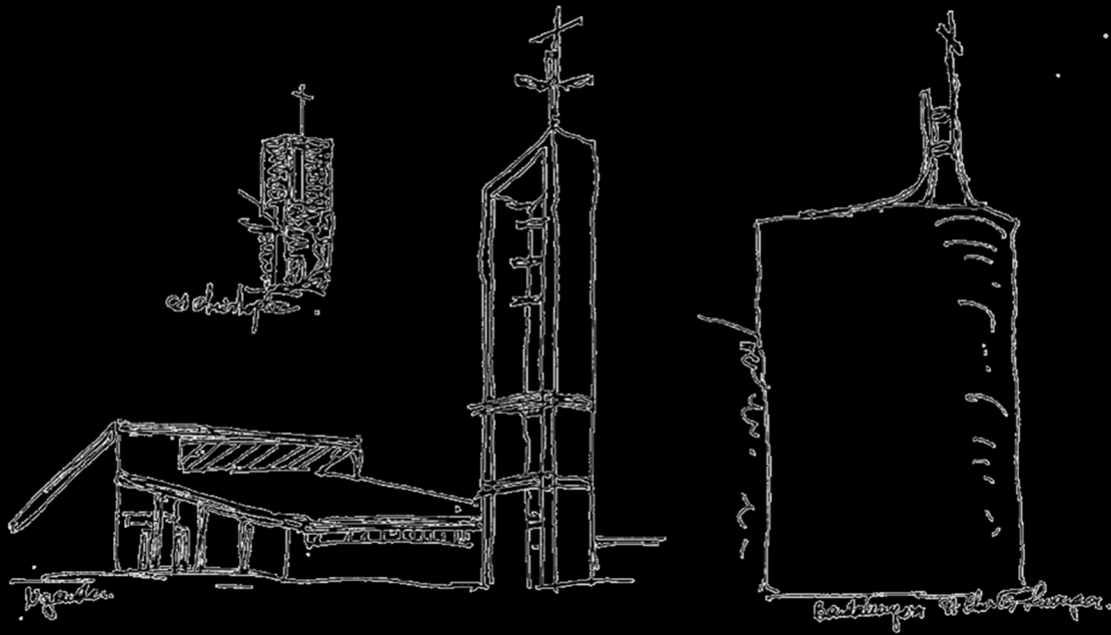


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Doctoral thesis in architecture

BY

VICTOR BAY MUKANYA KAYEMBE



PAUL DEQUEKER AND THE TROPICAL CHURCH :

Analysis of a conceptual approach to Catholic church building in tropical Africa

6 case studies

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Academic year 2021-2022

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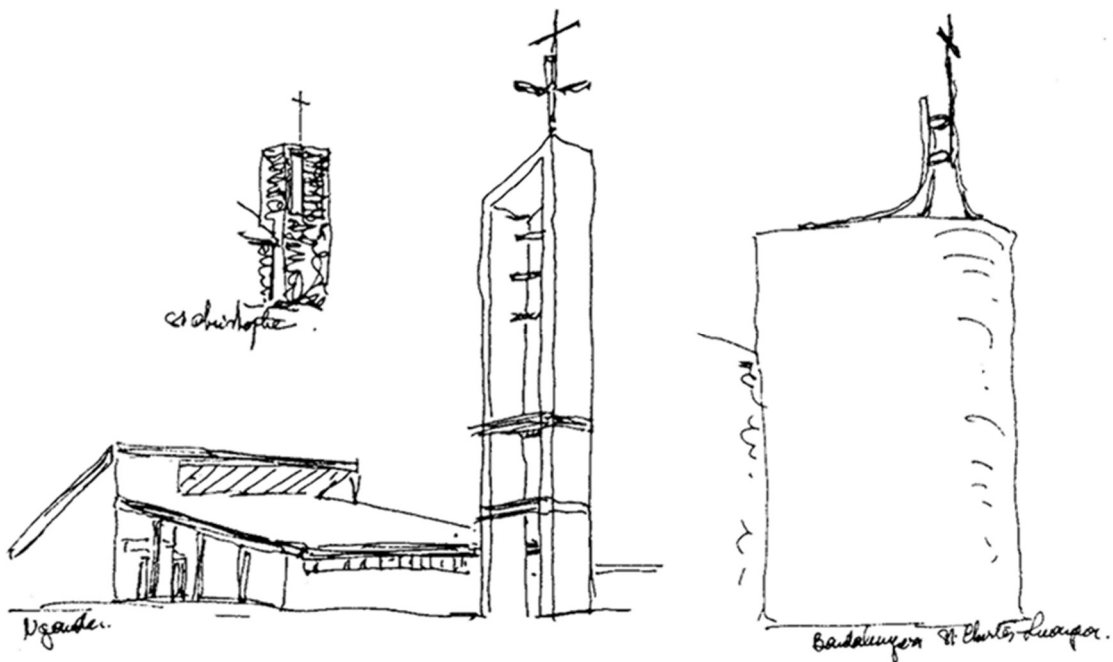


FIGURE 2: CROQUIS DE PAUL DEQUEKER, SOURCE KADOK

PAUL DEQUEKER AND THE TROPICAL CHURCH :

Analysis of a conceptual approach to Catholic church building in tropical Africa

6 case studies



IN MEMORIAM

Bay Numbi Wilfrid
Kongolo Lunkelu Jean-Baptiste



DEDICACE

To you my wife,
Dana Basungany Ntelenge

To you my sweet little children,
Victor Lumière Bay Mukanya
Joseph Daniel Bay Basungany
Rayyan Donatien Bay Majiba

To my mother, Mwanza Cibey Babanya Kabidji



REMERCIEMENTS

Manlio Michieletto

Jacopo Galli

Luc Dequeker

Corneille Kanene Mudimubadu

Olatunde Adedayo

Alexis Tshiunza Kabeya

Jean Claude Katanga Labila



CITATION

« De nombreux théoriciens ne construisent pas et beaucoup de constructeurs ne sont pas au courant des recherches théoriques. Sur la base de mon expérience, j'ai essayé de jeter un pont entre la théorie et la pratique. »

«Many theorists do not build and many builders are not aware of theoretical research. Based on my experience, I tried to bridge the gap between theory and practice. »

(DEQUEKER P., Tropical Architecture, 1992)

« En ce qui me concerne, nous pouvons sans risque le qualifier de "grand" architecte belge moderne (d'après-guerre). Son modernisme n'a jamais été transféré au post-moderne, mais rayonne de simplicité, de clarté et de contexte propice à la construction. »

« As far as I am concerned, we can safely describe him as a "great" modern Belgian architect (post-war). Its modernism has never been transferred to the post-modern, but radiates simplicity, clarity and a context conducive to construction »

(VERSCHURE, 2014)



ABBREVIATIONS AND ACRONYMS

B.E.C.	: Bureau de l'enseignement catholique
B.D.O.M	: Bureau diocésain des œuvres médicales
C.B.CO.	: Communauté baptiste du Congo-Ouest
C.E.P.	: Centre d'études pastorales
C.R.P.	: Centre de recherches pédagogiques,
C.C.L	: China college of Leuven
C.E.Z	: Conférence épiscopale du Zaïre
C.I.C.M.	: Congrégation du cœur immaculé de Marie
C.I.C.Z	: Centre' interdiocésain catholique du Zaïre
C.R.P	: Centre de recherches pédagogiques
E.I.C	: Etat indépendant du Congo
F.C.K	: Facultés catholiques de Kinshasa
H.A.I.S.L	: Hogger Al institut sint lucas
H.R.D.U.	: Housing Research and development unit.
KADOC	: Centre de documentation catholique de Louvain
K.U.L	: Université catholique de Louvain (Leuven)
O.P.	: Ordre des prêcheurs
O.C.A	: Office des cités africaines
R.T.N.C	: Radiotélévision Nationale Congolaise
R.D.C.	: République Démocratique du Congo
S.V.D	: Société du verbe divin
SCO.PE.NKO	: Scolasticat père NKONGOLO
U.I.A.	: Union internationale des architectes
I.S.A. U	: Institut Supérieur d'Architecture et d'Urbanisme
UNAZA	: Universités Nationales du Zaïre
TASOK	: Technical American Scool of Kinshasa
UNIKIN	: Université de Kinshasa



CHURCHES VISITED FOR THE SURVEY

Church of Saint Charles Loanga Kinshasa 1961

Church of Saint Luc of Kananga 1968

Christ-Roi Church in Kinshasa 1961

Saint Antoine Kinshasa 1962

Church of Saint Luc of Kinshasa 1963

Saint Christopher Kinshasa 1962

Church of Our Father of Kananga 1965

Chapel of Nganda Kinshasa 1965

Church of Saint Pius X Kinshasa 1965

Church of Saint Gabriel Kinshasa 1965

Church of Kambote of Kananga 1965-1975

Church of Saint Eloi Kinshasa 1967

Church of Saint Paul of Kinshasa 1967

Church of Saint Adrien Kinshasa 1967

Cathedral of Our Lady of Katoka Kasai 1971

Church of Saint Paul of Lubumbashi 1972

Cathedral of Goma Kivu 1974

Church of Saint Augustin of Kinshasa 1977

Chapel of Saint Pierre Canisius Kinshasa 1981

Church of Saint Antoine II of Kinshasa 1982

Church of Saint Raphael Kinshasa 1988



ARCHIVES CONSULTED

BE/942855/1687 Archief broeder-architect Paul Dequeker,
1960-2000 (Archief)

These archives represent a collection of approximately 3,000 photographs of more than 600 projects that architect Brother Paul Dequeker carried out between the late 1950s and 1980s. Most of his work has been carried out in Congo and includes many school buildings for primary, secondary, technical and university education and social and agricultural training centers, rural and urban medical institutes, health and maternity centers, centres for the physically handicapped, radio and television studios, residential buildings and blocks; factories, bridges and water towers. With regard to the specific research of this thesis, the consultation focused on the many religious buildings such as cathedrals, churches, chapels, convents and seminaries, scholasticats and novitiates built in DR Congo and also carried out in many countries such as: Haiti, Angola, Congo Brazzaville, Cameroon, Nigeria, Togo, Senegal, Burundi and Rwanda.



RESUME (*English*)

This thesis entitled «**Paul Dequeker and the tropical church**» is an analysis of a conceptual approach to the construction of Catholic churches in the tropical zone. In the specific case of this study, it concerns the typology of tropical churches carried out by Paul Dequeker in the Democratic Republic of the Congo from 1960 to 1988.

Through the rereading of the work bequeathed by Brother Paul Dequeker during his apostolic mission in Africa, this study retraces the ambitions of an Africa confronted with the concept of inculturation which provoked several reactions from the Pan-Africanists¹, Malula², who has been campaigning for a Catholic church in Africa for Africans since the 1950s, believes that the African church must be characterized by local habits.

To respond to this legitimate aspiration of a people in search of cultural identity at that time and to the expectations of Pan-Africanists, Paul Dequeker was chosen to design churches in the Congo adapted to the aspirations of the Congolese.

Defining tropical architecture as a way of life in the tropics, this thesis examines the particular character of the architecture of the

¹ In his speech entitled “Emblematic Figures of Pan-Africanism”, Barthélemy Boganda gives a more universal definition of Pan-Africanism in these terms; Pan-Africanism is a political movement that promotes the independence of the African continent, it encourages the practice of solidarity between Africans and people of African descent, wherever they are in the world.” In this, the «Pan-Africanist» calificative essentially aims at designing the authors and participants of the first congress of post-war Pan-Africanism held in Manchester in 1945 mainly Samuel Ladokè Akintola, Jomo Kenyatta, Wallace Johnson, Hastings Kamuzu Banda, Kwamé Nkrumah.

² Joseph-Albert Malula, considered until then one of the most important cardinals in the modern history of Catholicism in black Africa. Third indigenous Congolese bishop, he is considered one of the founders of the Churches of Africa and a figure of African patristic. In the 1970s, he restructured the whole Zairean Church, upsetting traditions and attracting many enmities, both in Rome and in Africa. He instituted ministries of the laity, the famous «bakambi» and in 1988 Pope John Paul II approved the «Zairois rite» also initiated by J.A.Malula.



churches built by Paul Dequeker. From six (6) examples of churches built by him in Kinshasa, this research demonstrates how traditional local influences, modernism and the climatic, economic and socio-cultural demands of the time guided their design processes.

At the end of this work, a synthesis of the architectural typological characteristics of so-called tropical churches will constitute the set of tools of an architectural grammar in tropical area collected in the project of Paul Dequeker.



ABSTRACT (*Français*)

Cette thèse intitulée « **Paul Dequeker et l'église tropicale** » est l'analyse d'une approche conceptuelle de la construction des églises catholiques en Afrique tropicale. Dans le cas précis de cette étude, elle porte sur la typologie des églises tropicales réalisées par Paul Dequeker en République démocratique du Congo de 1960 à 1988.

A travers la relecture de l'œuvre léguée par le frère Paul Dequeker lors de sa mission apostolique en Afrique, cette étude retrace les ambitions d'une Afrique confrontée au concept d'inculturation qui a provoqué plusieurs réactions de la part des panafricanistes, à l'instar de Mgr Malula qui militait depuis les années 1950 pour une église catholique en Afrique destinées aux Africains en considérant que l'église africaine doit se caractériser par des habitudes locales.

Pour répondre à cette aspiration légitime d'un peuple en quête d'identité culturelle à cette époque et aux attentes des panafricanistes, Paul Dequeker a été choisi pour concevoir au Congo des églises adaptées aux aspirations des Congolais.

Définissant l'architecture tropicale comme un mode de vie sous les tropiques, cette thèse examine le caractère particulier de l'architecture des églises construites par Paul Dequeker. A partir de six (6) exemples d'églises construites par lui à Kinshasa, la présente recherche démontre comment les influences traditionnelles locales, le modernisme et les exigences climatiques, économiques et socioculturelles de l'époque ont guidé leurs processus de conception.

Au terme de ce travail, une synthèse des caractéristiques typologiques architecturales des églises dites tropicales constituera l'ensemble des outils d'une grammaire architecturale en zone tropicale collecté dans le projet de Paul Dequeker.



KEY WORDS

Architecture,
church,
culture,
hot,
enculturation,
identity,
Joseph Malula,
modernism,
Paul Dequeker,
Tropical,
Tradition,



TABLE OF CONTENT

IN MEMORIAM.....	2
DEDICACE.....	3
REMERCIEMENTS.....	4
CITATION.....	5
ABBREVIATIONS AND ACRONYMS.....	6
ARCHIVES CONSULTED.....	8
RESUME (<i>English</i>).....	9
ABSTRACT (<i>Français</i>).....	11
KEY WORDS.....	12
TABLE OF CONTENT.....	13
LIST OF FIGURES.....	19
INTRODUCTION.....	28
1. Objective of the thesis.....	31
2. Why study churches ?.....	32
3. Research issues.....	33
4. Assumptions.....	34
5. Thesis.....	35
6. Methodological approach.....	36
7. Difficulties encountered.....	37
8. Inventory.....	38
9. The state of the art.....	39
9.1. Publications on the work of Paul DEQUEKER.....	39
9.2. Manuals of tropical art and architecture.....	42
9.3. Why is Paul Dequeker writing the book "tropical architecture".....	44
10. Between two paradoxes.....	46



10.1. First paradox: the existence or non-existence of a Dequeker style.....	46
10.2. Second paradox: Paul Dequeker more Zairean than Zairean.....	48
11. Organization of the thesis	49
CHAPTER I:	54
PROBLEM OF AUTHENTIC AFRICAN ARCHITECTURE IN THE TROPICS.....	54
I.1. Definition of the “tropical” concept.....	56
I.2. Tropical modernism in the Congo.....	57
I.3. Religious tropicalism	61
I.4. Sacred space in tropical Africa	70
I.5. The existence of authentic traditional architecture	74
I.6. A charter for Catholic missions in Africa.....	82
I.7. The definition of African Christian architecture	85
I.8. Paul Dequeker’s Christian architecture in opposition to Western styles	86
I.9. Universal ethnicity for African architecture	87
I.10. A church born of Pan-Africanism.....	90
I.11. Joseph Malula Father of the African Church.	91
1.12. “Zairian rite”	95
CHAPTER II:	98
PAUL DEQUEKER ARCHITECT ON MISSION IN AFRICA.....	98
II.1. A life.....	100
II.2. Paul Dequeker Missionary architect.....	107
II.3. A mission.....	112
II.3. A vision	119
II.4. For a spirit of Poverty	120
II.5. Paul Dequeker towards an authentic architecture	123
II.6. Paul and the Tropical Project	125



CHAPTER III:	132
FROM THE MISSIONARY CHURCH TO THE TROPICAL CHURCH	132
III.1. The missionary conquest	133
III.2. The C.I.C.M. in the Congo	136
III.3. The religious building in the Congo from 1880 to 1988.	139
III.3.1. Before 1880: the Palabra tree and African huts	139
III.3.2. 1880-1910: First missionary churches	141
III.3.3. 1910-1960 : European style churches	142
III.3.4. 1960-1988 Modern churches	147
III.3.5. Paul Dequeker's tropical churches.....	148
III.5. Chronological implantation of churches in Kinshasa	153
CHAPTER IV :	159
GENEALOGY AND GENETIC OF TROPICAL CHURCHES	159
IV.1. Genealogy of tropical churches.....	160
IV.1.1. Influence of traditional African architecture	160
IV.1.2. Influence of Western Modern Architecture	165
IV.1.3. From the European Church to the Tropical Church..	170
IV.2. Sacred geometry	175
IV.3. Form and patterns of Paul Dequeker's churches	176
IV.3.1. The churches on the cross:.....	179
IV.3.2. Circular and polygonal churches:	181
IV.3.3. The triangular and trapezoidal churches:.....	184
IV.3.4. Square and rectangular churches.....	186
IV.4. Symmetry, dissymmetry, laterality and motion.....	187
IV.4.1. Symmetry and asymmetry.....	187
IV.4.2. Laterality and movement.....	188
IV.5. The genetics of a tropical church	189
IV.5.1. Adaptation to bioclimatic requirements.....	190
IV.5.1.a. Air movement inside the building.....	192



Cross Ventilation	193
Stack Effect Ventilation	193
IV.5.1.b. the movement of air around a building	196
IV.5.2. Adaptation to material and technical requirements	197
IV.5.2.a. Foundations and elevation of walls.....	198
IV.5.2.b. Thermal insulation and the thermal resistance of a wall.....	198
IV.5.2.c. Frame, ceiling and roof	199
IV.5.2.d. Porous walls	201
IV.5.2.e. Tropical materials	203
IV.5.3. Adaptation to the requirements of economic factors 203	
IV.5.4. Adaptation to the requirements of socio-cultural functions.....	205
IV.5.5. Responses to the particular requirements of the liturgy 208	
IV.5.6. Restoration of Kisangani Cathedral; From the Gothic church to the church-hall.....	212
CHAPTER V:.....	217
SIX CHURCHES WITH ONE GRAMMAR.....	217
V.1. CHURCH OF CHRIST-ROI 1961	219
V.1.1. context History.....	222
V.1.2. Architectural resolution	222
V.1.3. A Christian identity or African tradition.....	223
V.1.3. A sober aesthetic	228
V.1.4. The techniques.....	228
V.1.3. The roof without valleys	230
V.2. SAINT-ANTOINE 1 (1962).....	235
V.2.1. Appropriation of traditional forms.....	238
V.2.2. Between tradition and modernity.....	240
V.2.3. Tectonic and aesthetic	241



V.2.4. An abandoned heritage.....	242
V.3. SAINT LUC CHURCH 1963.....	248
V.3.1. A modern African hut.....	250
V.3.2. The climate response	252
V.3.3. A stunning geometry	253
V.3.4. Structures and materials.....	256
V.4. CHURCH OF SAINT AUGUSTIN 1977.....	261
V.4.1. Historique	264
V.4.2. Aspect urbanistiques.....	264
V.4.3. Réponses architecturales.....	264
V.4.4. Aesthetics.....	266
V.4.5. The concrete portal frame: a "Dequeker" method.....	267
V.5. SAINT ANTOINE 2 (1982)	273
V.6.1. Is this the confirmation of a critical regionalism?	276
V.6.2. Return to authenticity	277
V.6.3. Towards a critical regionalism.....	278
V.6. SAINT RAPHAEL CHURCH 1988.....	284
V.6.1. Historical Context	287
V.6.2. Urban Context.....	287
V.6.3. Architectural Responses	287
CONCLUSION	294
1. Summary of results	295
Climate resolutions.....	295
Ventilation and natural light.....	296
Arrangement of the assembly.....	296
Local culture:.....	297
General characteristics of tropical churches.....	299
The form 300	
Foundations, walls, structure and roof	300



2. Contribution of the thesis	302
3. Conclusion Générale	303
BIBLIOGRAPHIE	308
ANNEXES.....	329
List of tropical churches by Paul Dequeker between 1960 and 1988	329
List of paul dequeker's projects in congo between 1958 and 1991	331
List of Paul Dequeker's projects in Africa	350



LIST OF FIGURES

<i>Figure 1: croquis de Paul Dequeker, source: Kadoc</i>	0
<i>Figure 2: croquis de Paul Dequeker, source Kadoc</i>	1
<i>Figure 3: chapelle du centre Nganda (1965), source, Eglises tropicales, 1984, p.39</i>	29
<i>Figure 4 couverture du livre eglises tropicales, source de l'auteur</i>	39
<i>Figure 5 : cover of the book "Eglises tropicales" published in 1984.</i>	39
<i>figure 6 : cover of the magazine vlaanderen. jaargang" number 39, in which Kathleen Vervaeke published in 1992 "de missionaris en de architectuur: paul dequeker, c.i.c.m."</i>	40
<i>Figure 7, cover of the book « l'architecture tropicale »,1992</i>	41
<i>Figure 8 cover of the book « architectuur en missie in afrika », 2014</i>	42
<i>Figure 9: cover of the book « Arts africains, signes et symboles » 2000</i>	44
<i>Figure 10: THIS IMAGE IS PROBABLY THE COVER OF VOLUME 2 OF THE BOOK TROPICAL ARCHITECTURE THAT PAUL DEQUEKER WANTED TO UNDERTAKE WITH PROFESSOR KANENE MUDIMUBADU, DRAWING BY PAUL DEQUEKER, SOURCE: KADOC</i>	52
<i>figure 11 : saint marc's parish 1962, source, tropical churches</i>	55
<i>Figure 12 Model of the Saint Anne's residence built by Paul Dequeker. The tropical language can be seen here.</i>	56
<i>Figure 13 Théâtre Municipal d'Elisabethville, Elisabethville, 1953-1957 - Claude Strebelle, source ; https://pin.it/2QIThNm</i>	58
<i>Figure 14 Marble Palace by Eugène Palumbo and Fernand Talangay , source: building for 'authenticity': Eugène Palumbo and the architecture of Mobutu's Congo; Johan Lagae and Kim de Raedt.</i>	59
<i>Figure 15 Sketch of sante ortolani for a cultural centre in mbuji-mayi, source: essay of an authentic architecture</i>	60
<i>Figure 16 : some churches built by Paul Dequeker from 1962 to 1985, source, « Eglises tropicales »</i>	63
<i>Figure 17: some churches built by Paul Dequeker from 1962 to 1985, source, « Eglises tropicales »</i>	64
<i>Figure 18 : 4 churches in the archidiocèse of Kananga, built by Paul Dequeker between 1965 and 1968, photo by Victor Bay</i>	64
<i>Figure 19 : some churches built by Paul Dequeker from 1962 to 1985, source, "Eglises tropicales</i>	65
<i>Figure 20: quelques églises construction de Paul Dequeker de 1962 à 1985, source, « Eglises tropicales »</i>	66
<i>Figure 21 : some churches built by Paul Dequeker from 1962 to 1985, source, « Eglises tropicales »</i>	67



Figure 22 : some churches built by Paul Dequeker from 1962 to 1985, source, « Eglises tropicales ».....	68
Figure 23: some churches built by Paul Dequeker from 1962 to 1985, source, « Eglises tropicales ».....	69
Figure 24 : drawing of ebandza, source, armouche 1989.....	71
Figure 25 masque pende du Bandundu (RD Congo) attribué au chef Pumbu en bois et raffia, source : hamillgallery.com.....	71
Figure 26 : Pende Pumbu Chiefs Mask, DRC source : hamillgallery.com	72
Figure 27 : Hat of the King of the Bakuba of Kasai, the main motifs used by Paul Dequeker for his Kasai churches can be seen	72
Figure 28 : King of the Bakuba tribe, Kasai province, Belgian Congo, at the time of his coronation photo Eliot Elisofon	73
Figure 29 Tente nègre du Congo et du Cameroun".1929 , on peut y voir les objets chrétiens mais dans une utilisations traditionnelle. source, Chronik und Ansichtskarten von Köln Riehl.2013.....	73
Figure 30 : The former house of the Mwami Sultan of Rwanda in Nyanza, Belgian Congo, photo Pierre Gallez, 1945	74
figure 31 : a hut with barza, covered outdoor circulation, (wauters, 1892, p.10-11).....	77
figure 32 : the barza which also serves as a kitchen.....	77
Figure 33 : one of the two prefabricated wooden houses of the former baptist missionary society (bms) station, source: kinshasa the end now	78
Figure 34 : former residence of the governor general of the belgian congo, in boma . photo: p. clement 2008.....	78
Figure 35 The cathedral of Bobo-Dioulasso.....	80
Figure 36 : Inside the cathedral, you can see the African motifs.	80
Figure 37 Carving of the testament (old and new) on the seats, in styles that artistically blend traditional and contemporary styles.	81
Figure 38 : Chapel of the Resurrection, University of Ibadan, Nigeria. source: www.willis-organs.com	82
Figure 39 Scheutist father on tour in the apostolic vicariate of Leopoldville around 1920. Source: Chaumot	85
Figure 40 : Kwame Nkrumah (President of Ghana, 1960-1966), Nkoroful, Gold Coast 1972, source: Krumahà High School.	90
Figure 41 : Cardinal Malula, photo Keystone, source, Au delà de l'« affaire Malula » ; by Philippe Decraene, 1972,	91
Figure 42 Mass celebrant's seat at Notre Dame de Katoka church in Kananga, photo by the author, 2018.....	92
Figure 43 : on the two photos one can notice on the one hand, the western dress of the nuns and on the other hand the nuns dressed in "malulettes"; dress adapted to the local culture.....	93
Figure 44: dressing of celebrants and decoration of liturgical ornaments with traditional motifs, photo: mn archive.....	95
Figure 45: LAST PICTURE OF PAUL DEQUEKER'S SMILE, SOURCE KADOC.....	101
figure 46 : at more than 63 years old, paul dequeker does not hesitate to retrain by learning, source: kadoc	103



Figure 47 : paul dequeker does not consider himself a priest but a missionary in a congregation of missionaries; he refuses to wear the cassock. source: kathleen vervaeke ,1992 "de missionaris en de architectuur: paul dequeker, c.i.c.m."	107
figure 48: paul dequeker worked with equally determined collaborators, as in this photo, source, architectuur en missie in afrika,	110
figure 49: Paul Dequeker during his visit to china, source kadoc.....	110
figure 50 : paul dequeker also carries out the tropical project with the population, source: kathleen vervaeke ,1992 "de missionaris en de architectuur: paul dequeker, c.i.c.m."	111
Figure 51: Paul Dequeker has to face economic obstacles, distances and climatic constraints, he will travel through the Republic of Zaire despite difficult travel conditions. source : kadoc.....	112
Figure 52 : Paul Dequeker crossing a makeshift bridge in the middle of a tropical jungle. source : kathleen vervaeke ,1992 "de missionaris en de architectuur: paul dequeker, c.i.c.m."	113
Figure 53: map of africa with the countries in which paul dequeker built during his mission in africa. drawing by victor bay 2018	114
Figure 54: number of churches built by Paul Dequeker, by province of the DRC, drawing by Victor Bay	115
figure 55: paul dequeker's productivity is very high, this graph represents the construction curve of religious buildings in the drc from 1961 to 2009, drawing by victor bay 2018.....	116
figure 56 : scolastica nkongolo, first project built in kinshasa (1959), photo Johan Lagae, source kadoc	117
figure 57 : in scolastica nkongolo, Paul Dequeker integrates the project into its site while addressing the climate need. photo Johan Lagae, source kadoc....	117
figure 58: saint phillip of kinshasa (1968), source tropical churches	118
Figure 59: cathedral notre dame of katoka (1965), photo by victor bay, 2018	118
Figure 60: Eglise SAINT PHILIPPE KINSHASA (1968), source : eglises tropicales	118
figure 61: this church is built in the middle of the village, according to the socio-economic factors of the place, saint luc de kananga, photo by victor bay 2018	120
figure 62: in saint luc of kananga, paul dequeker builds with the economic constraints of the time and place, photos by victor bay, 2018	122
figure 63: some non-religious buildings built by Paul Dequeker, source: architecture tropicale.....	125
Figure 64 : ISP Bukavu built in 1968 by Paul Dequeker, source : radio okapi..	127
Figure 65 : the American International School (TASOK) which he built in 1975 source : architectuur en missie in afrika.	128
figure 66: CBFC, administrative building of the protestant church in Congo, built by Paul Dequeker, source: tropical architecture	128
Figure 67: the Catholic University of Congo in Kinshasa - Limete 1979, source : beni lubero, 2010	129



<i>Figure 68 : the home for disadvantaged students of the Higher Educational Institute of Kinshasa-Gombe (1989)</i>	<i>130</i>
<i>Figure 69 : A "monganga" ; fetish doctor shows his merit to Father Baudin,Source: Fetichism and Fetich Worshipers, NY. 1885.....</i>	<i>133</i>
<i>figure 70 : a missionary priest who prepares the colony with the natives, source, marc piault, " afrique noire (culture et societe) - religions ", encyclopædia universalis</i>	<i>134</i>
<i>Figure 71: La Mission de Mpala aux bords du lac Tanganyika vers 1888, source : " Le royaume chrétien de Mpala : 1887 - 1893 ", in Souvenirs Historiques P. Jacques Casier.....</i>	<i>135</i>
<i>Figure 72: religious map of the Independent state of Congo, source, archives of paul Dequeker (kadoc).....</i>	<i>136</i>
<i>figure 73: 1. the sacred caravane composed by f. Huberlant, a. Gueluy, e. Cambier and a. de backer</i>	<i>137</i>
<i>figure 74: mikalayi mission of saint joseph in kasai. 1891, source: archives of paul dequeker in kadoc.....</i>	<i>137</i>
<i>figure 75: the small chapel of the scheutist station hospital in luluabourg, source archives of paul dequeker in kadoc</i>	<i>138</i>
<i>figure 76: saint joseph's church in mikalayi, source: pretredanslarue.blogspot.com 2014,</i>	<i>138</i>
<i>figure 77: in africa, the baobab is not just a tree, it represents divinity and it is also around it that the people listened to the wisdom of the elders. a baobab in boma, belgian congo.</i>	<i>139</i>
<i>figure 78: a rectangular hut serving as an altar for the priest (1927), considered as a temple of idols in the congo with fetishes in front. source :chroniknet.comcopyright 2016</i>	<i>140</i>
<i>Figure 79: Ruins of the Cathedral of St. Saviour built between 1560-1565 in the Kongo Kingdom, photo : César Esteves 2017.....</i>	<i>141</i>
<i>figure 80: first saint anna chapel in leopoldville (1908).....</i>	<i>142</i>
<i>figure 81: cathedral of lubumbashi photo: nick hobgood.....</i>	<i>143</i>
<i>Figure 82 : Saint Paul kinshasa, source, radio okapi, photo john Bompengo .</i>	<i>143</i>
<i>figure 83: saint anne's cathedral built around 1930 in leopoldville, source: ..</i>	<i>144</i>
<i>figure 84: cathedral of kisangani built in 1910, source,.....</i>	<i>144</i>
<i>Figure 85: Kisantu Cathedral,</i>	<i>145</i>
<i>Figure 86: Paroisse de Maboma, St-Jean-Baptiste, érigée en 1936 avec école primaire, école normale, internat pour élèves et pygmées. Photo Luanne Cadd, 2013.....</i>	<i>145</i>
<i>Figure 87: Cathédrale Notre-Dame du Congo,.....</i>	<i>146</i>
<i>Figure 88: CATHEDRAL OF KISANGANI BUILT IN 1910, SOURCE,Pierre Gallez :1955</i>	<i>146</i>
<i>figure 89: church of notre dame of fatima and church of sacre-coeur of kinshasa, anonymous source</i>	<i>147</i>
<i>figure 90: church of Notre Dame De la Sagesse, university of kinshasa (Lovanium), photos by roger cyr taken between 1960 and 1964</i>	<i>147</i>
<i>figure 91: saint sacrement church (1977) of Ngaliema in Kinshasa</i>	<i>148</i>



<i>figure 92: the cathedral of our lady of budjala 1967 is an example of what the faithful affectionately call dequeker style, source: eglises tropicales</i>	149
<i>figure 93 : the same language is used in the parish of saint adrien, 1967, kinshasa, source: eglises tropicales</i>	149
<i>figure 94 ; chapel of the nganda center in kinshasa, an example of modernism applied by paul dequeker: photo: paul dequeker, source kadoc</i>	151
<i>Figure 95 : eglise saint Paul de Lubumbashi 1975, photo : Johan Lagae</i>	151
<i>Figure 96: saint luc church in kananga, photo by victor bay 2018</i>	152
<i>figure 97: occupation of the city of kinshasa before 1937; it is also in this area that the first churches were established. drawing by victor bay</i>	153
<i>Figure 98: the Sims Chapel (1891) : source, Kinshasa the And Now</i>	154
<i>figure 99: occupation of the city of kinshasa before 1955; it is also in this area that the first churches were established. drawing by victor bay</i>	155
<i>figure 100: the church of saint françois de sales built in 1937 in kintambo,, source; kinshasa the and now</i>	155
<i>Figure 101: occupation of the city of Kinshasa before 1988; it is also in this area that the first churches were established. drawing by Victor Bay</i>	156
<i>figure 102: occupation of the city of kinshasa before 1988 ; it is also in this area that the first churches were established. drawing by victor bay</i>	158
<i>Figure 103: saint antoine 1 (1962) and saint luc (1963) are two examples that mark paul dequeker's willingness to imitate the local traditions for these first churches in kinshasa,</i>	161
<i>figure 104: PAUL DEQUEKER was inspired by african architecture in his attempt to update traditional forms in modern architecture source: les eglises tropicales; congo illustre 1895, henvaux, 1951,</i>	162
<i>figure 107: the liturgical furnishings are also composed on the imitation of traditional furnishings. photo by Victor Bay 2018</i>	163
<i>figure 105: wooden chest with original igbo motifs from nigeria, source: brooklynmuseum.org 2004</i>	163
<i>Figure 106: bamileke stool from cameroon, source: collections.mfa.org</i>	163
<i>figure 108: liturgical arrangements at saint Paul of Kinshasa, source : églises tropicales</i>	164
<i>Figure 109: the motifs and the wall paintings of the church Saint Pierre de Demba in Kasai in 1969, source : eglises tropicales</i>	164
<i>figure 110: altar and celebrant's seat at notre dame of katoka in kasai, photo by victor bay 2018</i>	164
<i>Figure 111: Arrangement of the congregation around the altar. Circumstances, sketch by Rudolf Schwarz</i>	167
<i>Figure 112: Sketch by Emil Steffann and Rudolf Scharz - from : Gisbert Hulsumann (ed.), Emil Steffann, Akademie der Architektenkammer Nordrhein - Westfalen und Deutsche Unesco Kommission, Bonn 1984, p. 54.</i>	167
<i>Figure 113: Rudolf Schwarz Church of Sta Anna, Düren, source : strasse-der-moderne.de</i>	168
<i>Figure 114: Plan of the church of St. Hedwig, Köln-Höhenhaus (1966) source: Neue Kirchen im Erzbistum Koln 1955 - 1995; editor: Dr. Karl Josef Bollenbeck ;</i>	169



<i>figure 115: église paroissiale st. laurentius, a cologne-lindenthal (1961), source : chiesa oggi architettura</i>	<i>169</i>
<i>Figure 116: Plan of St. Elisabeth's in Oplanden-Leverkusen, (1957) - source: New Churches of the Archdiocese of Cologne, Library of the Convent of the Dominican Fathers, (druck: J. P. Bachemkg in Köln), Bologna 1960, p. 35</i>	<i>169</i>
<i>figure 117: the question of the arrangement of the assembly remains very important in tropical church projects as shown in this drawing by paul dequeker for the sacré-cœur church in Bujumbura, source; Paul Dequeker archives, kadoc</i>	<i>170</i>
<i>figure 118: to justify his belonging to modernism, paul dequeker built churches in congo inspired by european churches, like the chapel in the nganda centre which is practically inspired by the otaniemi chapel of h. siren.....</i>	<i>171</i>
<i>figure 119 : otaniemi chapel by architect heikki siren on the helsinki technical university campus, photo: windfrid zakowoski.....</i>	<i>172</i>
<i>figure 120: Chapel of the nganda centre in Kinshasa by Paul Dequeker , source: eglises tropicales.....</i>	<i>172</i>
<i>Figure 121 : the Mitayana Pilgrim's Center Shine in Uganda, souce : thomortiz.tumblr.com.....</i>	<i>174</i>
<i>figure 122 : cemeteries and camps of afari nomads lie amidst lava flows partially buried in clay near the awash river delta in ethiopia. this photo was originally published in "a photographer's eye from the sky » :.....</i>	<i>176</i>
<i>figure 123: diffèrent forms of churches by Paul Dequeker, source: architecture tropicale.....</i>	<i>177</i>
<i>figure 124: 1. kalunga symbol of infinity</i>	<i>179</i>
<i>Figure 125: Christ-Roi churc (1961), source eglises tropicales.....</i>	<i>180</i>
<i>Figure 126: cathedral of bokungu (equateur, 1972).....</i>	<i>180</i>
<i>Figure 127: 1. les symboles d'origine ou de la loi, « mwanza kongolo » et « manyingu »</i>	<i>181</i>
<i>Figure 128; Eglise Bukasa (Mweneditu 1980), source,</i>	<i>182</i>
<i>figure 129: tokulamba church (kananga 1980), source: eglises tropicales.....</i>	<i>183</i>
<i>Figure 130: saint Kaggwa; kinshasa 1984, source : Eglises tropicales.....</i>	<i>183</i>
<i>Figure 131: Saint Gabriel kinshasa 1965, source, Eglises tropicales.....</i>	<i>185</i>
<i>figure 132: cathedrale saint vincent of luiza , 1969, source: eglises tropicales</i>	<i>185</i>
<i>Figure 133; Cathedral of goma 1974, source : Eglises tropicales</i>	<i>185</i>
<i>Figure 134: saint Pie X, kinshasa, 1965, source eglises tropicales.....</i>	<i>186</i>
<i>Figure 135: Mashala 1979, source Eglises tropicales</i>	<i>187</i>
<i>Figure 136: saint mathias of bumba, 1964, source: architecture tropicale ...</i>	<i>194</i>
<i>figure 137: saint laurant kinshasa, 1974, source eglises tropicales.....</i>	<i>194</i>
<i>figure 138: notre dame of budjala 1967, equateur, source: eglises tropicales</i>	<i>195</i>
<i>figure 139: saint paul of bandundu, 1968, source: eglises tropicales.....</i>	<i>195</i>
<i>Figure 140: saint boniface, 1965, kananga, source, architecture tropicale....</i>	<i>195</i>
<i>figure 141: air movement around the building, source, tropical architecture</i>	<i>196</i>
<i>figure 142: implementation of the foundations by paul dequeker, source architecture tropicale</i>	<i>198</i>



<i>figure 143: advantage of the truss without ceiling. paul dequeker believes that in the tropics the roof space should be exploited by using exposed trusses, source, tropical architecture</i>	199
<i>figure 144: paul dequeker developed several framework systems, in wood, metal and concrete to optimise the roof. he was also inspired by architects such as h. siren, sources: architecture tropicale</i>	200
<i>Figure 145: the claustras in facade, source : architecture tropicale</i>	201
<i>Figure 146: details and execution of the claustras in bujumbura (sacre-coeur church), source: archives of paul dequeker, kadoc</i>	202
<i>Figure 147: sacré-cœur construction site in bujumbura, photo: paul dequeker, source: kadoc</i>	205
<i>figure 148: saint Luc Church in Kananga, built in a very poor village, photo: Victor Bay 2018</i>	206
<i>figure 149: paul dequeker uses local materials, the socio-economic conditions are not an obstacle, but on the contrary a motivation.</i>	207
<i>figure 150: eglise kambote ; in the heart of the village at sunset, the church reveals three circles symbolising the unity of three beings in one god, photo by victor bay, 2017.</i>	207
<i>figure 151: liturgical furnishings proposed by paul dequeker, source, architecture tropicale</i>	209
<i>Figure 152: cathedral of kisangani</i>	212
<i>figure 153: this could be the construction of the cathedral square.</i>	213
<i>Figure 154: Kisangani cathédral before and after the transformation by paul dequeker,</i>	215
<i>Figure 155current chris-roi church entrance, photo: victor bay 2021</i>	220
<i>Figure 156: christ the king church, source: tropical churches</i>	221
<i>Figure 157 : christ roi 1961, source, archives de Paul Dequeker ,kadoc 2018</i>	222
<i>Figure 158: . kalunga symbol of infinity source: african arts, signes et symboles, nzuji f. 2000</i>	224
<i>Figure 159 : watercolour by Paul Dequeker for the church of Christ the King</i>	224
<i>Figure 160: christ-roi development allows full participation of the christian assembly, source, tropical churches</i>	225
<i>figure 161: ashendo symbol of reshaped nature, source: nzuji f. african arts, signs and symbols</i>	226
<i>Figure 162 : interior of the church, drawing by Victor Bay</i>	226
<i>Figure 163 : Church of Bokungu almost identical to christ-roi of Kinshasa, source, eglises tropicales.</i>	227
<i>figure 164: emprunt de l'auvent royal de la residence du mwami (roi) de nyanza (drc),</i>	227
<i>Figure 165 : THE CURRENT FAÇADE OF CHRIST-ROI, PHOTO BY Viector Bay 2021</i>	228
<i>figure 166: illustration of the long-span frame system developed by paul dequeker, source: architecture tropicale</i>	229
<i>Figure 167: the look of the long-span truss that also serves as a ceiling, photo: Victor Bay 2021</i>	229
<i>Figure 168: a view of Christ the King Church, photo by Victor Bay 2021</i>	230



<i>Figure 169 : plan of christ-roi, drawing by victor bay</i>	231
<i>Figure 170: PERSPECTIVE OF THE CHURCH, DRAWING BY VICTOR BAY</i>	231
<i>Figure 171: facades and sections of the christ-roi church, drawing by victor bay</i>	232
<i>Figure 172: technical details of the church of saint antoine 1</i>	233
<i>Figure 173, St Anthony's Church 1, currently in disrepair</i>	236
<i>Figure 174, eglise saint antoine 1, actuellement en delabrement</i>	236
<i>Figure 175: Saint Antoine(1962), photo by Paul Dequeker, source Kadoc</i>	237
<i>Figure 176: 3D simulation of the ensemble, drawing by Victor Bay</i>	239
<i>figure 177: Drawings of the original morphology of saint antoine drawing by victor bay</i>	240
<i>figure 178: drawing of saint antoine 1 which represents the basic motifs of the roof as a sign of remodeled nature (source: faïk nzuji, 1996, symbol 198)</i>	241
<i>figure 179: the ceiling of the church which ends with the oculus is inspired by the leopard's mouth (source: faïk, 1996, symbol 202).....</i>	242
<i>figure 180 : saint Antoine 1 (1962), photo by Victor bay 2022</i>	242
<i>figure 181: although used as a parish hall, the old church is today an abandoned heritage, photo victor bay</i>	243
<i>figure 182: the first church of saint antoine could collapse in the following years,</i>	243
<i>Figure 183: the roof can be seen completely deteriorated. photo, victor bay</i>	244
<i>Figure 184: vue en plan et volume de l'église Saint Antoine 1</i>	245
<i>Figure 185: façade et coupe schématique de saint Antoine, dessin de Victor Bay</i>	246
<i>Figure 186: détails des matériaux, Eglise Saint Luc, dessin de Victor Bay</i>	247
<i>Figure 187: Saint Luc, Photo de Victor Bay 2018</i>	249
<i>Figure 188: Church of Saint Luke (1963), photo Paul Dequeker, source Kadoc</i>	250
<i>Figure 189: Probable evolution of the design of the church of Saint Luke, drawing by Victor Bay</i>	252
<i>Figure 190: North and South facades of Saint Luc, drawing by Victor Bay</i>	252
<i>Figure 191: Inside Saint Luke's, natural light penetrates through the claustras ; photo by Victor Bay (2019)</i>	253
<i>Figure 192: bird's eye view of the 3 rhombuses formed by the slopes of the roof. Drawing by Victor Bay</i>	253
<i>Figure 193: la toiture de Saint Luc impressionne par sa geometrie</i>	254
<i>Figure 194: perspective of Saint Luc, drawing by Victor Bay</i>	255
<i>Figure 195: coupes et details de saint Luc, Dessin de Victor Bay</i>	258
<i>Figure 196: détails de construction de Saint Luc, dessin de Victor Bay</i>	259
<i>Figure 197: Saint Augustin, on voit ce carrelage qui dénature l'esprit originel du projet de Paul Dequeker Photo de Victor Bay 2021</i>	262
<i>Figure 198: Completion of the construction of Saint Augustin, photo Paul Dequeker, source Kadoc</i>	263
<i>Figure 199: drawings of the execution project by Paul Dequeker, source Kadoc</i>	265



<i>Figure 200: north and south facades of Saint Augustin; photo by Paul Dequeker, source Kadoc.....</i>	<i>265</i>
<i>Figure 201: intérieur de Saint Augustin, photo : Paul Dequeker, source: Architecture tropicale</i>	<i>266</i>
<i>figure 202: light and ventilation are part of saint augustine's assets. photo by victor bay 2021</i>	<i>268</i>
<i>Figure 203: THE SCAFFOLDING OF SAINT AUGUSTIN REMAINS ONE OF THE MOST FAMOUS PICTURES OF PAUL DEQUEKER'S BUILDING SITES.....</i>	<i>268</i>
<i>Figure 204: vue en plan de Saint Augustin, dessin de Victor Bay.....</i>	<i>269</i>
<i>Figure 205: perspective de Saint Augustin, dessin de Victor Bay.....</i>	<i>269</i>
<i>Figure 206: façades de saint augustin, dessin de Victor Bay</i>	<i>270</i>
<i>figure 207: section and details of saint augustine, drawing by victor bay.....</i>	<i>271</i>
<i>figure 208: porticoes and concrete framework and roofing of saint augustin, design by victor bay</i>	<i>272</i>
<i>Figure 209: saint Antoine 2, photo Victor Bay 2021</i>	<i>274</i>
<i>Figure 210: Saint Antoine 2, Photo Paul Dequeker, source Kadoc 2018</i>	<i>275</i>
<i>Figure 211: interior of St Anthony's Church 2 (1982) ; photo by Victor Bay 2021</i>	<i>276</i>
<i>Figure 212: saint Antoine 2, the original state of the building can be seen, photos by paul dequeker, source: architecture tropicale.....</i>	<i>278</i>
<i>Figure 213: current view of the exterior and interior of saint antoine 2, photo by victor bay 2021.....</i>	<i>279</i>
<i>Figure 214: on this photo the church of saint Antoine 2 keeps its original configuration, proof that it adapts to its environment. photos by Victor Bay</i>	<i>280</i>
<i>Figure 215: plan view of the church of saint antoine 2, drawing by victor bay</i>	<i>281</i>
<i>Figure 216: perspectives de Saint Antoine 2, Dessin de Victor Bay 2021.....</i>	<i>281</i>
<i>Figure 217: façades de l'église saint Antoine 2, dessin de Victor Bay.....</i>	<i>282</i>
<i>figure 218:.....</i>	<i>283</i>
<i>Figure 219: photo Saint Raphael 2022, photo Victor Bay</i>	<i>285</i>
<i>Figure 220: Saint Raphael 1992, photo Paul Dequeker, source Kadoc</i>	<i>286</i>
<i>Figure 221: top ventilation transom windows also allowing natural lighting, photo by Victor Bay, 2022.....</i>	<i>288</i>
<i>Figure 222 : Interior of Saint Raphael's Church, the exaltation of tropical light, Photo by Victor Bay, 2022.....</i>	<i>289</i>
<i>Figure 223: Contrary to the original idea of the architect Paul Dequeker, who used unpainted walls, the walls are now painted. Photo: Victor Bay 2022</i>	<i>290</i>
<i>Figure 224: plan view of the Saint Raphael church, drawing by Victor Bay....</i>	<i>291</i>
<i>Figure 225: perspective of the church of Saint Raphael, drawing by Victor Bay</i>	<i>291</i>
<i>Figure 226 : façades of Saint Raphael (1988), DESIGN : Victor Bay.....</i>	<i>292</i>
<i>Figure 227: détails constructifs de Saint Raphael, Dessin de Victor Bay 2021</i>	<i>293</i>



INTRODUCTION





LE DU CENTRE NGANDA (1965), SOURCE, EGLISES TROPICALES, 1984, P.39

After 30 years of experience in Zaire (Democratic Republic of Congo) Paul Dequeker has become a leading practitioner of tropical architecture whose works and tangible examples on the ground define the techniques developed by him and supported by the strength and skills of local people. The particularity of the architect on mission, Paul Dequeker, is the fact that he brought a new way of practicing architecture in the tropics and more specifically in the Congo, as can be seen through more than 1235 projects realized between the 1960s and the 1990s.

This thesis explains the motivations of Paul Dequeker generated by his post-graduate degree in tropical architecture from the *Associated School of Architecture* in London from which he derives the basic philosophy of architecture in the tropics, which consists of eliminating the heat that is a problem in the building, matching the architecture to the way of life, and making a judicious choice of materials used, which, according to him, should as far as possible be based on locally available raw materials. At the same time, he was concerned with finding the simplest and most advantageous construction methods, without compromising the aesthetic value of the work (Bosteels, 2018)

In 1984 Professor Mudiji Malamba Gilombe presents in his book «the tropical churches» the formal, cultural and evangelical plan, Paul Dequeker's work emphasizing the human values of the missionary architect to whom Cardinal Malula entrusts the mission of building churches in the Congo adapted to the socio-cultural realities of the time. Eight years later, in 1992, André De Herde, in his preface to the book «tropical architecture» apologizes for a scientific wealth of great craftsmanship produced by Paul Dequeker who, with Professor Kanene Mudimubadu explain the basic concepts of bioclimatic architecture and its practice in humid tropical Africa, especially in the Republic of Congo where this book is now considered the Bible of tropical architecture.



Many testimonies about the life of Paul Dequeker and his career as a missionary architect will affirm his greatness, following the example of Professor Han Verschure who considers Paul Dequeker as a great Belgian architect radiant with simplicity and clarity (VERSCHURE, 2014), and by Herbert Mathissen, who believes that Paul Dequeker is a bridge between tradition and modernity through his work (MATHISSEN H. 2014) as well as Johan Lagae, who said about Paul Dequeker's architecture that he immediately understood that it was an architectural heritage that deserved attention, not only because of its remarkable size, but also for its special attempt to create in the specific context of the Congo, an architecture adapted to the climate and the very precarious economic situation (LAGAE, 2014)

This thesis focuses on Paul's attempt to create authentic architecture in the Congo. It is therefore in line with the thought of Cardinal Malula who describes Paul Dequeker as a great master of the art of building and father of the tropical churches (MALULA, 1984) For it marks the step and methodical study of the architectural typology of churches built by him between 1960 and 1988 and justifies the claim that Paul Dequeker is the "Father of the Tropical Churches of Africa" (MALULA, 1984).

