of the church. Parishioner daily activities were concentrically at the church and its surroundings. A mass concentration at the monument only occurred once a year in a yearly mass to celebrate the Jesus Sacred Heart Day. Nevertheless, since Ganjuran Church became a pilgrimage destination, some new daily activities have been created at the monument and its surroundings. Together with the development of the sacrifice route stops and the discovery of the holy water fountain, devotional activities to the Jesus Sacred Heart at the monument area drastically rise (Paroki HKTY Ganjuran, 2009:33-34). The following human circulation diagram revealed that an architectural transformation has occurred in the circulation pattern, from axial movement to circumambulation movement:

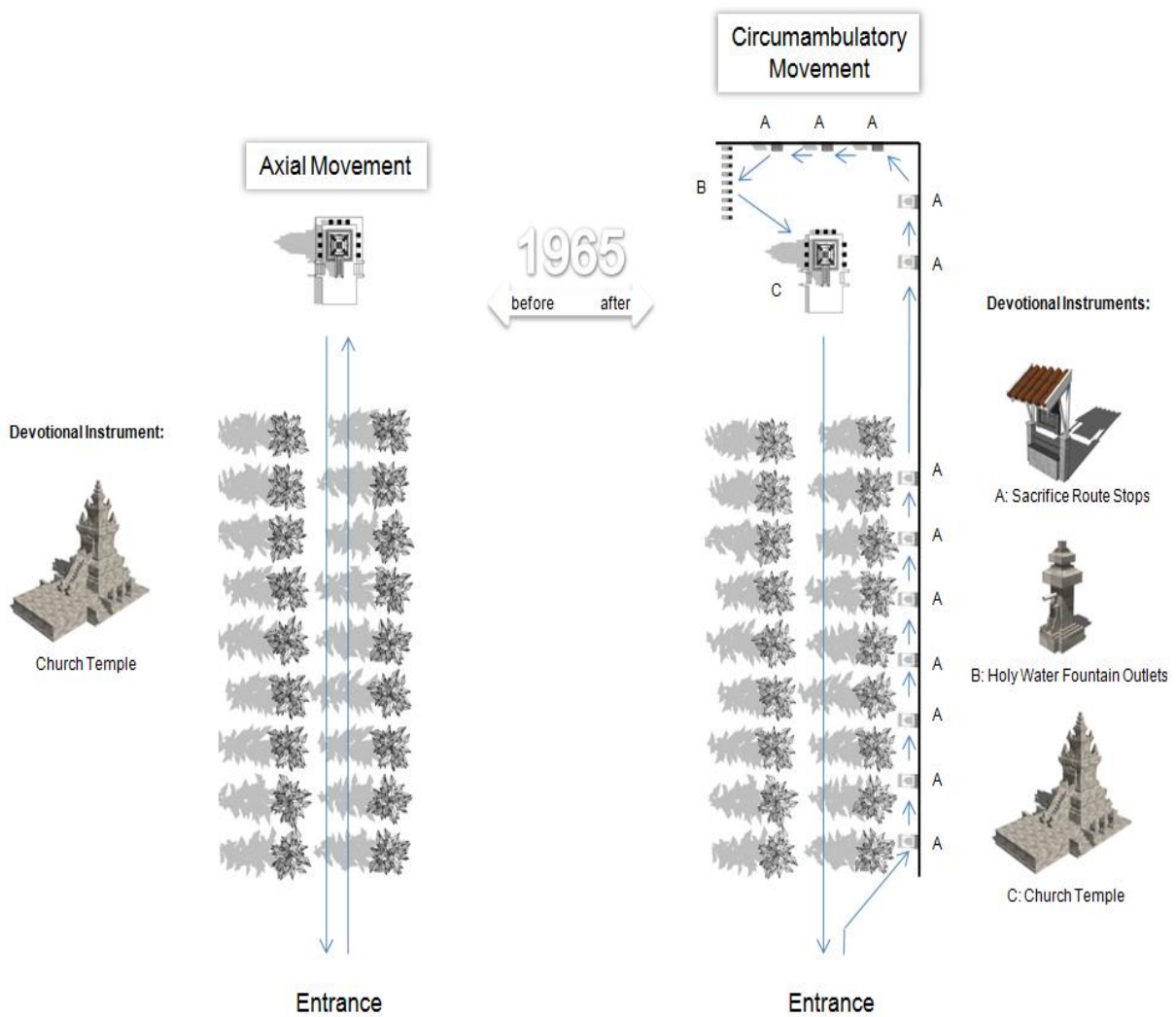


Figure 12. Transformation of the Monument (author, 2009)