1. Objective of the thesis

In an attempt to understand the deep motivations that led the architect Paul Dequeker to voluntarily depart from the so-called "white" styles in order to design tropical churches, this thesis demonstrates the relevance of a conceptual approach developed by Paul Dequeker by defining the characteristics of a tropical architecture through the analysis of six churches built by him in Kinshasa.

The aim of this thesis is therefore to write an authentic grammar of tropical architecture.



2. Why study churches ?

Since the origins of architecture, churches have defined civilizational developments. In this thesis, churches are taken as samples to convey through their forms radical responses from both transcendental and functional perspectives. Churches thus reveal information about the visible and invisible through their forms that other equipment cannot express.

The particular choice made in this thesis to analyze tropical churches is mainly induced by the quest to understand the influence of spiritual requirements in a building in a hot zone in addition to the climatic, economic and social requirements to accommodate human actions whether to live, study, work, entertain or pray, as Paul Dequeker states, *"We are looking for an architecture more adapted to deep aspirations, more viable and more alive, favoring communal encounters of man and climate in the heart of the church."* (DEQUEKER, Tropical Architecture, 1992).

It would not be complete to study in this thesis an architecture other than that of the churches because the question of updating the forms would have required buildings that did not exist in traditional Africa, such as schools, hospitals, or administrative buildings, and the only possibility of doing local would be to respect the tropical climate. But with the design of a church, it is possible to give the impression of not worshipping in a foreign place, a foreign god in a foreign way. Paul Dequeker had the time to observe that even as a Christian, the Congolese worship their God in a different way. His way of meeting with the other faithful is different. This God, whom we would like to believe is the same for all peoples, should accept some differences in the way all peoples worship in places designed for this purpose. (Tshiunza, 2021).

This thesis finally emerges the spiritual dimension in a very incisive way, because only sacred architecture defines the particular



character of the obvious relationship between man, the building and the divine being.

3. Research issues

Since African spirituality is perceived very differently from that of the West, it has proved to be complex and difficult for constructions not adapted to local habits to impose themselves and to be adopted by indigenous peoples. Africa already knows a way of praying and building that can be observed through the huts and traditional huts that will face the arrival of the colonizer because a new way of building in the tropics will be imposed, this is illustrated by the metal constructions on stilts with the British technique for nearly two centuries.

After the Second World War, the conception of tropical architecture underwent a great evolution thanks to the export of modernism from Europe. Better developed than colonial architecture, which is characterized only by constructive techniques adapted to the tropical climate for the survival of the colonists, modernism brings to Africa a new approach that takes into account the socio-economic parameters following the example of the projects of Maxwell Fry and Jane Drew, who present their architecture above all as a technique and a neutral discourse, disconnected from previous experiences of colonialism. (Galli, 2016)

In the 1950s, as the Belgian colonial regime came to an end in the independent state of Congo, the Congolese Catholic Church experienced an emancipation. While many Belgian colonists had to return to Belgium, the missionaries did not have to return to continue their evangelization because the missions were still functioning well. The political change of the EIC towards independence will reduce the aid coming from external collections (West) and several natives will be baptized and consecrated to ensure the local missionary succession. At the same time, the concern to build new churches was growing and it was also at this



particularly difficult time that the Catholic Church needed a religious architecture that responded to the financial difficulties and the adaptation of the architecture of new churches to the socio-cultural context of the beneficiary communities.

In the 1960s, contrary to the ambition to build emblematic buildings in tropical Africa, Paul Dequeker believes that Africa needs architecture strongly linked to local traditions and the needs of the time. (MUDIJI Malamba and Paul Dequeker, 1984) He thus proposes a more sober and pragmatic vision of construction.

Paul Dequeker's architecture is distinguished from other types by its austere character justified by the modest means and low costs of the work. Paul uses local people in his projects without the need for specialized expertise. He is thus considered the precursor of "building with the community" that many now see as the future of architecture in Africa. (LAGAE, 2014) Since it is not clear that this approach is decisive and leads to better results, the fundamental question of this thesis is *"How was the question of authentic traditional architecture confronted with inculturation and changing construction techniques addressed by architect Paul Dequeker in the tropical zone?"*

Three sub-questions are related to this fundamental question:

- *Is there such a thing as authentic African architecture?*
- *Why did Paul Dequeker not build in the tropics like all other missionaries and architects?*
- *Was Paul Dequeker the inventor of this way of doing things or did he have particular influences?*

4. Assumptions

To sketch answers to this question, the research conducted through this thesis shows that Paul Dequeker does not invent a style, but let's himself be influenced by cultures (arts and traditions)



Local and the achievements of the great architects of modernism by adding a personal dimension; the spirit of poverty, modesty and sobriety.

Paul Dequeker is for tropical Africa what Rudolf Schwarz or Emil Steffann would be for the Church in Europe! Indeed, his architectural production was mainly guided by the motivations of innovative architects and pioneers of modern churches.

One of Paul Dequeker's major influences was his time at the London School of Architecture, where he met Maxwell Fry as a teacher and did not hesitate to consider him a model. Based on the constructive techniques presented and proposed by the latter with Jane Drew in their manual «Tropical Architecture in the humid zones» published in 1956, Paul Dequeker devotes much of his work to contextualizing these techniques to produce his architecture. In 1985, he confirmed a set of processes that will be listed in his famous architecture manual entitled "Tropical Architecture" published in 1992, which puts in theory all the practices carried out in his projects in the tropics, mainly in the Democratic Republic of Congo (then Republic of Zaire)

Paul Dequeker understood that it is not enough just to transpose the architecture of the past into a contemporary language, but much better, it is necessary to integrate into architecture the social and technological developments of the time (MUDIJI Malamba and Paul Dequeker, 1984), this hypothesis reveals its refusal not to copy everything.

5. Thesis

This thesis justifies on the basis of an observational and intuitive analysis the reasons that led Paul Dequeker to express himself differently. It thus affirms the relevance of his architecture, which makes him the inventor of tropical churches in Africa.



6. Methodological approach

Because of the historical nature of this research, it has not been useful to carry out a survey questionnaire which would give no better opinion than the personal opinion of the author of the tropical churches of Africa. Historical research as a method is a very general and dialectical approach made of going back and forth from the archive to interpretation in order to create theoretical knowledge or to arrive at teaching statements taking history as evidence (Lemarchand & Nikitin, 2014, (Tshiunza, 2021)). This research therefore focuses primarily on archival documents and life stories. The use of the cartography, the images and the photographs of the architect brother's achievements constituted a useful and important documentary support to develop the necessary data of this research. In addition to the graphical data obtained from the results of site visits and building surveys, this thesis offers additional information and the current state of play of Paul Dequeker's achievements.

Paul Dequeker's visit to the churches and their structural analysis made it possible to verify the durability of the structures and the effectiveness of the techniques he developed to carry out his work. This field research also led to answers that allowed to develop this thesis. In this same register of field visits, it was possible to meet people who knew and/or lived with Brother Dequeker and to obtain life stories.

The methods used to read each of Paul Dequeker's churches were guided by the analysis of Faik Nzujji's interpretations of African signs and symbols in his textbook "Arts africains, signes et symboles" in which the author justifies the use of certain forms and symbols in African art. This architectural reading was also inspired by the texts of Bruno Zevi³, who in his textbook "Learning to see

³ Bruno Zevi begins his book by lamenting the difficulty of exhibiting a building as opposed to a painting or a sculpture. Generally, buildings are historically presented from



architecture" presents a very effective descriptive approach to describing architecture. In the specific case of this research, "reading" Paul Dequeker's buildings consisted first of defining its historical context, its urban and social situation, and then the technical aspects.

The data collection in Leuven, Belgium, at the Private Archives of Paul Dequeker provided little known information about his career and life, and also identified unpublished texts and unpublished historical data about Paul Dequeker's life. This documentary consultation constituted the largest research base for developing this study including the testimonies collected in the book 'Architectuur en missie in afrika' published in 2014 by the Kadoc Centre in Leuven which keeps all the archives of the architect Frère. The library of the IUAV, with its rich and diverse collection of works, has completed the sources of documentation useful for this thesis. In order to deepen the arguments and to propose a true architectural grammar of the methods and processes developed by Paul Dequeker, this thesis proceeded to an in-depth architectural analysis by redrawing six projects of Paul Dequeker in order to translate what photography cannot clarify.

From these six examples of tropical churches built by Paul Dequeker, the thesis emerges the tools of an architectural grammar resulting from a thorough research of the techniques and methods implemented by the missionary architect. This in-depth study also identified the main features of a particular way of designing architecture in the tropics.

7. Difficulties encountered

Researching the career and production of an architect with over 1,000 projects scattered over an average area of 2,345,410 km² is a very laborious task.

the outside, by tourist guides and not by architects! Indeed, "if we show architecture, we must first find a clear method that defines its essence.



The greatest difficulties encountered in this work are mainly related to the preservation of the archives and the material heritage left by Paul Dequeker; with the exception of the documents preserved in the archives of Paul Dequeker in Leuven (Kadoc), access to other documents was not possible due to poor preservation or disappearance of documents. Logistical difficulties have also made research more difficult; Paul having built for 30 years in more than 20 cities of a country 80 times larger than Belgium, going to meet the work is an almost perilous mission, from north to south, from east to west, The modes of travel were very varied and sometimes very dangerous.

In the urban context, some administrative difficulties did not allow a thorough visit to the churches built by Paul Dequeker, but beyond all these difficulties, the relentless desire to seek and find the answers allowed this thesis to succeed.

8. Inventory

After the 1990s, several neighborhoods of the extension not urbanized by the colonial authority were born and new churches were born. From the 1995's, most of these new churches will no longer be built according to the logic of religious tropicalism because the architects are engaged in a type of construction that mixes styles. The architecture of the churches of Kinshasa loses its tropical elegance to embrace styles that have not yet been elucidated! In addition to this morphological evolution climatic factors, In the worst case, we see the transformation and even the destruction of the churches built by Paul Dequeker after the example of Saint Luke of Ngaliema, Saint Eloi of Barumbu and soon Christ King of Kasa-Vubu, (figures)

The site visits allowed us to identify some cases of deterioration and transformations of the churches of Paul Dequeker. The churches visited do not show, for the most part, structural deterioration, but rather an aging of the project components or the



effects of transformation. Indeed, due to the demographic growth of the various places where churches are located, users have decided to expand them without taking into account the initial spirit of the project, like the church of the parish of Saint Luc de Kinshasa (My campaign) which is now (2022) being transformed to contain double its initial capacity as well as that of Saint Augustin de Kinshasa who underwent an inappropriate renovation of the facade.

9. The state of the art

9.1. Publications on the work of Paul DEQUEKER

In 1984, Professor Mudiji Malamba Gilombe in "tropical churches" attempted to publish a biography of Paul DEQUEKER, but his approach was limited to a brief description of the churches and the architect's thinking. However, it will be remembered from this work that the highlight of Paul DEQUEKER's architecture in the face of urban projects of tropical modernism in Congo is the particular character of these achievements which make him the master of a way of doing which the borrowing remains very visible in more than 200 religious' buildings in Central Africa.



FIGURE 5 : COVER OF THE BOOK "EGLISES TROPICALES" PUBLISHED IN 1984.



In 1990 in the magazine "Vlaanderen. Jaargang" number 39, Kathleen Vervaeke wrote an article entitled "De missionaris en de architectuur: Paul Dequeker, c.i.c.m." in which he evoked the impressive mission of the Belgian architect in a country in search of its own identity. After a biographical description of Paul Dequeker, the author traces the perilous path of the missionary architect, which resulted in the construction of more than 250 religious buildings characterised by simplicity and sobriety. Not hesitating to judge this simplicity as an element of grandeur expressed by the pure and harmonious forms that require neither decoration nor ornamentation, Kathleen Vervaeke finally acknowledges the merits of the missionary architect who devoted his mission to giving the local populations a traditional identity translated into modern architecture. This article remains one of the most explicit about Paul Dequeker's mission in Congo.



FIGURE 6 : COVER OF THE MAGAZINE VLAANDEREN. JAARGANG" NUMBER 39, IN WHICH KATHLEEN VERVAEKE PUBLISHED IN 1992 "DE MISSIONARIS EN DE ARCHITECTUUR: PAUL DEQUEKER, C.I.C.M."

In 1992, in «tropical architecture», Professor Kanene Mudimubadu with Paul Dequeker highlights the conclusions of theories on sociological and climatic research that lead to an architectural grammar that links 20th century technology to the particular conditions of the region, materials and techniques available on a



human scale and to a climatic and geological discipline. By presenting a large bank of images, plans and achievements of the architect Frère, this work does not however address a particular study on Paul Dequeker, but the interest of putting into practice the foundations of tropical architecture in order to realize successful projects. Indeed, until the end of his life, Paul Dequeker remains concerned to pass on a useful legacy to science and especially to future generations. In his letter to Professor Kanene, concerning the edition of Volume 2 of the book "Tropical Architecture", he says so well, "the publication of your second edition book will be more useful to young architects than a medal." (Dequeker, 1995)

Divided into six separate booklets, "Tropical Architecture" is a manual that presents the coherence and simplicity of Paul Dequeker's work, The main objective of the project is to demonstrate that African cities have adopted foreign urban standards and architecture that should never have developed in this way if planners and architects had listened to the natural environment and respected the cultural heritage.



FIGURE 7, COVER OF THE BOOK « L'ARCHITECTURE TROPICALE »,1992

After his visit to Kinshasa in 1980, Pope John Paul II received a photo album of churches built by Paul Dequeker over the past 20 years. These photos were published in 1984 in the book "Tropical Churches" presented by Prof. Dr. Mudiji Malamba Gilombe with a preface by Cardinal Malula, Archbishop of Kinshasa. In 1993, Brother Paul Dequeker returned to Belgium (Leuven) where he entrusted the Kadoc (Centre for Documentation and Research on



Religion, Culture and Society, KU Leuven) Where in 2010 more than 3,000 photos of buildings and plans of his achievements had aroused in 2012 his sister Maria and his brothers Luc and Jan, the idea of making an album of his works, but the idea of an album seems insufficient to pay tribute to this great man. After an exhibition in Belgium dedicated to the work of Paul DEQUEKER, in collaboration with the Scheut congregation, the Kadoc operation publishes «Architectuur en missie in Afrika», edited by Professor Dr. Luc Dequeker a complete catalogue, A book that gives a broad overview of the work of Paul Dequeker and offers a critical analysis of Johan Lagae (University of Ghent) and several testimonies.

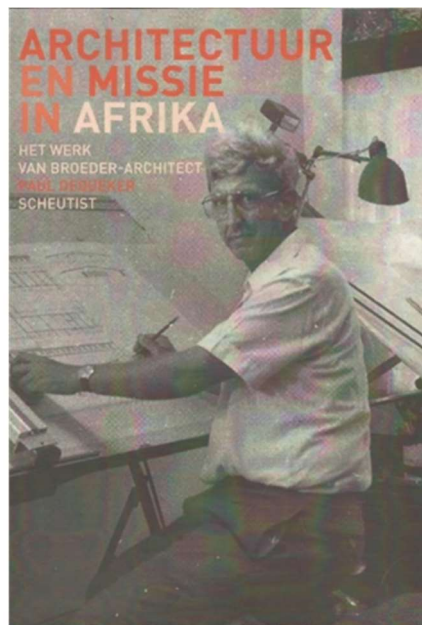


FIGURE 8 COVER OF THE BOOK « ARCHITECTUUR EN MISSIE IN AFRIKA », 2014

In the Journal *Élima* published in 1987 after the exhibition of Paul Dequeker's 30-year career, Tumba Kakwo brings exceptional revelations about the missionary brother who reveals his vision and his attachment to the spirit of poverty.

9.2. Manuals of tropical art and architecture

It will not be complete to talk about tropical architecture without consulting the famous manual «Tropical Architecture in the humid



zones» by Maxwell Fry and Jan Drew, the final edition published in 1964 will be the culmination of a very long and rich career of these two pioneers of modernism in the tropical zone. In contact with great names of modern architecture such as Walter Gropius and Le Corbusier during their career, this book, as mentioned above, highlights the fruit of a long professional and cultural career. It certainly does not deal with the work. This is both a danger and a stimulus to the definition of experimental methods as tools capable of linking the community and the environment Tropical. In contact with great names of modern architecture such as Walter Gropius and Le Corbusier during their career, this book, as mentioned above, highlights the fruit of a long professional and cultural career. It certainly does not deal with the work. This is both a danger and a stimulus to the definition of experimental methods as tools capable of linking the community and the environment.

Published in 2020, "L'architecture coloniale en République démocratique du Congo: vers la patrimonialisation d'un héritage ambivalent?" a handbook written by Yves Robert traces the history of Belgian architects of the 20th century and their works by dividing into three different periods the 50 years that occupied the great wave of intensive construction that took place in the former Belgian Congo, now the Democratic Republic of Congo (DRC). Spread over an equatorial territory almost 80 times the size of Belgium, the author relates the theatre of major urbanistic and architectural issues, which were influenced by the practice of urbanism and architecture in Belgium. This book is counted among the most important readings of tropical modernism in Kinshasa, but unfortunately does not allude to the work of Paul Dequeker, probably because the spirit of his writing is not to allude to religious constructions.

In 2000, Clementine M. Faik Nzuji devoted a great deal of attention to the interpretation of African signs and symbols in her textbook entitled "Arts africains, signes et symboles". Without wishing to assimilate his research to the present thesis, this book, which was



the first of its kind, elucidates several mysteries about the forms and adaptations of African symbols which also allowed us to interpret the conceptual logic of Paul Dequeker, particularly in the choice of motifs and forms of his churches. In the first part of this manual, the author shows, with the help of concrete examples, the importance of the elements that constitute the content of a culture, including language, symbols and ritual practices, in order to circumscribe the frameworks that allow us to understand the motivation of the symbols and facilitate their interpretation. "De missionaris en de architectuur: Paul Dequeker, c.i.c.m."

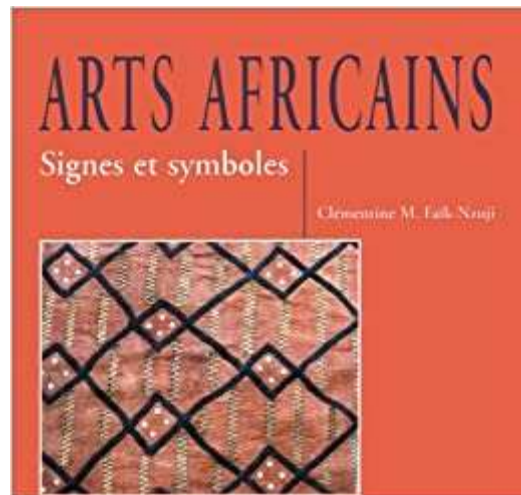


FIGURE 9: COVER OF THE BOOK « ARTS AFRICAINS, SIGNES ET SYMBOLES » 2000

The second part of this manual attests to the existence of a grammar of African graphic symbols and provides tools to access it. The third part proposes the analysis of objects and symbols in their natural context followed by a repertoire of signs with their meanings.

9.3. Why is Paul Dequeker writing the book "tropical architecture"?

Following the experiments of Maxwell Fry and Jane Drew in the tropics, Paul Dequeker gave priority in 1982 to sociological questions, local customs and habits of the Republic of Zaire in particular to poverty in order to write "tropical architecture" with



the collaboration of Professor Kanene Mudimubadu. This book will serve as an essential guide for future generations of architects. The fact that the "couple" of authors of this book is composed of an African living in the tropical zone who masters the local context and a European, missionary, called to build in Africa, the elaboration of this manual becomes de facto an answer to the sociological questions that constituted their conversations before being a technical concern. Indeed, in writing this book, Brother Dequeker immersed himself in the lives of local people to find solutions that meet their needs. As a missionary, Paul Dequeker traveled the cities to save souls and his achievements were mainly focused on sociological factors. In addition to the climate issue, he will focus on issues of poverty and local materials. This book therefore emphasizes the architectural specificity of the missionary work of Paul Dequeker and its own characteristics determining postcolonial architecture.

The rapid urbanization and the juxtaposition of an emerging Industry and Crafts related to the demands of a rigorous climate and the necessity of a society in transformation are also among the major challenges that push Brother Paul Dequeker to write the book architecture tropical. Through these six articles, he tries to express the new realities encountered on the spot. By using forms that, in his opinion, reconcile architecture and urban planning, it defines an architectural grammar that links 20th century technology with the particular conditions of the local climate, available materials and techniques translated on a human scale. After several years of experience in Africa, Paul Dequeker puts into practice several knowledges acquired to write this book which he considers as a shield to avoid mistakes of all kinds.

Pau Dequeker also believes that the "major works" are still not convincing for the Third World. In a controversial way, he considers that a publication written for a Third World population places this population in second position. He claims that people in the Third World are allergic to any technique designed specifically for them.



Besides climate, Paul Dequeker is interested in poverty and local materials. This book, considered today as the “bible” of tropical architecture in the Democratic Republic of the Congo, highlights the architectural specificity of Paul Dequeker’s missionary work and its own characteristics of tropical architecture.

10. Between two paradoxes

10.1. First paradox: the existence or non-existence of a Dequeker style

D. Sharp states the architectural style as the set of qualities very easily recognizable in a work or even an architectural achievement, in a set of buildings that architecture experts from all over the world have taken care to divide and classify under various names including in modern architecture one can enumerate the international style, expressionism, elementarism, regionalism, realism, futurism, functionalism, neo-constructivism⁴. (Sharp D, 1966)

Simplice Busimba considers that one cannot speak of art without asking the question of style; Relativism always imposes itself around the different currents, because some take one style for another and vice versa, each current having its arsenal of arguments, It is therefore generally impossible to believe that one can speak of art without evoking the notion of style. Any specific artistic field involves one or more well-defined styles, produced by one or more specialists at a well-defined period in history⁵. (BUSIMBA, 2002)

Speaking of the Romanesque and Gothic styles, L. BRULEY states the following on this subject: "these styles, precisely for the

⁴ Denis Charp, Histoire universelle de l'architecture du XXe siècle, Ed. Mardaga, London, 1966, p. 8-9.

⁵ Simplicie Busimba considers and affirms in 2002 the existence of the "Dequeker style in his graduate thesis at the University of Kinshasa entitled Paul Dequeker, architect of the churches in Kinshasa (1958-1993) p 34,



Romanesque, were inherited for the most part by the European states from the ancient Greek-Roman civilisations, the barbarians and other ancient peoples; it is the Gothic that will revolutionise the Romanesque by presenting itself as a completely rethought invention" (Bruley, 1971)

To return to the paradox of the expression «Dequeker style» used several times in the book «Eglises tropicales» by Professor Mudiji Malamba, the latter is convinced that it is a particular and unique identity attributed to PAUL Dequeker as he confirms himself-This style, known as the Dequeker style, exists and continues to make its way (MUDIJI Malamba and Paul Dequeker, 1984). Also used in the book «tropical architecture» by Professor Kanene Mudimubadu, this expression provokes several interpretations even in the scientific community. In addition to the men of science, in the local language of the population, in advertisements and in press releases the expression «Dequeker style» seems to prevail.

In his 1987 interview with the newspaper Elima, Paul Dequeker answers Tumba Kwako's question about a «Dequeker style» by saying: «... a Dequeker style, not really... My style is the result of the evoked research followed by a harmony of forms, volumes, voids (opening) as well as a harmony of colors difficult to understand, it must be lived.»⁶ (DEQUEKER, exhibition of 30 years of career, 1987). This deliberately polemical answer leaves the question open.

Paradoxically, the present study points out that although Dequeker leaves an architectural heritage rich in vocabulary, he does not himself claim that his way of doing things is assimilated to a «Dequeker style» as he states 10 years later in his letter "The church, a living problem"⁷ belong to modern architecture and that its way

⁶ Paul Dequeker remains embarrassed by the question of style, in 1987 he gives this controversial answer to Tumba Kwako of the newspaper Elima.

⁷ The letter "the church, a new problematic" is a response of Paul Dequeker to the Belgian clergy in reaction to his delay in updating liturgical forms and reforms after Vatican II, consulted at Kadoc 2018



of doing is associated with tropical modernism. (DEQUEKER P. 1994)

10.2. Second paradox: Paul Dequeker more Zairean than Zairean

This second paradox raises the fact that Paul Dequeker, He was a Belgian who was concerned about the problems of local habits and sociological problems of Zaire by putting in place suitable solutions, whereas the majority of modern Congolese architects are inspired by imported architecture to design their projects. This paradox reveals that Paul Dequeker had appropriated Zairian nature better than the Zaireans themselves! Indeed, by putting himself in the skin and soul of Zaire, according to Steven Lindemans, Paul Dequeker was only fulfilling his mission of evangelization, he refused to become a priest to become a missionary architect, in this way, architecture has enabled him to meet people and see God through them⁸. (LINDEMANS, 2014)

Paul Dequeker, for the well-being of the local populations gave all its positive energy without taking into account geographical or ethnic affiliations, but taking into account the only common thread of his ideal, which is to build the dwelling of God according to the climate and sociological realities of the place! By its attitude, the term "tropical architecture" no longer has only climatic connotations, but it expresses more the fusion of climate, tradition and tropical habits. We can no longer speak of tropical architecture without associating the culture and uses of «tropical man».

Paul Dequeker's attitude has unfortunately become the biggest cause of rejection of his architecture by Congolese architects who

⁸ In his testimony in the book "Architectuur en missie in Afrika," p. 157, Steven Lindemans quotes Paul Dequeker as saying, "Yes, we cannot see God face to face, we can only see his back, like Moses in the Old Testament (Ex 33:18-23). We can recognize God in the footsteps he left. Sometimes we can experience his loving presence in the people we meet along our life journey."



subjectively consider that Paul Dequeker was doing a retrograde architecture!⁹ Paul Dequeker produced by substitution an architecture that would have been produced by the Zairean architects. Despite this opposition, he received an honorary distinction on January 25, 1991, as a “Knight of the National Order of the Leopard”¹⁰ of the Republic of Zaire for his merits.

11. Organization of the thesis

This work is divided into six parts, including an introductory part and five chapters of analyses.

The first part is the presentation of the framework and the circumstances that led to the development of this work. This part is notably punctuated by the analysis of two paradoxes that provoke a rather curious look! The first paradox is that of a style granted to Paul Dequeker, who nevertheless recognizes himself as an architect of modernism. The second paradox is that Paul Dequeker, who is not African, feels fully responsible for an Africanness to be rediscovered while the Congolese themselves do not lend themselves to it.

In the analytical sections, the first chapter provides an overview of the origin of churches by presenting the different styles that marked the evolution of Christian architecture until the Second Vatican Council. This chapter begins with a brief overview of the origins of tropical modernism in the Congo, which later gave rise to the religious tropicalism advocated by Paul Dequeker. This is followed by an analysis of the sacred space in Africa starting from the generality of the beliefs of traditional African religions through

⁹ This is a reprehensible illusion of Congolese architects who think that the right expression is the one borrowed from the West.

¹⁰ Knight of the National Order of the Leopard is the highest distinction awarded exclusively to nationals, but it is also exceptionally awarded to foreigners who have rendered valuable services to the country



the clarification of the Kongo philosophy which attributes to the Muntu its own divinity expressed by the Kimuntu.

The second chapter is the presentation of Paul Dequeker's vision for an architecture in Africa for the Africans. This chapter begins with a brief presentation of Paul Dequeker's journey as a Missionary Brother, but especially as a Missionary Architect. The particularity of this chapter is to be found in all the facts, life stories and excerpts from texts of different works and interviews about his life and career. The career of Paul Dequeker has been extended to the projects and designs of buildings of all kinds, this first part is completed by a synthetic presentation of the achievements of the architect Scheutist other than the churches.

The third chapter of this thesis shows the chronological evolution of the architecture of churches in the Congo; their structural and architectural transformations and the discovery of a style (way of doing) specific to Africans. Through the temporality and spatiality described from the analysis of the mode of implantation of churches in Kinshasa from the arrival of the missionary (1888) to the churches of religious posttropicalism (1990 to date), this chapter will be concluded by an evolutionary mapping useful to understand the logic of the implantation of churches in Kinshasa.

The fourth chapter addresses the crucial question of the basic principles which aim to meet the four fundamental requirements of tropical architecture, among other things the bioclimatic requirement, the requirement of materials and techniques, the demand for economic factors and the demand for socio-cultural functions. This chapter translates the genetics and genealogy of church architecture in the tropics. By "genetics", this thesis expresses the DNA behind the way Paul Dequeker applies throughout his life in tropical Africa.

The fifth and final chapter of this thesis is the demonstration of the concept «Tropical Church» through six cases of churches carried



out by Paul Dequeker; Christ Roi (1961), Saint Antoine 1 (1961), Saint Luc (1962), Saint Augustin (1977), Saint Antoine 2 (1982) and Saint Raphael (1988). This chapter is a demonstration of the attributes of a way of doing exceptionally produced by Paul Dequeker who makes him the father of tropical architecture in the Congo and the architect of the Church of Africa. In this chapter, the production of the technical details and constructive systems put in place by the builder in the tropics will be put in synthesis while conducting a thorough analysis on the relevance of each constructive detail.





PAUL DEQUEKER

bouwmeester in de tropen

FIGURE 10: THIS IMAGE IS PROBABLY THE COVER OF VOLUME 2 OF THE BOOK TROPICAL ARCHITECTURE THAT PAUL DEQUEKER WANTED TO UNDERTAKE WITH PROFESSOR KANENE MUDIMUBADU, DRAWING BY PAUL DEQUEKER, SOURCE: KADOC



CHAPTER I:

PROBLEM OF AUTHENTIC AFRICAN
ARCHITECTURE IN THE TROPICS





FIGURE 11 : SAINT MARC'S PARISH 1962, SOURCE, TROPICAL CHURCHES

I.1. Definition of the “tropical” concept

Understanding the term “tropical” is a conceptual requirement to better justify the actions of Paul Dequeker in Africa. Indeed, the word tropical refers to the practices of populations living in the regions between the two tropics. It is recognized that these regions of the earth are dominated by high heat and very high humidity, whose cultural and artistic acts have taken a new direction called “tropicalism”.

In this thesis, tropicalism is perceived as the set of practices and expressions observed between the tropics of Cancer and Capricorn. It is the pure and simple expression of the human condition translated into art and architecture with the unique desire to conform to the real cultural and social needs of tropical man. This movement was born in Brazil in the late 1940s and has spread to Africa under the influence of music and the arts, becoming a new anthropomorphic expression that completes the vacuum left by modernism in the tropical zone, whose particularity in architecture is the integration of climatic devices such as sun breezes, stilts, moucharabiehs, claustras, slats). By adapting to these practices, Paul Dequeker has become a tropical man himself.



FIGURE 12 MODEL OF THE SAINT ANNE'S RESIDENCE BUILT BY PAUL DEQUEKER. THE TROPICAL LANGUAGE CAN BE SEEN HERE.



I.2. Tropical modernism in the Congo

At the beginning of the 20th century, in the Congo, the buildings were mainly built by missionaries and soldiers. The first engineers arrived before the architects and several attempts were made from the 1911's when the real question of an architecture in the Congo arose. But at that time, the Congo was a colony of exploitation and not of settlement, it did not attract future architects and the majority of the constructions at that time were temporary. (Tshiunza, 2021)

Around 1915 Gaston Boghemans arrived in Kinshasa as head of the building department at the Colony and published a few years later, in the «Editions Tekhné» a brochure devoted to colonial housing, but in his work, it does not only address technical climate issues such as ventilation and humidity, it focuses on the habits of the environment and makes certain recommendations prohibiting, for example, two-storey houses, semi-detached houses, It is assumed that in the Congo life takes place open doors and windows or outside (Boghemans, 1921). These recommendations were long observed and had been the typical model of colonial architecture in the Congo without addressing the real issue of local contribution directly. This question was dealt with from 1931 at the International Congress of Urbanism in the Colonies and in Countries of Intertropical Latitude (ROYER, 1932).

A few years later, the architects who arrived in the Congo in the late 1940s and early 1950s, received a lot of information about the climate, they had a different understanding of the issue than their predecessors. At that time, tropical modernism in the Congo was mainly characterized by the construction of monumental buildings; public administration, official residences, schools, universities and hospitals. Making this style a rather favorable response to colonial propaganda, for example the 11-storey Forescom (1946) building (figure) built in Kinshasa which was considered a lighthouse in Central Africa (Boeck & Baloji, 2015, p.86) and real object of colonial



propaganda (Toulier et al., 2013, p.85). This new vision of architecture in the Congo marks the desire to associate modern architecture with the impositions of the medium to the example of Claude Laurens who announced in 1953 that his architecture will really be Congolese, It will be beautiful because it is logical and well adapted to the special living conditions of modern man in Africa (Laurens, 1953). Among these first architects who arrived around 1945, we can also mention Maurice Houyoux, Marcel Lambrichs and Claude Strebelle who built the Théâtre Municipal d'Elisabethville (figure). Today they are considered as the precursors of tropical modernism in the Congo. It turns out, however, that certain personalities such as Roland Pré, Governor General of French Africa, and Michel Weill journalist, will present this architecture as a foreign modernism that requires another more adapted for Africa (1957).

FIGURE 13 THEATRE
MUNICIPAL
D'ELISABETHVILLE,
ELISABETHVILLE, 1953-
1957 - CLAUDE STREBELL,
SOURCE ;
[HTTPS://PIN.IT/2QITHNM](https://pin.it/2QITHNM)



After the 1960s, because of the wave of independence, the vast program of building Belgians was interrupted, the buildings built after 1963 will no longer be attached to a culture but to the glory of the architects and the question of place and cultural value will no longer be addressed only from the inside of the country and because of the policy of recourse to authenticity installed by Mobutu the Traces of colonization will be completely erased to regain tradition. Several Congolese architects expressed themselves after this time to merge Zairean tradition and modernity in what they would have called «African style»



(Diawisana, 2014) following the example of Mukadi Mbayi, Kipwasa, Mukwanga, Diawisana Lumeto, Epon Eber, Tala ngay.



FIGURE 14 MARBLE PALACE BY EUGENE PALUMBO AND FERNAND TALANGAY , SOURCE: BUILDING FOR 'AUTHENTICITY': EUGENE PALUMBO AND THE ARCHITECTURE OF MOBUTU'S CONGO; JOHAN LAGAE AND KIM DE RAEDT.

In the same spirit of authentic Zairean architecture, Sante Ortolan gave value to local architecture around the 1970s, By believing that the essence of Bantu thought has been blurred by centuries of inaccurate quotations and that it would be wrong to say that there is no proper architecture in the Congo (ORTOLANI, 1975). According to Alexis Tshiunza, Sante Ortolani's mission is to find the heart of this thought and the true face of authentic architecture (Tshiunza, Achitecture and regionalism in the Congo, 2022) because he himself says, Congolese architecture must have a shocking side by its form. And this one must be apparent. The pleasure experienced in observing something unusual is not enough, the observer must make an effort to analyse the work differently from a European construction that seems easy to read thanks to the classicism that has characterized it for centuries. He must seek "the profound meaning of the constructive spirit of ancestral architecture" (ORTOLANI, 1975, p. 19)¹¹.

¹¹ Read Alexis Tshiunza Kabeya's thesis in which he lists very exhaustively the chronological succession of this architectural mutation.





FIGURE 15 SKETCH OF SANTE ORTOLANI FOR A CULTURAL CENTRE IN MBUJI-MAYI, SOURCE: ESSAY OF AN AUTHENTIC ARCHITECTURE

Between the 1970s and 1980s, architecture in the Congo seemed to lose its bearings. To recall the existence of a truly tropical architecture in the Congo, Paul Dequeker who has more than 30 years of career in tropical architecture will publish in 1984 «Tropical Churches» with Professor Kanene Mudimubadu in which they affirm the theories and techniques put into practice by them in projects in tropical zone recalling that several projects of tropical modernism built in Congo were not typical examples of an architecture Tropical modernist and that it was time to rediscover tropical architecture.



I.3. Religious tropicalism

This thesis proposes the concept «religious tropicalism», to define the continuity of tropical modernism that accompanies the «Belgian civilizing mission» by the establishment of religious buildings that are part of the ten-year development program of the Belgian Congo promulgated in 1948¹² .

Indeed, at the end of the 18th century, vernacular architecture disappeared to give way to the «modernity» induced by the arrival of new trends and modern materials like concrete. Despite the preponderance of Gothic and Romanesque architecture that characterized the styles used by missionaries until the 1960s, this current will suddenly stop to see the appearance of a new way of building Catholic religious buildings in the Congo!

This thesis clarifies through the definition of a religious tropicalism, the beginning of a way of making the religious edifice, especially the churches in tropical zone that begins with Paul Dequeker whom Professor Mudiji generously calls «Tropical Churches» (Mudiji, 1984). Religious tropicalism as such took shape in the late 1950s, with the intelligent integration of solar protection devices, climate negotiators and the way of praying in the Congo, it is the birth of the bioclimatic movement that integrates on the one hand modern functionalist architecture for interior design and on the other hand urban architecture, architecture of places designed from the outer envelope of the building. (Kanene, 2017)

After the eclecticism that dominated the nineteenth century, with neo-Gothic, neo-Renaissance, neo-baroque, neo-classical styles, which, for lack of inspiration, began pasticher the old (Kanene, 2017), Paul Dequeker borrows the voice of the precursors of the Catholic Church of Africa to transform it into an architecture

¹² In 1952, Pierre Gourou published in the journal “les cahiers d'outre-mer” an article entitled “Le plan décennal du Congo Belge” a critical analysis of this great programme, including all the guiding lines and ambitions (les cahiers d'outre-mer, pp 26-41).



adapted to this church of Africa. He is in fact a precursor of the bioclimatic movement in the tropics whose recognition of his particular achievements suggests a Dequeker style (Kanene, 2018).

between 1952 and 1960, the creation of the Office of African Cities (OCA)¹³ intervenes in Congo to provide housing for the indigenous population, and at the same time, influenced by the Second Vatican Council on liturgical reform and the progressive implantation of tropical modernism in the Belgian Congo, Paul Dequeker will produce architecture guided by a more sober and pragmatic vision, Several churches built in the Belgian Congo as part of this vast program supported by the Archdiocese of Kinshasa were bequeathed to Paul Dequeker who had built almost all of these religious buildings between 1958 and 1988. This monopoly influences the architectural particularity found in churches built in the Congo. It is at this time that the erection of churches in these new cities urbanized by the colonial authority begins, it is also at this time that the Congolese church wishes to offer the local population churches adapted to their social conditions¹⁴.

The need for economy and the reappropriation of an almost lost identity will generate the opportunity to build the largest number of churches in a short time: this is what justifies its high productivity. He is responsible for carrying out most of the churches of this command. The first church built by Paul Dequeker in Kinshasa will be the Christ-King church in 1961 in the commune of KasaVubu then will follow the Charles Loanga churches in Dendal (current

¹³ During the creation of the Decennial Plan of the Belgian Congo, Ruanda-Urundi in 1947 and 1948, to solve the housing problems in the new cities, Professor R. Hulpia will propose the idea of setting up the Office of Indigenous Cities (OCI) whose decree will be promulgated on 16 January 1949 in Belgian Congo. Due to the misinterpretation of the word «indigenous», another decree will create on 30 March 1952 the Office of African Cities that intervenes in Congo between the years 1952 and 1960. After the independence of the Belgian Congo (1960), the OCA became the National Housing Office (ONL) on 9 June 1965. (B. Babunga, 2018)

¹⁴ On the occasion of his episcopal ordination in 1959, Joseph Malula launched his pastoral program “A Congolese Church in a Congolese State” which aims to work as a pastor for the effective incarnation of Christ in reality congolese. (Alpha Memidra Egbango, characters.cd, October 2021)



Bandalungua) in 1961, Saint Mark in Kinshasa 1962, Saint Anthony in Bumbu in 1962, Saint Stephen 1962, Saint Luke 1963, Saint Gabriel 1965, the Monastery of the Assumption Kinshasa 1965, La Chapelle Nganda Kinshasa 1965, Saint Pius X 1965, Saint Rombaut 1966, Saint c Paul 1967, Saint Adrien 1967, Saint Eloi 1967, Saint Philippe Kinshasa 1968. (Lagae, 2014).



TSHIBUNGU



LUKONO



FIGURE 16 : SOME CHURCHES BUILT BY PAUL DEQUEKER FROM 1962 TO 1985, SOURCE, « EGLISES TROPICALES »



FIGURE 18 : 4 CHURCHES IN THE ARCHIDIOCESE OF KANANGA, BUILT BY PAUL DEQUEKER BETWEEN 1965 AND 1968, PHOTO BY VICTOR BAY



TSHISENGE

KAPINGA



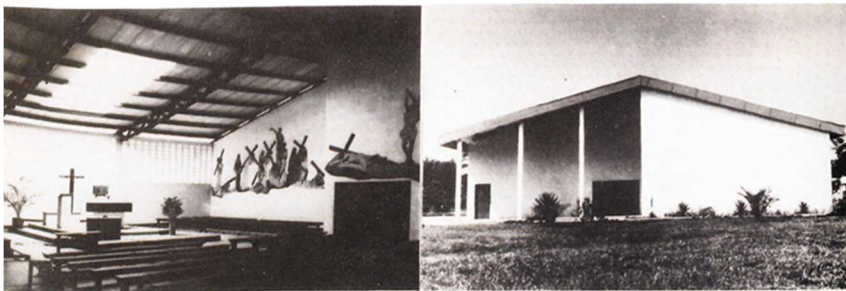
FIGURE 17: SOME CHURCHES BUILT BY PAUL DEQUEKER FROM 1962 TO 1985, SOURCE, « EGLISES TROPICALES »



DIBINGA

TOKULAMBA





YEMO - 1961



BUMBA - 1964 ST MATHIAS

GEMENA - 1981 SALONGO

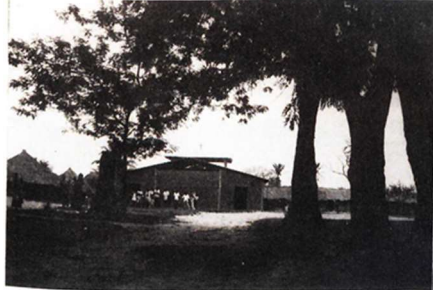


BUKULUKUTU - 1978

FIGURE 19 : SOME CHURCHES BUILT BY PAUL DEQUEKER FROM 1962 TO 1985, SOURCE, "EGLISES TROPICALES"



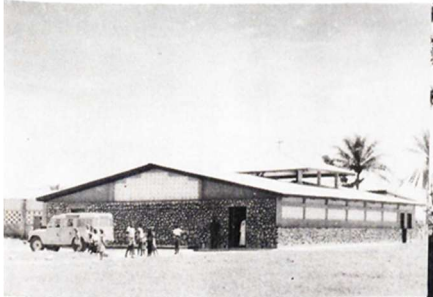
ARCHIDIOCESE DE KANANGA — 1965-1975



BITANDA



KAMBOE



KANANGA ST. BRUNO



KIMPANGA



MUSANGANA



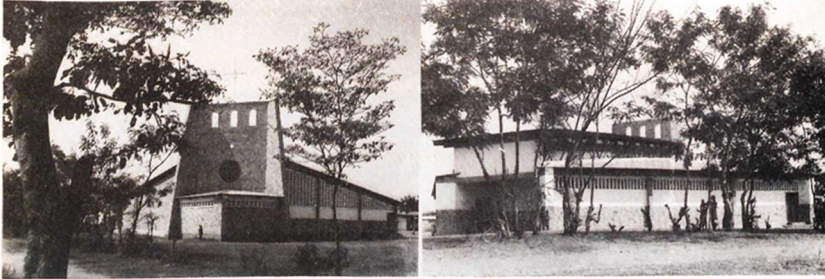
LUBUNGA



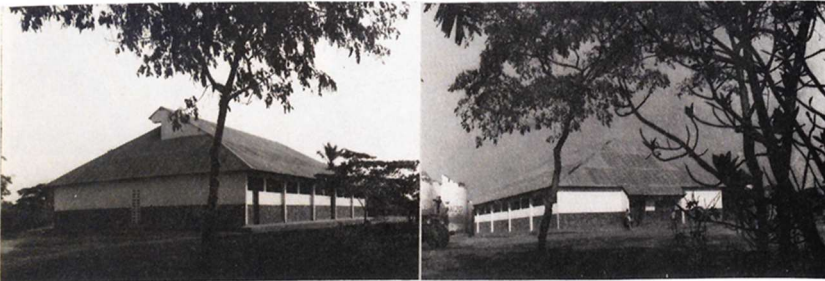
FIGURE 20: QUELQUES EGLISES
CONSTRUCTION DE PAUL
DEQUEKER DE 1962 A 1985,
SOURCE, « EGLISES TROPICALES »



DIOCESE DE LUIZA MUENE-DITU – 1975-1980



TSHIMALA



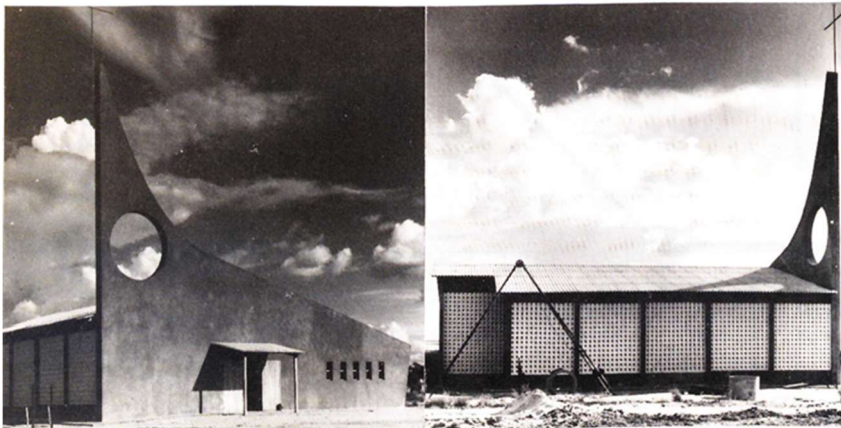
TSHIBANGU-MPATA



TSHIBANGU-MPATA



MASAULA



EGLISE ST. FELIX – 1963

FIGURE 21 : SOME CHURCHES BUILT BY PAUL DEQUEKER FROM 1962 TO 1985, SOURCE, « EGLISES TROPICALES »



DIOCESE DE MBUJIMAYI – 1965



MIABI



MBUJIMAYI

DIOCESE DE LUISA – 1970

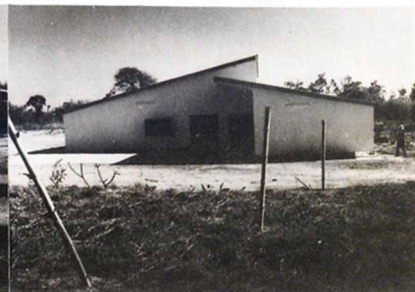


MUKUNGU



MUKUNGU

ARCHIDIOCESE DE LUBUMBASHI



PAROISSE UNIVERSITAIRE – 1979



FIGURE 22 : SOME CHURCHES
BUILT BY PAUL DEQUEKER FROM
1962 TO 1985, SOURCE, «
EGLISES TROPICALES »





FIGURE 23: SOME CHURCHES BUILT BY PAUL DEQUEKER FROM 1962 TO 1985, SOURCE, « EGLISES TROPICALES »



I.4. Sacred space in tropical Africa

Originally, the sacred space in tropical Africa is not made up of temples or churches per se because according to African ancestral beliefs, spirits are in nature, places of worship are mountains for certain beliefs, rivers or forests for others (Pirrotte 2007). None of this looks like a temple or a church. Giving nature the sacred place where spirits sit, the African does not need temples to come into contact with spirits. Ceremonies take place outdoors and offerings are laid on the ground (Zahan, 2019). The places of ceremonies in tropical Africa were therefore the rivers, the rivers, the lakes, the ponds for the cults dedicated to water while the cults dedicated to the earth are the hills, the caves, the rocks, the caves. The air cults as for them have for ceremonial places, trees, forests, groves. Volcanoes, ironworks and fireplaces are dedicated to the worship of fire. However, the sacred place is delimited and denied access to the uninitiated. (Zahan, 2019). It is thus obvious that before the arrival of the missionaries tropical Africa was dominated by animism whose rites were in conformity with traditional ancestral beliefs without impressive buildings; only huts for healers, sages, «nganga»¹⁵ or the "Nkumu"¹⁶ If they were built with branches of wood, bamboo or raw earth, they could justify the existence of sacred architecture. However, several initiatory or multi-function boxes have remained remarkable, such as the large meeting huts found in the Tsogho villages of Gabon otherwise known as "Ebandza"¹⁷ (figure) which are located in the heart of each major

¹⁵ The nganga or healers are initiates who come into contact with the spirits and whose functions are multiple and complex, they are usually priests, diviners, kings, prophets and or seers. (Olupano, 2014)

¹⁶ The term Nkumu is used to describe the 'wise old man' in the common Lingala language. It is also used in the Zairois rite to describe the 'wise' attendants of the main celebrant.

¹⁷ According to Pierre Amrouche (1989), the ebandza has several functions: it is a place for meetings and palaver, and also serves as a hut for travelers. Apart from these profane uses, the ebandza is the temple of the two main Tsogho secret initiation societies: the Witi and the Mwiri, whose rites it houses - its decoration is directly linked to the rituals of the latter. (Anthropologie De L'art: Formes Et Significations; Arts de l'Afrique, de l'Amérique et du Pacifique; Fascicule II 1988-1989)



district. These huts are quite peculiar in their unusual proportions and the care taken in their decoration, which suggests that they were used as a place of palaver, and also as temple of sacred rituals. (AMROUCHE, 1989) You can also see the beautiful huts of the Ashantis of Ghana, the Igbo of Nigeria, the Bandjoun of Cameroon and the sumptuous huts of the Kuba of the Democratic Republic of Congo (figure) that give African architecture an authentic identity.

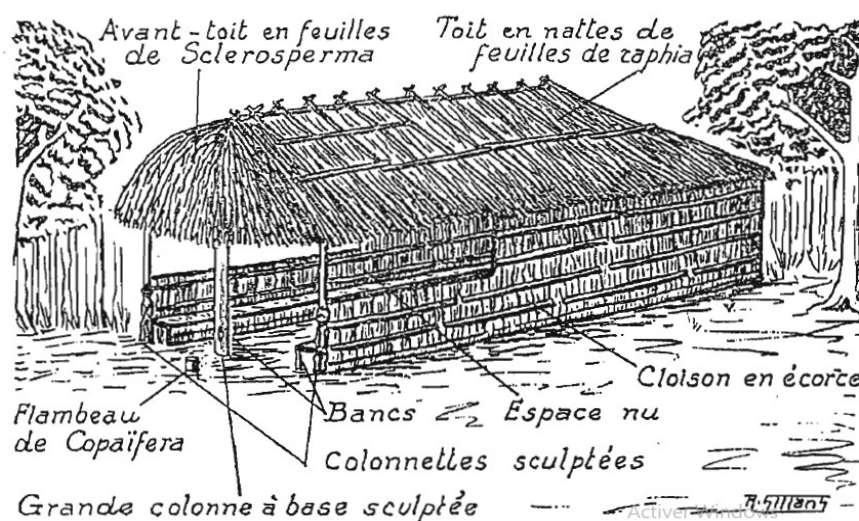


FIGURE 24 : DRAWING OF EBANDZA, SOURCE, ARMOUCHE 1989

However, the absence of large temples specifically dedicated to divinity does not exclude ancestor worship which is mainly characterized by sculpture rather than architecture. The spirits of nature are represented in the form of masks and ritual objects or utensils. Mudiji also explains, as several explorers have found, that the greatness of the traditional African chief was not in the size of the palaces necessarily, but in their decoration (JEWSIEWICKI, 1991). At the Pendes, for example, the chief's box was small but recognizable that by its cover in «esteemed noble thatch» and especially by «neat symbolic decorations» (MUDIJI, 1989) we can also see the outfit of Chief Kuba of the Kasai who put on a royal outfit that can reach 80kg during the ceremony of enthronement. André Lhote also thinks that the greatness of an architecture is verified by its ornamentation» (BOUILLIER, 2007, p.6).





FIGURE 26 : PENDE PUMBU CHIEFS MASK, DRC SOURCE : HAMILLGALLERY.COM



FIGURE 27 : HAT OF THE KING OF THE BAKUBA OF KASAÏ, THE MAIN MOTIFS USED BY PAUL DEQUEKER FOR HIS KASAÏ CHURCHES CAN BE SEEN





FIGURE 28 : KING OF THE BAKUBA TRIBE, KASAI PROVINCE, BELGIAN CONGO, AT THE TIME OF HIS CORONATION PHOTO ELIOT ELISOFON



1.5. The existence of authentic traditional architecture

FIGURE 30 : THE FORMER HOUSE
OF THE MWAMI SULTAN OF
RWANDA IN NYANZA, BELGIAN
CONGO, PHOTO PIERRE GALLET,
1945



For a long time, African architecture has expressed itself differently from the so-called universal architecture by a particular language, as expressed by this ancient house of Muami in Nyanza (DRC), which is only one illustration among many others.

The absence of religious monumentality was misunderstood by explorers, colonizers and researchers who are convinced of the nonexistence of an authentically African religious architecture as Celso Costantini says African art was not appreciated by whites and it would not have produced any remarkable architecture leaving buildings built by foreign influences as the only ones with architectural pretensions (Constantini,1949). This reflection to justify this lack of architecture of African origin is based on two main reasons;

First, he considers that a black man living in a warm, open-air climate would not feel the need to design and build a house as a white man would in the West because, he says, his construction activity was limited to the cabin, which served as a night shelter and shelter from the elements and from reptiles and wild animals (Constantini,1949).



Second, he thinks that the life of the Blacks has absolutely primitive forms; it ignores the ideas of hygienic comfort and the aspirations for this comfort that are peculiar to the most evolved and cultivated peoples. Architecture is one of the highest cultural and social manifestations of peoples, it is the expression of a life that already possesses a historical heritage and civilized customs; where cultural development is lacking, it is logical that architecture should be absent. (Costantini,1949)

The idea of ruling out the possibility of an existence of African art and architecture was widely discussed in 1931 at the International Congress of Urbanism in the Colonies and in Countries of Intertropical Latitude (Royer, 1932) The example of René Schoentjes, who certifies that there were “no monuments to respect or examples of inspiration” (Royer, 1932), while Colonel E. Weithas speaks of “the non-existence of any indigenous local architecture” (Royer, 1932). Because of these very extremist ideas, the assertion that there is no architecture in Africa unfortunately takes on its full meaning thus encouraging the architects invested in the civilizing mission of the colonies to create from scratch a new architecture completely unaware of the existence of what is was on site. (Tshiunza, 2021).

H.A. Bernatzik in these multiple journeys finds however that the African landscape is very rich in art and culture and that the traditional architecture of African blacks would be even more impressive than the European constructions, he even declares that it is in vain that one looks in Africa for beautiful buildings built by the Europeans, there are only ugly huts and vulgar houses, next to which the old original wooden and clay constructions of the natives, often give the impression of being artistic creations. (Bernatzik n.d.)

Unlike those who oppose the existence of an architecture specific to black Africa and the idea of an adaptation of religious architecture in Africa, or an original architecture produced by black



Africans, Paul Dequeker does not refrain from denouncing the guilt of the Whites in the face of an African vision of art and architecture despised by the colonizer by declaring that the unconscious behavior of the white therefore has the effect not only of assimilating the natives by aberrations of taste and judgment, but above all to stifle in them the original qualities of their artistic genius. It is not surprising that such treatment, when extended and generalized, causes the most complete disarray in their artistic mentality and ends up drying up the very sources of inspiration" (DECKER).

The confirmation of an African architecture is noticed when the colonizer proposing the bungalow as a typical tropical building is inspired by the vernacular architecture of some African tribes that build as Dr Murray John recalls in his book «How to live in tropical Africa», huts with barza and overflowing roof (Murray, 1895). This theory is also preceded by the writings of Wauters A-J., which in 1892 described traditional African architecture in these terms; the roofs were high, Slender, and overflowing from the wall by a wide projection that offers an excellent shelter from the rain... The roof, extended over the façade, formed a veranda supported by large wooden pillars. The palm branches that cover them are very tight and artfully braided to make the walls absolutely watertight." (Wauters A-J. 1892, p. 10-11). It is the confirmation of a constructive logic that will be copied by the colonizers imitating these traditional boxes that are raised on a layer of clay beaten from the height of one foot, so that rainwater does not penetrate the interior and can also be on stilts, especially attics where some exits are surmounted by awnings which are used especially for weaving when there is no paillote (Wauters, 1893, p.2). (Figure)





FIGURE 31 : A HUT WITH BARZA, COVERED OUTDOOR CIRCULATION, (WAUTERS, 1892, P.10-11)



FIGURE 32 : THE BARZA WHICH ALSO SERVES AS A KITCHEN.

PHOTO A. GAUTIER, 1897

Moreover, in the Congo, most of the buildings built by the colonizer; military posts, administration buildings, Huts or huts were built by chance with local resources and techniques generally inspired by indigenous constructions. This attitude of the colonizer in itself testifies to the ingenuity of the builders or the ability of an existing craft workforce in Africa. (Tshiunza,2021). Moreover, among the many constructions of this type built in the Congo there were still two wooden ones in the Baptist Community of the Congo River built in 1880 and demolished in 2016.



FIGURE 33 : ONE OF THE TWO
PREFABRICATED WOODEN
HOUSES OF THE FORMER
BAPTIST MISSIONARY SOCIETY
(BMS) STATION, SOURCE:
KINSHASA THE END NOW



FIGURE 34 : FORMER
RESIDENCE OF THE GOVERNOR
GENERAL OF THE BELGIAN
CONGO, IN BOMA . PHOTO: P.
CLEMENT 2008.



To the question of the existence or not of an original architecture produced by black Africans, this thesis, while justifying the existence in Africa of a local architecture adapted to the indigenous populations, contradictorily evokes the adaptation of Catholic religious architecture in tropical Africa carried out by substitution by foreign architects. This assertion is also supported by De



Decker's reflections on the existence of an African architecture, who said: « We have drawn the blacks so much into our own tastes that they have ended up not liking anything else. And in the disdainful abandonment of their own art values, they have come to flock to our trade imagery as if it were genuine masterpieces. This is very characteristic. One remark is in order. All the religious mawkishness of our so-called Sulpician productions of a realistic and sentimental type is brutally contradictory to the fundamental, very generally expressionist artistic conception. Our unconsciously clumsy behaviour has therefore had the effect not only of "assimilating" the natives, even in our aberrations of taste and judgement, but above all of suffocating in them the original qualities of their artistic genius. Let us not be surprised that such treatment, when it is prolonged and generalised, leads to the most complete disarray in their artistic mentality and ends up drying up the very sources of inspiration ».¹⁸

No doubt D Decker thinks so because he is convinced of the vast character of the churches that were built by Catholic missionaries in black Africa and he also recognises their beauty and the price of the sacrifices made for their construction, but he remains of the opinion that whatever style inspires them, these churches are of the Western type. (Busimba, 2002).

Several missionaries before and after Paul Dequeker also asked themselves the question of adapting traditional forms to modern architecture, for example Bishop Dupont of Bobo Dioulasso in Burkina Faso, who, in building the cathedral of Bobo Dioulasso, asked himself what the faithful would think of a church designed entirely in an African city in a European style. So Goddard thought, from the paving to the stained glass windows, from the doors to the altar furnishings, and even to the liturgical vestments, of a project that would meet Goddard's main concern of putting in place "a cathedral with an African atmosphere." Another example is also mentioned by Decker, citing Father Carroll in Nigeria, who built the University of Ibadan chapel with the motivation to adapt

¹⁸ De Decker, L 'adaptation de l 'art religieux en Afrique, in, Missions et cultures non chrétiennes. Rapport et compte rendu de la XXIXeme Semaine de missiologie de Louvain, 40 (1959), p. 274 -275.



the architecture to the local culture. Another example is also mentioned by Decker, citing Father Carroll in Nigeria, who built the University of Ibadan chapel with the motivation to adapt architecture to the local culture.

FIGURE 35 THE CATHEDRAL OF BOBO-DIOULASSO

IT IS OF MODERN ARCHITECTURE. IT WAS BUILT IN 1957 AND DEDICATED TO OUR LADY OF LOURDES. IT WAS OPENED FOR WORSHIP IN 1961.



FIGURE 36 : INSIDE THE CATHEDRAL, YOU CAN SEE THE AFRICAN MOTIFS.





FIGURE 37 CARVING OF THE TESTAMENT (OLD AND NEW) ON THE SEATS, IN STYLES THAT ARTISTICALLY BLEND TRADITIONAL AND CONTEMPORARY STYLES.

As with other architects of tropical modernism, the economic question is not always mentioned, but this is the strong point of Paul Dequeker who associates socio-economic factors with the adaptation of traditional architecture to modern architecture.



FIGURE 38 : CHAPEL OF THE RESURRECTION, UNIVERSITY OF IBADAN, NIGERIA. SOURCE: WWW.WILLIS-ORGANS.COM



I.6. A charter for Catholic missions in Africa

In order to understand the papal instructions on the Church in Africa, let us return to the concern of the Holy See, which also seeks to adapt the Catholic religion to the imperatives of the time, the environment and the circumstances. After the First World War, three popes drew up documents that initiated changes, particularly in missionary thinking: Benedict XV, Pius XI and Pius XII. "Rerum Ecclesiae" and the encyclical "Evangelü Praecones" (BUSIMBA, 2002)

This document was dedicated to the propagation of the Catholic faith at the time, and was considered to be the most important document of its kind on the missions. It was characterised by a profound reflection on the methods used to implant the Universal Church throughout the world. After a long introduction presenting the history of mission from its origins, the document was divided into three sections:



- *The encyclical "Maximum Illud"*

Published on 30 November 1919 by Pope Benedict XV, it asked mission leaders to be "the soul of their missions", i.e., to support the missionaries and to extend the apostolate as far as possible, while establishing links with neighboring missions. The superiors were to give priority to "forming and organising the native clergy", offering them the same training as western priests. These religious would be the best guides for the missionaries of whom they were previously only auxiliaries, being presumed to be the best able to understand the mentality of the native populations. The Pope thus insisted that the Catholic religion in all its aspects in the mission countries should not be alien. The second part of the document referred to the responsibilities of the missionary who had to overcome his nationalistic contingencies, which he described as "the most dreadful plague". Indeed, no matter how primitive, barbaric and crude they may be or appear to be, the populations are easily aware of the intentions of the missionaries. It was therefore necessary to ensure that the missionaries received the best possible training, including mastery of the language of the country to which they were sent, so that they could translate sermons, prayers, catechism and confessions.

In the third part of the encyclical, the pope asked in detail that lay Christians take an interest in the missions. This was a "sacred obligation" for them. Their help could be conceived in three ways: prayer, strengthening of the workforce in mission countries and support for missionary works. In this regard, Benedict XV emphasized the important role of the missionary union of the clergy, which was essential for the mission; however, this was not followed up immediately. It was therefore necessary to wait for another pontificate.



- *The encyclical. "Rerum Ecclesiae"*

Indeed, it was not until the pontificate of Pius XI that we saw the beginning of an appreciation of the precepts of Benedict XV's encyclical. Published on 28 February 1926, this encyclical extended the ideas of his predecessor. Although his apostolic letter was inspired by "Mascimum Illud", the "Pope of the Missions" developed new ideas, after an introduction in which he recalled the essence of the Church, namely its missionary vocation. He stated the two main objectives of his encyclical: to assign well-prepared missionaries and to reach the greatest number of faithful. The pope began by insisting that indigenous clergy should be recruited. To support his reasoning, he mentioned the possibility of revolts and persecution that could lead to the departure of foreign colonialists and missionaries, which would destroy all the progress made. He also insisted on the creation of seminaries to train colonial clergymen in the same way as European priests. This encyclical also insisted on the formation of good catechists, essential agents of the propagation of the Gospel. Pope Pius XI, a worthy successor to Benedict XV, was concerned with the establishment of a "total Church". There was always a need to reach more of the faithful. To this end, he organized the Vatican missionary exhibition in 1925, which became permanent with the opening of the Catholic missionary museum in Lateran.

- *The Encyclical "Evangelü Praecones"*

Published by Pope Pius XII on 2 June 1951, in addition to the more traditional objectives of the mission, he emphasised some fundamental features such as the importance of the laity in evangelisation, the enumeration of the activities of the apostolate and the question of missionary adaptation. In 1939, Pope Pius XII's first encyclical "Summi Pontificatus"¹⁹ insisted on the unity of the human race and respect for all civilisations. In the same year, Pius

¹⁹ In 1992, Simplicie Busimba used this reflection in his memoir entitled "Paul Dequeker, architect of the churches in Kinshasa" to justify the adaptations imposed by the hierarchy of the Catholic Church for the churches in Africa.



XII consecrated twelve bishops of different nationalities as the first black African bishop, Bishop Kiwanuka of Uganda.



FIGURE 39 SCHEUTIST FATHER ON TOUR IN THE APOSTOLIC VICARIATE OF LEOPOLDVILLE AROUND 1920. SOURCE: CHAUMOT

1.7. The definition of African Christian architecture

Despite the good will and determination of missionary attitudes for a well-integrated church in Africa, the question of adapted religious architecture is still not raised, but on the contrary, it has met with several controversies, it is towards the end of the 1950s that a great architectural attempt will be carried out by the Congolese church under the impulse of Cardinal Malula, but particularly by the concern of Paul Dequeker who wants to build churches in Africa for the Blacks. Indeed, as mentioned above, this thesis calls on Paul Dequeker, who, through his work in tropical Africa, confirmed the existence of an African architecture and art by taking as a source of composition the objects of worship and traditional furniture.

The absence of monumental buildings for worship in tropical Africa gave Paul Dequeker the duty to immerse himself in African traditions, to study African traditions and to live with Africans. He was therefore inspired to lend modern architecture the artistic values of the African people by updating the forms to make it an architecture that adapts to its time, while retaining its authentic character.



This attitude of Paul Dequeker is supported by the pontifical instructions concerning the adaptation of religious architecture in tropical Africa, as evidenced by the letter of the Holy Congregation for the Propagation of the Faith sent to His Excellency Monsignor Dellepiane, Apostolic Delegate of the Belgian Congo, in 1936, which justifies the fact that it is obvious that Congolese art is seen from another angle than that of the known Christian art. (Fumasoni-Biondi, Celso Constantini, 1936) The Western Church in particular has found something primitive and formless in Congolese art, although it represents a great wealth. The spirit of this letter even considers that Congolese art has "the candour and sincerity of childhood" as is the case with the music and songs of the primitive peoples of Africa and elsewhere (Fumasoni-Biondi, Celso Constantini, 1936).

In this same logic, the pontifical instructions recalled that the Catholic Church is not Belgian, French, Angolan, Italian or American: it is French in France, English in England, Belgian in Belgium, American in America. In the Congo, it must be Congolese: in the construction of sacred buildings and in the making of objects of worship, one must take into account the lines, the colour and all the elements of Congolese art. Thus, when Black people worship and pray in the church or participate in the official ceremonies of worship, the whole building worships, prays and sings the praises of the Lord with the authentic expression of its soul. Then, and only then, does a church in the midst of a people have its full divine and human significance at the same time: it is the house of God, filled with his presence, and the house of the faithful, built with their hands and adorned with their art (Fumasoni-Biondi, Celso Constantini, 1936).

[1.8. Paul Dequeker's Christian architecture in opposition to Western styles](#)

Regarding the architectural styles of churches built by the "white" missionaries, Paul Dequeker uses the term "alienated" to describe



the imitation of the copied constructive techniques of Western architecture imposed in tropical architecture: He thus wants to prove that an architecture that takes as its objective the integration of local culture and customs is sufficient in itself to become man's shelter and a refuge where he himself is at ease (Dequeker, 1984). This vision of African architecture justifies the profound motivations that led the missionary brother to voluntarily depart from the Gothic and Romanesque considered at the time as the architecture of «white» to devote themselves to so-called tropical churches considered as "black" churches. Paul Dequeker, in opposing the styles of the missionaries, encounters difficulties in expressing his vision, it is also rejected by Congolese architects who do not understand its purpose as denounced by Professor Kanene Mudimubadu who believes that the promotion of techniques and methods applied by Paul Dequeker was not obvious due to his opposition to the opinion General of the architects and teachers of the School of Architecture of Kinshasa (Kanene, 2017).

Simplice Busimba Simpeze who began a long conversation with Paul Dequeker in 2002 is convinced of the grandiose character and beauty of the churches built by Catholic missionaries in Black Africa, but remains of the opinion that whatever style inspires them, these churches are of the Western type and their construction in Black Africa does not generally reflect a concern for adaptation but rather inculturation (BUSIMBA, 2002). Thus, the probability is always great insofar as, although beautiful and great, the many churches built in black Africa by European missionaries have not been able to offer the welcoming atmosphere that Black natives would be entitled to find in the Father's house because they were built without studying the environment, mentalities, traditions, Current and future requirements (Busimba, 2002).

[1.9. Universal ethnicity for African architecture](#)

How to modernize and simultaneously return to the sources? How to awaken a dormant old culture and enter into universal



civilization (Ricœur, 2007). These questions that Ricœur asks imply that a people that does not have an identity marker (or tradition) must at least awaken it or better, invent it, to participate in the world culture. (Tshiunza, 2021)

Professor Mudinji writes in «Tropical Churches» that Paul Dequeker defines himself as a modern architect and that during his profession he wants to link tradition and modernity (Mudiji, 1984). When asked whether or not African architecture requires African architects, Paul argues that presupposed theories are linked to the very foundations of ethnicity and the universality of human culture (MUDIJI Malamba and Paul Dequeker, 1984), Paul implies by this assertion that it is not necessary to be African to make African architecture because both traditional and modern African civilizations evolve in their diversities according to which new influences are added to their habits.

This thesis therefore confirms that “universal ethnicity” is the attitude that any architect should adopt to design the project according to local traditions and to be fully imbued with it whatever its origins. It comforts the position of Paul Dequeker who is not African, but who acts as an African through his work. Indeed, the modernization of tradition is an imposition of technical evolutions and not a change of identity and this despite the contribution of new construction techniques or the use of new materials because the African man remains linked to the acts and gestures traditional.

Responding to the anthropologist JF THIEL of the Anthropos Institute of Germany who wanted to see in Africa an architecture more «in the typically African way», Paul Dequeker certifies that The African way of building changes as the materials used change and require another technique that is not necessarily traditional in Africa, and the forms of which are most often derived from the techniques used (Dequeker, 1984). It is equally important not to idealize vernacular and recognize the comfort that modernity brings and the need to live in the present (Tshiunza, Architecture



and regionalism in the Congo: 2022). Heritage serves precisely when it recalls from the past important lessons for the present life. "Tradition is not necessarily outdated and synonymous with immobility... (It) is not necessarily ancient, but may very well have been formed recently" (Fathy, 1970, p. 87). The idea of a vernacular architecture fixed in time prevents us from using it but such an image is contrary to the notion of tradition which implies a transmission and therefore an evolution. (Tshiunza, Architecture and regionalism in Congo: 2022)

For those who think that the stripping of form and simplicity of the materials used in the long term in Paul Dequeker's achievements can be misinterpreted and be the expression of a translation in the context of the poverty of the African Church in relation to the taste of religious works in the West, It could be a major obstacle to its recognition and even to its political and ideological influence. Paul believes and affirms that his philosophy of humility advocated by religion is the expression of the simplicity of techniques and of the choice of materials and rational forms that flow from economics, It even recommends dropping any unnecessary ornamentation to reduce construction costs. This does not mean that its architecture is poor. Its simplicity is an element of greatness. Pure and harmonious forms do not need decoration to embellish. The history of peoples' civilizations shows that epochs of great architecture are above all epochs of pure forms, elegant only by form, without any decoration.

Paul Dequeker's achievements have shown that he is a pioneer of Christian architecture in tropical Africa. Paul Dequeker defines tropical architecture as the implementation of methods to protect man living in the vicinity of the equator, between the tropic of Cancer and the tropic of Capricorn, by the construction of buildings capable of ensuring a pleasant microclimate in extreme heat conditions. (Kanene Mudimubadu, Paul Dequeker, 1992)



I.10. A church born of Pan-Africanism



FIGURE 40 : KWAME NKRUMAH (PRESIDENT OF GHANA, 1960-1966), NKOROFUL, GOLD COAST 1972, SOURCE: KRUMAHA HIGH SCHOOL.

Due to the social interference of the West on Africa, an interpellation is made by African intellectuals (Dr Kwame Nkrumah, George Padmore, Jomo Kenyatta, Nnamdi Azikwé), otherwise identified as precursors of Pan-Africanism in order to make their voice heard and to show the African people their destiny. Around the 1950s, the term inculturation was born from the words of African priests who also feared to completely lose their local identity. Not only about habits and the way of praying, but also about the forms of constructions adapted to local realities (climate, customs and customs.) Among these Pan-Africanists, Father Malula did not resign himself to struggle in search of identity recognition. Even before the Second Vatican Council (1962), the future Cardinal Malula already addressed the question of the Church of Africa for Africans, he would later become the so-called "father of the Church of Africa".



I.10.1. Joseph Malula Father of the African Church.



FIGURE 41 : CARDINAL MALULA, PHOTO KEYSTONE, SOURCE, AU DELA DE L'« AFFAIRE MALULA » ; BY PHILIPPE DE CRAENE, 1972,

Because Malula is convinced of a real cultural revolution, her action manifests itself in Catholic habits in the Congo. One can already notice the dress of the nuns taking on a very different cultural identity from the original dress of the Western Catholic nuns²⁰. Subsequently, the imposition in the Zairian rite of traditional gestures and rituals which provokes a philosophical reform of the liturgical actors resulting in the creation of decorations and objects of sacred art to the local identity.

²⁰ Because Congolese nuns adopt the traditional dress, they have been named by the population; "fille de Malula" (the Malulettes)





FIGURE 42 MASS CELEBRANT'S SEAT AT NOTRE DAME DE KATOKA CHURCH IN KANANGA, PHOTO BY THE AUTHOR, 2018



FIGURE 43 : ON THE TWO PHOTOS ONE CAN NOTICE ON THE ONE HAND, THE WESTERN DRESS OF THE NUNS AND ON THE OTHER HAND THE NUNS DRESSED IN "MALULETTES"; DRESS ADAPTED TO THE LOCAL CULTURE

Long before all these reforms, Malula chose Paul Dequeker to reproduce African identity in religious buildings, this concern for African tradition or modern Africanity will happily meet the aspirations of Paul Dequeker, also passionate about tropical culture.

Through his vigour in preaching, his eloquence, his apostolic zeal, his capacity for governance, his vision of the Church and his sense of teamwork, Joseph Malula received the trust of Bishop Scalais, Apostolic Vicar of Leopoldville, who appointed him vicar of the parish of Saint-Pierre, who successively appointed him parish priest of the parish of Christ the King and then parish priest of Saint-



Pierre. Malula's mission to Leopoldville coincided with the arrival of the wave of decolonization, which made it an influential play for Congolese society at the time. He therefore undertook a pan-African approach characterized by two critical considerations:

- cultural uprooting, a product of the colonial situation and
- the need for the missionary church to distance itself from colonial power.

Soon considered by young Congolese intellectuals as an attached guide, Malula was asked to lead several Christian movements, including Catholic Action and the League of Evolved Catholics of the Congo, of which he was also the founder. Malula must therefore face a social and political situation very delicately marked by several popular malaises during which he already ensures in his own way a link between the Church and the Congolese experience. In 1964, Malula was the third Congolese indigenous bishop, but he is already considered "one of the founders of the Churches of Africa, one of the fathers and a figure of the African patristic."

After his appointment as the first Congolese bishop of Kinshasa, Malula was confronted with the wave of independence and the holding of the Second Vatican Council, but also with new African political ideologies on the reclamation of traditional cultural identities. The massive and growing exodus of rural populations to the new urban centers posed new problems, as did the birth of Mobutu's bloody dictatorship and the growth of the phenomenon of poverty. This socio-political dimension of the Congolese Church at the time of Bishop Malula was repressed by Mobutu's dictatorial power. A victim of intimidation and isolation, Bishop Malula escaped the extreme rigour of a scheduled execution. He was sent into exile in Rome. Six months later, thanks to the diplomatic and personal intervention of Pope Paul VI, he was able to return to the Congo. This last stage of Malula's life involved him in a vast work of implementation of the Church. He had already approached this question in various ways, notably by focusing on the elements that



ensure the cohesion and identity of a particular Church and a Christian community. The organisation of ministries in his diocese with the creation of a ministry for the laity, called Bakambi²¹, the urgency of redefining the Church on the basis of small Christian communities, the promotion and implementation of an African language Christian liturgy called the "Zairean rite». (P. Decraene, 1972)

1.10.2. "Zairian rite"

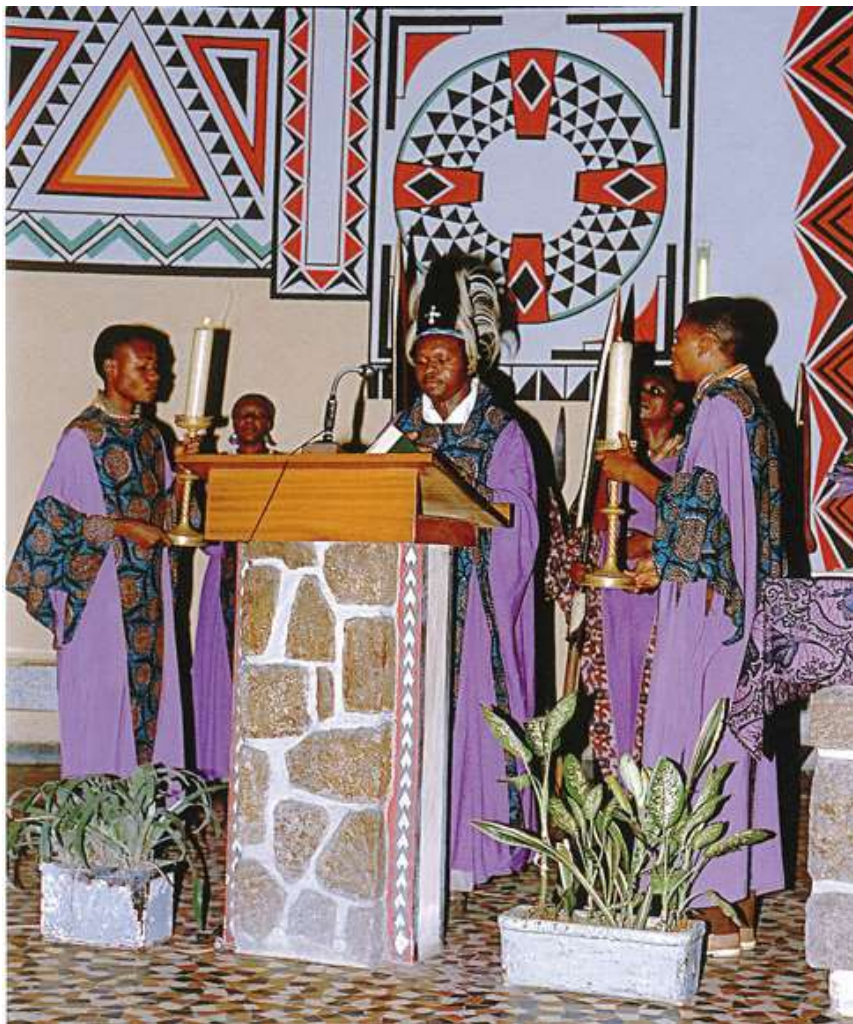


FIGURE 44: DRESSING OF CELEBRANTS AND DECORATION OF LITURGICAL ORNAMENTS WITH TRADITIONAL MOTIFS, PHOTO: MN ARCHIVE : SOURCE: MUNDONEGRO.2021

²¹ Bakambi is a term long used in Lingala to refer to a coach or trainer.



Cardinal Malula was vice-president of the National Conference of Bishops of Congo and president of the Symposium of Episcopal Conferences of Africa and Madagascar (SECAM). During the Second Vatican Council (1962-1965), he was instrumental in drafting the famous document *Sacrosanctum Concilium* on the liturgy. His mission was determined by his involvement in the Congo's independence process and especially by his contribution to the debate on the recognition of African theology, in which he influenced the creation of a female religious community whose lifestyle and style of dress are still the reference in Africa (Fr. Decraene, 1972).

At the end of the 1950s, the idea of a rite that emphasises the full participation of the congregation in praising and glorifying God through gestures and movements influenced the composition of religious buildings in Congo. In 1955, Cardinal Malula initiated and proposed a special rite that would be called the "Zairian Rite", adopted by Pope John Paul II in 1988. This ritual influence is also manifested in a particular architecture proposed by Paul Dequeker, who later became the future architect of the Church in Africa. The introduction of the "Zairian Rite" also corresponds to the implementation of the idea of inculturation, seeking to involve the faithful in the liturgy by recognising and taking into account the local culture. It insists on the active participation of the assembly, the involvement of the faithful, such as the dance, which is an expression of faith. Another particularity is the invocation of the ancestors and saints, which occupies an important place in the Zairian liturgy. It is an eschatological affirmation of the Christian assembly and an essential evocation that is part of the culture of the Congo. A third characteristic is the role of the readers in the liturgical celebrations who are mandated by the priest and receive a blessing from him before going to read (André H.; Kabongo É.F., 2008).





CHAPTER II:

PAUL DEQUEKER ARCHITECT ON MISSION IN AFRICA





II.1. A life

Paul was born in Roulers on January 15, 1930. He is the second of five children. After completing his secondary studies at the Collège Saint-Pierre in Louvain, Paul graduated in 1954 as an architect at the Institut Saint-Luc in Ghent. He was then admitted to the Congregation of the Missionaries of Scheut and pronounced his first vows in 1956. It is a conscious choice in Paul's life, a choice nourished by a strong desire to put his expertise at the service of the people and the Church in Africa. After graduating, he did a postgraduate degree in tropical architecture at the London Institute of Architecture. In 1958, he went on a mission to Leopoldville, Congo, where he built mainly schools.

In 1961, he became a member of the Department of Architecture of the Episcopal Conference of the Congo and in 1964, he became its director. For 35 years he worked as an architect in Africa, serving the CICM and other congregations in the dioceses of Congo (DRC), Congo Brazzaville, Angola, Rwanda, Burundi, Cameroon, Nigeria, Togo and Senegal. It is involved in more than 1,200 projects to build churches, convents, health centres, housing, industrial, agricultural and administrative buildings. Paul also built bridges, hydroelectric plants and drinking water treatment plants. In addition, as an artist, he made drawings and watercolours.

In 1992, at the age of 62, Paul returned to Belgium, to the CICM of Vlamingenstraat in Leuven where he devoted himself to research at the University of Leuven. He holds a Master of Architecture in Human Institutions from the Faculty of Applied Sciences and a postgraduate degree from the University of Lund, Sweden. He continued to advise on construction projects in Africa and China.

In addition to his intellectual research, Paul was also rector of the CICM in Leuven from 2001 to 2005. He retired there at the age of 75. Seven years later he was transferred from Leuven to the house of Torhout, to receive appropriate care.



In 2014, he published an album in homage to Brother Paul in which the Congolese cardinal Monsengwo describes his architecture as «modern and, at the same time, indigenous, in perfect harmony with time, like the black keys and white notes of an organ keyboard»

Paul passed away on Monday, December 4, 2017, at home, in his room, unexpectedly and peacefully. Today, more than a thousand buildings that have sprung from his mind reassure us that his footprint, especially in Africa, will remain indelible²²

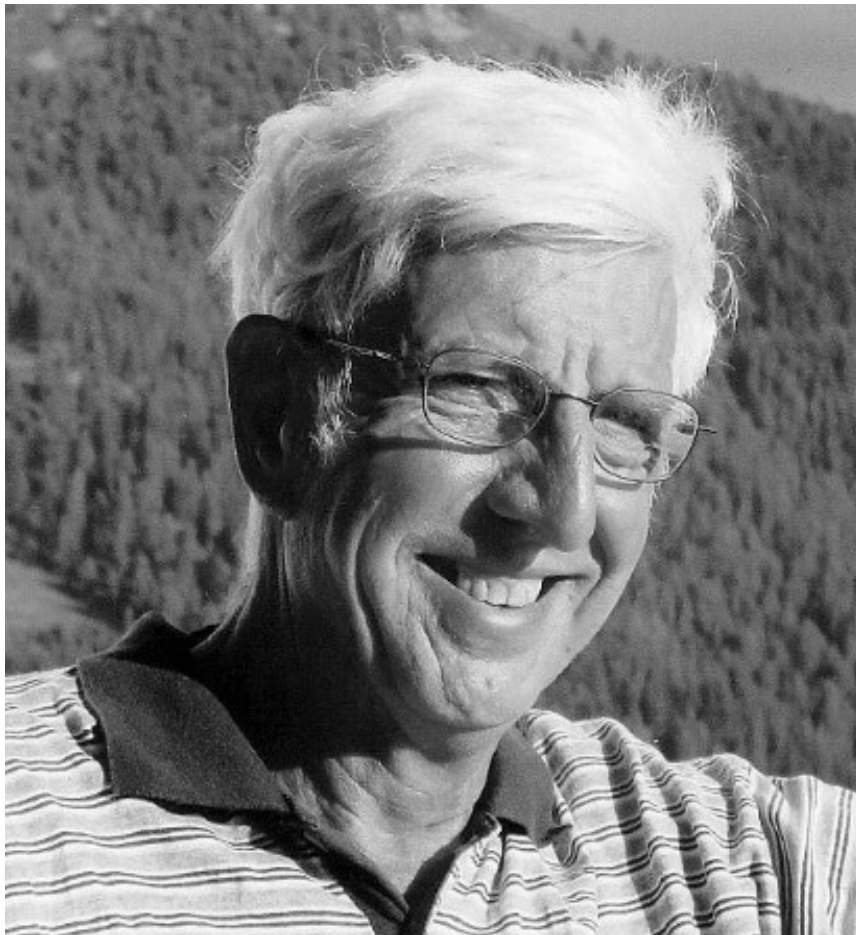


FIGURE 45: LAST PICTURE OF PAUL DEQUEKER'S SMILE, SOURCE KADOC

²² Funeral Oration by Werner Lesage and Alfons Ysebaert on the occasion of the death of Paul Dequeker



For Professor Han Verschure, who runs the postgraduate program (human settlements at KU Leuven), the modesty of architect Paul Dequeker is remarkable! In addition to his age and all his professional experience, he agreed to pursue his master's degree. Paul was the senior in the program and at the same time a student and a professor. He modestly kept this balance in his professional life. "Although I run the program, I kind of think of it as my teacher" (VERSCHURE, Paul Dequeker a great man, an exceptional architect, 2014). But Paul did not limit himself to this; in 1993 he also participated in the Nairobi City International Housing Competition, where he paid particular attention to the language and meaning of architectural/urban design, and technical aspects of materials and construction methods in a wider socio-political environment. (VERSCHURE, Architectuur en missie in Afrika, 2014)

Paul Dequeker was 63 years old (1993) when he submitted his thesis entitled "Tropical Urban Architecture in Hot and Humid Africa" to the KU Leuven Human Settlements Program, where he further researched bioclimatology, Area still very neglected at the University of Geneva. Paul Dequeker's work is the result of his obvious interest in bioclimatology and the desire to produce a document that reflects his experience in a tropical environment by proposing construction methods adapted to a place, the climate of the place and especially the user. Paul is characterized as concerned about sustainable development even before the term is fashionable, its architecture is not spectacular, but rather simple, functional and equipped with a «harmonious combination». (VERSCHURE, Paul Dequeker a great man, an exceptional architect, 2014)





FIGURE 46 : AT MORE THAN 63 YEARS OLD, PAUL DEQUEKER DOES NOT HESITATE TO RETRAIN BY LEARNING, SOURCE: KADOC

Paul Dequeker in his modesty remained sober and unnoticed throughout his career, over time his work will be showcased by Kadoc by organizing several activities aimed at the fruitful mission of the one who became the father of sub-Saharan architecture. In 2013, the Belgian Development Cooperation published a manual on its small bridges and will also get a special mention of Belgian architecture abroad.

Several authors, architects, university professors have expressed their thoughts and opinions on the missionary architect Paul Dequeker, in fact all are unanimous on the simplicity of the person and the sobriety of his work. In addition to his missionary



responsibilities, as head of the Architecture Office of the Episcopal Conference of Zaire, Paul makes it his duty to work on architecture at the service of the people and meets the demand to build many buildings useful for a country in search of autonomy of infrastructures. It is true that Paul Dequeker built several buildings in the big cities, but his genetic aspiration is primarily to work in rural areas, where the construction problems are greatest and where the populations are the poorest. The fact remains that brother Dequeker will take into account local requirements to propose an architecture that adapts to the climatic, sociological and economic environment,

In the mid-1980s, a Congolese architect, Yvon Tshilumba, was appointed his assistant. He worked with him until he returned to Belgium. In 1961, when the Architectural Bureau was created, he was already assisted by a Congolese architect, Ruben Magema. Shortly thereafter, however, he left for France to take a two-year course in urban planning. His work already covers specialized literature and the academic world of his home country.

In 1990, the article by Kathleen Vervaeke, which followed her thesis at KU Leuven, was published in the magazine Flanders at the request of Omer Tanghe (2001). That same year, Paul received the ribbon and insignia of a Knight of the National Order of Zaire for service to the people and the nation. The following year, at the end of 1991, he became a Knight of the Order of the Belgian Crown. In 1991, during the revolt of the Congolese army, Paul unexpectedly went to Belgium with a group of white refugees evacuated via Brazzaville. In early February 1992, he contacted Misereor to finance his book. On 20 February, he went to Kinshasa for several weeks and to Angola to assess, as an expert for Misereor, the damage caused to mission buildings and churches by the 16 years of civil war. The full report on Misereor was lost on his return to Belgium.



In the late 1980s and early 1990s, construction orders continued to decline. Paul turned to writing and collaborated with Congolese architect-professor Kanene Mudimubadu Corneille to produce a scientific study and report on his years of practice. Together they publish the famous book "Tropical Architecture", which is a theory put into practice in wet tropical Africa, prefaced by Professor André De Herde of UCL (Catholic University of Louvain) in the Department of Architecture. This book was published in Kinshasa at the Educational Research Centre in 1992 and will be a reference manual for new Congolese architects. The book is published with the financial support of Scheut (25%) and Bauabteilung de Misereor (75%).

In a letter to Professor Kanene in 1995, Paul Dequeker did not reserve the right to say that the production of the book Tropical Architecture is the best legacy he leaves to future generations. Paul Dequeker leaves behind several articles and reviews, the most famous of which are:

- Architecture Scolaire des Pays Tropicaux", in the Revue Africaine de Pédagogie, July 1959.
- The Shrine and the Instruction of the Constitution on the Liturgy", in Orientations pastorales, September-October 1965.
- The tabernacle at the end of the Eucharistic celebration", in Orientations pastorales, March-April 1966.
- La profession d'architecte au Congo", in Edíglizia Moderna, no. 89-90, 1966. Practical Guide for Calculating Unit Prices for Construction Works, Ed. CEP, Kinshasa 1974.
- A bioclimatic approach to tropical architecture", in World Hospitals, International Federation of Hospitals 1975.
- The vaulted masonry bridges, ed. Atol, Louvain 1979.
- Tropical architecture: theory put into practice in the tropical zone, Ed. CEP, Kinshasa, 1992 - Eglises tropicales, Ed. CEP, Kinshasa, 1984



In addition to published works, Paul Dequeker has participated in several national and international conferences as an architect, for example:

- UIA Seminar "Architects of Intertropical Africa" Lomé, Togo, March 1974.
- International Seminar on Public Health" Nairobi, Kenya, November 1974.
- Planning and Design of Health Facilities in Developing Countries", New York, December 1975.
- UIA seminar on the integration of educational and community facilities, Athens, October 1976.
- Bauen für die Dritte Welt", Frankfurt, November 1977.
- UIA - Unesco, "Educational Spaces", Dakar, March 1978.
- Conferences on "Bioclimatic research, limited resources and architecture in Central Africa" and "Discovery of economic architectural solutions in sympathy with the climatological environment of Zaire". University of Nairobi, Kenya, April 1980.
- OPEZ, "Seminar for Construction Contractors", February 1977/78.

From 1975, an annual symposium on "Tropical Architecture" at the Institute of Building and Public Works, Architecture Section of the National University of Zaire. During his career, Paul Dequeker was also a scientific correspondent for:

- The Construction Research Centre, Watford, England.
- The "Centre Scientifique et Technique de la Construction", Brussels.
- D'ATOL and PGC-KUL, Leuven, Belgium.



II.2. Paul Dequeker Missionary architect²³



FIGURE 47 : PAUL DEQUEKER DOES NOT CONSIDER HIMSELF A PRIEST BUT A MISSIONARY IN A CONGREGATION OF MISSIONARIES; HE REFUSES TO WEAR THE CASSOCK. SOURCE: KATHLEEN VERVAEKE ,1992 "DE MISSIONARIS EN DE ARCHITECTUUR: PAUL DEQUEKER, C.I.C.M."

"Brother Paul Dequeker is a "missionary architect" and not an "architect and missionary"; he is no longer a "missionary priest", a "minister or sacramental servant", but a "missionary architect"!"²⁴ (Lindemans, 2014)

He sometimes had difficulty explaining to confreres and others that he did not want to become a priest. Many thought it was better to

²³ From the testimony of Herbert Mathissen about Paul Dequeker in «architectuur en missie in afrika» p.153

²⁴ Steven Lindemans in «architecture and mission in africa» p.157



be a priest than a simple architect. Paul took a clear position on this: not a priest, but a missionary in a congregation of missionary religious, an architect-missionary, this statement was new and revolutionary in the 1950s.

Paul said in his last years that he had had a rich missionary life and that his many travels had made him understand that to see God is to meet people we do not know, but with whom we share life and joy, it is also to experience God's loving presence in the people we meet on our way of life. To quote explicitly the people that Paul met in his life, there is Father Jozef Vande Putte, Superior General of Scheut who had allowed Paul Dequeker to become the specialist of tropical architecture that the Congo had never had.

In 1958, Paul arrived in Leopoldville, now Kinshasa. At that time, he still had to find his way as an architect among his many colleagues who work in the capital. He was helped in this task by the Office of Catholic Education, the famous BEC, for the construction of many new schools in a capital where the population continues to grow and new schools must be built. But his life as a missionary architect took its final turn when he was summoned by Father Mosmans, Secretary General of the Standing Committee of the Congolese Episcopal Conference, the second providential figure in Paul's life, to concentrate alongside the other departments of the Episcopal Conference. It is in this context and as president of this office that his missionary life will develop fully. Its scope is no longer limited to Kinshasa or education, it is open to the whole country.

Another providential element of his life concerns the circumstances in which he was allowed to work. This work has been undertaken by many courageous pioneers under sometimes very difficult and dangerous circumstances. Think of all those missionaries who died a few years ago from a tropical disease.

In 1960, after the independence of the Democratic Congo, Paul Dequeker built not only Catholic missions, but also evangelical



missions or the Salvation Army. According to him, this work as a missionary architect was done in the spirit of the Kingdom of God, at the service of the people.

At that time, there were still many missionaries who worked with enthusiasm and were able to raise the necessary funds for everything that had to be built because the construction costs money, even a lot of money. And many fellow pastors were grateful to the architect Paul for doing everything he could to keep construction costs as low as possible. Architectural fees, payable to the architectural firm, remained limited. Brother Paul Dequeker worked with many other priests during his career, he made the admiration of many brothers builders and fathers of families, At work on their site under a tropical sun whose names will remain engraved on the walls of the most beautiful churches of Kinshasa, following the example of Father Jozef Coene, who built the church of the parish of Saint Paul of Kinshasa, of Father Paul Van den Bosch, Brother Albert Calle, the tireless brothers Gérard Stulens and Jan Van den Heuvel. (Mathissen h. 2014)

In the Kasai, Brother Paul Dequeker bore his admiration for Brother Jos Wolters and Brother Marcel Mathys. All these church builders had not only technical knowledge, but also human knowledge, allowing a large group of men to work together, in the native language of their country, of course, and to achieve a solid structure. Some of these workers had technical training, but others had to be trained from scratch. The simplicity of the architect Paul Dequeker is even more evident during his visits to the workplace, the builders did not call him "Mr. Architect", but simply "Paul" as if to speak to a colleague to explain things as simply as possible. Paul Dequeker, a true missionary, has not only worked hard, as evidenced by the rich honours of his various buildings, but has also formed a fine team of collaborators who continue his work today. (Mathissen H. 2014).



FIGURE 48: PAUL DEQUEKER
WORKED WITH EQUALLY
DETERMINED COLLABORATORS, AS IN
THIS PHOTO, SOURCE,
ARCHITECTUUR EN MISSIE IN AFRIKA,



FIGURE 49: PAUL DEQUEKER
DURING HIS VISIT TO CHINA,
SOURCE KADOC





FIGURE 50 : PAUL DEQUEKER ALSO CARRIES OUT THE TROPICAL PROJECT WITH THE POPULATION, SOURCE: KATHLEEN VERVAEKE ,1992 "DE MISSIONARIS EN DE ARCHITECTUUR: PAUL DEQUEKER, C.I.C.M."



II.3. A mission²⁵



FIGURE 51: PAUL DEQUEKER HAS TO FACE ECONOMIC OBSTACLES, DISTANCES AND CLIMATIC CONSTRAINTS, HE WILL TRAVEL THROUGH THE REPUBLIC OF ZAIRE DESPITE DIFFICULT TRAVEL CONDITIONS. SOURCE : KADOC

Paul Dequeker had impressive productivity, he quickly conceived! And it respected the terrain and habits of users (LAGAE, 2014). In more than 15 cities in tropical Africa, Paul Dequeker has built churches for more than 30 years whose architectural characteristics are not indifferent. Indeed, the programming of the Episcopal Conference of Zaire obliges the architect brother to propose

²⁵ description of Paul Dequeker's career in the Belgian Congo from «Architectuur en missie in Afrika», p.12-13



several churches to respond quickly to the demand and the missionary requirements. The large number of these projects suggests that he is not alone! However! Paul Dequeker produces all his churches at a rather special speed and each of his churches is unique, each project meeting the functional requirements of its location. Paul faces economic obstacles, distances and climate constraints.



FIGURE 52 : PAUL DEQUEKER CROSSING A MAKESHIFT BRIDGE IN THE MIDDLE OF A TROPICAL JUNGLE. SOURCE : KATHLEEN VERVAEKE ,1992 "DE MISSIONARIS EN DE ARCHITECTUUR: PAUL DEQUEKER, C.I.C.M."