The former church building was put at the west part of the Ganjuran Church area, and it faced to the west, face to face with a Catholic grave yard which was laid in the west border. Seen from its form and construction, as mentioned by the former analysis, the former church was based on a basilica form and employed a timber construction system. Whereas, the new church building was put at the same place with the former ones; nevertheless, it faces to the south,

side by side with the grave yard and the monument area. Seen from its form and construction, as mentioned by the former analysis, the new church was based on a *joglo tajug* form and employed a concrete construction system. Differences between the former and the new church have revealed architectural transformations in three aspects: building orientation, building types, and construction systems. Below is the diagram of the transformation:

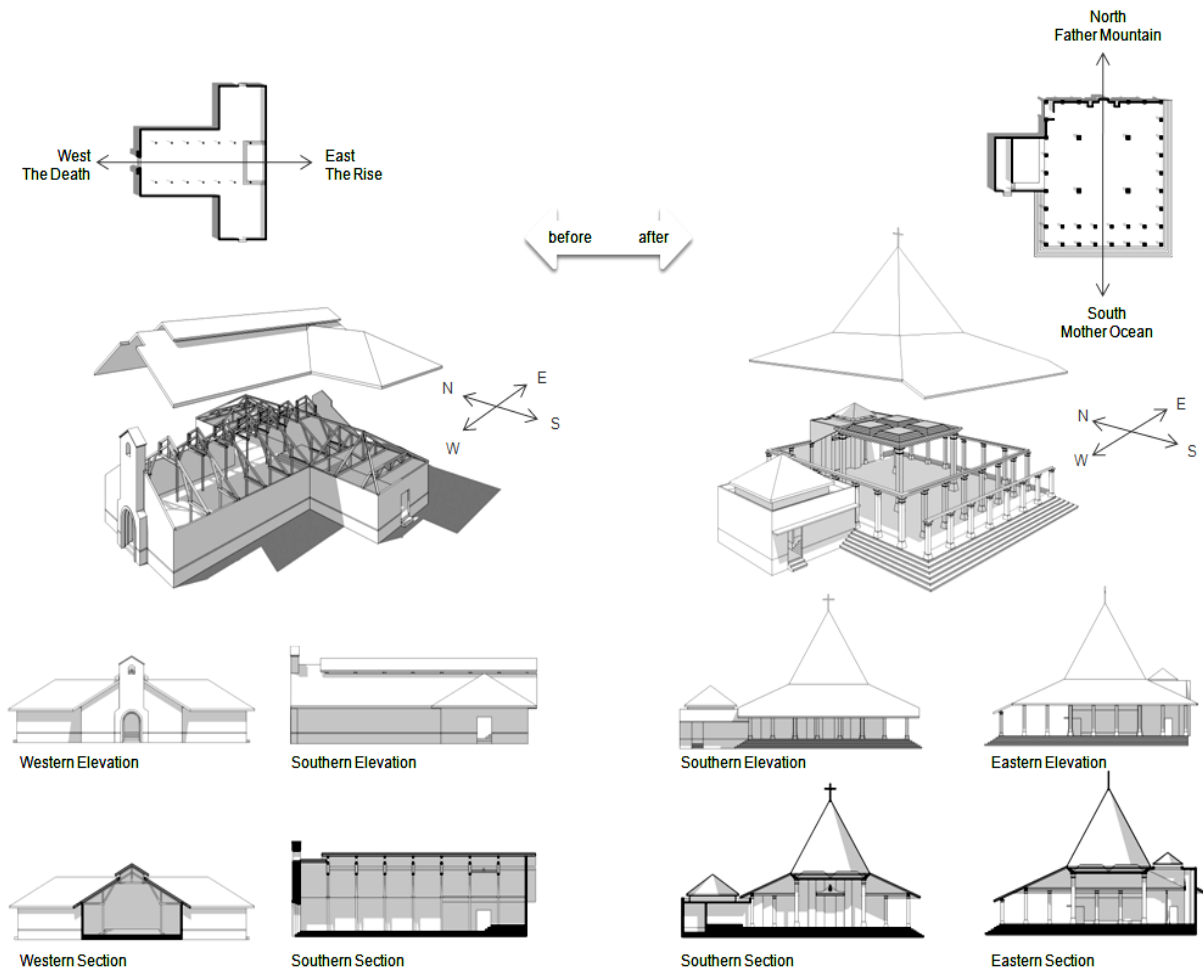


Figure 13. Transformation of the Church (author, 2009)

## CONCLUSION

Learning from this case study, it is known that typological analysis is not only able to reveal architectural transformations, but also cultural transformations. Typology is not only related to technical matters such as form and construction but also non-technical matters such as cultural perception and symbolism.

The development of building typology doesn't always conform to the time periods. The time periods can be used as one of the indications to analyze building typology. Nevertheless, the final determination depends on the local contexts of the pertinent building such as historical, social, cultural, ideological, even political contexts.

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