To realize all these churches, Paul Dequeker will travel through the Republic of Zaire despite difficult travel conditions. He will successively use a bike, a car, a jeep and even small planes to make ends meet in this great country braving the very hostile terrain in a ruthless climate with a very diverse flora and fauna. For his many journeys, Paul Dequeker was even obliged to combine two specializations; architect and pilot to the point of risking his life in 1969 because of poor conditions of navigation towards extremely difficult distant destinations. From 1958 to 2006, the architect of the Congolese church built 247 churches across Africa and 103 in the Democratic Republic of Congo, the largest production of which is concentrated in Kinshasa (47.6%)²⁶

²⁶ source of the author



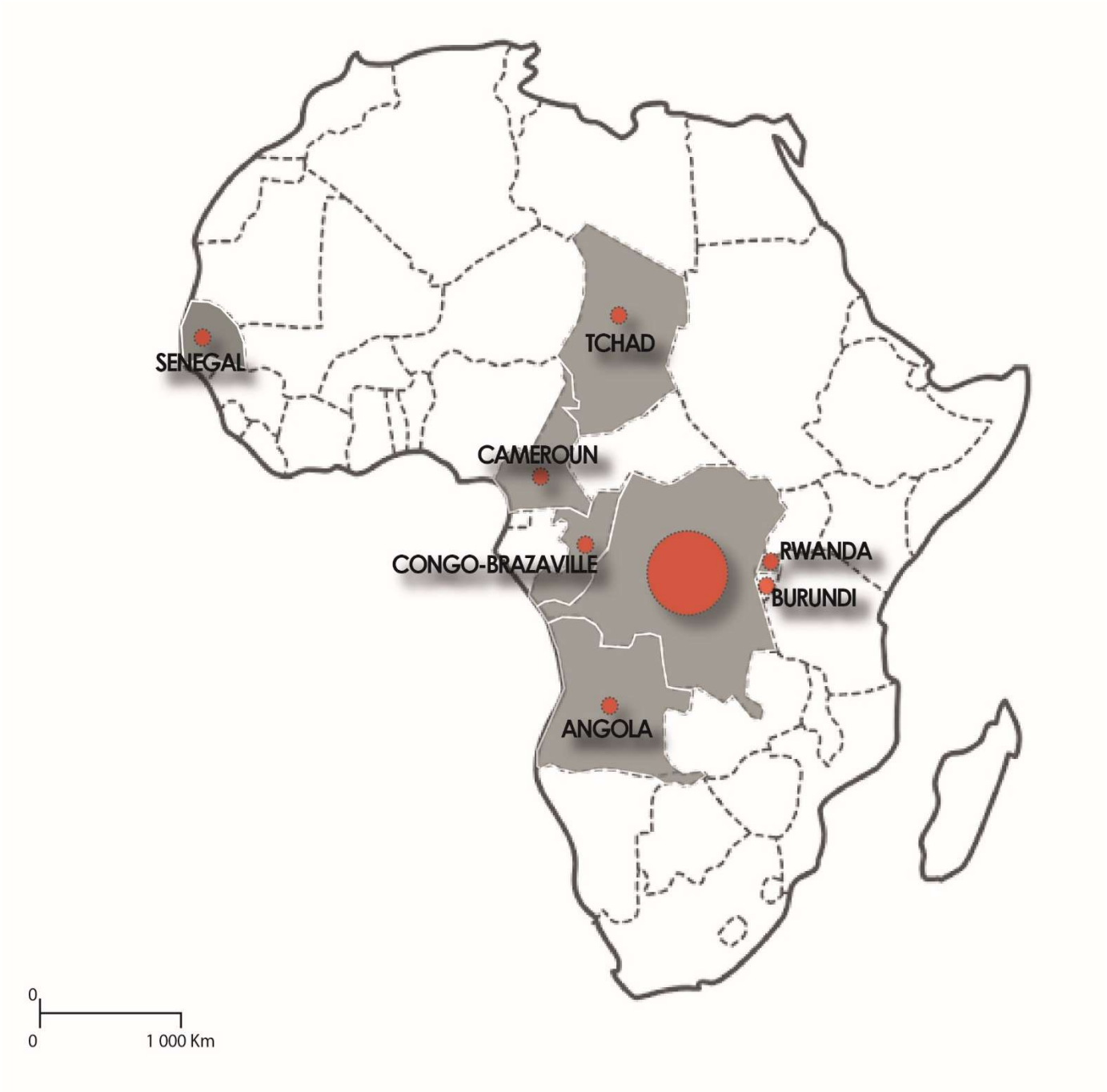


FIGURE 53: MAP OF AFRICA WITH THE COUNTRIES IN WHICH PAUL DEQUEKER BUILT DURING HIS MISSION IN AFRICA. DRAWING BY VICTOR BAY 2018



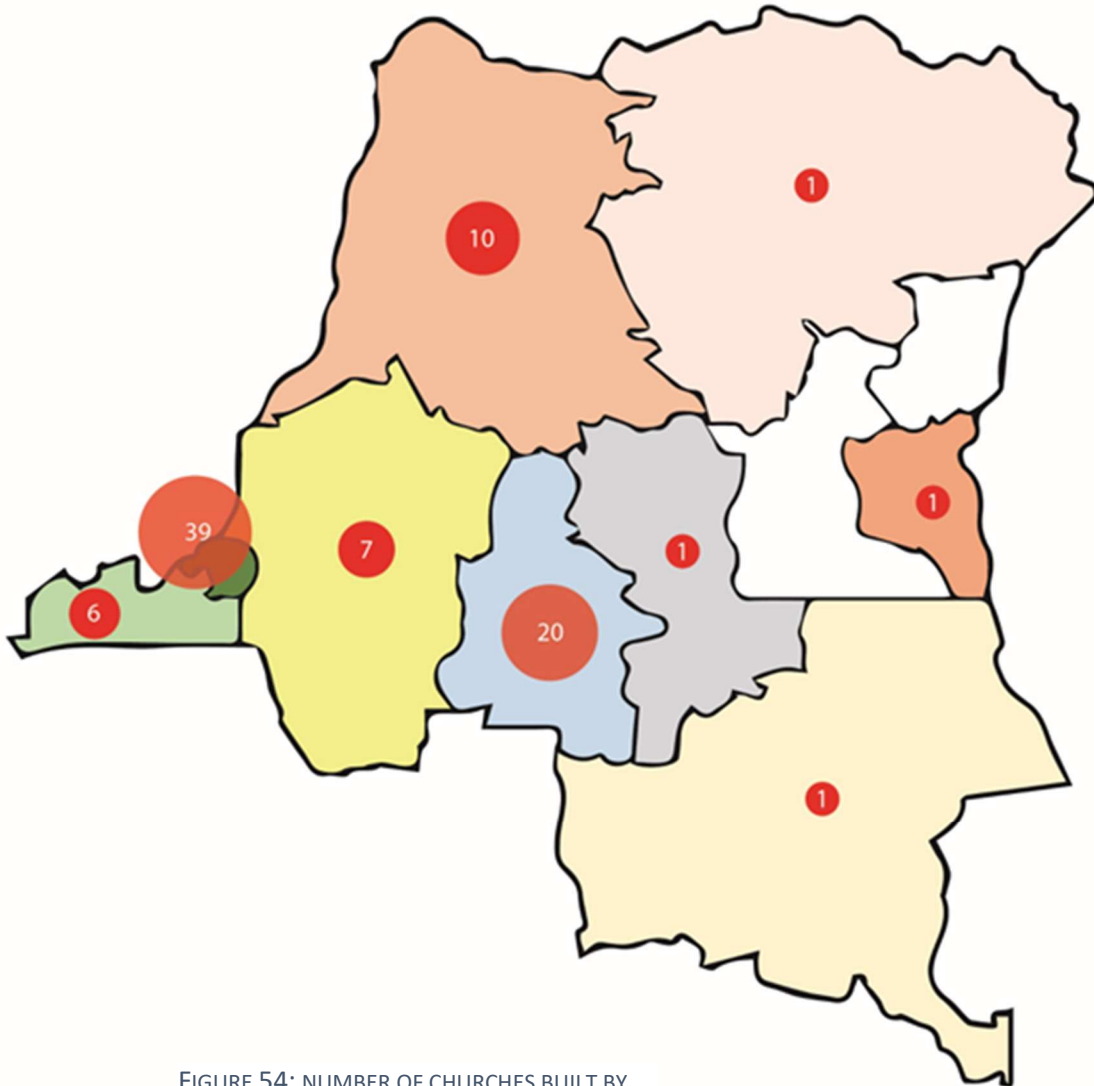
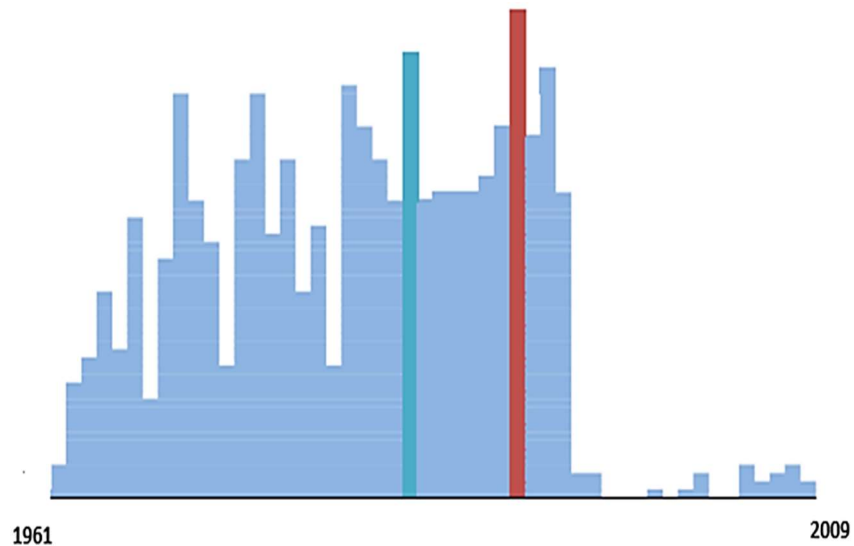


FIGURE 54: NUMBER OF CHURCHES BUILT BY PAUL DEQUEKER, BY PROVINCE OF THE DRC, DRAWING BY VICTOR BAY

- 39 in Kinshasa,
- 21 in Kasai
- 10 in Equateur
- 7 in Bandundu
- 6 in Bas-Congo
- 1 in Katanga
- 1 in Kivu
- 1 in Haut-zaïre



FIGURE 55: PAUL DEQUEKER'S PRODUCTIVITY IS VERY HIGH, THIS GRAPH REPRESENTS THE CONSTRUCTION CURVE OF RELIGIOUS BUILDINGS IN THE DRC FROM 1961 TO 2009, DRAWING BY VICTOR BAY 2018



In August 1958, after a study visit of Le Corbusier's works in southern Germany, Switzerland and France, Paul left for the Congo. He makes a long stop in Nigeria to see the exploits of Maxwell Fry, whom he met in London. After Congo's independence in 1960 and the creation of the Episcopal Province of the Roman Catholic Church in the Congo in 1961, Paul was mainly responsible for building schools, at the request of the Office of Catholic Education (BEC), under the direction of Jozef Moerman. Paul creates his standard modules according to adapted climatic standards. He explains the orientations of his policy in *Tropical Countries* (1959). He participated in the necessary revision of the *General Specifications*, which has not been updated since 1935. During the same period, he made several official trips to Congo (Kasaï, Kisantu, Borna, Inongo), Rwanda and Uganda. In 1959, he built for the Scheuts near the University of Lovanium the famous scholasticate of Nkongolo for the Congolese monks, «place of architectural pilgrimage», one of the most representative buildings of the Dequeker style. (LAGAE, 2014)





FIGURE 56 : SCOLASTICA NKONGOLO, FIRST PROJECT BUILT IN KINSHASA (1959), PHOTO JOHAN LAGAE, SOURCE KADOC



FIGURE 57 : IN SCOLASTICA NKONGOLO, PAUL DEQUEKER INTEGRATES THE PROJECT INTO ITS SITE WHILE ADDRESSING THE CLIMATE NEED. PHOTO JOHAN LAGAE, SOURCE KADOC

In 1961, Brother Paul moved to the inter-diocesan centre in Kinshasa to manage the architectural office of the episcopate. He no longer worked exclusively for teaching, but as an architect, he was involved in the various works of the church. Like his colleagues, he now worked for the new church hierarchy, under the direction of the Congolese bishops. From 1961 until Mobutu took power in 1965, Paul mainly built churches. In the remote areas of Kinshasa and in the interior of the country, he relied on a long-term basic structure, which was then supplemented by more extensive means in the wealthier areas of the capital and in the interior of the country, where he built more elaborate churches, such as the



cathedral of Notre-Dame-de Katoka (1965) in Kananga and the churches of Saint Philip (1968) in Kinshasa.

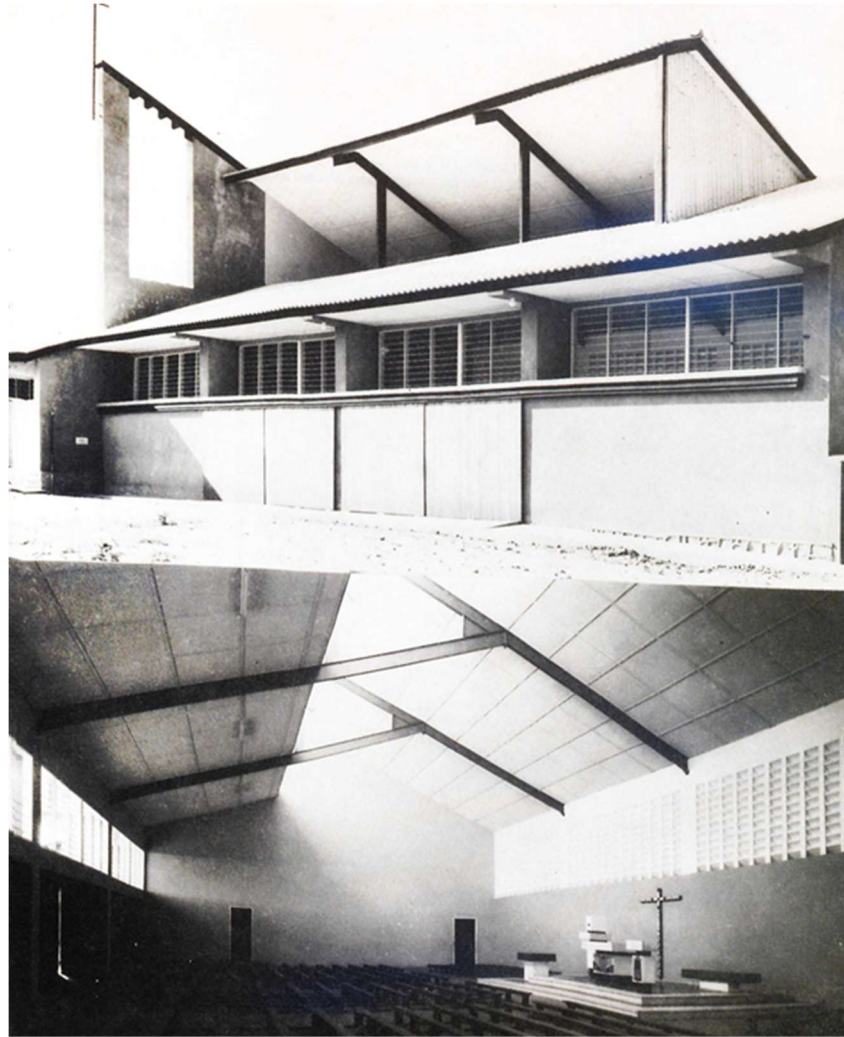


FIGURE 58: SAINT PHILLIP OF KINSHASA (1968), SOURCE TROPICAL CHURCHES



FIGURE 59: CATHEDRAL NOTRE DAME OF KATOKA (1965), PHOTO BY VICTOR BAY, 2018



II.3. A vision

Paul Dequeker impresses so much that the media does not cease to sell his achievements, for example the biweekly "Kongo ya Sika" published from September 1 to 15, 1967 on the occasion of the construction of the chapel of the Nganda center, an interview of Paul Dequeker gives several directions towards his vision.

In another article published in 1987 in the newspaper Elima, considered at the time as the greatest editorial in Zaire, Brother Paul Dequeker offers an exceptional interview with Tumba Kwako in which he presents the best description of his still enigmatic vision. When asked how Paul Dequeker arrived at the profession of architect by chance or necessity, he stated that from childhood he devoted himself to the visual arts, painting and sculpture, while his father and mother pushed him towards architecture, according to these parents, the architect earns a better living than a painter even before he becomes aware of his religious vocation. Paul Dequeker has no other source of inspiration than his imaginary museum, which is the accumulation in his memory of everything he has seen and read about architecture around the world and his personal approach is simple! He always tries to be correct and sincere with the program requirements and available techniques. The outer form is his last concern because it is the result of the adaptation of the project of this program, to the climate, the site, the materials and the techniques available.

On the specific question of a Dequeker style, the scholastic architect thinks that his way of doing is the result of the evoked research followed by a harmony of forms, volumes, voids (opening) as well as a harmony of colors, difficult to describe, but which must be lived by insisting that his satisfaction and experience be shared on more successful achievements than others, among which, certain findings proved unpleasant, But he does not reserve the right to consider that the apartments of the parish of Sainte-Anne, the church of Saint-Augustin of Lemba, the scholasticate Father



Kongolo at Mount Amba, in Kinshasa can be cited among the most successful.

In addition to church buildings, Paul has also built many human settlements through which, I hope, every citizen will find their well-being by adapting to their environment. Man cannot live happily by enjoying the good things of daily life. Architecture, even without wealth, being appropriate and beautiful can make life happy. It is not wealth that makes it happy. His last hope is that Zairean architects become aware of their power to give their fellow citizens a real architecture, beautiful, rich in bioclimatic value and aesthetic without being a luxury architecture for the rich alone. In Kinshasa, his message was not to look elsewhere for plans and models of houses, they can be beautiful, but unsuited to the climate and life in Kinshasa. Many Kinshasa architects, conscious of the local values to be exploited, are ready to give the best of their talents to make the house and all Kinshasa worthy and more beautiful.

II.4. For a spirit of Poverty

FIGURE 61: THIS CHURCH IS BUILT IN THE MIDDLE OF THE VILLAGE, ACCORDING TO THE SOCIO-ECONOMIC FACTORS OF THE PLACE, SAINT LUC DE KANANGA, PHOTO BY VICTOR BAY 2018



Paul Dequeker was first inspired by the Bible, which gave him the strength and vision of his service, and then by his constant contact with nature, the environment and its ability to adapt to the needs of the populations that led it to build churches where people of all languages and races meet in harmony. The spirit of Poverty that Paul develops is therefore the result of these previous factors and of the respect of the principles (constitution) of the CICM that made him opt for universal brotherhood, the commitment to the poor and the certainty of living in Christ a missionary and religious vocation throughout one's life. Paul therefore knew, even before the Second Vatican Council, what a community liturgy meant. In his many speeches, he keeps reminding us that it is not the walls that make a church, but the community of believers, with their own characteristics and customs. A contemporary church building is not primarily a house of God, but the home of the community of God's people.

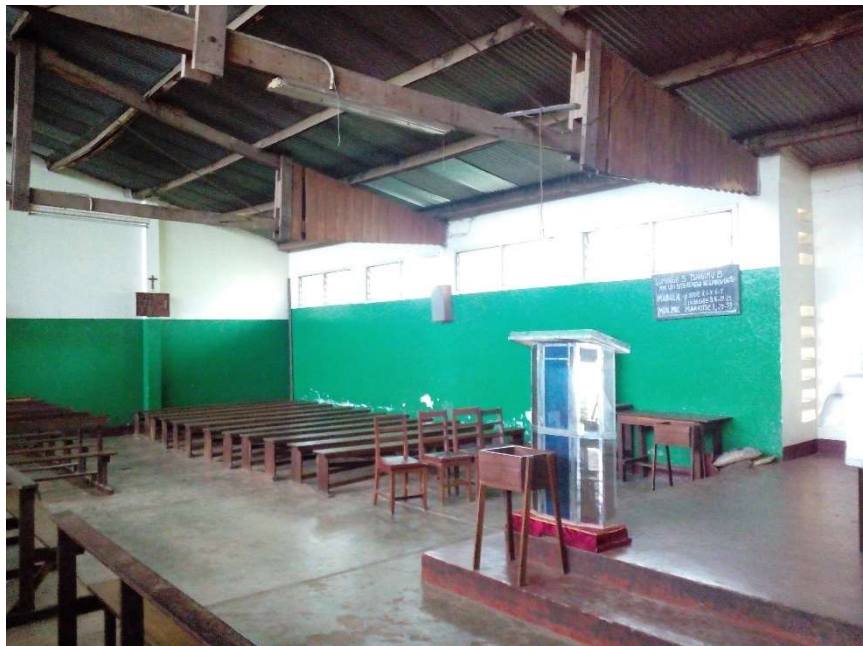
This spirit of poverty guides Paul Dequeker who built simple and sober buildings, but full of cultural communications, Paul Dequeker's churches are an identity for Africa. This famous "Ndako ya Nzambe" is characterized by:

- Naco framed windows,
- Doors made of wooden slats,
- Claustras or slats in front of the house
- Wooden, metal or concrete frames,
- Corrugated metal roofing
- Natural stone foundations





FIGURE 62: IN SAINT LUC OF KANANGA, PAUL DEQUEKER BUILDS WITH THE ECONOMIC CONSTRAINTS OF THE TIME AND PLACE, PHOTOS BY VICTOR BAY, 2018



II.5. Paul Dequeker towards an authentic architecture

Since in a humid tropical zone the temperature inside the building will have to be kept substantially at the temperature of the outside air, it is necessary to provide permanent ventilation during the night as well as during the hot hours of the day. To meet these climatic requirements, Paul Dequeker develops a grammar that links new technologies to the particular conditions of the region, materials and techniques available on a human scale. The basic principles of his architectural approach are solidly based on the development of an authentic system that meets the conditions of the time; social, technical and environmental. Paul Dequeker sought architecture that was more adapted to the deep and living aspirations of Indigenous peoples, promoting community encounters by integrating buildings into their environment. In addition to these qualities, its architecture is simple, practical, universal and imaginary. Paul then formulates conceptual recommendations for an authentic architecture;

- Know how to listen and see how people live in their environment and make the effort to understand it.
- Seek perfection in the simplest forms.
- Living the serenity of traditional rural architecture while being aware of the evolution of orthodox architecture that has put too much emphasis on individual architecture.
- Create new reports that correct the paltry and mediocre architecture, unusable and disconnected from reality.
- Take into account a varied architecture, multiform, not concerned by schools and definitions alongside the "great" architecture, which is part of the history of architecture,
- The beauty of spontaneous architecture is not accidental, it is the result of a rare common sense in mastering practical problems. Through the ages and despite the fragility of materials, constantly renewed, it has preserved the permanence of millennial forms.



- The architect must learn much from spontaneous architecture, so to speak without architects, full of inventions, original plastic solutions, always closely linked to the imperatives of function, the needs of the structure and the possibilities of materials.
- Do not oppose so-called noble architectural works to popular achievements; all are indispensable to history and architectural balance. We too often forget that shelter, like clothing, are tools and protect the human before being the soulless supports of a fashion.
- The primary function of architecture must remain the improvement and enhancement of the human condition by having semi-open outdoor spaces characteristic of the traditional architecture of warm countries.
- The architect's imagination and creativity are only the possibility of making something new from experience. A chain of individuals is necessary for an invention to break out, for something new to be created.
- Do not give in to the superficial imitation of the West by ignoring the local context and adopting inappropriate models. From the point of view of African culture and civilization, we are faced with a phenomenon of alienation.
- African cities have adopted foreign planning and architecture standards that should never have developed in this way if planners and architects had listened to the natural environment and respected cultural heritage.
- The alienating nature of current architectural design and Orthodox urbanism is the blatant denial of integration into African life and family.
- Architecture, which has given itself the task of being integral and self-sufficient as a child, becomes once again the shelter of man, without any challenge, where man is at ease at home.
- Shelters built with materials of recovery, simple techniques and the participation of local artisans, tending towards a



quality architecture worthy of African culture and modern man. (DEQUEKER P. , architecture tropicale, 1992)

II.6. Paul and the Tropical Project

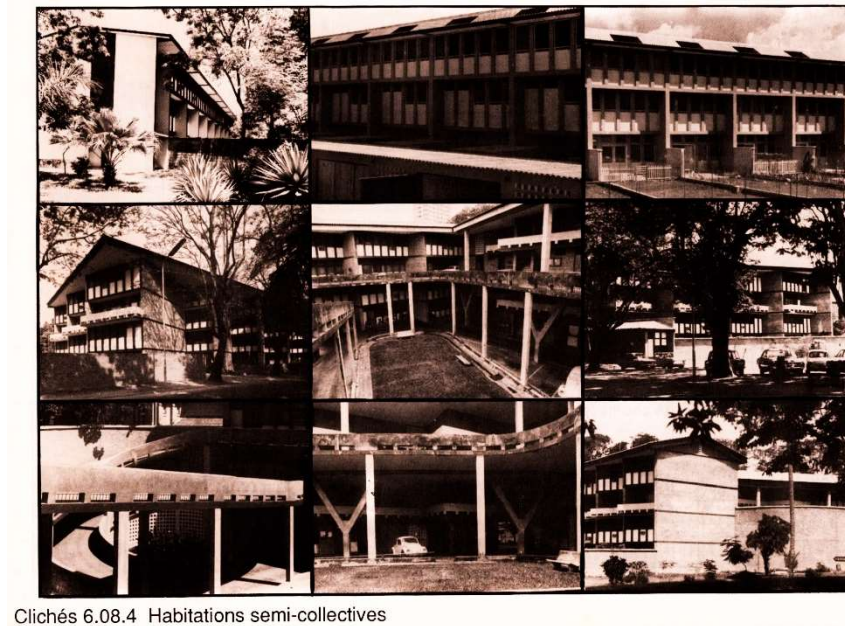


FIGURE 63: SOME NON-RELIGIOUS BUILDINGS BUILT BY PAUL DEQUEKER, SOURCE: ARCHITECTURE TROPICALE

The particular creativity of Brother Architect Paul Dequeker is surely due to the fact that he was both an architect and a brother of a missionary congregation. For several years Paul Dequeker was in charge of the Architecture Office of the Episcopal Conference of Zaire where he responded to the great demand for infrastructure for a country that wants to prosper. Paul not only built religious buildings, but also administrative buildings, industrial establishments, medical buildings, school buildings, dwellings, bridges and dams. (VERSCHURE, Paul Dequeker a great man, an exceptional architect, 2014)

The need for infrastructure does not only concern built cities, but also rural areas where construction problems are the most important. The fact remains that Brother Dequeker always took into account local requirements in order to propose an architecture that adapts to the climatic, sociological and economic environment.



Through his training, he makes sure that his art is mastered and tries to understand the behaviour of the climate in the different cities of Zaire, it uses the studies of architect Victor Olgay of the University of Princeton in the United States to ensure optimal simulation of conditions, ventilation and radiation to protect the building user from excessive heat.

Religious and architect, his interest is therefore not to impress or produce a spectacular architecture, his work is based on a "spiritual" approach, thoughtful and disciplined as Herbert Mathissen thinks. The architecture designed by Paul Dequeker is therefore functional and remarkably simple depending on its destination and its users. Brother Paul Dequeker, as a missionary, is both an exceptional servant of God, an artisan and a professional architect! (Mathissen H. 2014)

This somewhat peculiar character does not want to hear about "career" while for nearly half a century he designed and built many churches, monasteries, schools, houses and other important buildings, going even to the construction of bridges, He worked as an architect for the nine dioceses of the Congregation of Congo for over 33 years, and also as a consultant architect in various countries of Africa, Asia and Haiti. (Mathissen, 2014)

Paul Dequeker's churches are distinguished by the search for cultural values applied in composition and induced by an artistic approach, a dialogue or a message between the user and the architect. The originality of the tropical churches of Paul Dequeker is also defined by a natural and urban context in harmony with the local ways and customs, listening to a living tradition of local values complemented by taking into account the original characters of existing works in the environment. Several examples support this assertion such as: the domed boxes of the Holo villages, those of the Pende in Zaire or those of the Saba and Mogum in Chad. We thus see that these different forms are assigned to various uses that



can be profane and sacred; habitat, granaries, places of initiation and cultural functions.

Far from being an adaptation of the architecture of Catholic churches in a tropical climate, Brother Paul Dequeker's works are an expression of his desire to make a new architecture in Africa for Africans. By rereading the architecture of the Catholic churches of the Belgian Congo built between the end of the 17th century and the beginning of the 1950s, this thesis reveals the point of rupture between the styles used by the missionaries and the way of doing things.

Paul Dequeker does not build only churches or religious buildings, on the contrary! It has more civil buildings than religious ones. In 30 years, it built about 1200 projects, including only 253 religious' buildings (Dequeker L. 2014). Thanks to these multiple projects in Kinshasa, Paul Dequeker is quickly appreciated outside the country as in 1966, he is invited to Angola for the construction of schools and churches. He was also invited to Butare in Rwanda in 1968 for the construction of a monastery for the Dominicans in and in 1968 in Nigeria for the construction of university cities in Ibadan. In 1968, he began building the Higher Pedagogical Institute in the province of Kivu (figure), entrusted to the Archdiocese of Bukavu in difficult war conditions. (Dequeker L. 2014)



FIGURE 64 : ISP BUKAVU BUILT IN 1968 BY PAUL DEQUEKER, SOURCE : RADIO OKAPI



In the multitude of his tropical projects in Zaire (DRC) Paul Dequeker also built for non-Catholic communities, for example in 1972 he drew up plans for the seat of the community of the Church of Christ in Zaire (figure) and a Baptist temple in the Ngaba district of Kinshasa in 1980, he also worked for the Salvation Army in Kasangulu and Kinshasa.



FIGURE 65 : THE AMERICAN INTERNATIONAL SCHOOL (TASOK) WHICH HE BUILT IN 1975 SOURCE : ARCHITEKTUUR EN MISSIE IN AFRIKA.



FIGURE 66: CBFC, ADMINISTRATIVE BUILDING OF THE PROTESTANT CHURCH IN CONGO, BUILT BY PAUL DEQUEKER, SOURCE: TROPICAL ARCHITECTURE



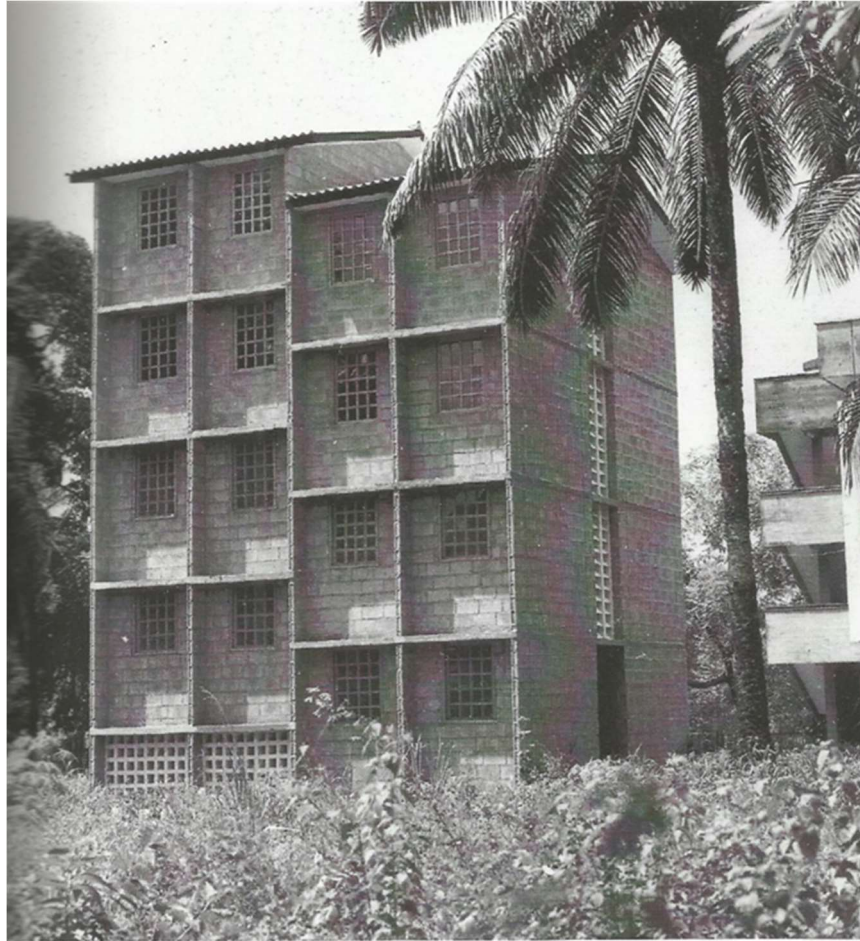
Under the Mobutu regime, the Ministry of National Education proposed that Paul Dequeker develop a model plan for schools. (Dequeker L. 2014) in this vast program of school reform, Paul will establish the plans of the American International School (TASOK) which he built in 1975 (figure) according to specific American norms, in 1979 he built the Catholic University of Congo in Limete and in 1989, He built one of his least known but certainly characteristic projects, the home for disadvantaged students of the Higher Educational Institute of Kinshasa-Gombe. Through this project, Paul Dequeker expresses a remarkable simplicity and a typology that many did not imagine. Indeed, in his search for a low-cost construction, he proposes a 10cm cement block cell structure (figure) It considers very economical and resistant for multi-storey buildings because it requires little concrete to make thin slabs and very little volume for the sails of load-bearing walls. (Kanene Mudimubadu, Paul Dequeker, 1992)



FIGURE 67: THE CATHOLIC UNIVERSITY OF CONGO IN KINSHASA - LIMETE 1979, SOURCE : BENI LUBERO, 2010



FIGURE 68 : THE HOME FOR DISADVANTAGED STUDENTS OF THE HIGHER EDUCATIONAL INSTITUTE OF KINSHASA-GOMBE (1989)



In addition to the buildings, Paul Dequeker practised the construction of works of art such as the vaulted bridges in masonry (1979) (figure) of which he drew up a standard plan which served as a basis for a study of the "Belgian Technical Cooperation" (CTB) (figure). In the same proportion of achievements as before 1980, Paul devoted himself to countless medical projects, missions and interior schools.

In the tropical project, Paul Dequeker imposes a design that will be reproduced for several years and the construction processes will even be adapted to his way of doing things. The vulgar language will even call this architecture, "kotonga ya ba sango"²⁷ in other

²⁷ Kotonga ya ba sanngo is a designation for religious buildings in Lingala.



words; "The architecture of priests". But without actually knowing that the author of this movement does not want to be displayed through the plasticity of his works, but rather through what he himself calls "the invisible beauty". Architect and missionary at the service of the episcopate, Paul Dequeker was called upon for several projects useful to society.

Paul Dequeker's contribution to architecture in the Congo is immense, each construction site is an opportunity for the professional to come and learn rational techniques adapted to the local climate, Paul Dequeker's projects are compared to a training school for the construction of a city in full transformation. (LAGAE, 2014). In the urban approach of Paul Dequeker's project, the project fits into the urban fabric without taking away its value, but complementing it by the form of the project. This is evident in many of his works, and will later justify the many geometric forms he used to design his churches. (LAGAE, 2014). Paul Dequeker in his avant-garde spirit already thinks of a green city for Kinshasa because green has several functions, not only it softens harsh environments, but it also reduces noise and plays a crucial role in creating a pleasant microclimate. (LAGAE, 2014)



CHAPTER III:

FROM THE MISSIONARY CHURCH TO THE TROPICAL CHURCH





FIGURE 69 : A "MONGANGA" ;
FETISH DOCTOR SHOWS HIS
MERIT TO FATHER
BAUDIN, SOURCE: FETICHISM
AND FETICH WORSHIPERS, NY.
1885

III.1. The missionary conquest

At the end of the seventeenth century, the missionary conquest took place in the lives of the indigenous peoples of tropical Africa who live in harmony with nature and believe in the ancestors and spirits of Nature by bringing ritual and cult upheavals. However, this conquest was not easy at its beginnings because after various unsuccessful attempts, such as the conversion of King Kongo in 1491 by the Portuguese, the baptism of a prince of Ivory Coast taken to Versailles and sponsored by Louis XIV or the attempts of German missionaries to evangelize the Hottentots, Christianity hardly succeeded in imposing itself seriously before the beginning of the 19th century. Many missionaries entered the continent from all sides, as well as travellers sent by different European nations to explore Africa's commercial possibilities. Catholics and Protestants, English, German, Swiss, French, Dutch, engaged in fierce



competition, relying on the struggle against slavery and finally as a prelude to the colonial races that launched the European nations to the conquest of Africa.



FIGURE 70 : A MISSIONARY PRIEST WHO PREPARES THE COLONY WITH THE NATIVES, SOURCE, MARC PIAULT, " AFRIQUE NOIRE (CULTURE ET SOCIETE) - RELIGIONS ", ENCYCLOPÆDIA UNIVERSALIS

Following the social and political destructuring induced by colonization, at the same time as the lack of understanding and marked contempt for purely African religions and beliefs, Christianity, as Islam, proposed a possible method of grouping; but the obstacle of a large and foreign clergy imposing cults whose sacred characters were all external to Africa led to the progressive constitution of independent churches, African sects emerging primarily from Protestant missions, and then from the birth of prophetic movements and syncretic cults where African elements of rituals and beliefs in Christian liturgies and teachings are intimately intertwined. (Piault, 2018)

In 1835, the Holy Spirit Fathers began to evangelize the western coasts of Africa and went up the coast to the mouth of the Congo. Fathers Deniaud and Augier, as well as the former papal zouave Félix D'Hoop, docked on Lake Tanganyika in Burton Bay and created the first post at Mutweba in Masanze in 1880, but they abandoned it a little later following the incessant raids of Arab slave owners in 1881. A second post was created in Kibanga in 1883 by



a Belgian father Vyncke, but it was also abandoned in 1893 due to the unsanitary conditions of the area.

The post of Kapakwe created in 1884 was also abandoned in favour of the posts of Mpala and Karema ceded to the missions by Captain Tempests in 1885. The missions of Baudouinville and Lusaka were occupied in 1893 and 1896 respectively. On the other hand, the White Fathers sent missionaries to the Congo estuary around 1880, where they created two missions at Banana and Boma, which they occupied until 1888. (figure) and from Leopoldville with the mission to go up the river by creating missionary posts everywhere. In 1883, Father Guyot created the Kwamouth mission but drowned in the river and was replaced by Fathers Merlon, Dupont and Schynse. (VANNESTE, 1955)

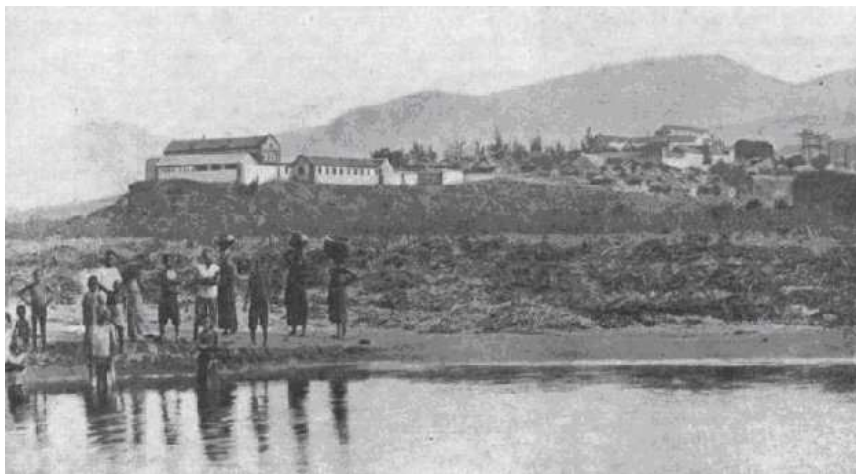


FIGURE 71: LA MISSION DE MPALA AUX BORDS DU LAC TANGANYIKA VERS 1888, SOURCE : " LE ROYAUME CHRETIEN DE MPALA : 1887 - 1893 ", IN SOUVENIRS HISTORIQUES P. JACQUES CASIER

The creation of these posts allows a new way of understanding divinity and meeting God. Indigenous peoples are now faced with a different way of praying than their usual rituals. This change, although not easy to accept, will eventually happen thanks to the determination of the missionaries, mainly scheuts



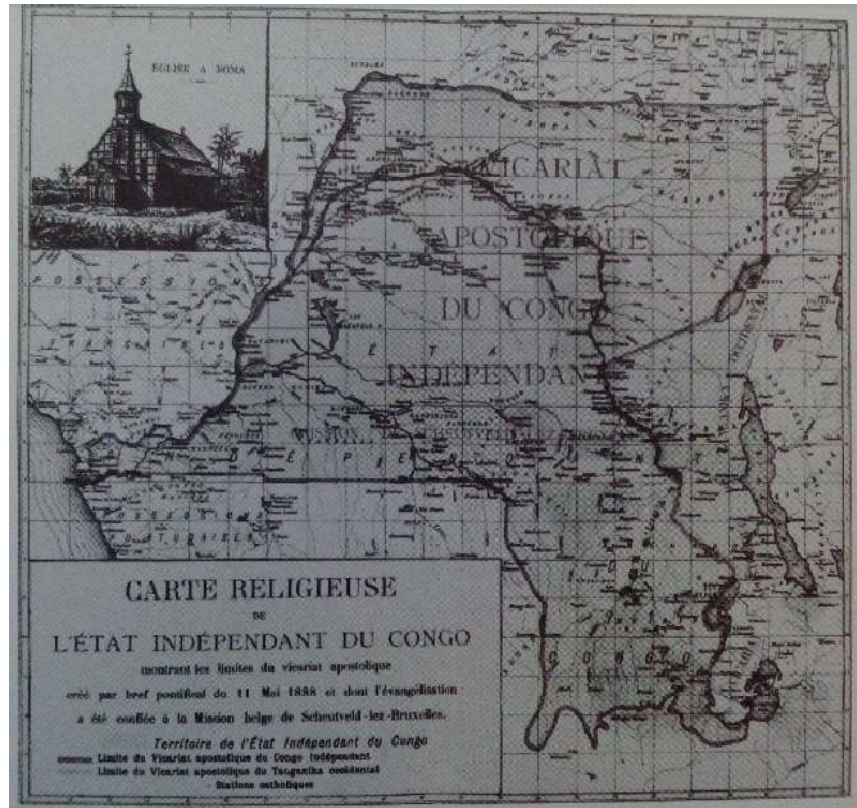


FIGURE 72: RELIGIOUS MAP OF THE INDEPENDENT STATE OF CONGO, SOURCE, ARCHIVES OF PAUL DEQUEKER (KADOC)

III.2. The C.I.C.M. in the Congo

The Congregation of the Immaculate Heart of Mary "C.I.C.M" was founded in 1862 by a diocesan priest, Theophilus Verbist. The name of the Scheut Missionaries under which its members are known derives from the "scheut" suburb of Brussels where the congregation was born. Originally, the founder had intended it for the evangelization of China but, by the insistent will of King Leopold II, he found himself, from 1888, owner of the vast vicariate of the independent state of Congo. The Scheutist missionary fathers carry out a work that deserves the attention and recognition of the Congolese population. Arriving in the Congo in 1888, they went to Kwamouth to occupy the Notre-Dame de Bungana mission on the right bank of the Kasai. This first foundation was named Berghe-SainteMarie because its existence was only possible thanks to the financial support of Bishop Oswald-Marie van den Berghe,



parish priest of Saint Joseph of Antwerp. From this main mission, Fathers Scheut first went up the river to found the New Antwerp mission at Makanza, in the Bangala region (1889); then, Eméri Cambier left for the conquest of Kasai, where he founded Mikalayi-Saint-Joseph in 1891 (VERVAEKE, 1990).

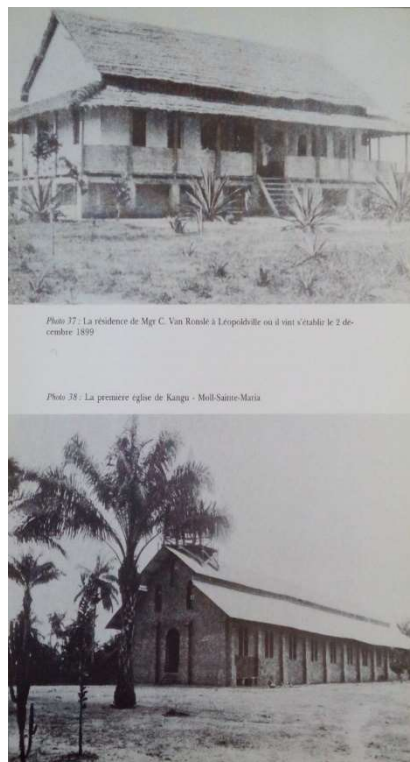
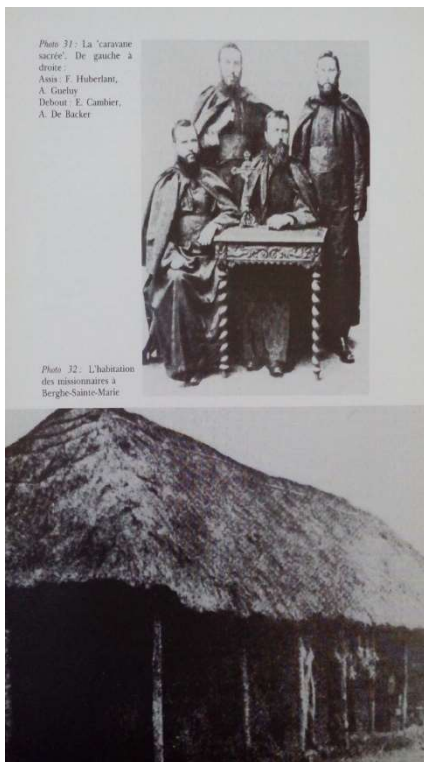


FIGURE 73: 1. THE SACRED CARAVANE COMPOSED BY F. HUBERLANT, A. GUELUY, E. CAMBIER AND A. DE BACKER

2. THE MISSIONARIES' HOME IN BERGHE-SAINTE-MARIE

3. THE RESIDENCE OF MONSEIGNEUR C. VAN RONSLE IN LEOPOLDVILLE 1899

4. THE FIRST CHURCH IN KANGU-MOLL-SAINTE-MARIE



FIGURE 74: MIKALAYI MISSION OF SAINT JOSEPH IN KASAI. 1891, SOURCE: ARCHIVES OF PAUL DEQUEKER IN KADOC



FIGURE 75: THE SMALL CHAPEL OF THE SCHEUTIST STATION HOSPITAL IN LULUABOURG, SOURCE ARCHIVES OF PAUL DEQUEKER IN KADOC



FIGURE 76: SAINT JOSEPH'S CHURCH IN MIKALAYI, SOURCE: PRETREDANSLARUE.BLOGSPOT.COM 2014,



III.3. The religious building in the Congo from 1880 to 1988.

III.3.1. Before 1880: the Palabra tree and African huts



FIGURE 77: IN AFRICA, THE BAOBAB IS NOT JUST A TREE, IT REPRESENTS DIVINITY AND IT IS ALSO AROUND IT THAT THE PEOPLE LISTENED TO THE WISDOM OF THE ELDERS. A BAOBAB IN BOMA, BELGIAN CONGO.

According to the theories of ancestor belief and "Muntu"²⁸, Africa already knew the existence of invisible spirits generating positive energies in which it carried all its spiritual motivations. This belief

²⁸ The word Muntu means «man» in the Kongo language.



in the elevation of the "Kimuntu"²⁹ does not need a place built, adorned or majestic to meet God; before 1880, the sacred space in the Belgian Congo was only a box for the healer (Nganga), built in a structure of tree branches covered with palm leaves and/or also in raw soil stabilized under a cover of straw or natural leaves. These typically traditional Negro buildings are generally of three types: round huts, hive-shaped huts and rectangular huts. They all have straw or thatch roofs made up of stacked walls connected by branches covered with dried mud, or generally clay walls with some artistic sense in the decoration of doors and walls and in the edges of gutters. These huts are built either in isolation or in groups according to the modes of use.



FIGURE 78: A RECTANGULAR HUT SERVING AS AN ALTAR FOR THE PRIEST (1927), CONSIDERED AS A TEMPLE OF IDOLS IN THE CONGO WITH FETISHES IN FRONT. SOURCE :CHRONIKNET.COMCOPYRIGHT 2016

²⁹ According to Olivier Bidounga in «Kimuntu, source of the wise Kongo», Kimuntu designates «what makes man»; this word covers all the qualities required in a human being, goodness, generosity, truth, justice, respect, solidarity, in a word humanism... One can be Muntu without having Kimuntu ... The exact opposite of Kimuntu is what the Kongo call Bungungu, i.e. lies, malice and depravity of morals, etc. Kimuntu is thus a philosophy and a way of life essentially linked to the word. The word is also justified as the creative element of the divine word (Genesis 1).



III.3.2. 1880-1910: First missionary churches

It should be noted that towards the end of the 17th century, some Christian buildings were already under construction, as evidenced by the traces of the evangelization of Africa through the remains of Mbanza Kongo, in the Kongo kingdom in Angola which already characterize the edifice of Christian worship around the seventeenth century (figure). But strictly speaking, it was from the 1870s on, with the arrival of the missionary, that the construction of the first missionary churches began and brought to the indigenous peoples a different way of understanding the sacred place and of meeting God. Places of worship were transformed over the years, from the traditional hut to the modern church. The establishment of missions, the contribution of new materials and the advent of new techniques will influence the forms of churches by bringing imported architectural styles to Africa.



FIGURE 79: RUINS OF THE CATHEDRAL OF ST. SAVIOUR BUILT BETWEEN 1560-1565 IN THE KONGO KINGDOM, PHOTO : CESAR ESTEVES 2017

M'Banza Kongo was the home of the Menekongo, the monarchs who ruled the Congo kingdom. In 1549, under the influence of Portuguese missionaries, a Catholic church was built, the Cathedral of St. Saviour of Congo, on the oldest site in sub-Saharan Africa.



The name of the church is Nkulumbimbi. It was elevated to the status of a cathedral in 1596. Pope John Paul II visited the cathedral in 1992.

The first missionary churches were built of semi-sustainable materials (wood, raw earth or terracotta) depending on the location. Generally rectangular in shape, their dimensions depend on the size of the mission post or the local population as can be observed from the 1900s, the missions are already very well established and the first churches are provisionally built to allow the prayer of the European populations like the first chapel of Saint Anne of Kinshasa (1908) (figure) and the Sims Chapel built in the late 19th century in Ngaliema Bay



FIGURE 80: FIRST SAINT ANNA CHAPEL IN LEOPOLDVILLE (1908)

III.3.3. 1910-1960 : European style churches

The architecture of religious buildings (churches) took a characteristic form of European churches (Gothic and Romanesque) from the 18th century when the missions were established and European populations became numerous in the Congo. Note for example the cathedral Saints Peter and Paul of



Lubumbashi (1920) and the church Saint-Pierre of Kinshasa which is built in a neo-Romanesque style by brother Henri Beckers, we notice the semicircular arches, the columns with two bays, the capitals with geometric decoration, the buttress.



FIGURE 81 : CATHEDRAL OF LUBUMBASHI PHOTO: NICK HOBGOOD



FIGURE 82 : SAINT PAUL KINSHASA, SOURCE, RADIO OKAPI, PHOTO JOHN BOMPENGO

In the Neo-Gothic style, several buildings were built in Kinshasa and in all provinces, such as the Kisangani Cathedral built in 1910, the



Cathedral of St. Anne of Kinshasa, the Saint John Baptist Cathedral of Wamba built in the middle of the equatorial forest in Maboma in 1936 and the Kisantu Cathedral (the largest cathedral in the DRC) built between 1926 and 1936.



FIGURE 83: SAINT ANNE'S CATHEDRAL BUILT AROUND 1930 IN LEOPOLDVILLE, SOURCE:



FIGURE 84: CATHEDRAL OF KISANGANI BUILT IN 1910, SOURCE,





FIGURE 85: KISANTU CATHEDRAL,
PHOTO : PIET CLEMENT 2008



FIGURE 86: PAROISSE DE MABOMA,
ST-JEAN-BAPTISTE, ERIGEE EN 1936
AVEC ECOLE PRIMAIRE, ECOLE
NORMALE, INTERNAT POUR ELEVES ET
PYGMEES. PHOTO LUANNE CADD,
2013

Although sumptuous, beautiful and large, these churches do not integrate into the immediate environment giving the impression of distorting the place and do not take into account cultural and sociological factors.

By the 1940s, the means of execution were becoming increasingly enormous and required qualified personnel. The churches are built of bricks fired in most works in Kinshasa and in all provinces, such as, the cathedral Notre-Dame du Congo built in 1948, and the cathedral of Bukavu (1951), this period is therefore of great productivity marked by large and very impressive churches



FIGURE 87: CATHEDRALE NOTRE-DAME DU CONGO,
SOURCE: EVENTS RDC.COM, 2021



FIGURE 88: CATHEDRAL OF KISANGANI BUILT IN 1910,
SOURCE, PIERRE GALLET : 1955



Although the Gothic and Romanesque features are visible in these buildings, from the years 1955 the architects of the churches began to impose themselves, the architecture is confirmed by achievements worthy of modernism, The influence of new materials and techniques will give rise to a very varied architecture to the example of the Church of Our Lady of Fatima (1955) in Kinshasa,



Our Lady of Wisdom built in 1954 by Marcel Boulangier at Lovanium University,



FIGURE 89: CHURCH OF NOTRE DAME OF FATIMA AND CHURCH OF SACRE-COEUR OF KINSHASA, ANONYMOUS SOURCE



FIGURE 90: CHURCH OF NOTRE DAME DE LA SAGESSE, UNIVERSITY OF KINSHASA (LOVANIUM), PHOTOS BY ROGER CYR TAKEN BETWEEN 1960 AND 1964

III.3.4. 1960-1988 Modern churches

After the Second Vatican Council (1963), the forms were liberated and the architect's imagination was given free rein. It is true that these churches will now be built taking into account the local climate and customs, but there is even less; the economic factor! Modern churches are expensive and do not yet meet the aspirations of a local church that claims to be a victim of inculturation. Churches are still only a product of European imports, such as the Church of the Blessed Sacrament in Ngaliema, built in



1977 by the Italian architect Palumbo and the Congolese architect Fernand Talangayi



FIGURE 91: SAINT SACREMENT CHURCH (1977) OF NGALIEMA IN KINSHASA

III.3.5. Paul Dequeker's tropical churches

During the same period (1960-1990), several churches built throughout the Congo reveal a new church architecture that makes maximum use of local resources (tools, materials and personnel) and techniques accessible to all. These particular churches tend to respond to the aspirations of the Congolese people who want to worship and pray to God according to traditional requirements but in the process of globalisation and modernity through the evangelical message of Jesus Christ.

At that time, these churches built in the organic space of the African world of the 20th century were imagined and realised according to the perception and customs of the African man of the time (Mudiji, 1984). Characterised by a particular architectural language, these churches were defined in 1984 as 'tropical churches' by Professor Mudiji, who even dedicated the book 'Tropical Churches' to them in 1984. These churches, all designed by Paul Dequeker, not only respond to the aspirations of the Congolese people, but also integrate a typically African contribution. They have a morphological characteristic that combines tradition and



modernity, as the designer of these buildings works to update traditional architectural forms in a rapidly changing African architecture.

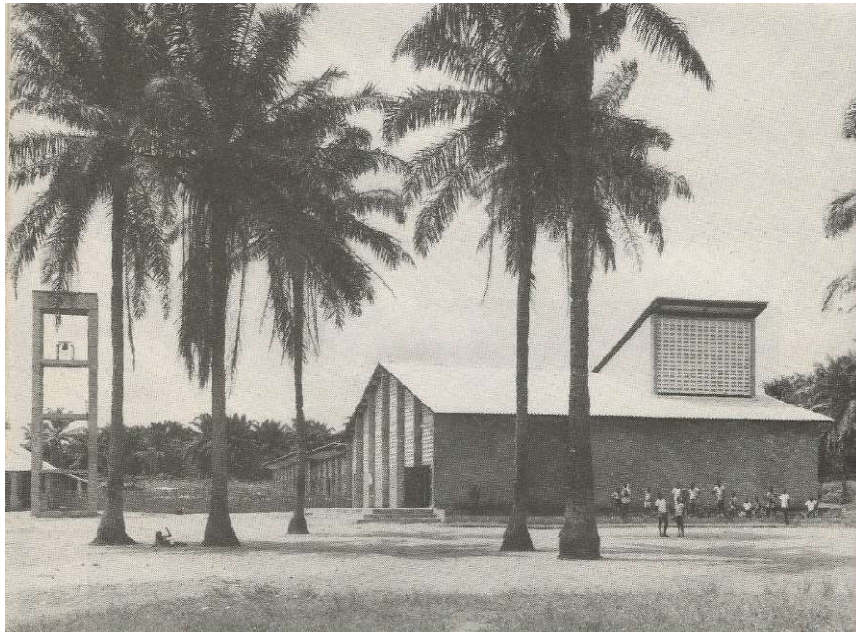


FIGURE 92: THE CATHEDRAL OF OUR LADY OF BUDJALA 1967 IS AN EXAMPLE OF WHAT THE FAITHFUL AFFECTIONATELY CALL DEQUEKER STYLE, SOURCE: EGLISES TROPICALES



FIGURE 93 : THE SAME LANGUAGE IS USED IN THE PARISH OF SAINT ADRIEN, 1967, KINSHASA, SOURCE: EGLISES TROPICALES

Between 1958 and 1960, at the independence of the Belgian Congo, the young Paul Dequeker, brother Scheutist, graduated in



tropical architecture in 1949 at the Hoger Instituut St Lucas de Gent, was installed by Malula and will impose an authentic identity on his compositions based on utilitarian architecture and defining in its own way tropical architecture; thus meeting the expectations of Cardinal Malula, he will be a designer as an architect of the churches of the Congo and will create what could be called today the «Dequeker style».³⁰

To endow the Zaire church with this authentic identity, Paul Dequeker proposes an architecture relatively oriented towards the climate, economic issues and local customs. A rather exclusive concept, but which does not derive its origins from nothingness. The architect Paul Dequeker is religious and studies tropical architecture. The influence of these two aspects will deeply channel his vision of architecture and proclaim himself of the modernist current, It borrows several architectural examples from Europe bringing a tropical grammar to the example of the Saint Paul churches of Lubumbashi and the chapel of the Nganda center in Kinshasa.

On March 30, 1984, to preface the book "Churches in the Tropics", Cardinal Malula did not hesitate to declare his admiration for the work of Paul Dequeker by stating:

"Brother Dequeker, in a very creative way, has promoted an art of building which contributes in a dignified and beautiful way to the splendour of worship according to the genius of our time and of our peoples." (Malula 1984)

³⁰ This thesis suggests that the use of the term Dequeker style could be the subject of further study.





FIGURE 94 ; CHAPEL OF THE NGANDA CENTER IN KINSHASA, AN EXAMPLE OF MODERNISM APPLIED BY PAUL DEQUEKER: PHOTO: PAUL DEQUEKER, SOURCE KADOC



FIGURE 95 : EGLISE SAINT PAUL DE LUBUMBASHI 1975, PHOTO : JOHAN LAGAE





FIGURE 96: SAINT LUC CHURCH IN KANANGA, PHOTO BY VICTOR BAY 2018

III.5. Chronological implantation of churches in Kinshasa

For specific reasons of this thesis, the choice of the city of Kinshasa is induced by the fact that the capital of the DRC has a rather particular historical evolution whose implantation of churches has followed the rhythm of the mutation over the years. This choice was also decisive because it had the largest number of churches built by Paul Dequeker between 1960 and 1988.

1891 to 1930

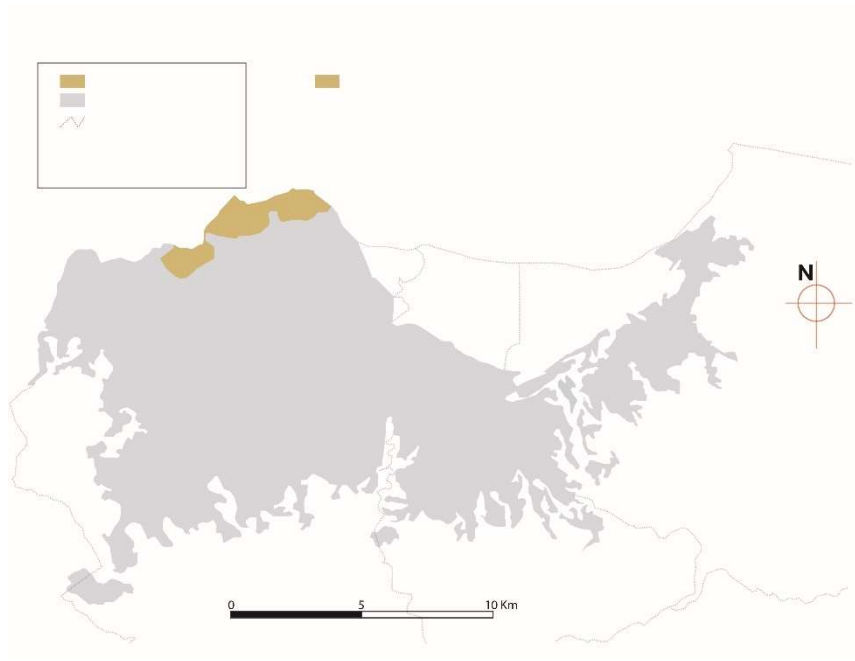


FIGURE 97: OCCUPATION OF THE CITY OF KINSHASA BEFORE 1937; IT IS ALSO IN THIS AREA THAT THE FIRST CHURCHES WERE ESTABLISHED. DRAWING BY VICTOR BAY

Between the 16th and 17th centuries, around the 1584's, shortly before the arrival of the first Capuchin missionaries, we trace the history of the present city of Kinshasa established in the west, in the bay of Ngaliema (Malebo basin), along the Congo River in present-day Ntambo Kintambo. At the end of the 19th century, the Gombe became the residential area reserved for white people. The cities of Kintambo, Saint John (Linguala), Kinshasa and Barumbu are designed to house the work that white people need.



This spatial and functional distribution of the city will influence the implantation of religious buildings. The first church of the Protestant mission in Kinshasa, the Sims Chapel (1891), was established on Ngaliema Bay, and in 1899 the first church of the Catholic mission was established in Ngaliema, the church of Saint Leopold, dedicated to Saint Leopold, in memory of Leopold II, king of the Belgians and ruler of the church. Logically, in 1913, Sainte-Anne Cathedral was built in the heart of the white city.

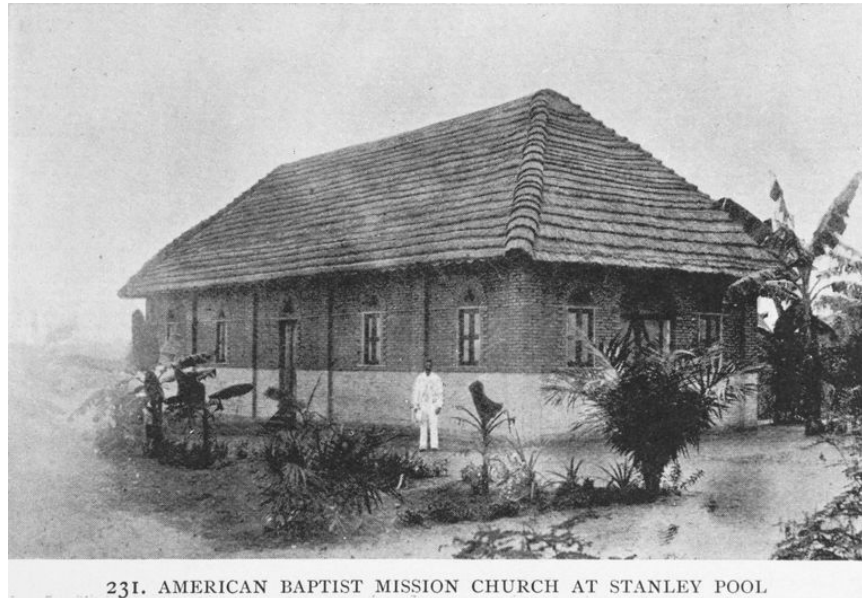


FIGURE 98: THE SIMS CHAPEL (1891) : SOURCE, KINSHASA THE AND NOW

1930 to 1955

In 1932, the church of Saint Pierre in the commune of Kinshasa was built to evangelise the workers and the white workforce, preceding the church of Saint François de Sales built in 1937 in Kintambo, these two buildings were the first churches built in Kinshasa for the indigenous populations. In 1935, the Sacré-Coeur Church was built in Gombe in the Sacred Heart High School, run by nuns who had arrived in Kinshasa in 1929 to train white children. This church was enlarged in 1958 (P. Madimba Mbombo and Manisa Muloki, 1994).



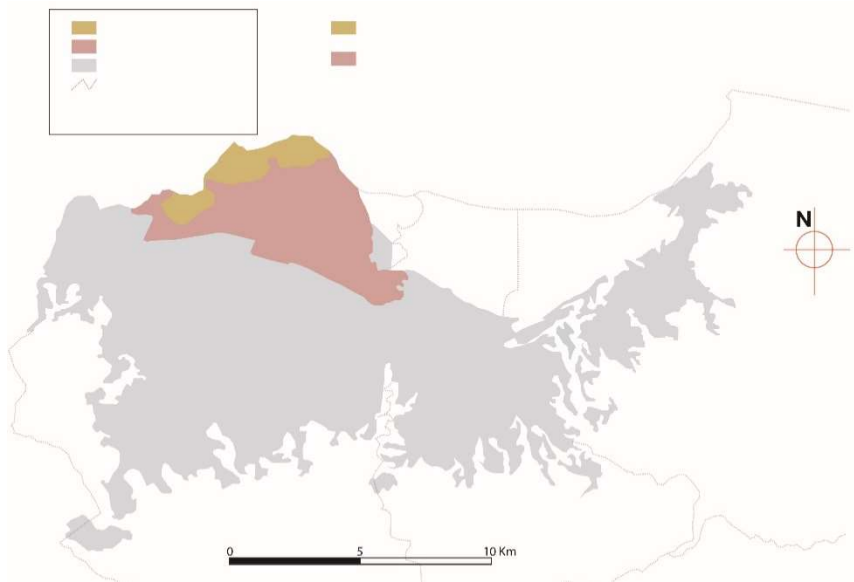


FIGURE 99: OCCUPATION OF THE CITY OF KINSHASA BEFORE 1955; IT IS ALSO IN THIS AREA THAT THE FIRST CHURCHES WERE ESTABLISHED. DRAWING BY VICTOR BAY

After Saint François de Kintambo, several churches were built in the indigenous towns for the evangelisation of the workers, notably the church of Saint Paul, which was the third church in the indigenous town built in 1946, followed by the cathedral of Notre-Dame du Congo, the fourth church in the indigenous town built in 1948 (P. Madimba Mbombo and o. Manisa Muloki, 1994)



FIGURE 100: THE CHURCH OF SAINT FRANÇOIS DE SALES BUILT IN 1937 IN KINTAMBO,, SOURCE; KINSHASA THE AND NOW



From the 1950s onwards, the Congo experienced a very active period in the field of construction, with several European architects making great achievements, including R. Fostier, Marcel Lamrich, René Schoentjes, Van Ackere, Anibal Bado, Eugène Palumbo and Claude Laurenz, but none of them clearly defined the principles of a typically local architecture that took into account the social conditions of the indigenous people. This architectural trend was strongly dominated by the construction of large administrative, religious and school buildings of 'tropical modernism'.

This trend of tropical modernism was to assert itself at the end of the 1950s with the construction of very elaborate churches, and the architects of the churches were to really begin to impose themselves with great achievements influenced by the contribution of new materials and techniques, such as Saint Joseph of Matonge and Saint Alphonse of Matete.

From 1960 to 1988

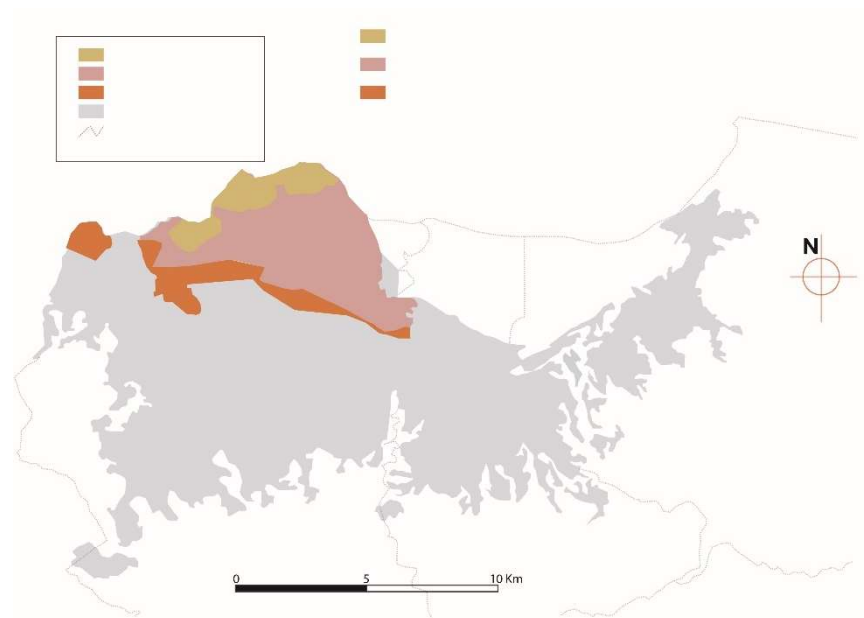


FIGURE 101: OCCUPATION OF THE CITY OF KINSHASA BEFORE 1988; IT IS ALSO IN THIS AREA THAT THE FIRST CHURCHES WERE ESTABLISHED. DRAWING BY VICTOR BAY

During the creation of the Decennial Plan of the Belgian Congo, Ruanda-Urundi in 1947 and 1948, to solve the housing problems



in the new cities, Professor R. Hulpia will propose the idea of setting up the Office of Indigenous Cities (OCI) The decree will be promulgated on January 16, 1949 in the Belgian Congo. Due to the misinterpretation of the word «indigenous», another decree will create on 30 March 1952 the Office of African Cities that intervenes in Congo between the years 1952 and 1960. After the independence of the Belgian Congo (1960), the OCA became the National Housing Office (ONL) on 9 June 1965. (B. Babunga, 2018). Several important buildings were then built in Leopoldville to make it a capital worthy of the greatness of the colony. They will replace most of the buildings cited by James Chapin. An effort was also made to house the Congolese in the best conditions than in the workers' camps. Thus were born cities built by the OCA (Office de Cités Africains) which built nearly 40,000 dwellings in the Colony (Robert, 2010d, p.36) including 20,000 in Léopoldville (Bost, 2015, p.380).

It was also at this time that Monsignor Scalais, who had no funds-built parish churches with materials recovered from the various OCA sites, following the example of the temporary churches of Saint Michael in Bandalungua, Saint Pius X in Ngiri-Ngiri, Saint Teresa in Ndjili and Saint Augustine in Lemba. According to Paul Dequeker, half a million Belgian francs per temporary church built by Scalais was a loss. (BUSIMBA, 2002) He then proposed that he build the big works of a definitive church, even if it had to be completed over time. It was only after the construction of the main work of the extension of the Saint-André church that Bishop Scalais approved the proposal of the architect Paul Dequeker and The church no longer speaks of temporary buildings in Kinshasa announcing the beginning of the great project of tropical churches, Among others the construction of ChristRoi in Kasa-Vubu (1961), St Antoine in Bumbu (1962), St Luc in Binza (1962), St Charles Lwanga in Bandalungua, St Martin in Kimbanseke, St Marc in Kingasani, Ste Famille in Masina. St Jacques in Kinkole, St Christophe in Binza, St Marie Goretti in the city of Kauka, After this experience, former critics, Clergy and political authorities, as well as

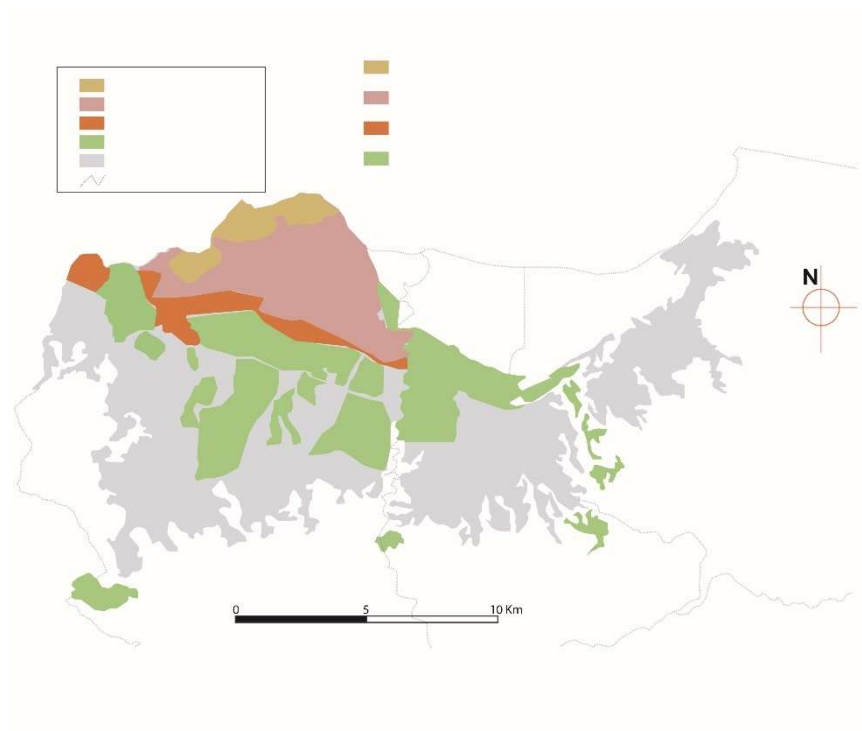


some entrepreneurs, have become promoters of this architecture and of Paul Dequeker's way of doing things. (Dequeker, letter to Busimba, 2002).

From 1988 to 2020

After the construction of the church of Saint Raphael in Limété, the churches built in Kinshasa from 1988 onwards did not follow a formal logic. The great demographic growth of the city of Kinshasa has caused a spontaneous extension of the new districts in all directions provoking an urban chaotic situation; it is from this chaotic situation that several new churches are built, for the most part without taking into account the climatic questions nor the style because in fact, they mix gothic, baroque, modern and contemporary in a single hybrid architecture to be redefined.

FIGURE 102: OCCUPATION OF THE CITY OF KINSHASA BEFORE 1988 ; IT IS ALSO IN THIS AREA THAT THE FIRST CHURCHES WERE ESTABLISHED. DRAWING BY VICTOR BAY



CHAPTER IV :

GENEALOGY AND GENETIC OF TROPICAL
CHURCHES



IV.1. Genealogy of tropical churches

Although responding to an evangelical mission, Paul Dequeker exercised himself to produce a work worthy of originality guided by two major influences which are African culture (tradition) and European modernism.

IV.1.1. Influence of traditional African architecture

Paul Dequeker is strongly imbued with the life of Africans to design his churches, he studies all African traditions, their construction techniques and also their domestic uses. In the book "Tropical Churches" published in 1984, Professor Mudindji wonders if there are pure African architectural forms that have not been used elsewhere, in Asia, Australia, Polynesia? In his reply he believes that inevitably, African architecture by developing in harmony with African man will lose the image that the Western world has made of its African character. To qualify as «African», architecture must be rooted in the user population, it must take into account the climate and must materialize with the materials available on site. Form is therefore not a justification for belonging to a tradition, but can be an implication of the cultural requirements of the place. (MUDIJI Malamba and Paul Dequeker, 1984).

Considering that the tropical churches fit perfectly in the framework of the «modern renewal» of architecture and plastic language that dates back to the end of the 19th century and the abolition of the dictatorship of the plastic language of the Greek-Greek artistic civilization Paul Dequeker states that this belonging to modernism is based mainly on two essential elements which are matter and form. (Dequeker P. 1984) Matter as materials used in the construction of these churches which is purely local and form is the way to conceive and organize space within the framework of a vision of universal culture. (MUDIJI Malamba and Paul Dequeker, 1984)





FIGURE 103: SAINT ANTOINE 1 (1962) AND SAINT LUC (1963) ARE TWO EXAMPLES THAT MARK PAUL DEQUEKER'S WILLINGNESS TO IMITATE THE LOCAL TRADITIONS FOR THESE FIRST CHURCHES IN KINSHASA,

Paul Dequeker for his appropriation of the elements of African architecture will borrow the forms taken from traditional constructions taking into account the natural techniques of ventilation and insulation against overheating and the effects of weather (regular rains). Since the majority of traditional constructions are either dwellings or mansions of kings, besides the circular form typical of traditional huts and the rectangular form widely used in African architecture, Paul Dequeker in his attempt will Delicately appropriate the frequent applications listed in the tribes of Central Africa to the example of the gallery created by the roof overhang supported by columns in tree trunk of the Kongo boxes, porous walls in palm branches or mashrabiyyas in the raw earth of the Ashanti peoples of Ghana, or the woven or sculpted colonnades supporting the roof of the large huts of the Bamileke of Cameroon and also multiple forms of roof or elements of facades and rock paintings observed in traditional African architecture.



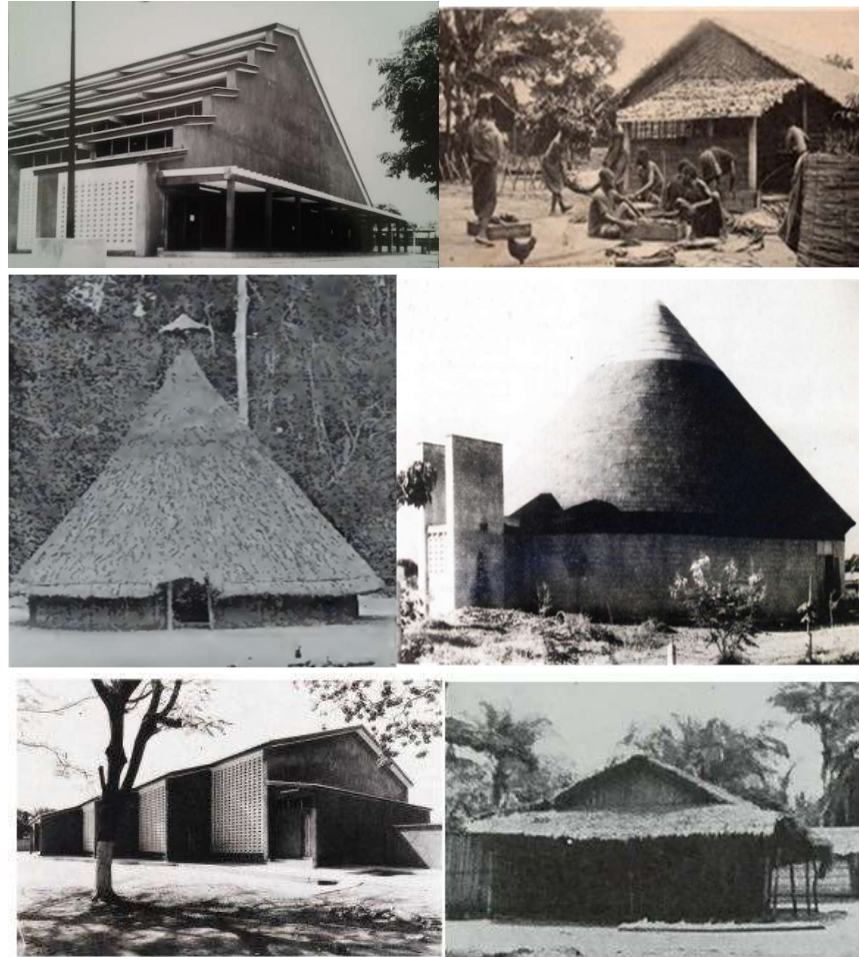


FIGURE 104: PAUL DEQUEKER WAS INSPIRED BY AFRICAN ARCHITECTURE IN HIS ATTEMPT TO UPDATE TRADITIONAL FORMS IN MODERN ARCHITECTURE SOURCE: LES EGLISES TROPICALES; CONGO ILLUSTRE 1895, HENVAUX, 1951,

As for the decoration and furnishing of the tropical churches, Paul Dequeker on liturgical furnishings will take as a source of inspiration the sculptural motifs of furniture and Kuba utensils of the Kasai in the DRC or those of the Igbo tribes of Nigeria. Several other symbols of the African language will constitute the base of the actualization of traditional forms in the modern architecture of Paul Dequeker to the example of «the remodelled nature», symbol of fullness, Ohendo and other populations of Kasai and the "leopard's mouth", a symbol of political power that also represents the divine gifts and the word of the chief among the As'ohendo of the Democratic Republic of Congo.





FIGURE 106: WOODEN CHEST WITH ORIGINAL IGBO MOTIFS FROM NIGERIA, SOURCE: BROOKLYNMUSEUM.ORG 2004



FIGURE 107: BAMILEKE STOOL FROM CAMEROON, SOURCE: COLLECTIONS.MFA.ORG



FIGURE 105: THE LITURGICAL FURNISHINGS ARE ALSO COMPOSED ON THE IMITATION OF TRADITIONAL FURNISHINGS. PHOTO BY VICTOR BAY 2018

Because forms and techniques evolve according to a given context, the most eloquent examples are to be counted among the different furniture made by Paul Dequeker. In his great conciliar attempt of the 1960s, he composed several modern objects inspired by African art. One will notice very quickly the sacred wooden furniture with the kuba motifs of the church Saint Paul in 1967, the motifs and the wall paintings of the church Saint Pierre de Demba in Kasai in 1969,



FIGURE 108: LITURGICAL ARRANGEMENTS AT SAINT PAUL OF KINSHASA, SOURCE : EGLISES TROPICALES

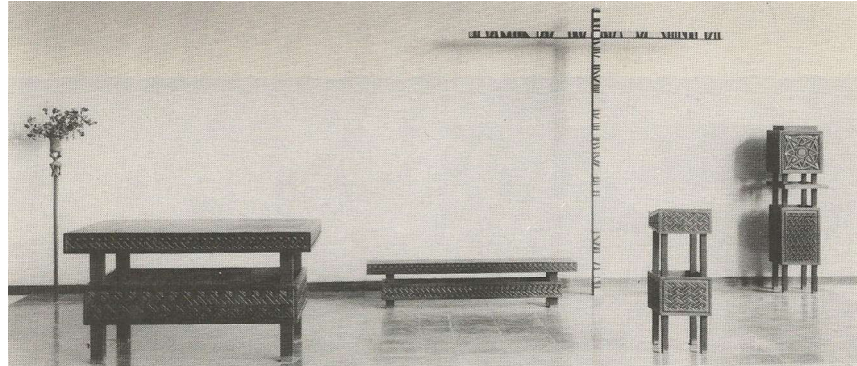
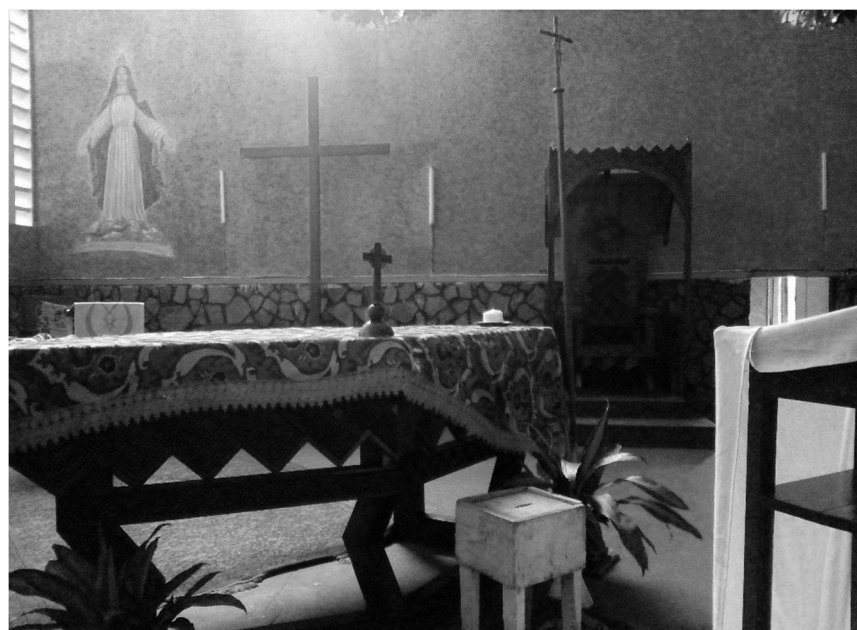


FIGURE 109: THE MOTIFS AND THE WALL PAINTINGS OF THE CHURCH SAINT PIERRE DE DEMBA IN KASAI IN 1969, SOURCE : EGLISES TROPICALES



FIGURE 110: ALTAR AND CELEBRANT'S SEAT AT NOTRE DAME OF KATOKA IN KASAI, PHOTO BY VICTOR BAY 2018



IV.1.2. Influence of Western Modern Architecture

Despite all his integration into African life and skin, Paul remains European and takes the influence of European religious architecture to complete his vision. He is convinced that the various tensions resulting from the reform of the church are generally resolved by the force of creation, otherwise, he says, "we would not have the astonishing succession of styles and geniuses of the places that make us happy today." (DEQUEKER P. 1994). Taking the example of the church in Belgium, he believes that it is because of its discretion that it is not mentioned today in works of religious architecture. No doubt, because it seems more focused on art than on worship, as would be the case in France with Le Corbusier or in Switzerland or in the Scandinavian countries.

In fact, the Vatican, by insisting above all on the "liturgy", gave reason to the Belgian attitude which, a hundred years earlier, was one of the first cradles of the liturgical movement led by personalities like Dom Lambert Beauduin, Cardinal Mercier and the abbots of Mount Caesar in Louvain, who, in association with other movements of the time (literary and artistic movements, Christian workers), produced the Second Vatican Council in 1962.

But from an architectural point of view, the question remains unanswered, and in his letter «our churches, a living problem» (Dequeker, 1993), he wonders whether the pioneers of the liturgical movement in Belgium have taken into account the question of places? His conclusion is certainly negative, he thinks that these actors, bathed in the texts and rites of their own spiritualities and of the paschal mystery, were content only with the churches which he describes as «normal» of their time, the beautiful old churches, In the 19th and early 20th centuries, attempts were made to transpose structures and decorations.

Paul Dequeker, by his reflection also notes that Belgium is much more behind in the face of the opening of competence



demonstrated by Romano Guarini who, with architects like Rudolf Schwarz, adept of the Bauhaus in Germany, From the 1920s onwards, architecture and its openness to the world understood that this style was to penetrate the world of churches. And, unfortunately, Belgium will be among the last countries in Europe to have built modern churches until the 1950s. We can generally mention the small monastery of the Poor Clares of Ostend, built in 1959 by Professor Paul Félix of the University of Louvain, which is considered as a model of true simplicity and of which Paul Dequeker already presents the attractions and even considers it as a "place of architectural poetry".

Paul Félix, Roger Bastin and Marc Dessauvage had later become models for Paul Dequeker, who rightly considers them as the authors of countless works that set the tone for Belgium, which was able to reduce its lag and go further, In contrast to several countries that remained faithful to the strict framework of "dualism choir-shuttle" and linear alignments.

The Council proposes to open and occupy the space according to the fundamental theological fact that is "the living assembly" (People of God, family of God) by giving enveloping forms and including the great liturgical places like the altar, the tabernacle and the baptismal font.

To fully understand the conceptual logic of Paul Dequeker, it would be necessary to go back to the 1920s, on the one hand to the liturgical movement and the thought of Romano Guardini who concretizes a community organization at Rothenfels Castle, this organization of space essentially aims at an active participation of the assembly (church); the church is no longer considered only a symbolic place, but much more, as a community place.

This ideal model of social and cultural relations is an asset for the African Church. On the other hand, the work of Paul Dequeker takes on its full meaning thanks to the contribution of architects like



Rudolf Schwarz who have carried out innovative projects in the architecture of churches in Belgium and Germany characterized by formal resistance. This way of conceiving the churches is an invitation to a community meeting of people opposed to the hierarchy, an idea endorsed at the Second Vatican Council in 1962.

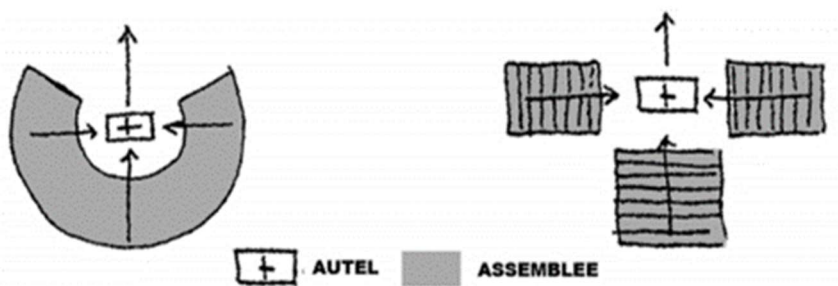


FIGURE 111: ARRANGEMENT OF THE CONGREGATION AROUND THE ALTAR. CIRCUMSTANTES, SKETCH BY RUDOLF SCHWARZ

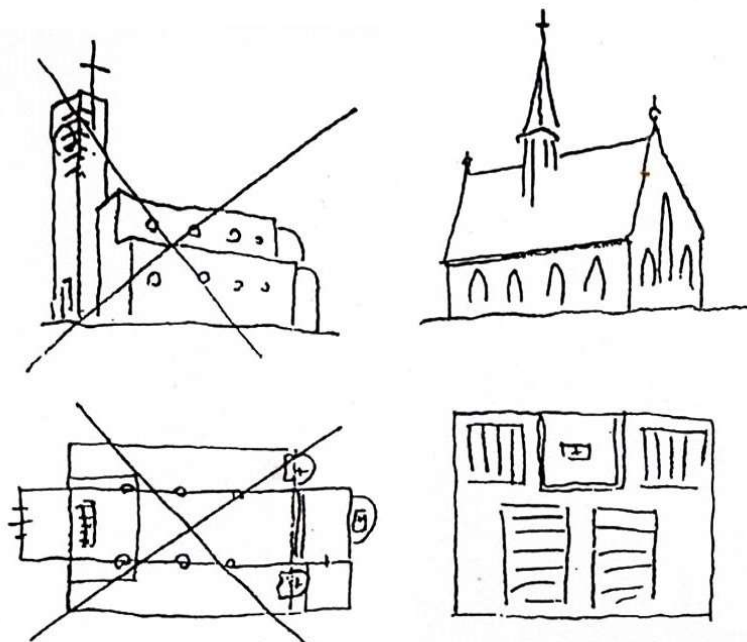


FIGURE 112: SKETCH BY EMIL STEFFANN AND RUDOLF SCHARZ - FROM : GISBERT HULSUMANN (ED.), EMIL STEFFANN, AKADEMIE DER ARCHITEKTENKAMMER NORDRHEIN - WESTFALEN UND DEUTSCHE UNESCO KOMMISSION, BONN 1984, P. 54.



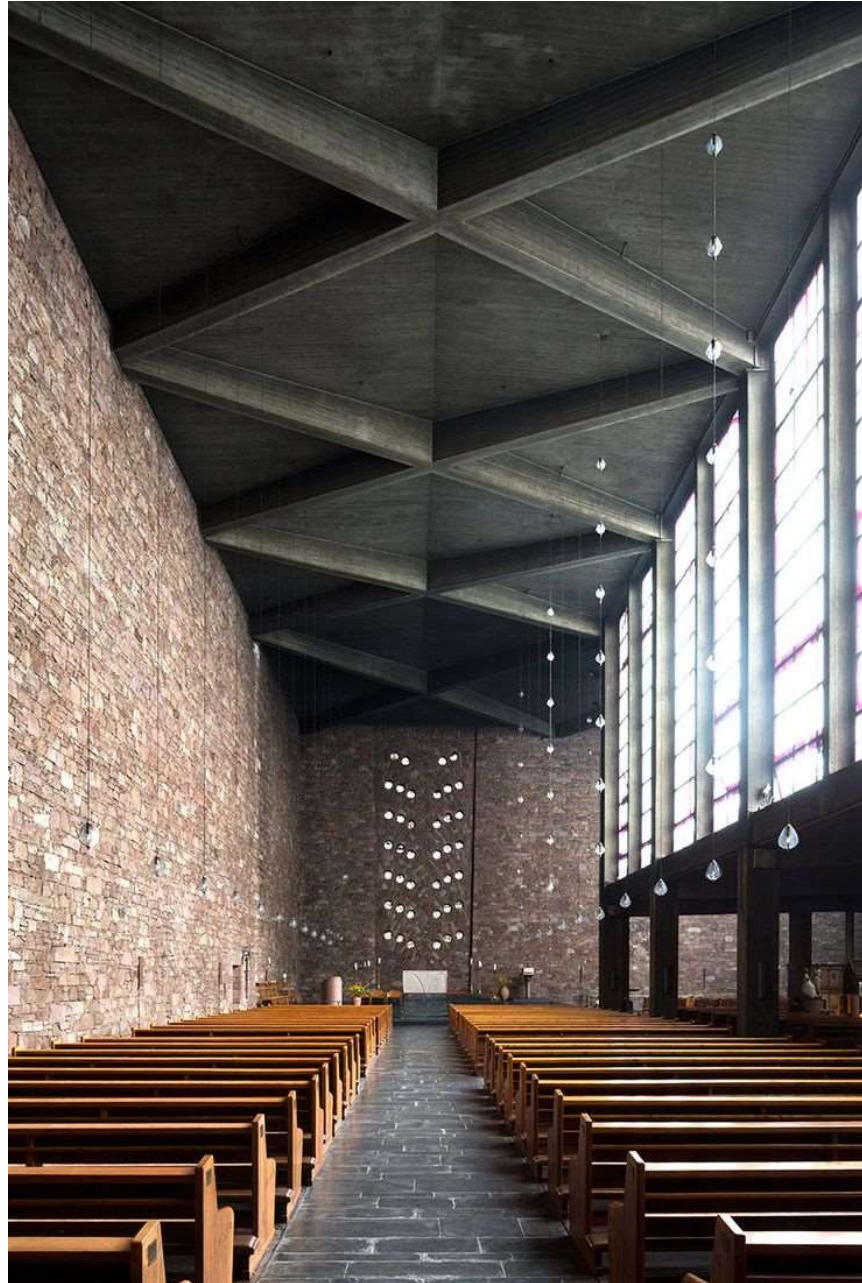


FIGURE 113: RUDOLF SCHWARZCHURCH OF STA ANNA, DÜREN, SOURCE : STRASSE-DER-MODERNE.DE

After Vatican II, three major arrangements will be made in the spatial organization of modern churches, each having its advantages and disadvantages;



- The classical arrangement, that of most churches built since the Middle Ages, places the whole in front of the altar: it is the "arrangement of buses" (Father Thizon) that does not facilitate the participation of the Church.



FIGURE 114: PLAN OF THE CHURCH OF ST. HEDWIG, KÖLN-HÖHENHAUS (1966)
SOURCE: NEUE KIRCHEN IM ERZBISTUM KÖLN 1955 - 1995; EDITOR: DR. KARL JOSEF BOLLENBECK ;

- The concentric plan, or radiating around the altar, in accordance with the theological reflection on liturgical renewal conducted by the German school and Brother Guardini. However, these provisions are sometimes impractical during worship.

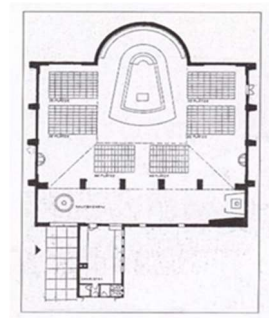


FIGURE 115: EGLISE PAROISSIALE ST. LAURENTIUS, A COLOGNE-LINDENTHAL (1961), SOURCE : CHIESA OGGI ARCHITETTURA

- The congregation is arranged in an amphitheater. This scheme has been adopted in most contemporary churches because it is functional, suitable for the liturgy, and conducive to an exchange between the assembly and the clergy.

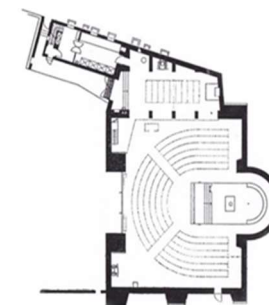


FIGURE 116: PLAN OF ST. ELISABETH'S IN OPLANDEN-LEVERKUSEN, (1957) - SOURCE: NEW CHURCHES OF THE ARCHDIOCESE OF COLOGNE, LIBRARY OF THE CONVENT OF THE DOMINICAN FATHERS, (DRUCK: J. P. BACHEMKG IN KÖLN), BOLOGNA 1960, P. 35



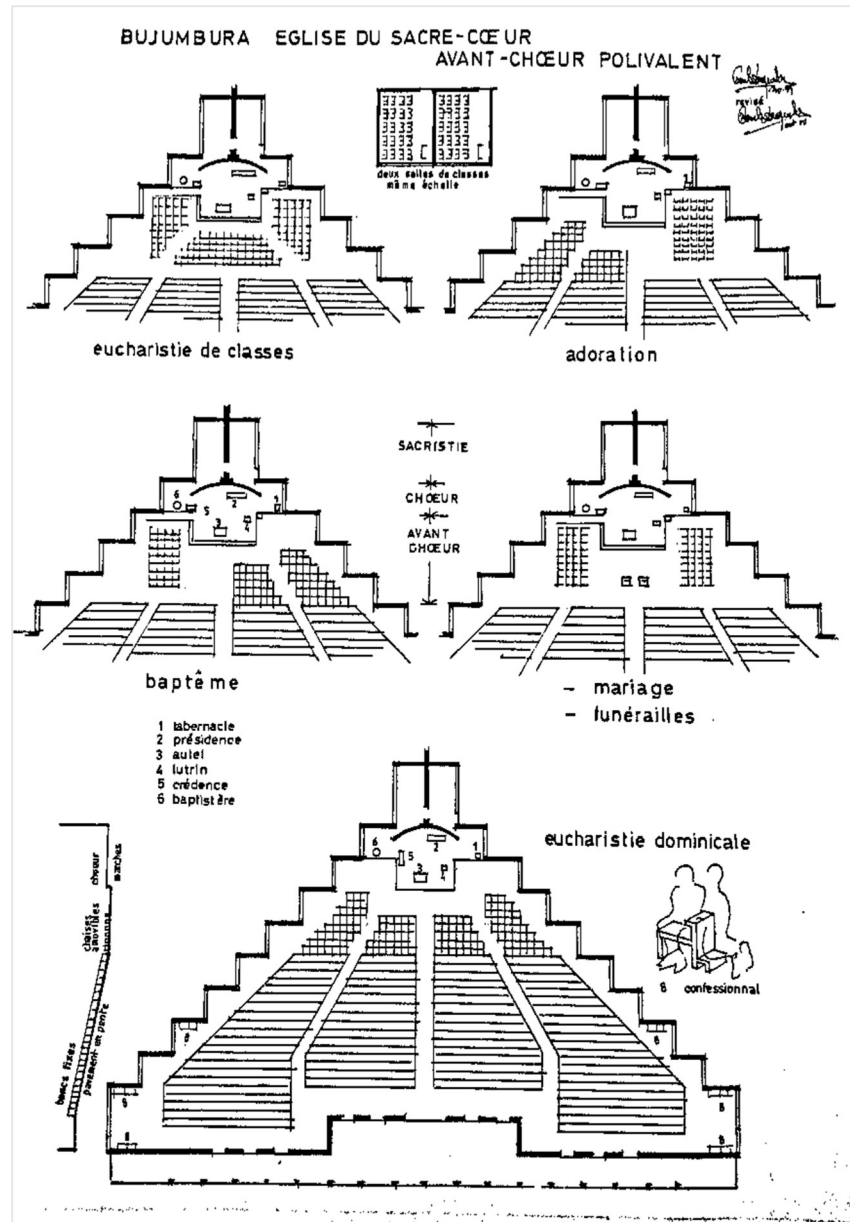


FIGURE 117: THE QUESTION OF THE ARRANGEMENT OF THE ASSEMBLY REMAINS VERY IMPORTANT IN TROPICAL CHURCH PROJECTS AS SHOWN IN THIS DRAWING BY PAUL DEQUEKER FOR THE SACRE-CŒUR CHURCH IN BUJUMBURA, SOURCE; PAUL DEQUEKER ARCHIVES, KADOC

IV.1.3. From the European Church to the Tropical Church

In this context of Africanization and apprehension of the space dedicated to God for an African Christianity, Paul Dequeker was surely faced with the fact that he could not find in Central Africa grandiose traditional temples or very important buildings that could serve as a source of inspiration to build these churches because the African people, Kongo in particular, having preserved



a large part of his traditions, still considers that God is primarily the manifestation of the spirits that govern nature.

Compared to his point of view expressed in his letter «The Church a Living Problematic», Paul Dequeker says that, his churches are inspired by modern architecture, guided by the influence of precursors of modern churches like Rudolf Schwarz, which leaves very eloquent works to the example of the church Maria K ningin in Cologne in 1954, the church Sainte Anne in Diken in 1956. Paul Dequeker also says he is inspired by the simplicity of some churches such as: the church of HeerAgimont built in Belgium in 1962 by Ren  Bastin (roger bastin saint nicolas), the Chapel St Andr , Loppem in 1963 by Marc de Sauvage, the church St Paul of Waterloo, 1969 by Jean Cosse, the church of Pforzheim built in 1953 by Eirmann Egon, the church of Maria in den Benden in D sseldorf in 1958 by Emil Steffan, of St. Paul Dielsdorf, 1954 in Switzerland by Justus Dahinden, of the church of Effretikon built in Switzerland in 1961 by Ernest Gisel, Notre-Dame de Ronchamp in France, 1954 by Le Corbusier and also in Finland, the chapel of Otamiemi in 1956 by K. and H. Siren. Imatra church in 1958 by Alvar Aalto.

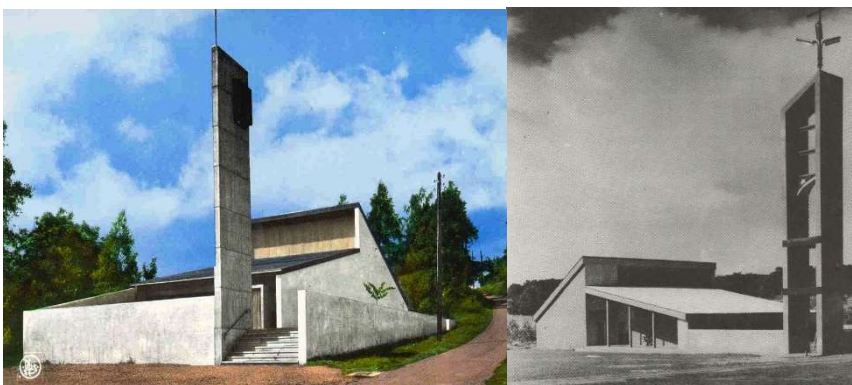


FIGURE 118: TO JUSTIFY HIS BELONGING TO MODERNISM, PAUL DEQUEKER BUILT CHURCHES IN CONGO INSPIRED BY EUROPEAN CHURCHES, LIKE THE CHAPEL IN THE NGANDA CENTRE WHICH IS PRACTICALLY INSPIRED BY THE OTANIEMI CHAPEL OF H. SIREN



FIGURE 119 : OTANIEMI
 CHAPEL BY ARCHITECT HEIKKI
 SIREN ON THE HELSINKI
 TECHNICAL UNIVERSITY
 CAMPUS, PHOTO: WINDFRID
 ZAKOWOSKI

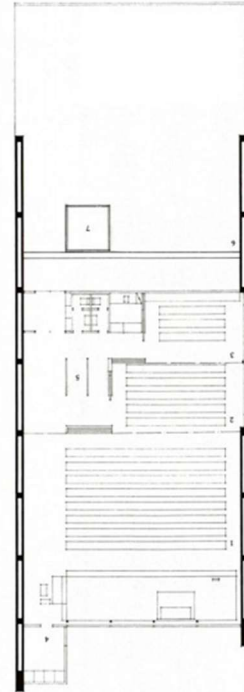
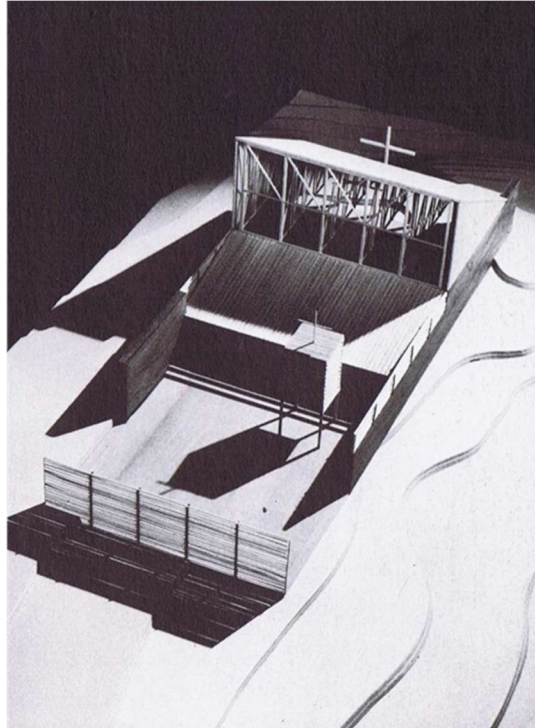
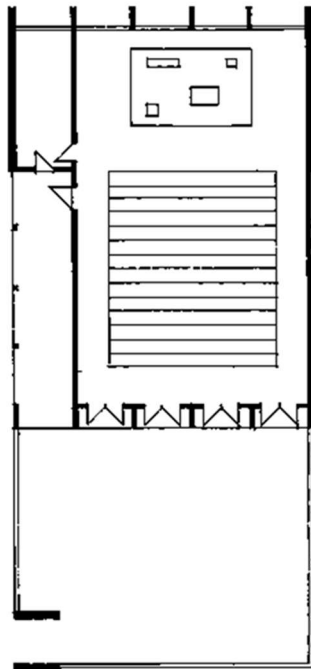


FIGURE 120: CHAPEL OF THE
 NGANDA CENTRE IN
 KINSHASA BY PAUL
 DEQUEKER , SOURCE:
 EGLISES TROPICALES



Although taking modern architecture as an example and inspiration, Paul Dequeker prefers to see directly the problem of



updating traditional architectural forms in this changing Africa and the need for a typically African contribution to his creations in tropical Africa. He also finds that the creation of modern churches in a traditional context is a symbol of modernity and progress for the beneficiary populations. However, it places a necessary balance in the search for the exploitation of local material on the basis of new ideas, attentive both to the sensitivity and mentality of the users and to the practical imperatives.

Regarding his views on traditional and modern architectural design and to give an opinion to those who would have liked to see in Africa an architecture more «in the typical African way», Paul Dequeker in his letter of 19 November 1983 replies to Dr J.F. Thiel of the Sankt Augustin Anthropos Institute in Germany by saying: «you are looking for churches "die ein biszchen anleihe an die africanische Bauweise Machen"³¹. But this African way of building is changing because the materials used evolve and require another technique, a new technique and not necessarily traditional African. Then the forms are most often derived from the techniques used.” (Dequeker P. 1984)

Should churches be adorned with mouldings or golden rosettes, lavish stained glass windows, inlaid with imposing sculptures or create elegant porticoes, vaults or architraves in these churches? (Mudiji, 1984) The architect of Africa asked himself the same question before choosing his architectural party. However, the spirit of poverty expressed by him is not assimilated to the spirit of misery! He wants to offer these God-thirsting populations the possibility of meeting him in the conditions of their power (economic possibilities).

Brother Dequeker truly responded to the aspirations of the African peoples, composing with great creativity an art of building that contributes in a dignified and beautiful way to the splendour of

³¹ « Architecture that borrows from African architecture »



worship according to the genius of our time and our peoples. (LAGAE, 2014). According to Professor Mudiji in "Tropical Churches", by paying attention to the originality of the formal and decorative values of materials in Africa, we can transcend the modesty and material and technical precariousness of traditional African constructions, that is, according to him, the path towards the joint realization of functional imperatives and spiritual values, this path that allows the original form to cross the timeline and become a historical witness of civilizations by inspiring other forms that will enrich invention and creative freedom. (Mudiji, 1984)

From an economic point of view, Johan Lagae comparing the churches of Paul Dequeker to the Church of Our Lady of Wisdom built by Boulengier on the UNIKIN campus in Kinshasa, and to the Church of the Blessed Sacrament built by the Italian architect Eugene Palumbo, Found that these very expensive projects required experienced and specialized staff to produce the same effect! The churches of Paul Dequeker, in their exceptional characteristics, have nothing of the hypertrophy of the form observed in the work of Justus Dahinden , an architect who, from the 1960s, also sought to give new shape to the church in Africa following the example of the Mitayana Pilgrim's Center Shine in Uganda, (LAGAE, 2014)



FIGURE 121 : THE
MITAYANA PILGRIM'S
CENTER SHINE IN UGANDA,
SOURCE :
THOMORTIZ.TUMBLR.COM



IV.2. Sacred geometry

In order to better understand the African influences on the choice of forms and motifs of the projects of the tropical churches, the relevant question of an African geometry raised by researchers such as Lucien Stephan and Ron Eglash is highlighted in this thesis. Based on Yvo Jacquier's commentary on Palaeolithic architecture, he thinks that Geometry is designed by artists to create a link between the human and the Divine and that the language of the image blossoms in the space of the Sacred, where the Earth wrestles from its gravity to confront the Celestial. This one and the same Sacred Geometry develops over millennia, without ever contradicting itself. If geometric forms are not yet fully revealed to man, who does not measure them, artists instinctively find the way³². (Jacquier, n.d.)

Lucien Stephan also takes comfort in the idea of a traditional aesthetic that bases its "intelligence" on the collective in the space of the tribe, approaching an absolute geometric model³³. Mathematician Ron Eglash, for his part, approaches traditional African architecture with fractal theory. Indeed, he is convinced that African art and African architecture apply a sacred geometry linked to a succession of well-balanced forms³⁴ (Eglash 1999). He discovered that many African villages are deliberately laid out to form perfect fractals, with repeated self-similar shapes in the rooms of the house and groups of houses in the village, following mathematically predictable patterns. Ron Eglash also considers that the European arriving in Africa was not aware of a geometric logic already used by the Africans and found the architecture to be very disorganised and therefore primitive. But this vision of the

³² Yvo Jacquier, « La Géométrie du Paléolithique », Art-Renaissance.net

³³ « La sculpture africaine, essai d'esthétique comparée », in L'art africain, Paris, 1988-2008, Editions Citadelles et Mazenod. Auteurs : Jacques Kerchache, expert en arts premiers - Jean-Louis Paudrat, historien d'art - Lucien Stéphan, esthéticien et philosophe - Germain Viatte, conservateur de musée. Code ISBN : 978 2 85 088 441 2

³⁴ La conférence de Ron Eglash sur ted.com, le site des "idées à partager"



European did not allow him to think that Africans could have used a mathematical theory never yet discovered by the white man.

FIGURE 122 : CEMETERIES AND CAMPS OF AFARI NOMADS LIE AMIDST LAVA FLOWS PARTIALLY BURIED IN CLAY NEAR THE AWASH RIVER DELTA IN ETHIOPIA. THIS PHOTO WAS ORIGINALLY PUBLISHED IN "A PHOTOGRAPHER'S EYE FROM THE SKY » :

SOURCE : NATIONALGEOGRAPHIC.COM



Already in the 1960s, Paul Dequeker, in his quest to adapt modern architecture to an African art language, did not shy away from the logic of symbols to establish his philosophy, for example the motifs used for the fascia board and the oculus ceiling of St. Anthony, the rhombus roof of St. Luke, and the cover of the celebrant in the church of Christ the King.

In order to better explain African symbols and signs, this thesis has borrowed the interpretations of Christian Scheurer, Brenda Mallon and Faik Nzujji, who rightly considers that each human community has its own conception of the symbol and uses it according to its particular existential experience. (Nzujji, arts africains, signes et symboles., 2000)

IV.3. Form and patterns of Paul Dequeker's churches

Starting from the logic of a sacred geometry derived from traditional art, Paul Dequeker withdraws from the original logic which consists of church forms that relate to the utilitarian concept without absolute justification of the choice of forms. This reality is very remarkable and justified in the local context of tropical cities



whose forms diverge according to traditions; Paul Dequeker acquires a great experience.

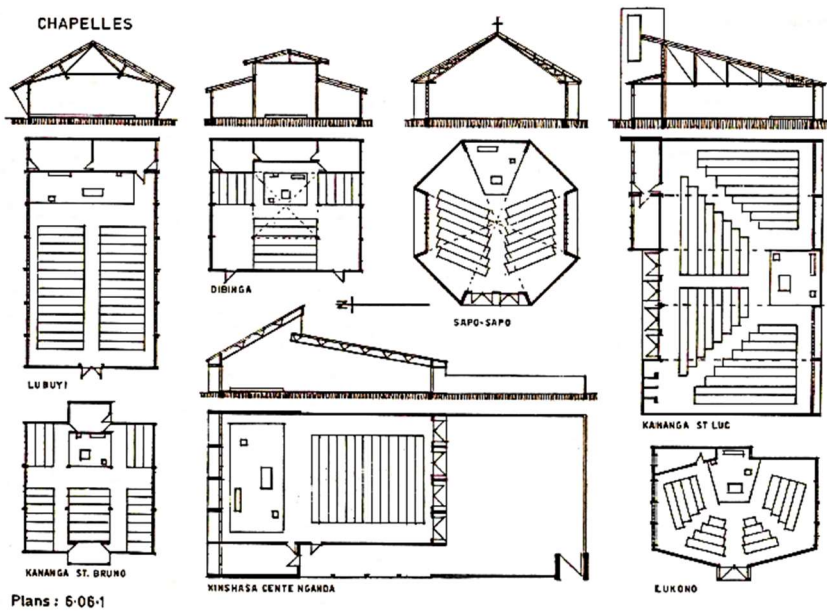


FIGURE 123: DIFFERENT FORMS OF CHURCHES BY PAUL DEQUEKER, SOURCE: ARCHITECTURE TROPICALE

In this thesis, the interpretation of the hidden symbolism of certain forms in Africa allows to elucidate intuitively what would be the very basis of the composition of the buildings. Among the most used symbols the cross takes a place of choice. In Africa and in the Christian church, the cruciform plan indicates the interaction of heaven and earth. Paul Dequeker for the tropical churches will imitate for several churches' ornaments and sculptures very related to the local origins including the reproduction of Kuba carpets. For Paul Dequeker, «Tropicaliser» a church is also to represent this God through local ancestral personalities as shown by this fresco of an "African Jesus» or an "African Crucifix" (figure) or a sculpture of the Black Virgin Mary (figure), Paul Dequeker even says that the secret of the success of the frescoes made by the Reverend Sister Dolores Gomez Ramon in many churches in Zaire is the result of a deep consultation with the natives before their execution in the churches (LAGAE, 2014). For example, the church of Christ-Molobeli, the church of Saint Gabriel in Kinshasa or on the walls of the



scholasticate Nkongolo, parishioners decide the forms and motives that relate the traditional acts and gestures to be respected. Most of the churches were thus built according to plans suggested or proposed by the local populations, for example the church of Kalo, in the diocese of Idiofa (Zaire), where Christians imposed themselves by asking for a church similar to that of Mokala, Still in idiofafa (LAGAE, 2014) and to this day, users are still satisfied with their circular church, like the parishioners of the subparish of Bulumbu, near Idiofa, who also rejected a rectangular plan to impose an octagonal construction.

Thanks to the liturgical reforms of the Second Vatican Council (1963), Paul Dequeker finds the opportunity to propose a diversity of forms that is the fruit of a search for authenticity. He composes square, circular, rectangular and triangular projects and through his creations, he expresses an ability to vary the compositions but keeping the same architectural identity. Always explaining the motivation of the different forms of Paul Dequeker's churches, Father Mudindji Gilombe considers that in Africa, there are tiny shrines, or sacred fences that respect the cosmogonic rules to be rediscovered and appreciated for their Christian actualization. So as not to adopt them in ignorance, that is, the soul of the beliefs that underlie the plastic manifestations present. Also in order to understand the reasons and profound motivations of the wishes of qualified consultants called to dialogue with the author of a church project or a work of religious decoration. (MUDIJI Malamba and Paul Dequeker, 1984)

All the churches of Paul Dequeker are simple and austere. They integrate perfectly into their environment as places of gathering of the people of God. Most of these churches are surmounted by a cross and a bell tower often built of wood. To express the Divine and greatness, the interior volume of each Paul Dequeker church is emphasized by triangular forms that allow large spaces on all the height of the buildings.



For Professor Johan Lagae, the churches of Saint-Augustin 1977, Saint-Marc 1962 or Saint-Paul 1967, with their singular forms, explicitly mark the centre around which a local community can develop, without its architecture degenerating into free monumentalism. (LAGAE, 2014).

Ranging from polygons to perfect circularity, the churches of Brother Dequeker are built from very varied geometric shapes and figures, simple or combined, inspired by aesthetic research or by the requirements of users.

IV.3.1. The churches on the cross:

All Bantu traditions recognise the existence of a Creator God who is at the origin of all creatures, as do the Bambara of Mali, who consider that this divine creature, uncreated, vibrates and from its vibrations all the creatures of the universe emerge, thus as a network of uninterrupted relations between the creator and his creation, energies circulate that collide or agree, heat up or cool down, creating a polarity of infinite character. This conception is also effective among the Luba of Congo and several other tribes such as the Valucazi, the Tshokwe, and the Baluunda who live in eastern Angola, south-central Congo and north-western Congo Kinshasa, who represent this infinite polarity by a cross called "Kalunga" (Nzuji F. 2000, fig 11, p.30).

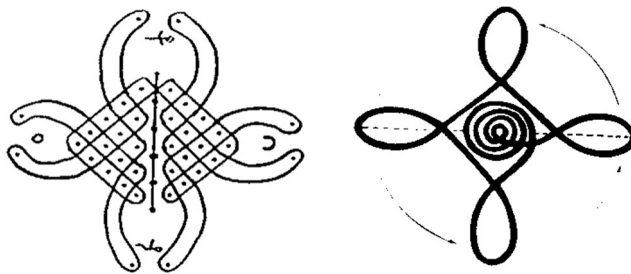


FIGURE 124: 1. KALUNGA SYMBOL OF INFINITY

2. KALUNGA THE CYCLE OF LIFE,

SOURCE: AFRICAN ARTS, SIGNES ET SYMBOLES, NZUJI F. 2000

We also know that the African never separates the sun from the cross and that in Africa the cross symbolizes human destiny, life and death. It evokes the earth, the sky and the land of the dead, as can also be seen in African Architecture where Bantu huts form a



cross with the man's hut in the centre, surrounded by the four wives (Christian Scheurer, n.d.). From this cycle generated by the universe, man also benefits from the primitive force that unfolds in time and space in a perpetual movement rendered by the symbol of the human trajectory that merges the "kalunga" and the spiral that constitutes the cycle of man's life (Nzuzi F. 2000, fig 12, p.32).

Paul Dequeker, having studied African traditions, certainly used this symbolism to build his first church in Kinshasa, the Christ Roi church (1961), which has the shape of a cross with trapezoidal arms, and 11 years later he built the Bokungu cathedral (Equateur 1972) in the same shape, which has the shape of a T-shaped cross.

FIGURE 125: CHRIST-ROI CHURC (1961), SOURCE EGLISES TROPICALES

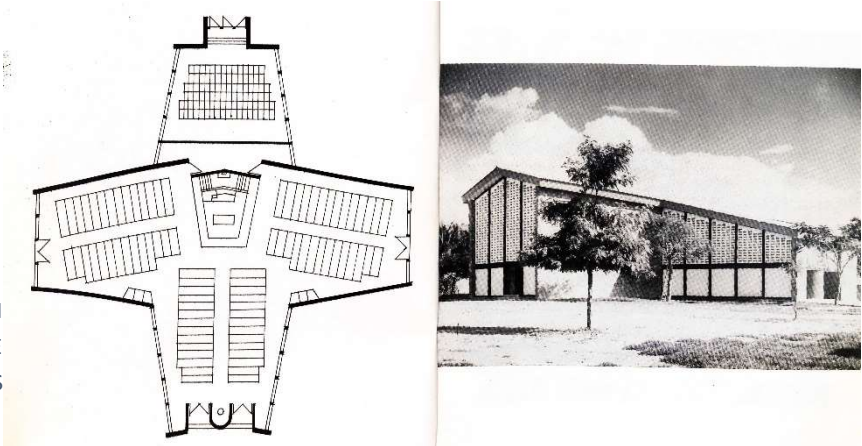
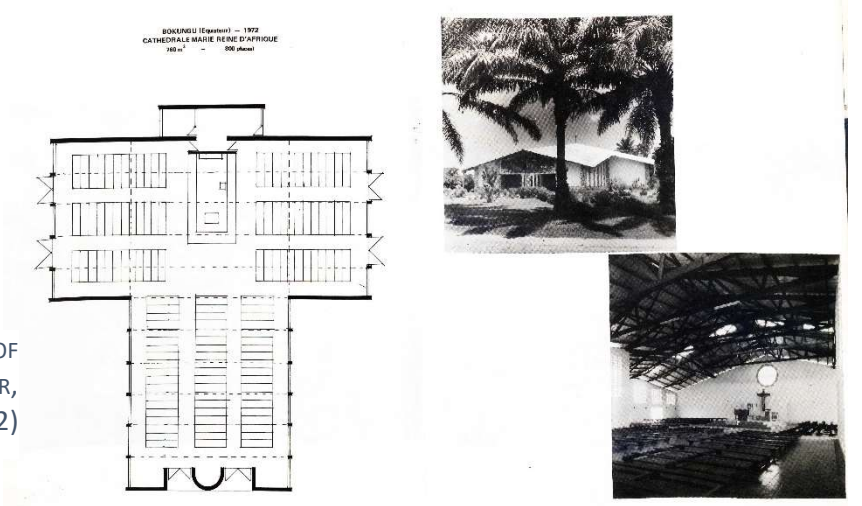


FIGURE 126: CATHEDRAL OF BOKUNGU (EQUATEUR, 1972)



IV.3.2. Circular and polygonal churches:

If for Brenda Mallon the circle symbolises the harmonious ensemble" emblem (Mallon B. 2008), in Africa, the transmission of knowledge was done in a circle around a tree (palaver tree), thus promoting equity between teachers and pupils. Not to mention that African dwellings were generally circular (huts, huts). African wisdom also teaches that people gather in a circle to unite, pray, meditate, discuss and consult each other. However, Faik Nzuji in his manual "African arts, signs and symbols" points out that among the Luba of Kasai, the circle is part of the "bimanyinu bya bangabanga" which means the "signs of origin" or "signs of the beginning" which are considered to be the orderers of the law, in other words, the "Kongolo Kaa Mukanda" (Nzuji F.2000).

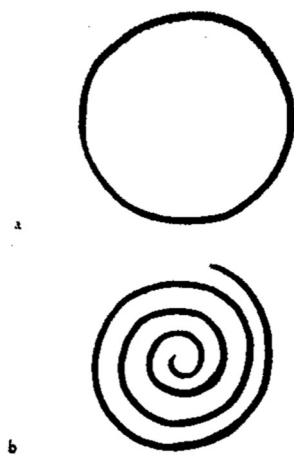


Fig. 7.12
Symbole de l'entraide

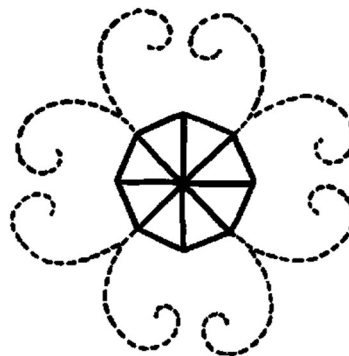


FIGURE 127: 1. LES SYMBOLES
D'ORIGINE OU DE LA LOI,
« MWANZA KONGOLO » ET
« MANYINGU »

2. LE SYMBOLE DE L'ENTRAIDE
COMPOSE DU « BAKE » ET DU
« JOOKI »

SOURCE: NZUJI F, ARTS
AFRICAINS, SIGNES ET SYMBOLES.
P115 ET 125

Represented by "Mwanza Kongolo" which means "the original circle" (symbol 7.1, original symbols in Kasai), the circle thus designates the being that is in a perfect state and that gives perfection to all that conforms to the law. The spiral circle is a variable of the circle, it defines the being that moves and makes it move that is called "Manyingu". It can be seen that Saint Antoine (Kinshasa 1962), which has a perfect circular base with a square bell



tower crowned by an oculus towards the sky, where the law sits, is the only circular church built by Paul Dequeker.

In addition to the circular church, other polygonal churches are also associated with this logic of gathering and define the ideal place to meet and know God because the octagonal shape called "bake" (the bouquet) completed by 4 "jooki" (ears) among the Luba of Kasai denotes the gathering of the members of a tribe, a clan or any other community to make a single person. This theory maintains that because of the particularity of the Zairois rite which invokes the ancestors, Paul Dequeker, in agreement with Malula and the autochtones, suggested the polygon to symbolise the presence of the ancestors and their assistance to the living, following the example of the Bukasa church in Mwene ditu (Kasai 1980) and Tokulamba also in Kasai (1980), and also other polygonal churches such as Saint Luc (Kinshasa 1963), Saint Kaggwa (Kinshasa 1984)

FIGURE 128; EGLISE BUKASA
(MWENEDITU 1980), SOURCE,
EGLISES TROPICALES

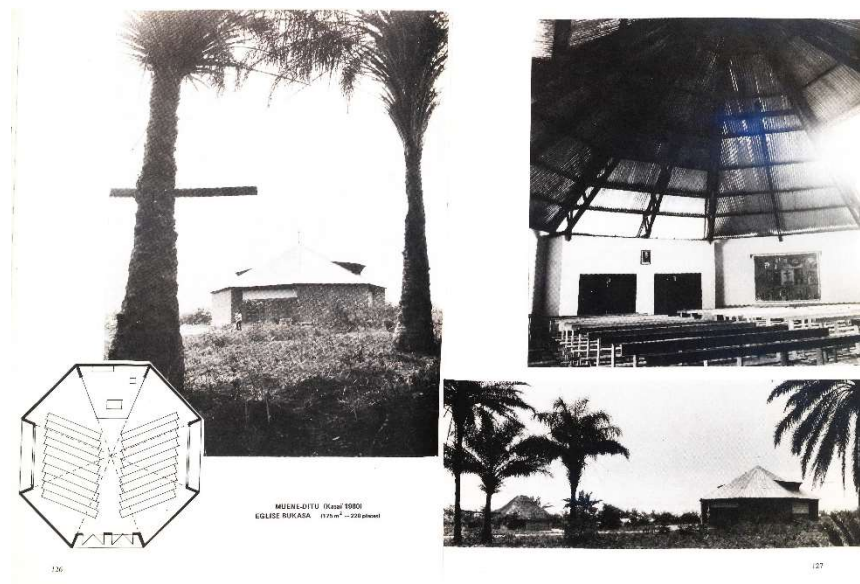




FIGURE 129: TOKULAMBA CHURCH (KANANGA 1980), SOURCE: EGLISES TROPICALES

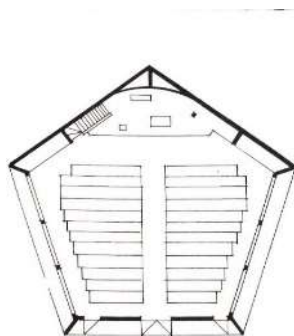


FIGURE 130: SAINT KAGGWA; KINSHASA 1984, SOURCE : EGLISES TROPICALES



IV.3.3. The triangular and trapezoidal churches:

In general, in Christianity, the triangle is associated with the Trinity. It is interesting to note that the triangle is not often depicted on Christian monuments, even at a time when there was great reluctance to represent God directly and the triangle might have offered a convenient alternative. In Africa, to return to Faik's interpretation, "The Mouth of the Leopard", a figure composed of several triangles, symbolises power among the As'ohendo of Zaire, and also represents the divine gifts and the word of the chief. Paul Dequeker, for the construction of the church of the Sacred Heart in Bujumbura, symbolises the heart of Jesus with a triangle. Several tropical churches will therefore borrow the triangle as a basic shape, as in the case of the cathedral of Goma 1979, which has a capacity of 1200 seats, whose walls are built on broken or straight lines and are mostly vertical, with a roof of one or two slopes, extended by an overhang through which light enters the church obliquely, as in the cathedral of Notre Dame de Bujala 1977, the church of Okala in Cameroon (1968) and the church of Luiza in Kasai (1969), which is also built on a circular plan with the location of the altar in the chancel as the focal point of the liturgical action and the rows of pews converging on it; And the church of St. Raphael 1988 in Kinshasa.

For some churches that are not triangular or trapezoidal in planimetry, Paul Dequeker used the triangular mass to compose pyramids by projection as for the churches of Christ Molobeli, Saint-Augustin de Lemba (1977) (figure), or the second church Saint-Antoine built in 1983, all in Kinshasa.



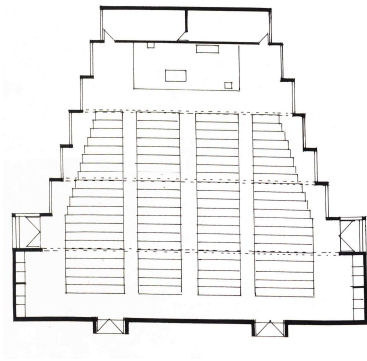


FIGURE 131: SAINT GABRIEL KINSHASA 1965, SOURCE, EGLISES TROPICALES

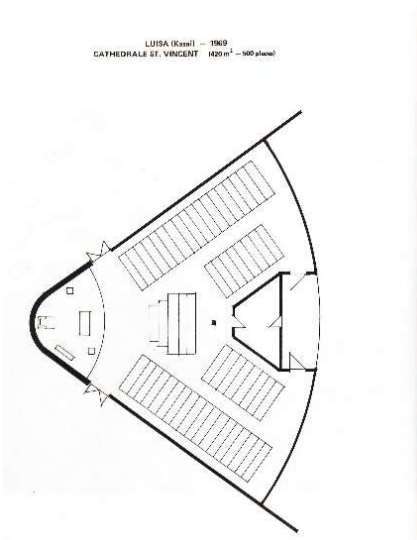


FIGURE 132: CATHÉDRALE SAINT VINCENT OF LUIZA , 1969, SOURCE: EGLISES TROPICALES

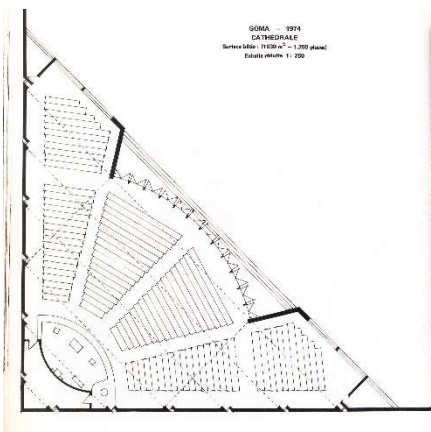


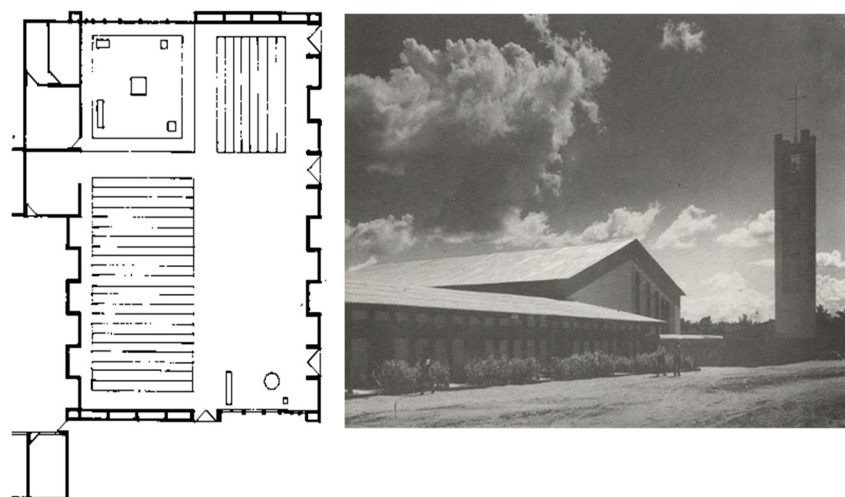
FIGURE 133; CATHEDRAL OF GOMA 1974, SOURCE : EGLISES TROPICALES



IV.3.4. Square and rectangular churches

In the Kente culture, the square is the symbol of the earth and the cosmos, its four sides represent the junction and the union of these two entities. It is associated with femininity, because the woman, beyond her life gives life (creation-procreation). In the form of lozenges or superimposed squares, this form is widely used in kuba art, mainly in tapestry. This rug in ancient Kuba raffia from Kasai is prepared by the men while the confection is entrusted to the women of the tribe and requires several days or even several months of weaving and embroidery. This is why each piece is unique and authentic. When its sides are almost identical in size, it is better known as the Kuba square or the Kasai square whose dimensions vary from 50 to 60 cm. Paul Dequeker's greatest artistic reproduction is inspired by the Kuba carpet because of its exceptional beauty.³⁵ Paul Dequeker also built the pyramid with square base and triangular summit as for the cathedral of Atakpamé in Togo (1983), the church Saint Rombau built in Kinshasa in 1966, Saint Paul of Bandundu in 1968 and the church of Evodoula in Cameroon in 1968 which have a square plan.

FIGURE 134: SAINT PIE X,
KINSHASA, 1965, SOURCE
EGLISES TROPICALES



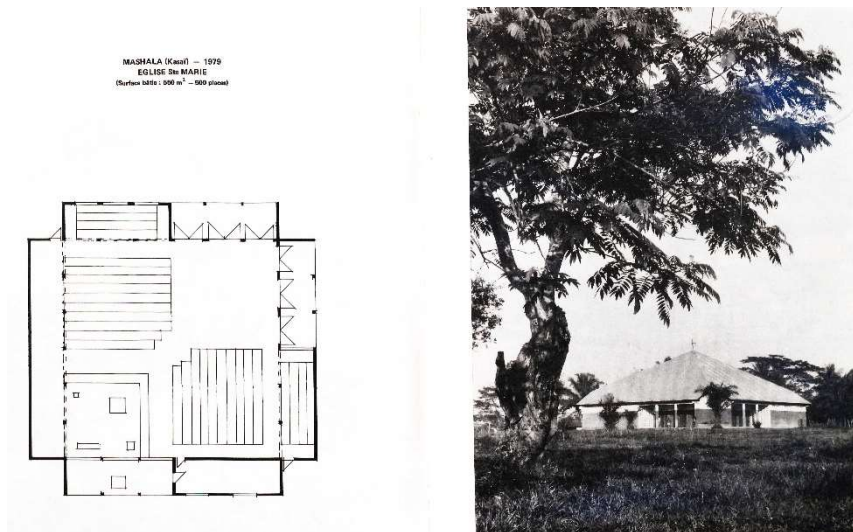


FIGURE 135: MASHALA 1979, SOURCE EGLISES TROPICALES

IV.4. Symmetry, dissymmetry, laterality and motion

Paul Dequeker does not use symmetrical arrangement as a doctrinal value, but lends himself to the demands of modernism to ensure the axial arrangement converging towards the altar. The dissymmetry used in many of these churches is like laterality the two notions that introduce movement into the modern church. In the case of Saint Pius X parish (figure), applied asymmetry tends to create a multiple perception of light by the faithful.

IV.4.1. Symmetry and asymmetry

Hermann Weyl considers symmetry to be the idea by which man has tried for centuries to understand and create order, beauty and perfection (Weyl, 1964). This first natural then mathematical concept has gone through the entire secular history of human creativity from the origins of knowledge to the present day; widely used in all fields of modern science without exception, in the particular context of this study we address it specifically in religious architecture.

In modern religious architecture, the notion of symmetry, dissymmetry, laterality, axiality is defined in particular by Rudolf



Schwartz in the composition of his churches. Paul Dequeker, a follower of this precursor to the modern church and the liturgical reforms of 1962, used the same principle to develop his tropical churches. This arrangement can thus be observed in the following churches, Christ-Roi, Saint Antoine 1,

IV.4.2. Laterality and movement

With regard to laterality, it is once again very well presented by Patrick Germe in "Notes on the religious architecture of Rudolf Schwartz" who thinks that laterality is a modern paradigm, put together with asymmetry, it introduces into the architecture the movement. (Germs, 2011)

Thus, in several churches of Paul Dequeker one can observe the use of laterality which engenders movement, for the very eloquent example of the Charles Loanga church (1961) in Kinshasa where laterality is the result of a delicate implantation of the church in relation to the public road imposing on the architect to place the entrance of the assembly on the side wings giving an unacceptable layout of the assembly which forms two perpendicular groups, while the entrance of the celebrant is opposite, almost behind the stage. This particular arrangement used by Paul Dequeker is also motivated to offer climatic responses inside the church because, although oriented east-west, the architect placed openings in upper transoms thus using the doors as a call and transoms as air outlet.

Another fine example of laterality and movement is that of the Saint Pie X church in Kinshasa (1965), which on the other hand arranges the assembly perpendicularly, but uses the altar as an intersection element. This lateral arrangement, which is also associated with asymmetry, promotes good lighting because the openings thus arranged allow multiple perceptions of light by the faithful. Examples of movement in the liturgical arrangement employed by



Paul Dequeker are not limited to these two churches, it is found in several other churches in his repertoire.

IV.5. The genetics of a tropical church

The genetics of Paul Dequeker's tropical churches are based on four main factors:

- The first factor is the choice he made to study architecture at the Hoger Instituut St. Luc de Gent where he graduated in 1954,
- the second factor is his Adhesion to the Congregation of the Missionaries of Scheut in 1955, this choice is guided by the concern to serve God through man.
- the third determining factor is his specialization in tropical architecture in the famous department of tropical architecture of the Association of Architecture in London in which he obtains a certificate of tropical architect in 1957.
- His membership in the congregation of Scheut missionaries and his passion for tropical architecture direct his choice towards African traditions. Paul dequeker wants to know the tropical man and master his habits and customs. thus the fourth factor is his registration at the Katholieke Universiteit Leuven in which he will graduate in African sciences in 1958 (Dequeker & Mudiji, 1984, p.7-8; Dequeker & Kanene, 1992, p.292).

the four factors mentioned above forge Paul Dequeker's DNA, making him different from other architects working in the Congo; he does not even refrain from directly condemning the churches built in Kinshasa, such as the churches of Sainte Anne, Saint Léopold, Notre Dame de Kinshasa, Notre Dame de Fatima and even the churches built by the OCA in Matete, Sainte Alphonse and in Matonge, Saint Joseph considering them in a stereotypical style



(Dequeker P. 1984) Because of this position, although his projects were designed to meet the basic requirements of tropical architecture, he struggled to have his ideas: Whether on the side of the civil or ecclesiastical authorities, everyone distrusted him. They consider the architect brother Paul Dequeker as an idealist without any sense of realism.

And yet, he thinks, his architecture is really intended for the future occupant of the building, he gives man first place in the design of his churches, the main characteristic of which is respect for the climate, the site, materials and techniques available. All these agreed requirements result in an architecture that is not a copy of what already exists, Paul Dequeker took the time to know the human requirements, the climate, the site, the materials and the techniques available. The churches of Paul Dequeker are different from the churches built in Kinshasa before the end of the fifties because they respond to the needs of the man, the site and the climate and not an imaginary representation of a church generally based on existing churches elsewhere , especially in Europe, built over the past centuries, built for another people, another climate and in a different situation. (Dequeker P. 1984)

IV.5.1. Adaptation to bioclimatic requirements

Several architects such as Le Corbusier, Antonin Raymond, Lucio Costa or Oscar Niemeyer demonstrated that it was possible to take into account the climatic constraints of warm countries such as Algeria, India or Brazil in modern architecture and produce an architecture "sui generis" (Lagae & Laurens, 2001, p.17). In Léopoldville, Maurice Houyoux designed the building of the Bank of the Belgian Congo in Léopoldville (Kinshasa) by defining in broad lines the tropical modernist language by opting for a transverse ventilation and chimney effect, using claustras, canopies, quartz cladding, double ventilated roof. He did this by examining



vernacular constructions to build in the tropics (Catalgirone, 2010, (Tshiunza, 2021))³⁶,

Paul Dequeker prefers to keep in these projects a better orientation of the building to avoid overloading it with several elements of protection against the sun, he considers that changing the orientation of the building to capture the direct breeze is detrimental to the human body, Because of the absorption of heat from the sun's rays by the building elements, it suggests that all sun protection elements should in turn not become heat sources (DEQUEKER P., tropical architecture, 1992). In addition, these sunscreens act as a brake on the passage of air. This justifies the masterly choice to use the claustras as the main ventilation material of tropical churches.

Bearing in mind that bioclimatic architecture refers to the biological life of man in a well-defined climate whatever his living environment, on the equator or in the polar cold, Its body temperature remains 37°C thanks to a self-regulatory system to adapt to its environment through perspiration or metabolism, but to a limited extent. Man must also protect himself from the harsh climate, through his clothes and his habitat, and thus his architecture. (Dequeker P. 1984) For his work in the tropics, Paul Dequeker relies on the work of Victor Olgyay and Mahoney's theories to combine in a single diagram the bioclimatic requirements of a specific DRC location for all hours of the day. He has also devised and verified solutions that meet the climatic conditions of ventilation and radiation to allow the user of a premises to protect against the excesses of the climate and enjoy the natural elements of comfort. (Mudiji, 1984). Thus, to define its fundamental concept, which relies on protecting the building from overheating and heat dissipation by natural ventilation Paul Dequeker believes that if the building traps a piece of outdoor

³⁶ Catalgirone, S. (2010). « Maurice HOUYOUS sous les tropiques », in les nouvelles du patrimoine, n°128, édition l'association des amis de l'Unesco, Belgique, p. 27-29



space and transforms it to create a climate conducive to human life, it is also up to the designer to extend the building indoors and create comfortable spaces for the climate. (Dequeker P. 1984) The missionary architect finally resolved to use only natural means to ensure ventilation in a tropical building (Kanene Mudimubadu, Paul Dequeker, 1992) by taking care of the following factors;

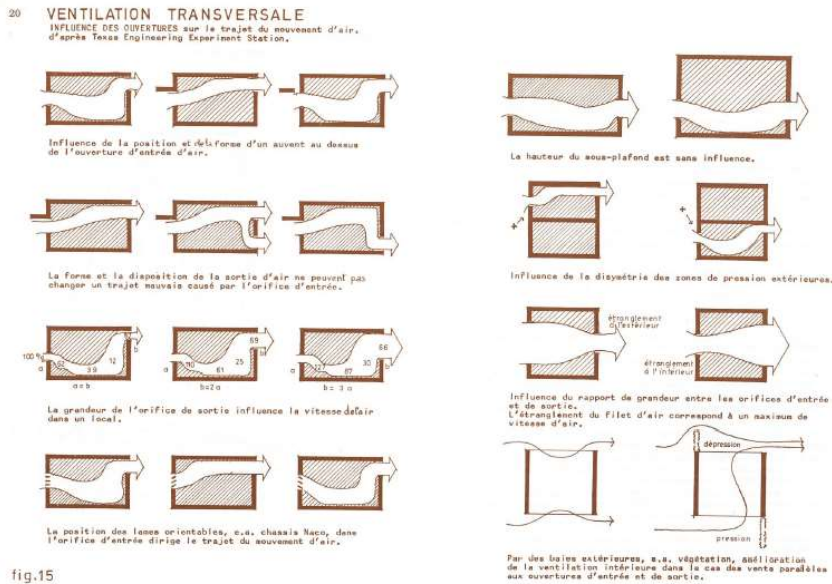
- The position and shape of an awning above a window opening influences the airflow in the building.
- The shape and layout of the air outlet hole cannot alter the wrong path caused by the inlet opening
- Outlet hole size influences air velocity in a room
- The position of the swivel slats at the entrance hole directs the air movement path
- ceiling height does not matter
- The size ratio between the inlet and outlet ports influences the air velocity. (Kanene Mudimubadu, Paul Dequeker, 1992)

IV.5.1.a. Air movement inside the building

Applying all these theories, for the tropical churches, Paul recommends two main methods for managing the phenomenon of natural ventilation, these are the transverse ventilation that penetrates directly from the outside to the inside across the width of the building and the chimney effect ventilation that applies the difference in density between cold and hot air.



Cross Ventilation



The city of Kinshasa has exceptional gales of around 100km/h. In general in this region the gales that accompany thunderstorms are of the order of 40 to 60 km/h. (Kanene Mudimubadu, Paul Dequeker, 1992) But around the building, this wind speed is never identical to the meteorological speed because of the existence of obstacles (neighboring buildings, vegetation, etc.) which also modify the micro climate; the environment of the house to be built can slow down, or sometimes accelerate the profile of the natural breeze. It is not enough that a building is exposed to the wind to claim that it is ventilated; the wind has to go through it. It is therefore imperative, in order to achieve effective ventilation of the building, that all parts of the building have an air inlet and outlet. (DEQUEKER P., tropical architecture, 1992)

Stack Effect Ventilation

Although this process was not the most used by Paul Dequeker, he applied it in certain projects such as the first church of Saint Anthony of Bumbu (1962), the chapel of the Nganda centre (1967), the cathedral of Budjala (1967), the church of Saint Paul of Bandundu (1968), Saint Philippe de Kinshasa (1968), Saint Martin de Kananga (1968), Goma Cathedral (1974), Christ Molobeli de



Kinshasa (1977), Saint Laurent (1974), Saint Mathias de Bumba (1964) In which one notices the various devices favouring the effect of chimney (entry of fresh air from the bottom and evacuation of hot air from the top).



FIGURE 136: SAINT MATHIAS OF BUMBA, 1964, SOURCE: ARCHITECTURE TROPICALE

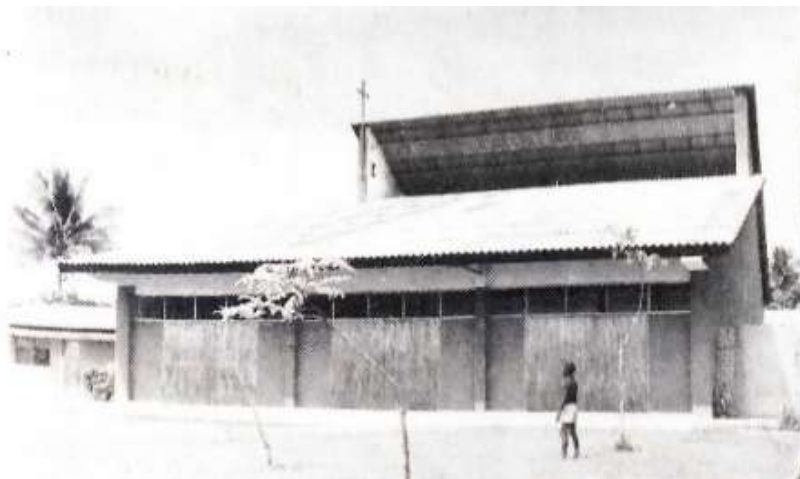


FIGURE 137: SAINT LAURANT KINSHASA, 1974, SOURCE EGLISES TROPICALES





FIGURE 138: NOTRE DAME OF BUDJALA 1967, EQUATEUR, SOURCE: EGLISES TROPICALES



FIGURE 139: SAINT PAUL OF BANDUNDU, 1968, SOURCE: EGLISES TROPICALES



FIGURE 140: SAINT MARTIN, 1968, KANANGA, SOURCE, ARCHITECTURE TROPICALE



IV.5.1.b. the movement of air around a building

According to Paul Dequeker, every architectural achievement must be in harmony with its environment: it is climate architecture. It is therefore clear from the principles relating to the presence of natural or built obstacles outside the building that influence the circulation of air around the building;

- A fence wall and a hedge in the wind path influence ventilation, so avoid a wall too close to the building
- A thick tree or construction around the building must be removed from the building by a distance equal to three times the height of the obstacle
- By windbreak effect, an external obstacle can create a decrease or even a suppression of the wind speed depending on whether it is waterproof or semi-permeable. To restore wind speed, it is necessary to plant a tree or an open wall at the bottom. (DEQUEKER P. Architecture tropicale 1992)

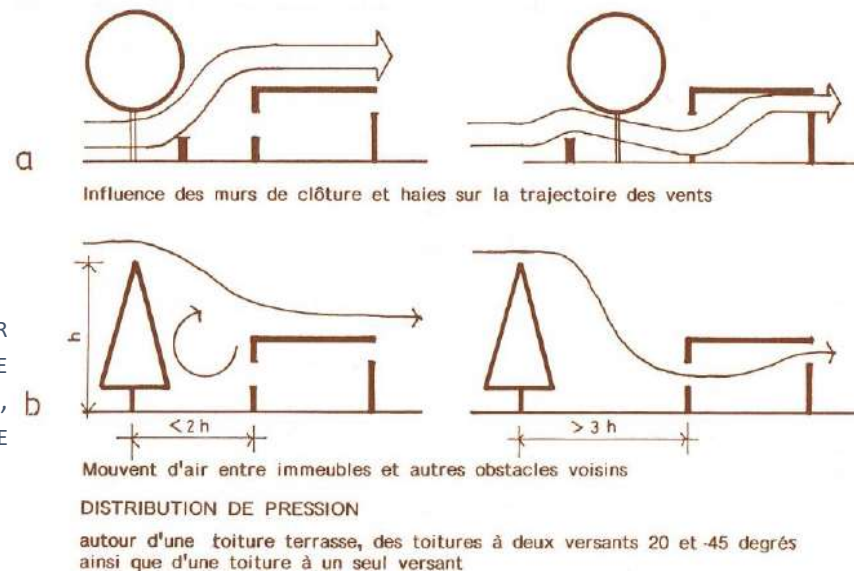


FIGURE 141: AIR MOVEMENT AROUND THE BUILDING, SOURCE, TROPICAL ARCHITECTURE



IV.5.2. Adaptation to material and technical requirements

The more the building materials are used in their essence, the more visible and readable the structure becomes: a logic of the structure appears to the eye as evidence and thus already as a source of satisfaction. Through Paul Dequeker's projects, the structure thus appears as an element of the composition of the project (Delrue, 2013); The large scale required for these church projects will influence rather specific structural forms that will awaken these engineer reflexes, the abundance of materials: wood, brick or natural stone also influences the firmness adopted and due to the different microclimates encountered in tropical areas, Paul Dequeker will be faced with multiple solutions to meet the needs of each place among others, Despite the advantages of traditional materials in the context of the past in balancing indoor and outdoor temperatures, Paul Dequeker is concerned about the precariousness they would represent in the current context. To replace them, He engages in a search for modern materials in a near source and available by making the best possible use of them. The same applies to building techniques that need to be adapted to the real possibilities, benefits and needs of tropical humans. (Mudiji, 1984)

Professor Jan Delrue evokes on the career of Paul Dequeker the revolutionary spirit which already at that time (1958) addresses the question of durability, he finally specifies that "Dequeker has become a specialist in comfortable construction. " (Delrue, 2013). This statement finds its full meaning in the pragmatic approach observed in tropical churches. Paul Dequeker tries to bring together these three fundamental elements of architecture by creating buildings of "African" beauty. carried by simple structures offering such simple functionality, but having as a corollary an optimal thermal comfort.



IV.5.2.a. Foundations and elevation of walls

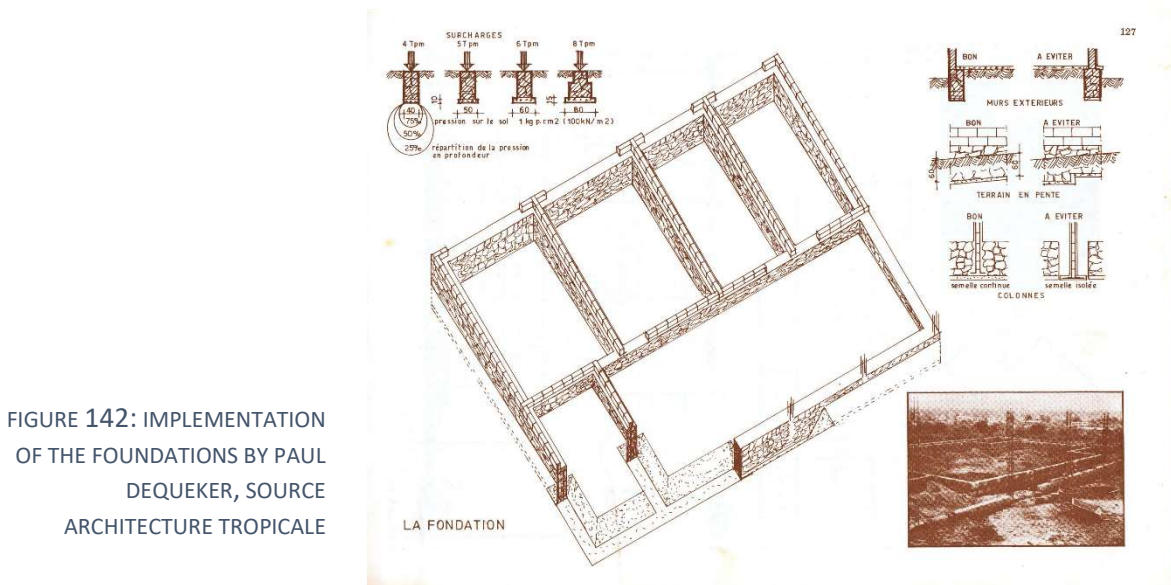


FIGURE 142: IMPLEMENTATION OF THE FOUNDATIONS BY PAUL DEQUEKER, SOURCE ARCHITECTURE TROPICALE

All the foundations of Paul Dequeker's projects are made of natural stone and the walls are raised using cement blocks or fired bricks. In order to overcome the problems of heat transmission through the walls, the walls exposed to the sun (East - West) are double-thick, solid and opaque. While the north and south facades are generally equipped with mesh openings to promote good transverse ventilation.

IV.5.2.b. Thermal insulation and the thermal resistance of a wall

As described above, the thermal insulation of gable walls is ensured by its thickness (double walls or walls covered with a stone facing) and the thermal capacity of the masonry. At the roof level, where possible, the thermal insulation of the roof is improved by a triplex underceiling. The shading of the glass walls is ensured by a lateral projection of the roof.

In tropical regions, any roof or wall facing west is inevitably heated by the sun. This solar radiation on the walls and the roof creates a



heat flow to the inside of the building. According to the conclusions of Paul Dequeker, we also note that this external heat is not immediately felt inside, it is transferred gradually according to the thickness and strength of the wall. To stop it, it is therefore necessary to double the west wall of a building or to give it an additional covering. For the roof, there must be ventilation space between the roof and the false ceiling. Of course, the thickness of the false ceiling also reduces heat transmission.

IV.5.2.c. Frame, ceiling and roof

The rural structure is made of wood, while it is metal or reinforced concrete in the city. In 90% of Paul Dequeker's churches, the ceiling is non-existent. Where there is, it is made of triplex and often fiber cement sheets. The roof is covered with galvanized corrugated sheets.

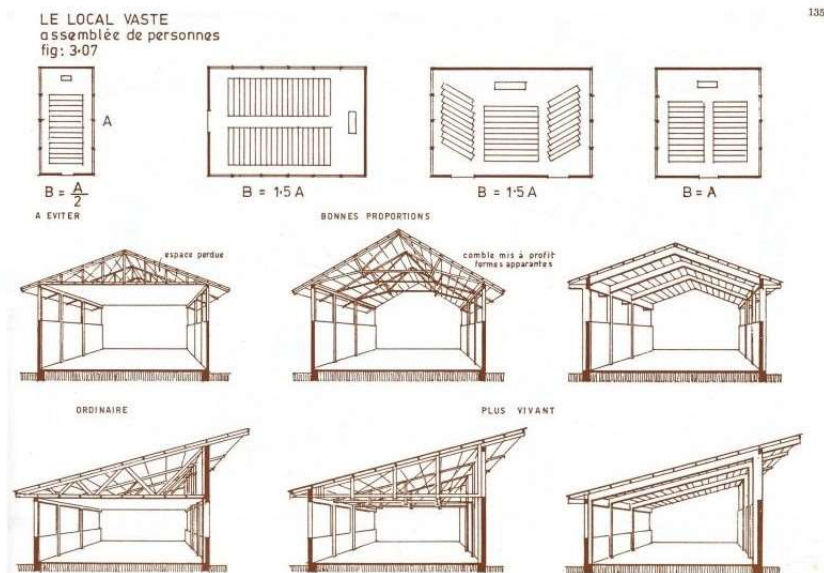


FIGURE 143: ADVANTAGE OF THE TRUSS WITHOUT CEILING. PAUL DEQUEKER BELIEVES THAT IN THE TROPICS THE ROOF SPACE SHOULD BE EXPLOITED BY USING EXPOSED TRUSSES, SOURCE, TROPICAL ARCHITECTURE



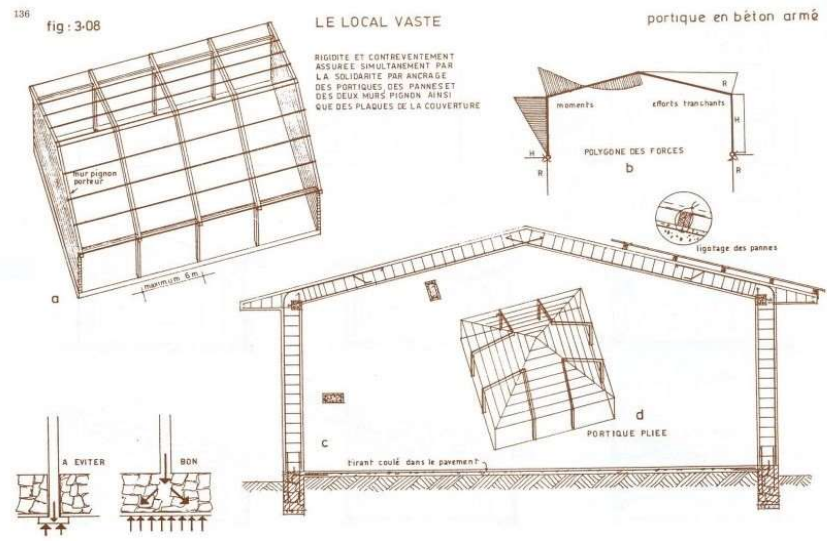
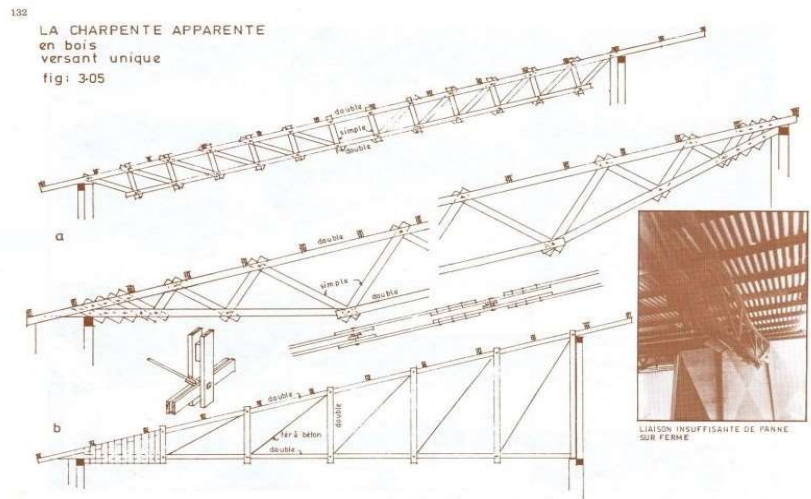
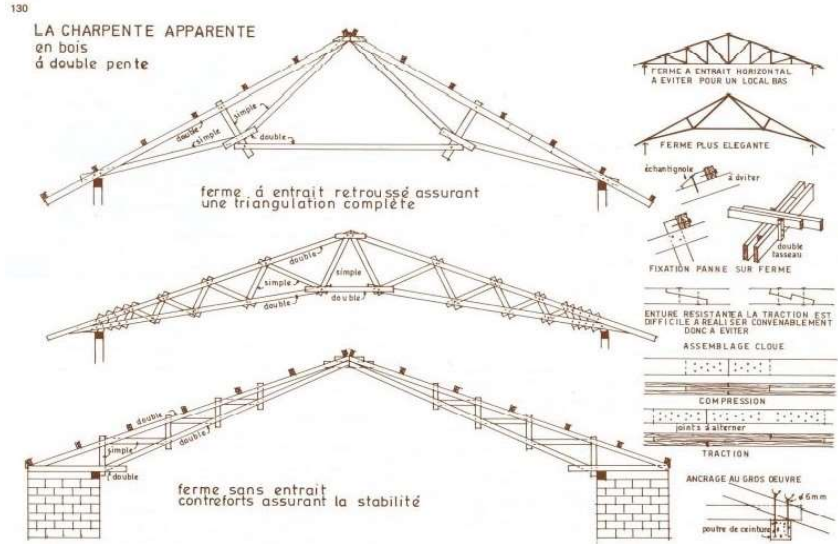


FIGURE 144: PAUL DEQUEKER DEVELOPED SEVERAL FRAMEWORK SYSTEMS, IN WOOD, METAL AND CONCRETE TO OPTIMISE THE ROOF. HE WAS ALSO INSPIRED BY ARCHITECTS SUCH AS H. SIREN, SOURCES: ARCHITECTURE TROPICALE



IV.5.2.d. Porous walls

The claustra are one of the most used materials by Paul Dequeker, it is the characteristic identity of this way of doing things. The claustra panels therefore perfectly meet the requirements of glare-free light, ventilation and above all the necessary contemplation in a place of prayer. The architect brother was ready to defend his choice whatever the stakes or even the recommendations of the high hierarchy of the church to the example of the construction of the ChristRoi church of Kinshasa in Kasa-Vubu whose construction fund was a gift of Monsignor Malula, which, during one of his visits, the placed claustras were not yet painted, which made the interior of the church quite dark. Bishop Malula urged the brother-Architect to place glass windows in order to have sufficient lighting. With great difficulty, Brother Architect Paul Dequeker was able to avoid these suggestions, promising Bishop Malula to install glass windows at his own expense if the final result was not satisfactory. Later, during the inauguration of the church, Bishop Malula will withdraw his request and recognize that the brother-Architect was absolutely right and that the brightness was more than satisfactory.

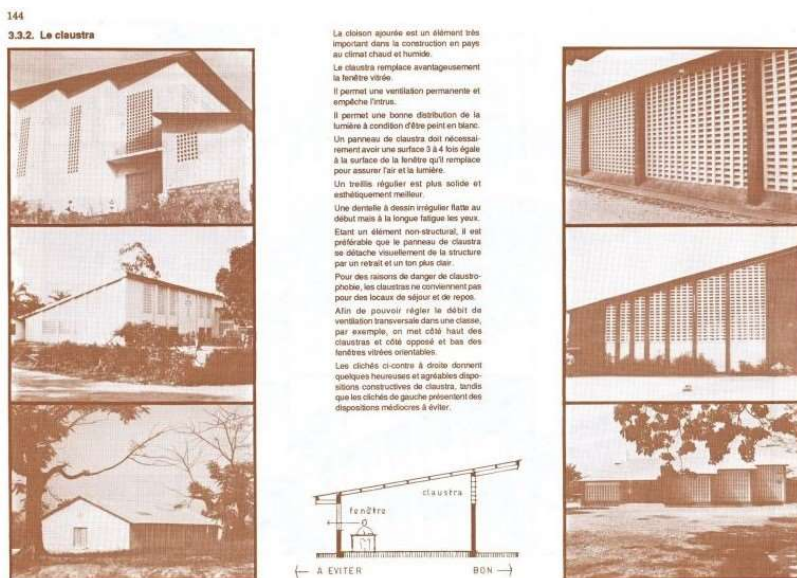


FIGURE 145: THE CLAUSTRAS IN FACADE, SOURCE : ARCHITECTURE TROPICALE



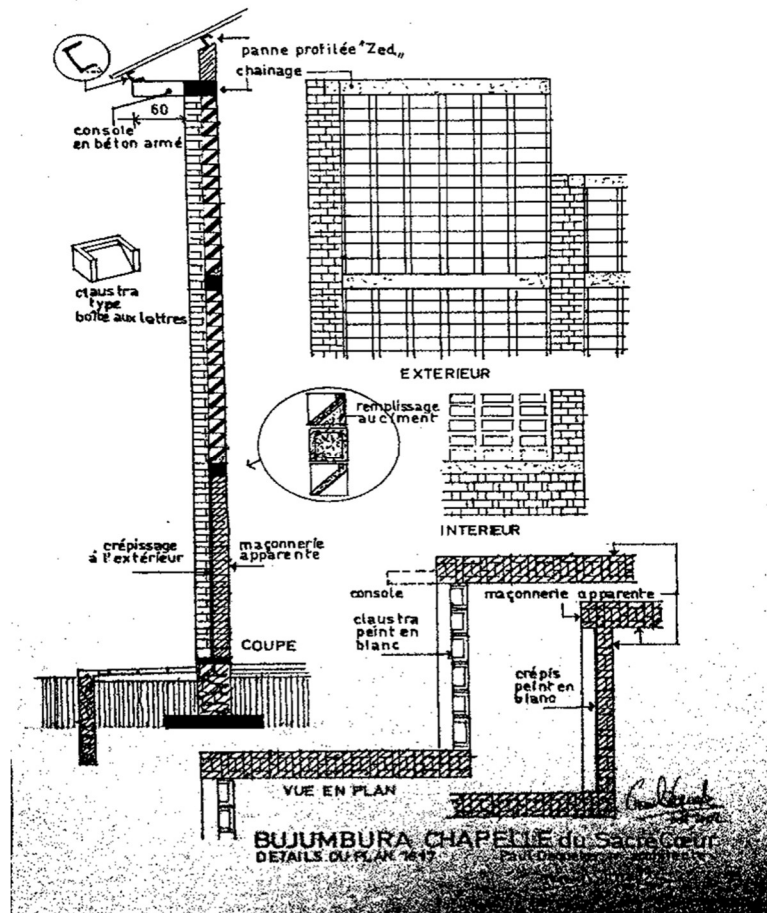


FIGURE 146: DETAILS AND EXECUTION OF THE CLAUSTRAS IN BUJUMBURA (SACRE-COEUR CHURCH), SOURCE: ARCHIVES OF PAUL DEQUEKER, KADOC



IV.5.2.e. Tropical materials

Despite the very limited choice of local materials, four main materials have solved almost all the problems:

- natural stone,
- cement blocks,
- wood and
- the metal

For climatic reasons, the walls East and West are blind and those of North and South are made up of sloping claustras (lamellae or moucharabieh) which act at the same time as windows. This arrangement allows a transversal ventilation. The choice of the constructive system is always the same! Whatever the place and the moment of realization, Paul defines in his architecture a will to use local and available materials. One can thus characterize;

- Natural stone foundations
- Reinforced concrete gantry
- Cement block walls coated and covered with Tyrolean plaster without paint (originally) and bare baked brick.
- Jalouse air vents or claustras
- Vertical concrete slats
- The wood or metal frame

IV.5.3. Adaptation to the requirements of economic factors

Economic factors through their impact on the real capacities of the population, both to initiate and complete the work and to maintain their community buildings, compel Paul Dequeker to show realism and measure. (Mudiji, 1984)

In his introduction to the opening of the retrospective lecture on the work of Paul Dequeker at KADOC in Leuven, Jan Delrue, Engineer-architect and professor at KU Leuven, concludes that "If Francis of Assisi had been an architect, he would have done architecture like Paul Dequeker". (Delrue, 2013). Indeed, according to him, the projects of Paul Dequeker respond very strongly to the



idea of Ludwig Mies van de Rohe: "Less is More", which justifies his spirit of simplicity and freedom. Undoubtedly, this search for simplicity would be linked a priori to the predetermined construction budget that Brother Paul Dequeker wanted to take into account in each of these projects in order to satisfy his Scheut order and the request of the Congolese Episcopal Conference. By approaching his buildings with such austerity, Paul Dequeker clearly shows the three interlaced qualities of any good architecture: Firmitas, Utilitas and Venustas, (Delrue, 2013) by a strict control of functionality on the one hand and construction on the other. This simplicity does not limit the creativity of Paul Dequeker, who creates works of atypical beauty, beauty being for him more philosophical than visible. (Delrue, 2013).

All plans are designed in such a way as not to involve many particular techniques that would require a great deal of expertise or technical means. One of the best illustrations of this technical approach is the construction of the church of Saint Augustin in Lemba and also the Sacré-Coeur in Bujumbura with little mechanical equipment, wooden scaffolding mounted by workers. This adaptation to the economic requirements made it possible to respond to the request of the Archdiocese of Kinshasa to build as many churches as possible, which led Johan Lagae to make a comparison between the simplicity of Paul Dequeker's churches and the very expensive churches Our Lady of Wisdom built by Boulengier in 1954 and the Church of the Blessed Sacrament built by Eugene Palumbo in 1977 (LAGAE, 2014)





FIGURE 147: SACRE-CŒUR CONSTRUCTION SITE IN BUJUMBURA, PHOTO: PAUL DEQUEKER, SOURCE: KADOC

The demands of economic functions have enabled Paul Dequeker to carry out several projects in rural areas where modern materials are unavailable and the almost impossible accessibility of construction equipment. We note for example the construction of the church of Kambote and that of Saint Luc, both in Kananga for which the missionary architect realizes walls with blocks of fortunes made by the villagers, Construction sand carried in makeshift bags by women. We also note the particular structure made of wood clambered with concrete irons. (Kalala, 2018)

IV.5.4. Adaptation to the requirements of socio-cultural functions

“We regret the superficial imitation of the West, which ignores the local context by adopting inappropriate models. From the point of view of African culture and civilization, we are faced with a phenomenon of alienation.” (Dequeker P. 1984)



FIGURE 148: SAINT LUC CHURCH IN KANANGA, BUILT IN A VERY POOR VILLAGE, PHOTO: VICTOR BAY 2018



Paul Dequeker first turns to utility, associative life, friendly and African solidarity to compose his churches with a line without frills. (Delrue, 2013) For him, man being the main vector of his compositions, lifestyle and socio-cultural conditions (habits, customs and mores) become the main design indicators as Professor Mudiji testifies by evoking Brother Dequeker's ability to adapt well to the social and cultural requirements of each site; He is based on the principles of respect for the geographical framework, of the emergence of the building. He tries to take care of the landscape by avoiding demolishing it as much as possible. Thanks to his fertile imagination, he produces buildings that are the result of a symbiosis of deep aspirations and needs, both intimate, psychological and spiritual, that must be embraced by a people on the way that stands at the crossroads of a globalized history, this people for whom the sacred edifice is built is closely related to his society and is part of an environment in which he must live in harmony. (Mudiji, 1984).

Professor Mudiji is convinced that to ignore the harmony between the people, their culture and the building is to cut this people from its psychological, social and ecological roots at the risk of indisposing them instead of disposing them in the use of worship. (Mudiji, 1984).





FIGURE 149: PAUL DEQUEKER USES LOCAL MATERIALS, THE SOCIO-ECONOMIC CONDITIONS ARE NOT AN OBSTACLE, BUT ON THE CONTRARY A MOTIVATION.



FIGURE 150: EGLISE KAMBOTE ; IN THE HEART OF THE VILLAGE AT SUNSET, THE CHURCH REVEALS THREE CIRCLES SYMBOLISING THE UNITY OF THREE BEINGS IN ONE GOD, PHOTO BY VICTOR BAY, 2017.



IV.5.5. Responses to the particular requirements of the liturgy³⁷

At the end of the influences suffered by Paul Dequeker, he merges the results and proposes the following answers for a tropical church; A purely functional sanctuary is a bad sanctuary (Dequeker P. 1984) Each of its elements must reveal to God's people the invisible mystery of the eternal Church. You have to be functional, but make sure you add something more. It is the rhythm and poetry indispensable to the harmonious development of man. Nevertheless, the sanctuary must be a tool in the hands of the priest and his assistants as the cockpit in those of an airplane pilot". (MUDIJI Malamba and Paul Dequeker, 1984)

According to Paul Dequeker, it is not the walls that make a church, but the assembly of the members of a well-determined community with its own characteristics. The liturgical program is far from being solved by the criterion of visibility alone. Paul Dequeker thinks that today's church is no longer just the House of God, but the gathering place of God's people. The architecture of the Church will focus on the specifically personal, intimate and sacred character of the liturgical assembly. It must be the place of a living culture where an assembly gathers spontaneously. We do not build churches for the celebration of a rudimentary worship but for the full exercise of a living liturgy. This liturgical space consists in an assembly gathered around the shrine to hear together the Word of God and to participate fraternally in the Eucharistic meal.

³⁷ In fact, in this part of the famous manual, Paul Dequeker gives great importance to the liturgical furnishings of Congolese churches, which should be identified with the traditional furniture while adapting to the liturgical requirements



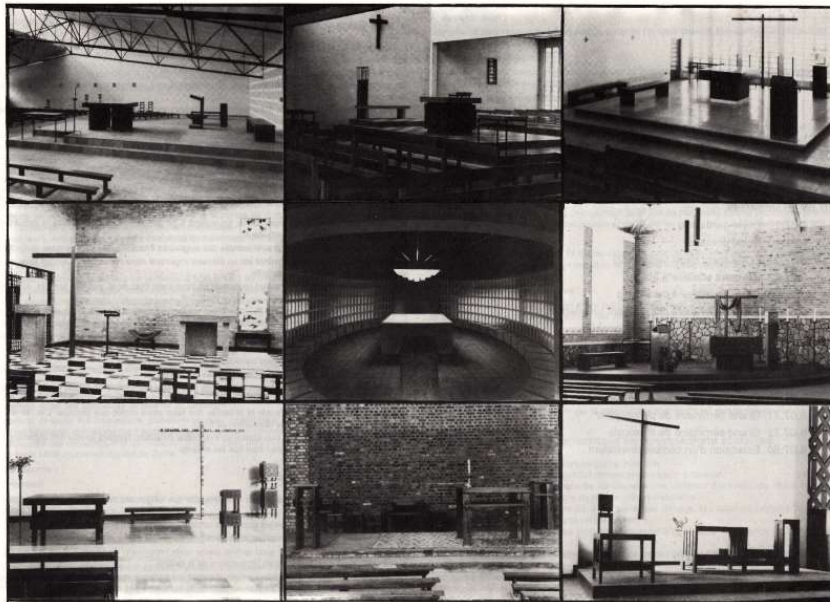


FIGURE 151: LITURGICAL FURNISHINGS PROPOSED BY PAUL DEQUEKER, SOURCE, ARCHITECTURE TROPICALE

Archives 6.06.6 Ameublement liturgique

The Mass takes place not around a single pole of the altar but around three different poles: the altar, the celebrant's seat and the ambon. To this is added the tabernacle which constitutes a particular friend. In order for the celebrant and the faithful to gather around the sanctuary, it must not be too large. The four poles must form a dynamic whole where each element retains a relative autonomy without however giving to each one too great material importance because the person of the celebrant, his action and his voice are more important than these elements. It is therefore important that the whole sanctuary be truly put at the service of the assembly.

It is appropriate that everything that happens in the sanctuary and not only what is done at the altar is perceptible, it is not necessary to elevate the altar itself above the level of the sanctuary. We must avoid unduly raising the podium of the celebration; three steps are enough: a barrier or a bench of communion hinders the free communication between the assembly and the celebrant. A screen of 60 cm wide is enough to make the separation and this facilitates



the comings and goings of the priest during the Eucharistic meal: the faithful remain standing on the first march.

The erection of a presidential seat for the celebrant, an ambon for readings, as well as the arrangement of the altar for the celebration before the people is not a liturgical mode but an adaptation of the place of celebration to the true nature of the Mass lived with the active participation of the faithful. The altar plays no role during the first part of Mass: the celebrant, after having praised the altar, goes to his seat, where he presides, until the time of the offertory. There is no fully liturgical assembly without a president. The seat must be placed so as to close the assembly and allow the celebrant to preside effectively. Placing the seat of the president at the bottom of an apse is a good thing, but it raises quite complicated problems: the chair must be made visible above the altar: in seeking to make it visible, the seat must not take on the appearance of a throne that only suits the bishop. The seat of the celebrant located next to the altar to express by its general disposition a real presidency.

The ambon where the word is spoken must appear as clearly as the place of the president and the altar. It must be far enough from the altar to constitute a clearly differentiated focus during the liturgy of the word. In addition, it will be placed in a place where the celebrant, singing or reading, will be clearly visible and can be easily heard. It is desirable that the ambon remains in direct contact with the president's seat and that the celebrant does not have to go around the altar to go there.

At Mass, the priest is placed only in the middle of the altar, so it is not necessary to have a very long altar, its majesty will be ensured by more depth. A square altar can occupy a sufficient number on all sides of the altar during concelebration.

The place to be given to the Eucharistic reserve poses delicate problems. It is important to maintain the essentially significant liturgical principle of an altar in a place of worship. Current legislation allows for a separate pole of the altar for the tabernacle.



However, the transfer of the tabernacle to a chapel of the Blessed Sacrament will never be a partial solution, as it is simply a matter of transposing the problem to a smaller scale. This chapel, in the large churches, is used for the celebration of mass on weekdays when the faithful are few. And the problem arises again. In a small church, the principle of the unity of the altar must prevail over all other considerations.

The tabernacle is the place of conservation of the Holy Species that survive after the Eucharistic Meal. The entire liturgy of the Mass ignores the Blessed Sacrament laid in this tabernacle. One may wonder whether he is very happy to place the tabernacle in the wall at the bottom of a deep sanctuary. This does not exactly correspond to the intimacy and closeness that personal worship requires. The tabernacle can be placed at the entrance of the sanctuary on a Eucharistic column as is the case in several ancient churches where it occupies an honorable place without hindering the celebration of Mass. The answers to the particular demands of the liturgy cannot be purely practical: A purely functional sanctuary is a bad sanctuary: each of its elements must reveal to the People of God the invisible mystery of the eternal Church.

Pure functionalism leads nowhere. It is necessary to be functional, of course, but be careful to bring something more, that more is the rhythm and the poetry indispensable to the harmonious development of man. Nevertheless, the sanctuary must be in the hands of the priest and his assistants as the cockpit in those of an aircraft pilot.

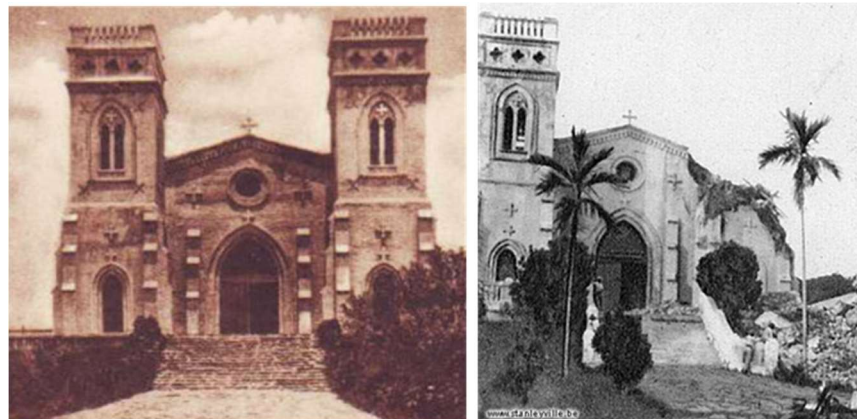
Simple answers can be given to complex questions by a humble and refined approach in a spirit of simplicity and economy: simplicity of materials and harmony of their forms, respect for use and means. The search for originality at all costs does not offer real solutions and aims for the easy effect. The brilliance of beauty has nothing to do with triumphalism, sentimentalism or the display of mediocrity; beauty is built with talent, soul and faith.



Simplicity, the result of a long work, hides from the clear minds all that is sensitive and refined in such a stripping. A few years ago, we preferred stone or masonry furniture. Today, for its ease of adaptation and its warmer appearance, wooden liturgical furniture is privileged, but because it has become "furniture", the architect, author of the church, is less consulted. The stone liturgical furniture was a "building" that was an integral part of the building designed by the architect.³⁸

IV.5.6. Restoration of Kisangani Cathedral³⁹; From the Gothic church to the church-hall

FIGURE 152: CATHEDRAL OF KISANGANI
ONE OF THE TWO TOWERS OF STANLEYVILLE CATHEDRAL, DESTROYED BY A TORNADO, 30 OCTOBER 1930. PHOTO : DEFREYN
SOURCE: "L'ILLUSTRATION CONGOLAISE", 1931, COLLECTION PIERRE VAN BOST



In the former province of Haut-Zaïre, Paul Dequeker does not hesitate to carry out an unexpected transformation in the rehabilitation of the Cathedral of Our Lady of the Rosary of Kisangani built in 1908. Indeed, this cathedral underwent several transformations as in 1936 due to a catastrophe when the right tower collapsed following a storm, or when its roof was bombed by the rebellion during the civil war.

The restoration of the buildings is a rather delicate operation that includes not only the renovation of the facades, but also the

³⁸ Paul Dequeker, «architecture tropicale, page 230

³⁹ Paul Dequeker, architecture tropicale p 229



reconstruction of the elements and the replacement of the materials. It is important that the restorer has the ability to recognize the architectural features in situ and appreciate the changes that have occurred over time in the composition, strength and texture of the building materials to be restored. We take as an example the restoration and interior renovation of the Kisangani Cathedral. First church built in Kisangani in 1908 in the neo-Gothic style with its main facade with two towers and inside, a central nave and two naves under one roof, typical of the church. (DEQUEKER P. , tropical architecture, 1992).



FIGURE 153: THIS COULD BE THE CONSTRUCTION OF THE CATHEDRAL SQUARE.

PHOTO PUBLISHED IN THE BOOK "ELEVEN KONGO" BY HILDE EYNIKEL, DAVIDSFONDS/LEUVEN 1997.

The cathedral of Kisangani is for this city a historical monument to preserve. In 1973, a renewal of the roof and the entire structure was necessary. The archbishop asked for an interior layout adapted to the liturgy, better visibility and more space. The interior was littered with heavy columns and false plaster vaults. The exterior has been preserved after some renovation work, while the interior has been completely redesigned. The fineness of the new columns, or rather



the reinforced concrete porticoes, made it possible to free up the interior of the building and greatly increase the useful space.

From the Gothic church, we went to the church-hall with a single nave. The intensity of the light and ventilation is increased by replacing the existing small openings with claustras, while maintaining the clear shape of the windows. To avoid cracks and to avoid disturbing existing foundations, the new columns do not have clean foundations, they are supported by a load distribution beam that spans the foundations of the outer wall and the old columns. Between the new and old columns, no cracks have so far appeared.

But as for the work undertaken by the missionary architect, none of this has happened! Paul Dequeker is in charge of giving a youthful touch to this solemn building that can be attributed to the Gothic, the cathedral of Kisangani will be transformed into a hybrid church that would be the fusion of the Gothic and the modern tropical! If the exterior morphology does not change completely, inside, the stained-glass windows are replaced by claustras, the posts that support the pointed vault by simple concrete porticoes giving a more user-friendly appearance, but, once again, this project will be the subject of controversy and opposing reactions, due to the choice of the architectural party adopted by Dequeker,

Brother Paul Dequeker does not let himself be taken at random! He has a reason and an analysis behind his decision, speaking through his 1993 letter, He sketches a critique of church architecture in Belgium with two relevant remarks on the phenomenon of the transformation of old-style churches by the new architects. His first remark relates to the composition: "We can no longer affirm today (as we did a few decades ago) that a modification of this importance goes almost necessarily "against nature" relevant historical architectures (Romanesque, Gothic, Baroque, etc.) all considered heirs of early Christian Basilica architecture and its fundamental axiality. In reality, archaeologists and historians today



agree that the spatial economy of the Christian Basilica first, then cathedrals is much more complex, that it was accompanied by enveloping dispositions of the assembly in relation to all the ancient churches. We can therefore consider ourselves freer than has been said. The readjustment of the liturgical poles to the new liturgy becomes much less restrictive, very close to that of the new churches.



FIGURE 154: KISANGANI CATHEDRAL BEFORE AND AFTER THE TRANSFORMATION BY PAUL DEQUEKER,

PHOTO 1 ET 2 : SOURCE ARCHITECTURE TROPICALE ;

PHOTO3 : ANONYME

PHOTO 4 : GEERT BAERT

Paul Dequeker also believes and affirms in his second remark that the presence, in the remodelling, of a real climate of density, and of actuality, is a call to creativity, as he describes it in several projects carried out in Belgium to justify his intentions and vision relating to sacred art, mainly the art of Catholic liturgy; In fact, this modernity had already manifested itself during the fifties in an effort that concerns above all the "decoration", In particular the stained glass windows (which also take part in the architecture, a



rather French specialty where the greatest painters will soon meet and which in Belgium will also take its full value with the presence, in the old churches, of a Michel Martens or a Louis Londot. (DEQUEKER P. 1994)



CHAPTER V:

SIX CHURCHES WITH ONE GRAMMAR





CHRIST ROI 1961

SAINT ANTOINE 1 1962

SAINT LUC 1963

SAINT AUGUSTIN 1977

SAINT ANTOINE 2 1982

SAINT RAPHAEL 1988



V.1. CHURCH OF CHRIST-ROI 1961





FIGURE 155 CURRENT CHRIS-ROI CHURCH ENTRANCE, PHOTO: VICTOR BAY 2021

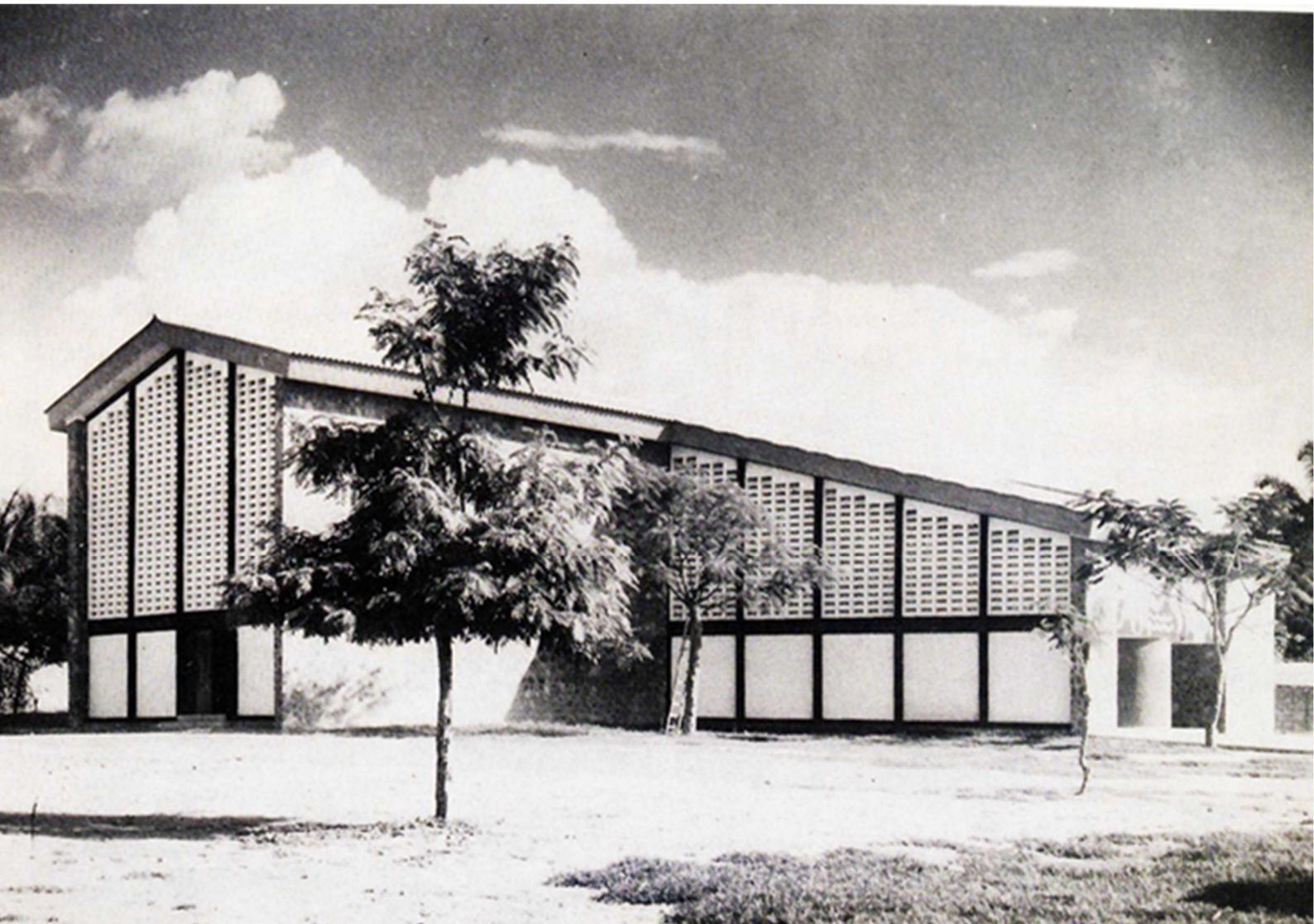


FIGURE 156: CHRIST THE KING CHURCH, SOURCE: TROPICAL CHURCHES



V.1.1. context History

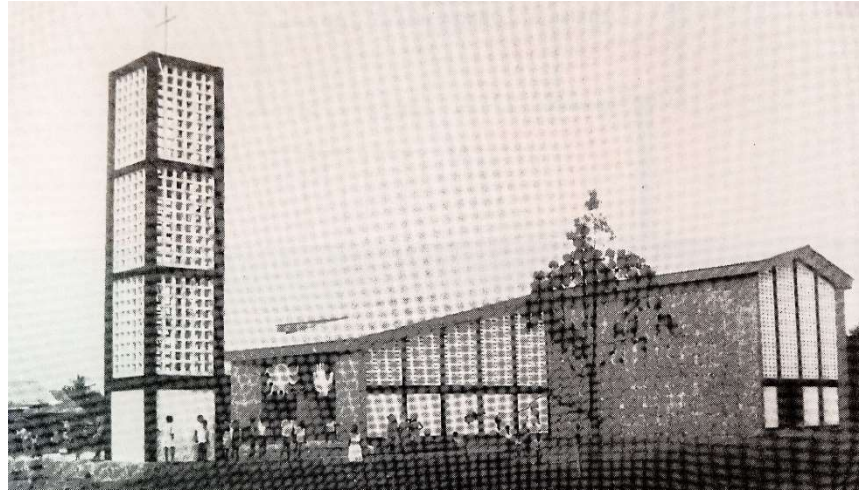


FIGURE 157 : CHRIST ROI 1961,
SOURCE, ARCHIVES DE PAUL DEQUEKER
,KADOC 2018

The parish of Christ-Roi was founded in 1951 by Father Percy Witte, who is from the Congregation of the CICM Fathers. On May 15, 1962, it was entrusted to the Fathers of the SVD Congregation. The choice of the name of Christ the King probably follows the consecration (proclamation) of Christ, King of the Universe by Pope Pius XI in 1925 after the First World War at the beginning of secularization and atheism. Located in the former commune of Dendale, now known as the commune of KasaVubu, the parish of Christ-Roi was served since 1933 by the parish church of Saint-Pierre, located in the commune of Kinshasa. The first church of Christ the King was built in 1951 when Bishop Malula was curate there from 1951 to 1954 and became parish priest there from 1954 to 1959. At that time, the old church blessed by Bishop Georges Six was no longer suitable for the many faithful of the parish and the new church was built in 1961 by Brother A. Calle on the plans of Brother Dequeker and blessed by Bishop Joseph Albert Malula in 1963, on Easter Day, (P. Madimba Mbombo and o. Manisa Muloki, 1994)

V.1.2. Architectural resolution

In the tropical zone, the cross shape is a constraint for good ventilation of the building because of the sunshine that could harm



the facades exposed to the West. In response to this concern, Paul Dequeker advocated large openings filled with claustras on the facades to the north of the building and in the medium openings to the south as shown in the plan. All walls facing east and west are blind.

In Paul Dequeker's tropical project, the use of claustras masks both the sun and allows a permanent transverse ventilation in order to promote a comfortable activity in a building where the people pray by African songs and dances. This technical arrangement reduces the risk of perspiration that would be caused by the low wind speed and the warm, humid air of the tropics. The double walls on the blind walls located on the facades exposed to the sun (East and West) are the main option used by Paul Dequeker to thermally insulate the church. This option is also reinforced by the use of a false wooden ceiling to give an answer to the concerns of Victor Olgay who claims after his experiments for construction in warm areas that the cover is the main protection element. The walls are secondary and lose their usual role because the limits are defined by the roof that gives shade. (DEQUEKER P., tropical architecture, 1992)

V.1.3. A Christian identity or African tradition

Paul Dequeker's motivation for composing the church in the shape of a cross comes from the main concept of 'Christ on the cross'. He thinks that the church as a building could be modernised and retain one or two elements that remind us that it is a place of worship. The most important factor in any project in tropical Africa is respect for the climate, which leads to a way of organising the space regardless of the form chosen at the outset. Contrary to what he would do a year later for Saint Anthony (a church that reflects an African hut), Dequeker conceived Christ the King by associating a known and very familiar form (the cross) to Christian churches to mark a symbol of identification of a church but which also refers to African traditions that always link the sun and the cross because,



according to Christian Scheurer, in Africa the cross is the earth sign symbolised by four circles at the end of four arms that represent the course of the sun. (Scheurer, 2016)

Intuitively, this thesis argues that Paul Dequeker chose the cross form 'Christ, crucified king' because the cross symbolises in Christianity the death and resurrection of Christ and in Africa it symbolises human destiny, life and death, it evokes the earth, the sky and the land of the dead (Scheurer, 2016). In fact, it is already justified in these terms that several tribes of the Congo DRC symbolise the infinite generating energy of the universe by the cross called "Kalunga" (Nzuji F. 2000) among the Luba of Kasai, which is also found among the Baluunda and the Tshokwe.

FIGURE 158: . KALUNGA
SYMBOL OF INFINITY SOURCE:
AFRICAN ARTS, SIGNES ET
SYMBOLES, NZUJI F. 2000

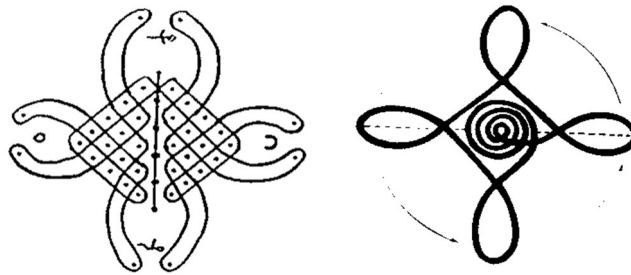


FIGURE 159 : WATERCOLOUR BY
PAUL DEQUEKER FOR THE CHURCH
OF CHRIST THE KING



from the above, this thesis has taken the opportunity to interpret Paul Dequeker's watercolour symbolising the Glorious Sign of the Sun bearing the 'Alpha and Omega' symbol of the Godhead by associating it with the destiny of man symbolised by the hand in the flame. it is a pity that this beautiful painting which marked the



entrance to Christ the King's church has been replaced, no doubt by the unwary.

In addition to the intuitive motivations, the very familiar form adopted by Paul Dequeker carries conceptual accents faithful to his vocation and to the very near influences of the liturgical reforms that will be confirmed at the Second Vatican Council (1963). Within the Church, he makes use of the disposition of the People of God around the altar (figure) to allow a truly participatory celebration by rediscovering the etymological meaning of the "domus ecclesiae", derived from the precepts of the "Sacrosanctum Concilium" which show that it is not appropriate to define as entirely sacred the space of the celebration and all that it contains, but rather to bring out in that it materializes a space of the sacred, a form of genitive that adapts better to the foundations of the conciliar reform in accordance with the liturgical movement and the thought of Romano Guardini around the 1920s which aimed at a new organization of space for a more active participation of the assembly where the church It would no longer be merely a symbolic environment but would be structured within a Community framework. (Marcuccetti, 2012) This approach aimed at a return to a monastic spirituality of the type «thinking and praying while thinking», a model of social and religious relations opposed to the image of the triumphant Church (Marcuccetti, 2012).

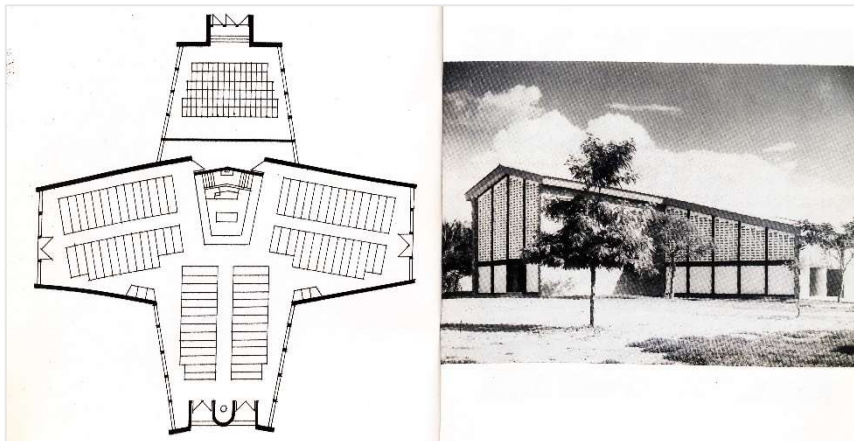


FIGURE 160: CHRIST-ROI DEVELOPMENT ALLOWS FULL PARTICIPATION OF THE CHRISTIAN ASSEMBLY, SOURCE, TROPICAL CHURCHES





FIGURE 162 : INTERIOR OF THE CHURCH, DRAWING BY VICTOR BAY

FIGURE 161: ASHENDO SYMBOL OF RESHAPED NATURE, SOURCE: NZUJI F. AFRICAN ARTS, SIGNS AND SYMBOLS



198

The Tropical Churches are carriers of African cultural information; Paul Dequeker arranges his churches to tell a message to the local populations by hidden signs like the ceiling where he uses a frame in the shape of "The Remodelled Nature"; symbol of fullness and perfection among the Ohendo and several other populations of the DR Congo, (Nzuji, 1966) (figure) although at that time, for the population, the buildings might seem alien and the message they conveyed was unclear, In addition to camouflaged symbols, it incorporates frescoes on the facade to allow many to understand



the call to participate in worship as when one dances and celebrates around the mask wearer (Mudiji, 1989, p.268). In 1968, it took over the church of Bokungu at the equator, almost identical to Christ the King, where one can very well notice the entrance fresco that invites the people of God to share the Holy Word by considering the church as a palaver tree.



FIGURE 163 : CHURCH OF BOKUNGU ALMOST IDENTICAL TO CHRIST-ROI OF KINSHASA, SOURCE, EGLISES TROPICALES.

To confirm his appropriation of traditional forms in modern architecture, several other representations were used by Paul Dequeker such as the large vault above the mass celebrant and the altar which borrows the royal canopy from the hut of the Mwami (King) of Nyanza in Congo.



FIGURE 164: EMPRUNT DE L'AUVANT ROYAL DE LA RESIDENCE DU MWAMI (ROI) DE NYANZA (DRC),



V.1.3. A sober aesthetic

FIGURE 165 : THE
CURRENT FAÇADE OF
CHRIST-ROI, PHOTO BY
VIOCTOR BAY 2021



To Christ the King, Paul Dequeker, uses claustras not only for ventilation and light, but also as a component of exterior aesthetics. He composes a regular pattern (figure) which he considers more solid and aesthetically better compared to a lace mosaic with irregular patterns (figure) which, according to him, flatters the eyes at first but wears them over time. (DEQUEKER P., tropical architecture, 1992) Being a non-structural element, the claustra must be visually distinguished from the structure by a withdrawal and a clearer tone. To highlight the elegance of the natural materials on the façade, the double thermal walls are clad in natural stones (rubble) built on the entire width of the façade. (Kanene Mudimubadu, Paul Dequeker, 1992) (Figure)

V.1.4. The techniques

In his book on tropical architecture, Paul Dequeker highlights the functionality of a structure that he himself calls a "long-span frame" because it is a metal, wood or concrete system that allows the roof to be carried and supported over long spans without intermediate supports. The structure consisting of long-span timber trusses is part of the design adapted to large spaces on the basis of a more creative composition giving the building a clear and unexpected character.



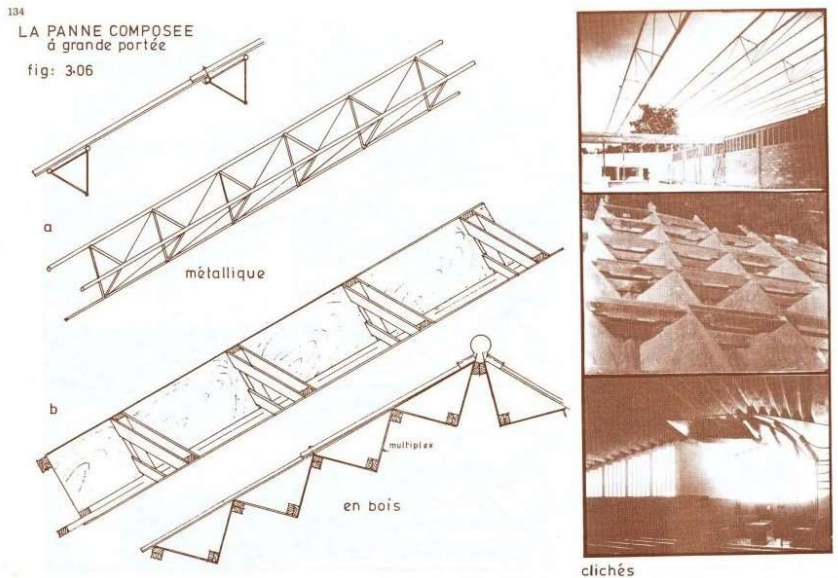


FIGURE 166: ILLUSTRATION OF THE LONG-SPAN FRAME SYSTEM DEVELOPED BY PAUL DEQUEKER, SOURCE: ARCHITECTURE TROPICALE



FIGURE 167: THE LOOK OF THE LONG-SPAN TRUSS THAT ALSO SERVES AS A CEILING, PHOTO: VICTOR BAY 2021

Indeed, this way of doing allows to revalorize the roof either with an apparent structure at a single slope, or with visible farms with repelled fastenings. In order to involve the frame in the interior decoration and to ensure a spatial multiplicity and a greater volume of air contrary to the frame of the attic composed of ordinary farms with one or two slopes with horizontal entrance that creates a lost space and lays the problem of attic ventilation.



V.1.3. The roof without valleys

In tropical regions, large amounts of water recovered after rain are harmful to buildings when roofs are not well done. To this end, in order to avoid any infiltration of water in a blanket, Paul Dequeker recommends un-knot covers for churches in the tropics, it is the beginning of a particular typology knowing that the roof is also a constituent element of architecture. The roofs are therefore one or two simple slopes, whatever the shape of the church. So for the church of Christ the King; although the building has the shape of a cross, Paul Dequeker refrains from using the junction of two roofs usually applied to these types of buildings as shown in the figure to make a simple two-sided roof with a main ridge. (figure)



FIGURE 168: A VIEW OF
CHRIST THE KING CHURCH,
PHOTO BY VICTOR BAY 2021



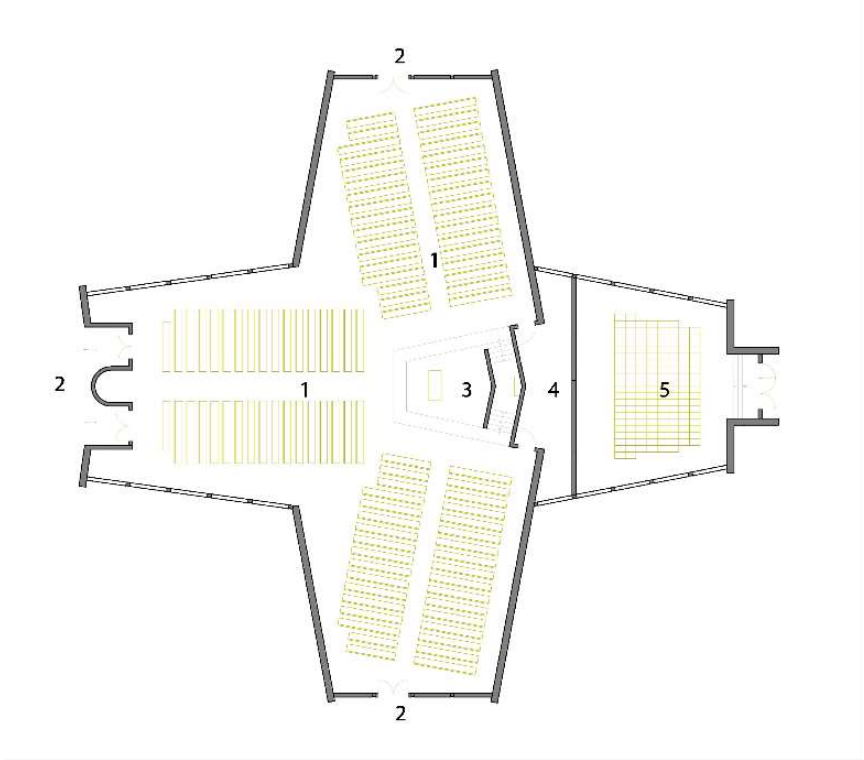


FIGURE 169 : PLAN OF CHRIST-ROI, DRAWING BY VICTOR BAY



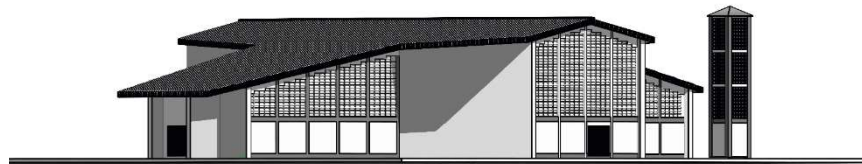
FIGURE 170: PERSPECTIVE OF THE CHURCH, DRAWING BY VICTOR BAY



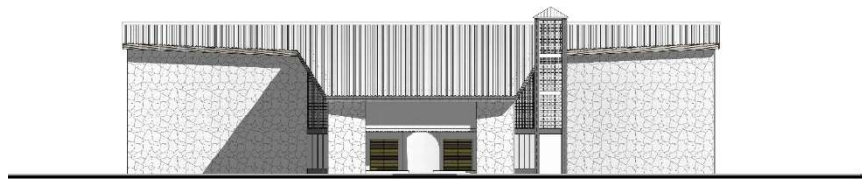
South façade



Perspective



West façade



Schematic section



FIGURE 171: FACADES AND SECTIONS OF THE CHRIST-ROI CHURCH, DRAWING BY VICTOR BAY



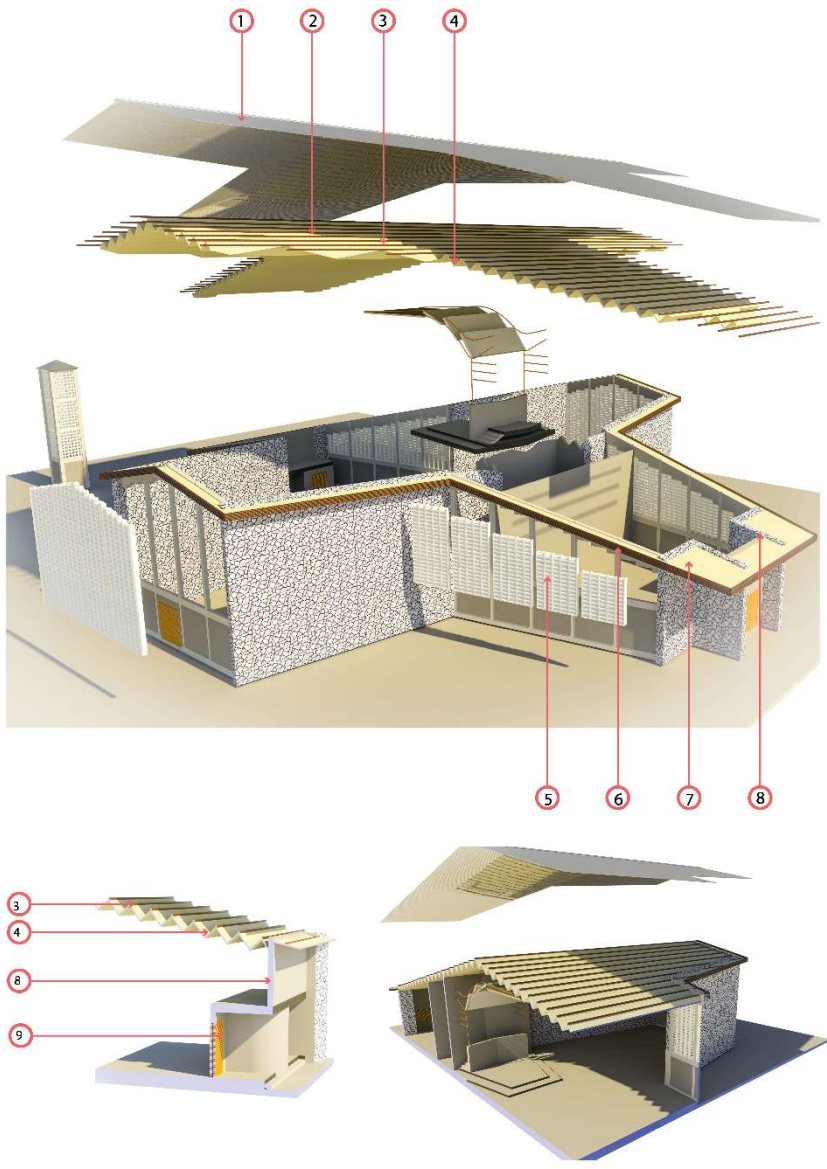


FIGURE 172: TECHNICAL DETAILS OF THE CHURCH OF SAINT ANTOINE 1





V.2. SAINT-ANTOINE 1 (1962)





FIGURE 173, ST ANTHONY'S CHURCH 1, CURRENTLY IN

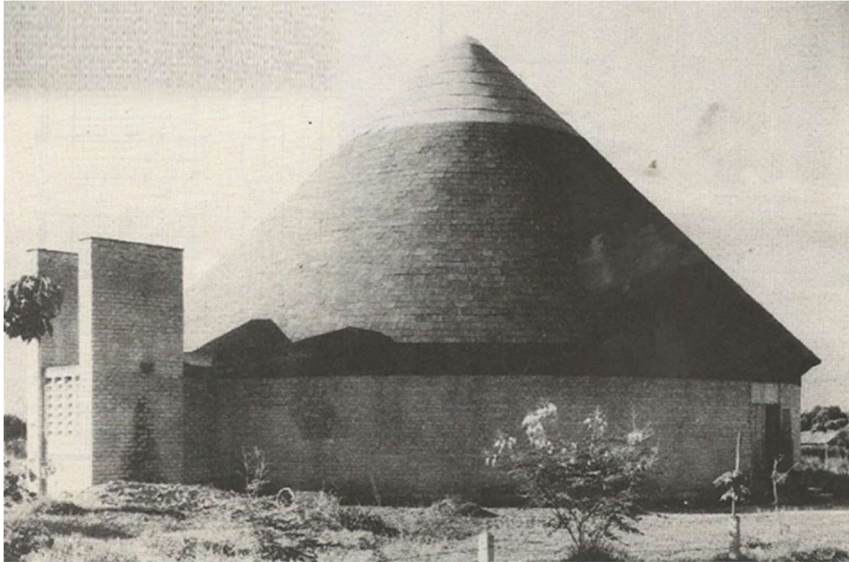


FIGURE 175: SAINT ANTOINE(1962),
PHOTO BY PAUL DEQUEKER, SOURCE
KADOC

The church of Saint Anthony is located in the commune of Bumbu, next to the commune of Kasa-Vubu. In 1962 Bumbu is not a commune of Leopoldville. It's a rural area. It's part of the Kongo Central in the Kimwenza territory. From 1960 to 1968, this town was named «Sinalco», after a brewery producing lemonade and water. It became a commune in 1968 with about 38000 inhabitants. The word Bumbu is a distortion of «Mpumbu» which means «large market». (Bolia, 2014; Fumunzanza, 2008). It was subdivided in the 1960s because of the overcrowding of the communes near the city and the rural exodus. The area is therefore little inhabited in 1962 by a population that builds its own housing and we can imagine that some still make dwellings close to the boxes or squares outright. So it's a big box in the middle of others, for a population that still has this fresh shape in mind as Paul Dequeker builds. (Tshiunza, 2021)

Although the first church was built in 1962, the parish of Saint-Antoine was founded in 1963 from the parish of Saint Pie X by Scheut Fathers. The construction of the first church was financed by Father Wulf, a former professor at the minor seminary of Leopoldville. The SaintAntoine church was built by Father J. Coene, according to the plans of Paul Dequeker and was blessed on July 5



1963 by Bishop Félix Scalais. (Fr. Madimba Mbombo and o. Manisa Muloki, 1994).

Dequeker Paul arrived in the Congo in 1958. He had some time previously trained in tropical architecture at the prestigious London school. When he received the commission from Saint Antoine, he had already conceived a few projects in the Congo, including the radio which served as RTNC2 and schools. He shows his willingness to do architecture for the Congo. But a traditional radio or school doesn't exist, and the only way to do local is to respect the tropical climate.

But with the project of a church, it is possible to give the impression of not worshipping in a foreign place, a foreign god in a foreign way. He had time to see that even when they became Christians, the Congolese worship their God differently, their way of meeting other faithful is also different. This God who one would like to believe the same for all peoples should accept some differences in the way of worshipping of all peoples in places designed for this purpose.

V.2.1. Appropriation of traditional forms

The wall of the church of Saint Anthony (Kinshasa 1962) is circular; the roof is a cone surmounted by a translucent hat by which the light bursts forth and floods the church from above. The interior space is clear and airy, it houses sober furniture and decoration based on the use of local motifs.



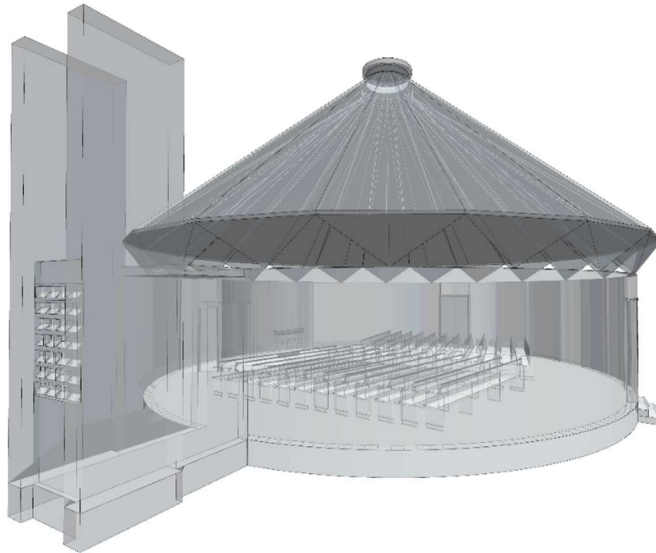


FIGURE 176: 3D SIMULATION OF THE ENSEMBLE, DRAWING BY VICTOR BAY

Although a good expression in architecture recalls the familiar image of the building, the Gothic or Romanesque styles of the churches that preceded it certainly had nothing but an import. The architectural values he conveys bear witness to his autonomy from the Early Christian and Neo-Romanesque inspiration of early mission churches. Far from being modern and far from evoking a certain local tradition, these Romanesque and Gothic churches seem foreign to the local culture. Dequeker understands that the black African people have needs and aspirations in accordance with their world view and tradition. It must be able to translate this while recognizing that this traditional africanity must be offset by technological scientific acquisitions.

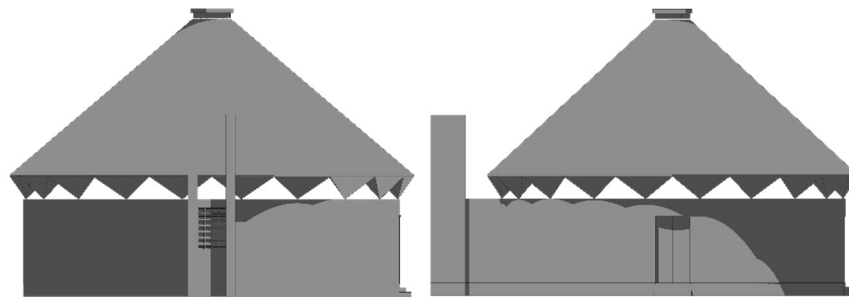
The question asked by Paul Ricoeur: «how to modernize and at the same time return to the essential? » Is the one that concerns the architect Dequeker the most because the approach of a regionalism is more complex for him since he builds for a culture different from his own. Paul Dequeker must first respond to Mudiji's concern about whether «African architecture needs African architects or not». Paul Dequeker therefore feels obliged to design by substitution and applies a regionalism that Liane Lefèvre and Alexander Tnozis call popular regionalism in which the architect copies façades or traditional exterior forms for a new project. This



approach is generally commercial. It is found in universal exhibitions, the most notable of which in the monumentalization of vernacular architecture of the Congo remains the pavilion of Henry Lacoste in 1931.

In this approach to the tropical project, Dequeker imitates the African hut to design the first church of Saint-Antoine (1962). Unable to rely on wind speed, it adopts chimney ventilation by creating a pointed roof and a main opening at the top (oculus) allowing static ventilation by leaving low openings to let in fresh air that escapes at the top level of the oculus peak.

FIGURE 177: DRAWINGS OF THE ORIGINAL MORPHOLOGY OF SAINT ANTOINE DRAWING BY VICTOR BAY



V.2.2. Between tradition and modernity.

Like many other architects Paul Dequeker thinks that the church as a building could be modernized and retain one or two elements reminding that it is a place of worship; A bell tower or a cross at the top might suffice and this is noticed in Saint Anthony, where he thinks he can do better by associating a known form, familiar to Africans, with these few symbols that make it possible to say that it is a church in Africa! He is also reluctant to make a very large building. His first church, Saint Anthony is therefore a replica of the monumental African square (figure). The case of St. Antoine thus illustrates two approaches to regionalism; one, historicist that tends to visibly retain one traditional form and the other, modernist or critical regionalism that is built on a measured respect for tradition or regional culture (Canizaro, 2007, p.23)



V.2.3. Tectonic and aesthetic

The wall of the first church of Saint Anthony is circular. If this shape is not ideal for the climate, it can be very attractive for the eye. It does not require any particular decoration to please. The height of the roof and the arrangement of the plates are enough to create an emotion. Nevertheless, Dequeker plays to the end the game of African inspiration by imitating the shape of a traditional box and adopts the shape of the triangle for the decoration elements, we read the triangle everywhere, from the inside as well as from the outside "Nature reshaped"⁴⁰ on the bank board (figure), the leopard's mouth⁴¹ (figure) (Nzuji, 1966) and the oculus⁴² for the ceiling (figure).

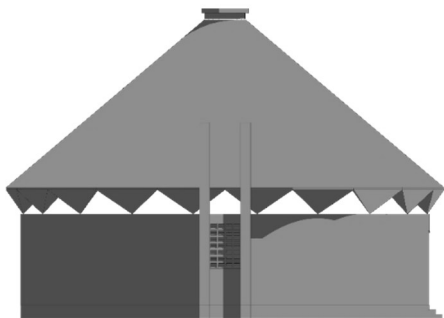


FIGURE 178: DRAWING OF SAINT ANTOINE 1 WHICH REPRESENTS THE BASIC MOTIFS OF THE ROOF AS A SIGN OF REMODELED NATURE (SOURCE: FAÏK NZUJI, 1996, SYMBOL 198)

⁴⁰ Symbol of fullness, of perfection among the Ohendo and other populations of the Kasai.

⁴¹ Symbol of power and in particular of political power among the As'ohendo of Zaire This symbol also represents the divine gifts and the word of the chief



FIGURE 179: THE CEILING OF THE CHURCH WHICH ENDS WITH THE OCULUS IS INSPIRED BY THE LEOPARD'S MOUTH (SOURCE: FAÏK, 1996, SYMBOL 202)

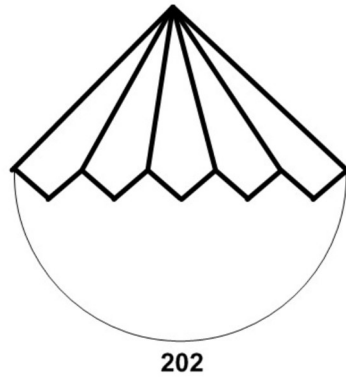


FIGURE 180 : SAINT ANTOINE 1 (1962), PHOTO BY VICTOR BAY 2022



V.2.4. An abandoned heritage.

When Bumbu was a village, this beautiful church was a heritage for the inhabitants. Due to the increasing urbanisation and the strong demographic growth of the city of Kinshasa, the old St. Anthony's built in 1962 was abandoned to make way for the new church built in 1982. This situation is similar to the unfortunate case of several churches built by Paul Dequeker that are abandoned or destroyed.



This thesis is therefore intended to protect and restore the abandoned heritage.



FIGURE 181: ALTHOUGH USED AS A PARISH HALL, THE OLD CHURCH IS TODAY AN ABANDONED HERITAGE, PHOTO VICTOR BAY



FIGURE 182: THE FIRST CHURCH OF SAINT ANTOINE COULD COLLAPSE IN THE FOLLOWING YEARS,
PHOTO : VICTOR BAY, 2021





FIGURE 183: THE ROOF CAN BE SEEN COMPLETELY DETERIORATED. PHOTO, VICTOR BAY



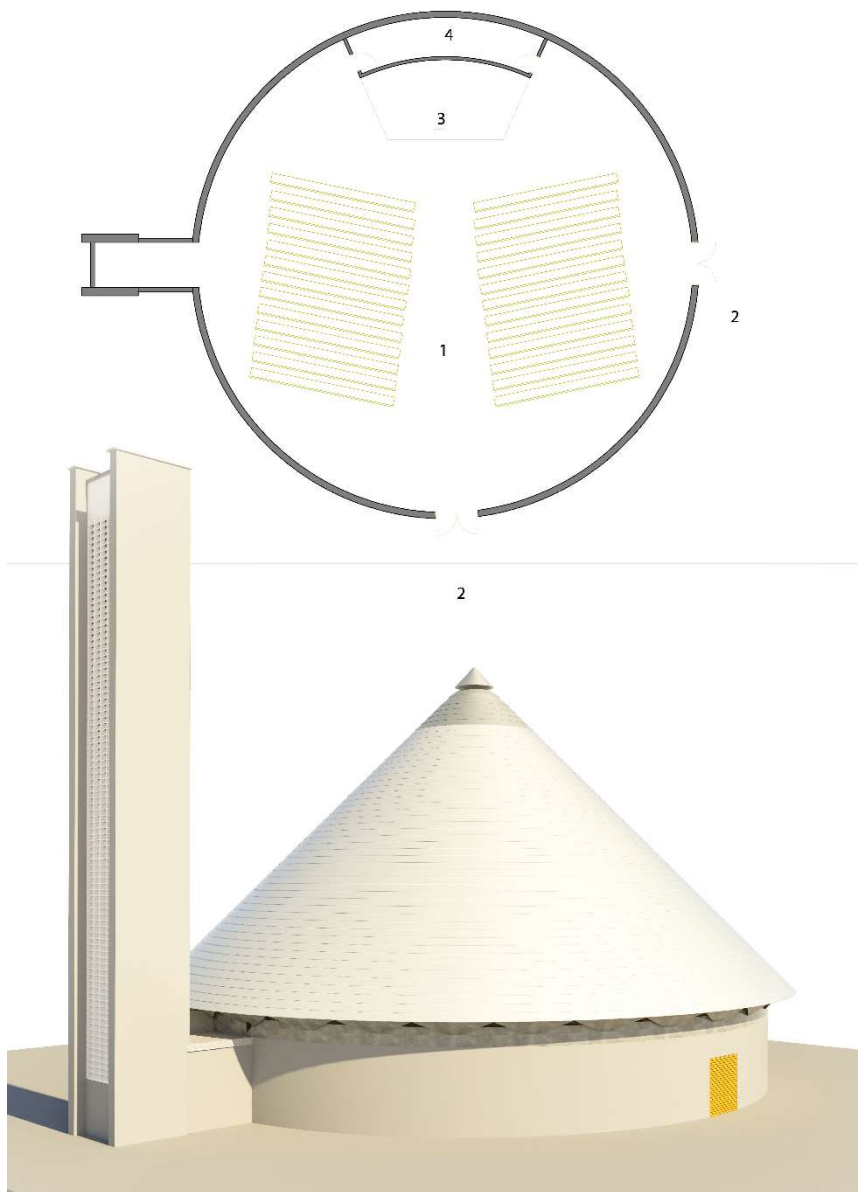
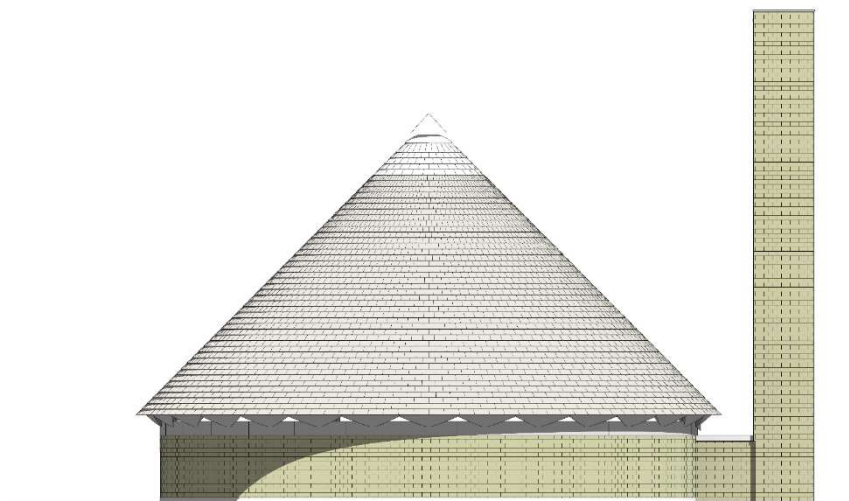


FIGURE 184: VUE EN PLAN ET VOLUME DE L'ÉGLISE SAINT ANTOINE 1



Façade



Coupe schématique

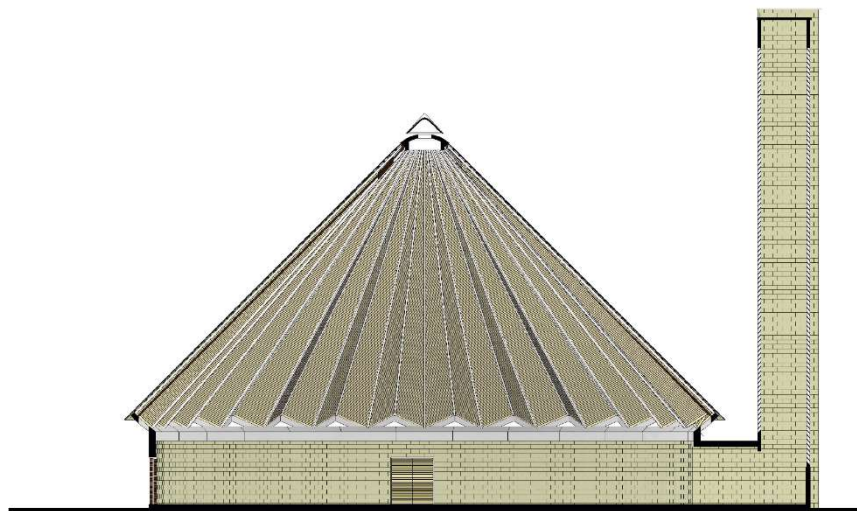


FIGURE 185: FAÇADE ET COUPE SCHEMATIQUE DE SAINT ANTOINE, DESSIN DE VICTOR BAY



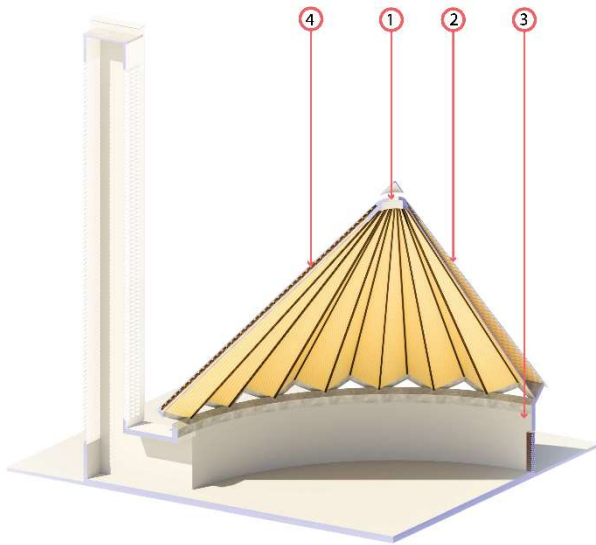
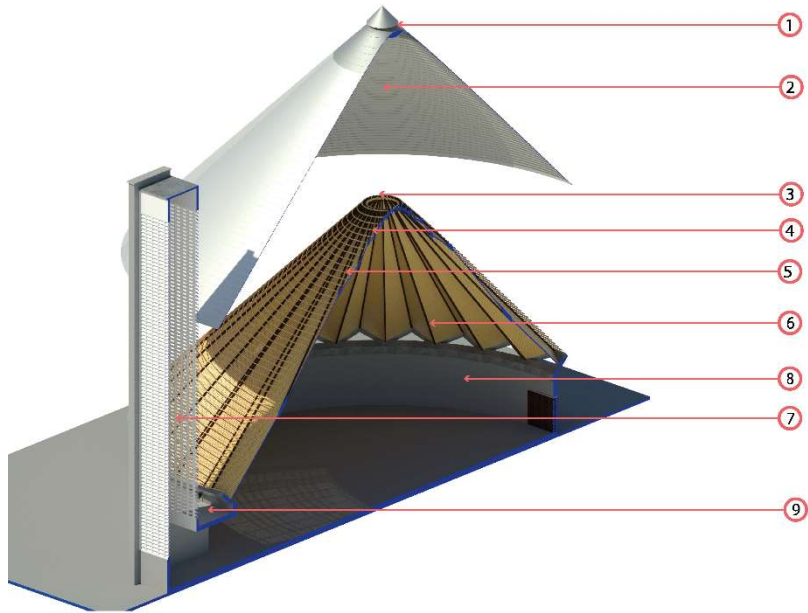


FIGURE 186: DETAILS DES MATERIAUX, EGLISE SAINT LUC, DESSIN DE VICTOR BAY



V.3. SAINT LUC CHURCH 1963





FIGURE 187: SAINT LUC, PHOTO DE VICTOR BAY 2018

Founded by the Scheuts Fathers, the church SAINT LUC is located in the commune of Ngaliema in the former concession of the park of Hembrise became «ma campagne». In the 1960s, as the city (Leopoldville) expanded further and further east, this park saw between 1961 and 1962 a construction by Brother Piet Nooyen based on the plans of Paul Dequeker. Planned for a maximum of 600 people on 520m², Saint Luc is a little bigger than Saint Antoine, but today threatened by a transformation that will definitely distort it!

V.3.1. A modern African hut



FIGURE 188: CHURCH OF SAINT LUKE (1963), PHOTO PAUL DEQUEKER, SOURCE KADOC

A year after the construction of Saint Anthony, we understand that Paul Dequeker is still motivated by the actualization of traditional forms because the church Saint-Luc is also designed on a form reminiscent of a large traditional hut, but with a modern geometry. Designed on a hexagonal plan with the circular top half-way up the elevations, Saint-Luc is crowned by an imposing three-sided pyramid-shaped roof. Unlike Bumbu, which was only a village at that time, the Hembrise Park is occupied by Belgian families. Paul Dequeker will have to express himself differently but with the idea



of a «modern hut». While the Second Vatican Council is in full gestation, Paul Dequeker already wants to update himself and proposes a rather monumental plan that goes almost against his sobriety. But Paul Dequeker is surely inspired by Le Corbusier who built in 1955 the chapel Notre Dame Du Haut, not because of its shape, but because of his attitude, for, Le Corbusier who usually builds on straight lines indulges in curves and. Surprises with these unusual forms, in fact, he wants to bring in harmony the hilly landscape of the vosges⁴³ with the curves of the chapel that meet the hills⁴⁴. An explanation for this behaviour is linked to the period that influenced the two architects because it will be noted that: between the years 1950 and 1960 modernism sees the development of curves and countertowers⁴⁵ to the example of Frank Lloyd Wright who built the museum of Guggenheim (1959) in New York in circular form, Eero Saarinen who built the north christian church between 1959 and 1964 in hexagonal form in Columbus.

Paul Dequeker, who proclaimed himself a follower of modernism and an admirer of Le Corbusier, probably finds himself in the same constraints of the years «curves of modernism» (1950-1960) and will adopt the same attitude for Saint Luc by integrating the silhouette of Saint-Luc in the hills of Mount Ngaliema and is inspired by the papal mitre to conceive Saint-Luc.

⁴³ Les vosges sont une chaîne de montagnes basses de l'est de la France , près de sa frontière avec l'Allemagne. <https://www.collinenotredameduhaut.com/wp-content/uploads/2020/06/logo-cndh.png>



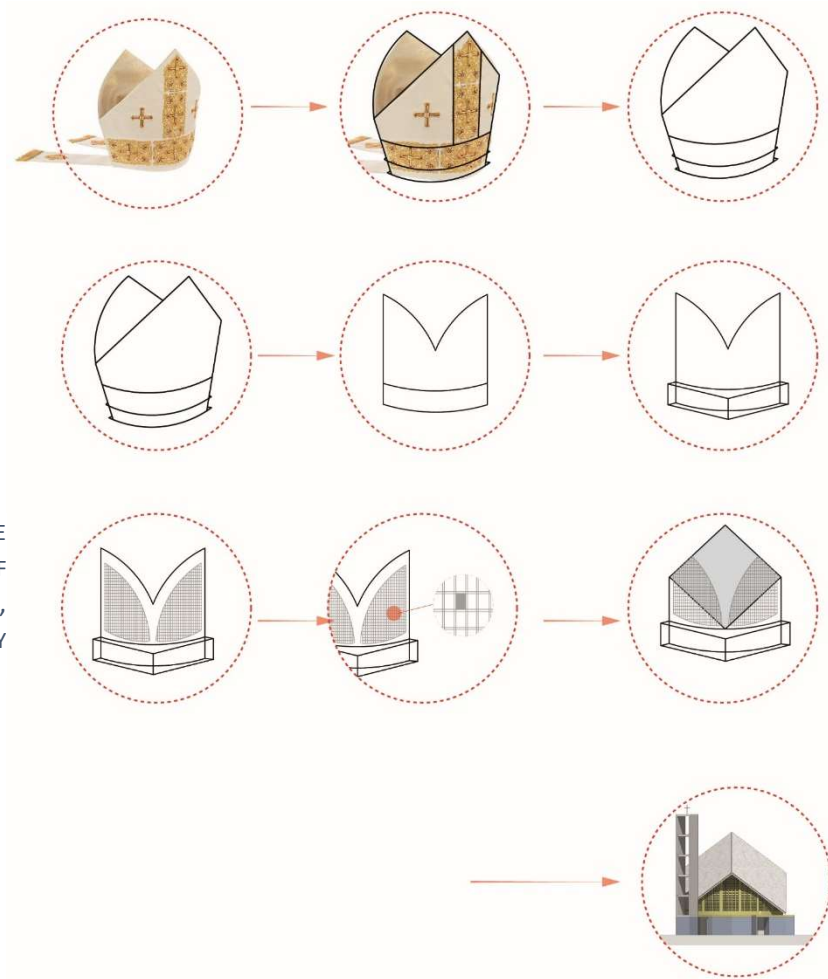


FIGURE 189: PROBABLE EVOLUTION OF THE DESIGN OF THE CHURCH OF SAINT LUKE, DRAWING BY VICTOR BAY

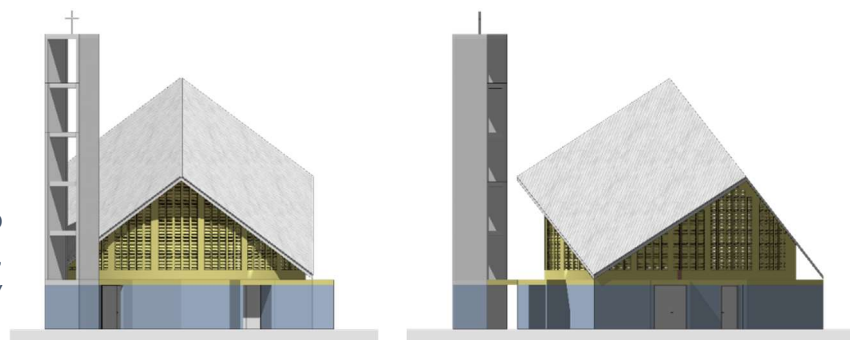


FIGURE 190: NORTH AND SOUTH FACADES OF SAINT LUC, DRAWING BY VICTOR BAY

V.3.2. The climate response

Paul Dequeker surely notes that Saint Anthony 1 is not sufficiently illuminated, and ventilated because the ventilation by chimney effect recommended there probably does not work as he would



have liked in 1961. To optimize ventilation and lighting in Saint Luc, it removes the oculus and enlarges the triangles (Nature remodelled) of the shore board to create a large bay made of claustras. (Figure) Thus taking up one of the main ventilation and lighting resolutions already applied to Christ the King two years before. This is the beginning of the magnificent, clever and correct game of the claustras arranged under the light in the tropical wind.



FIGURE 191: INSIDE SAINT LUKE'S, NATURAL LIGHT PENETRATES THROUGH THE CLAUSTRAS ; PHOTO BY VICTOR BAY (2019)

V.3.3. A stunning geometry

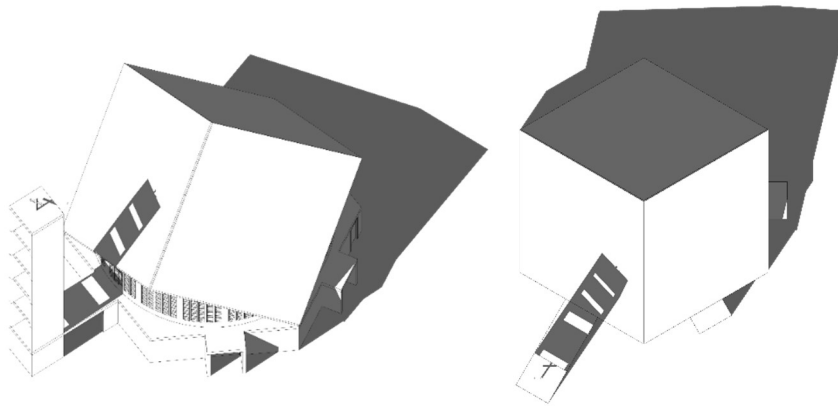


FIGURE 192: BIRD'S EYE VIEW OF THE 3 RHOMBUSES FORMED BY THE SLOPES OF THE ROOF. DRAWING BY VICTOR BAY

The roof of the Church of Saint-Luc in Kinshasa is very impressive in its surroundings, as some parishioners attest, considering its roof to be "stunning!" Indeed, at first glance, the observer who looks at this church wonders about the choice made by the architect to compose this roof. It is already recognized that Paul Dequeker



avoids using the meeting of the slopes of the valley roofs to reduce the risk of rainwater seepage into the building. In a classic case of framing, the roof of Saint-Luc would have been on multiple slopes composed of valleys and faitières. To avoid this inconsistency in his way of doing things, he remains faithful to his theory of a roof without valleys and goes in search of a geometry that is both disturbing and significant by dividing the lower circle into three equal crescents along axes oriented at 120° to obtain a pyramid composed of three diamonds (inverted squares)



FIGURE 193: LA TOITURE DE SAINT LUC IMPRESSIONNE PAR SA GEOMETRIE.

This angular geometry is also reproduced in the "Y" shape of the dominant axes of the roof and the edges of the polygonal masonry (hexagon) forming a 120° angle (figure). The consequence is quickly perceived on the apex of the roof projected orthogonally in front. Inside the church, the original false ceiling⁴⁶ forms a three-

⁴⁶ In 2006, after the deterioration of the old roof, the wooden frame, the corrugated fibre cement sheet roofing and the false ceiling made of cement fibre were replaced by a new



petalled flower reminiscent of clover (fabaceous) native to tropical areas.

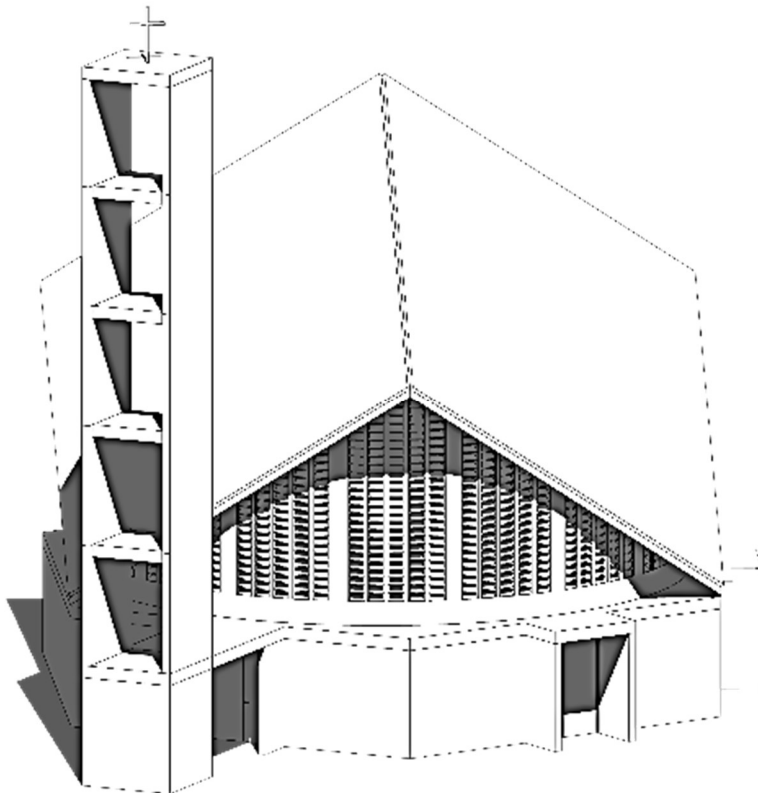


FIGURE 194: PERSPECTIVE OF SAINT LUC, DRAWING BY VICTOR BAY

This stunning geometry puts Christianity and Africanism in duality because in Africa, the diamond is widely used in Bantu sacred art; we notice it in the kuba sculptures of the DR Congo and also Igbo of Nigeria.

The roof in three reversed diamonds of Saint Luke is thus perceived in this thesis as a message of spiritual reconnection between generations and especially between African tradition, modern Africanity and Christianity because the geometric forms are, the oldest and easiest way to understand cultures. (Jacquier, n.d.) Did

metal frame roof with aluminium-zinc sheets and a false ceiling made of wooden panelling that did not respect the original design.



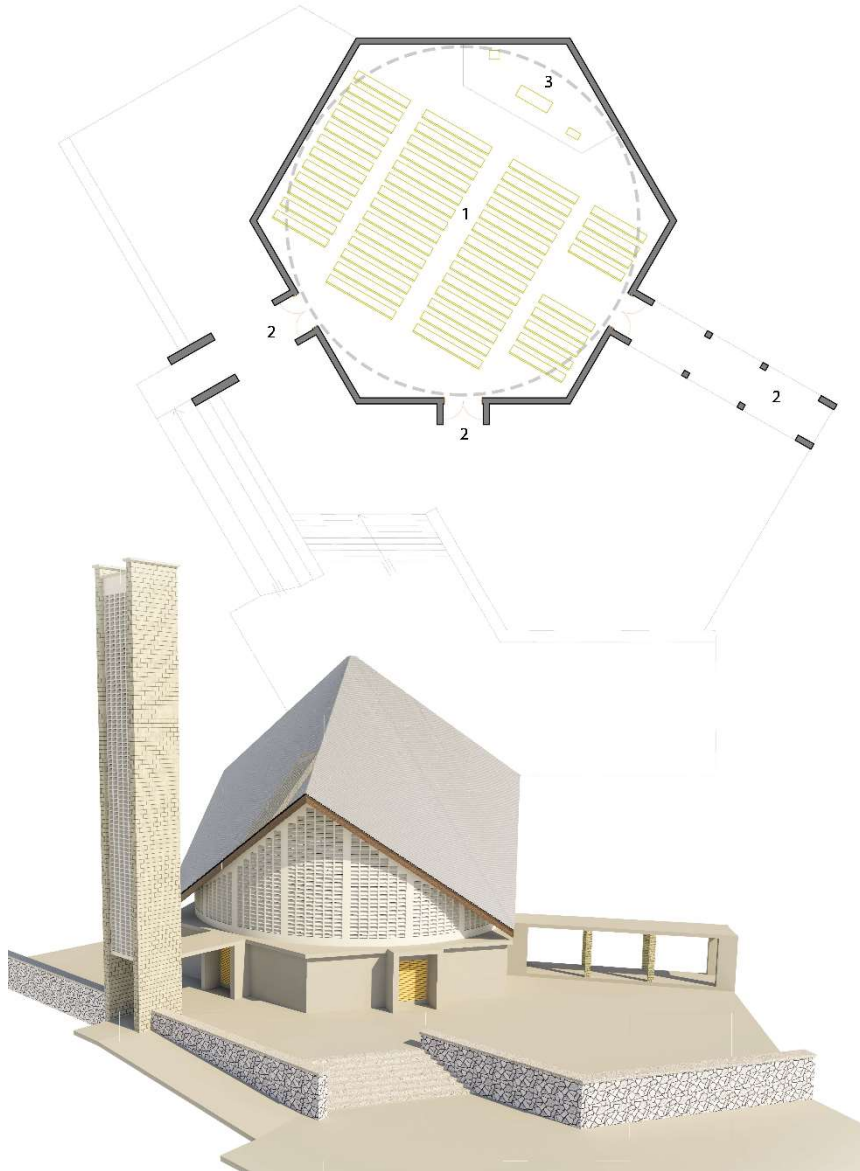
Paul Dequeker deliberately create this geometry to be in harmony with tradition?

V.3.4. Structures and materials

As in all of Paul Dequeker's projects, the foundation is made of rubble masonry, while the elevations are made of brick fired on the hexagonal lower part and claustras for the circular part that carries the roof.

Originally the frame was made of wood, but when it was renovated between 2006 and 2010, the wood was replaced by a metal frame. The false ceiling, also restored, was originally composed of fibrocement plates replaced today by wooden panels. In the same spirit of renewal, the old asbestos-cement corrugated fibre roof is replaced by triple-wave aluminum-zinc bins.





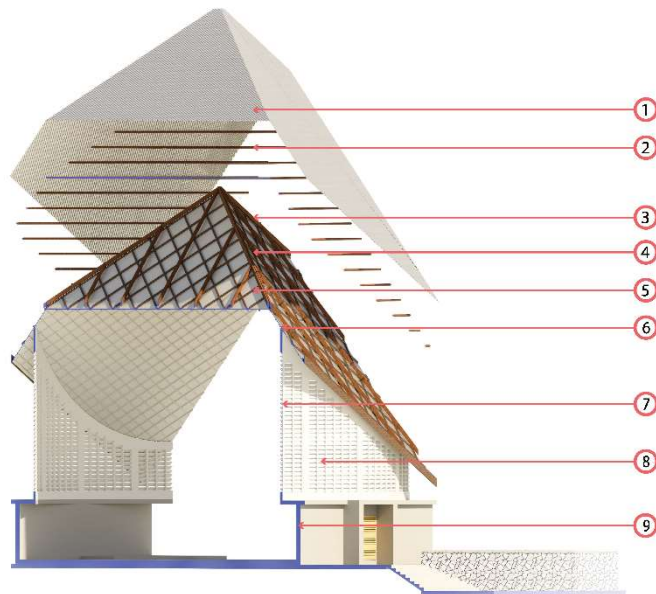
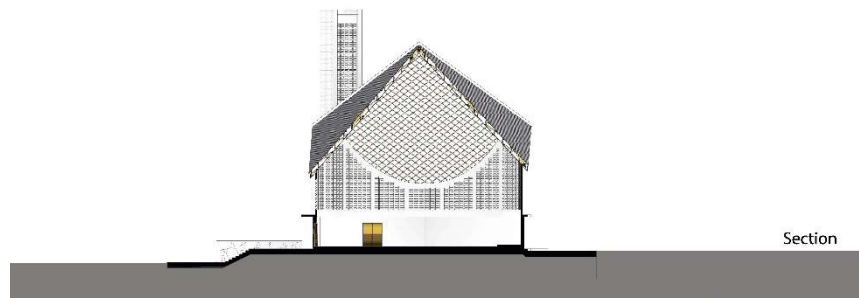
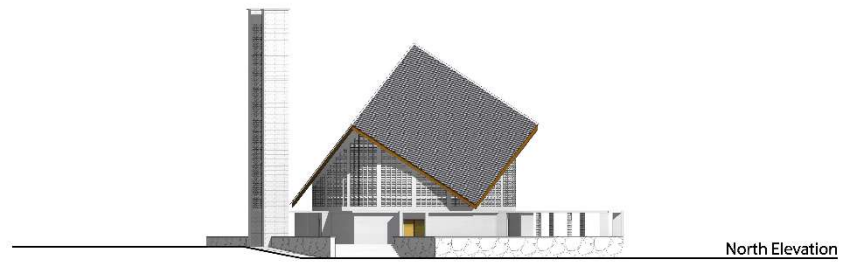


FIGURE 195: COUPES ET DETAILS DE SAINT LUC, DESSIN DE VICTOR BAY



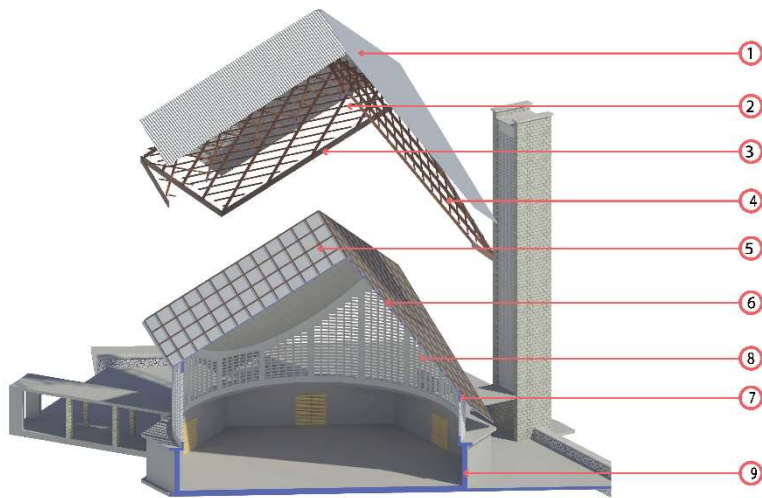
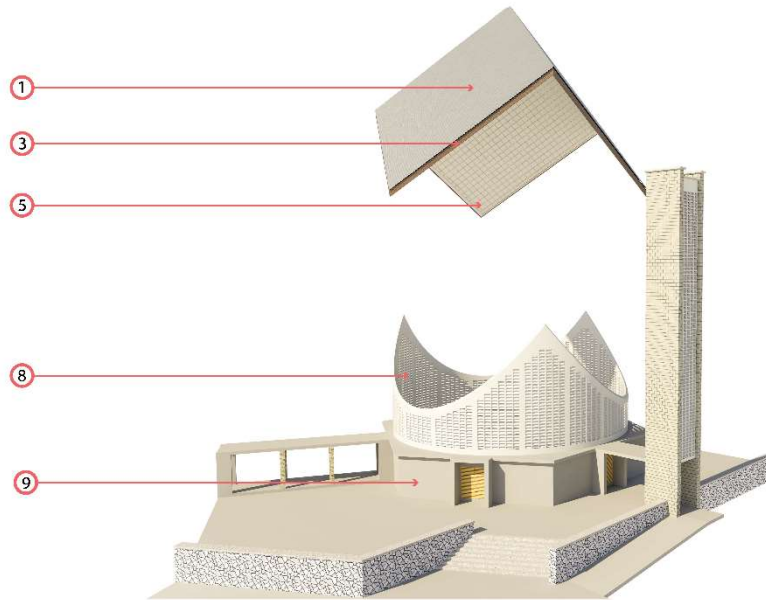


FIGURE 196: DETAILS DE CONSTRUCTION DE SAINT LUC, DESSIN DE VICTOR BAY





V.4. CHURCH OF SAINT AUGUSTIN 1977





FIGURE 197: SAINT AUGUSTIN, ON VOIT CE CARRELAGE QUI DENATURE L'ESPRIT ORIGINAL DU PROJET DE PAUL DEQUEKER PHOTO DE VICTOR BAY 2021





Figure 198: Completion of the construction of Saint Augustin, photo Paul Dequeker, source Kadoc

V.4.1. Historique

The parish of Saint Augustine was founded in June 1959 by Father H. Dom and has since been under the responsibility of the Scheut Fathers. The founding of this parish coincided with a great period of awakening of the African (Congolese) conscience and struggle for independence, hence the choice of the name of Saint Augustine, bishop of Hippo and doctor of the Church in memory of the African saints. The present church was built in 1977 and blessed on 9 December 1977 by Cardinal Joseph-Albert Malula. (Fr. Madimba Mbombo and o. Manisa Muloki, 1994).

V.4.2. Aspect urbanistiques

Located in the Mandrandele district of the commune of Lemba which was once considered the commune of Congolese intellectuals, this commune was especially famous for its impressive facilities, for example the campus of the University of Kinshasa, The former Lovanium and the Kinshasa International Fair. This influence is directly noted on the ambitions of the architect who wants to design a church at the height of the commune. the shape of the tropical church must emerge in its originality on a natural and urban background that welcomes it without conflict or disharmony. Listening to a living tradition of local values presupposes in this field the consideration of the original characters of the works existing in the milieu and for a large part the wishes of the protagonists of this milieu» (Dequeker & Kanene, 1992, p.218).

V.4.3. Réponses architecturales

From a formal point of view, the trapezoidal church of Saint-Augustin is part of a typology that Paul Dequeker loves to the example of the second church Saint-Antoine built 10 years later. Lemba being already at this time very populated by intellectuals, the architect designs one of these largest churches with an area of 912m² for a capacity of 1050 places,



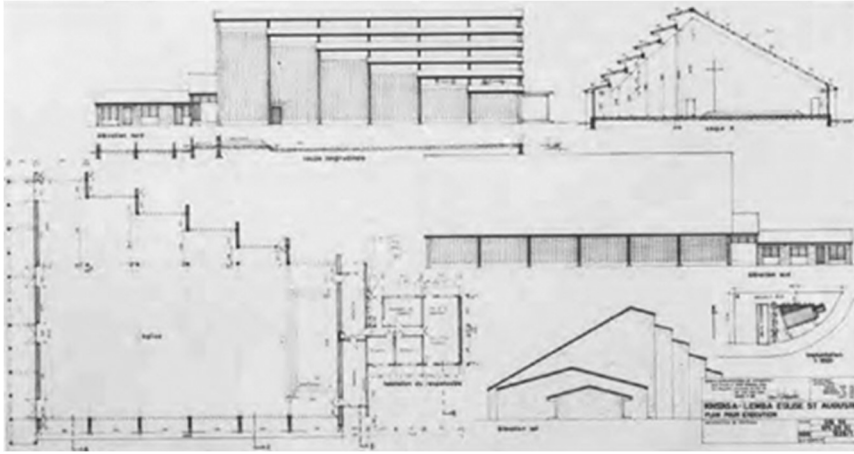


FIGURE 199: DRAWINGS OF THE EXECUTION PROJECT BY PAUL DEQUEKER, SOURCE KADOC

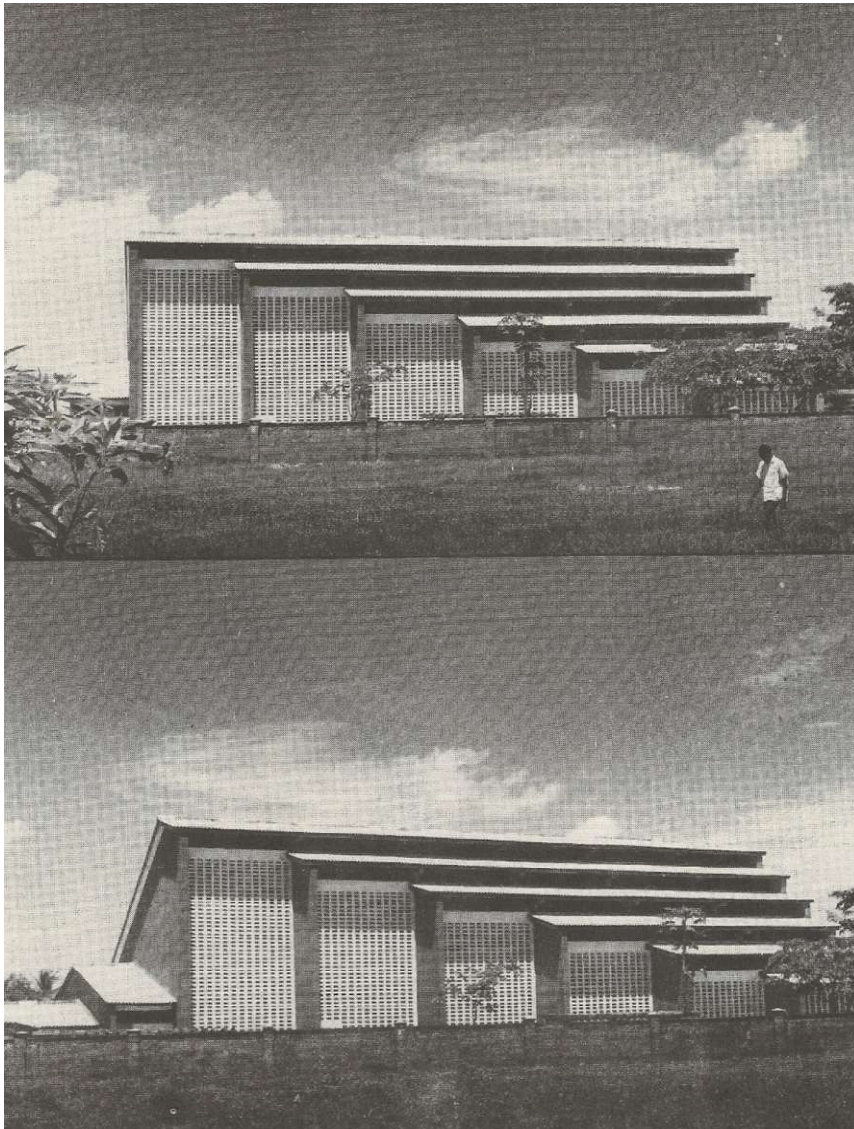


FIGURE 200: NORTH AND SOUTH FACADES OF SAINT AUGUSTIN; PHOTO BY PAUL DEQUEKER, SOURCE KADOC



V.4.4. Aesthetics

Although it stands out in the urban landscape of Lemba for its silhouette, Saint-Augustin is dominated by a simple and austere exterior! The church blends harmoniously into its surroundings with its ascending pyramid that expresses a divine aesthetic, full of splendour. This can also be seen in the interior volume highlighted by triangular concrete porticoes that cover large open spaces on the entire height of the building. To create a balance, a square tower for the bell tower rises in the foreground, separated from the main body of the church. (Figure) Here too Paul Dequeker preserves what he understood of African architecture and translates it into requirements. Instead of glass walls, it uses walls are porous! Indeed, according to theories put into practice in tropical areas, the use of porous walls or openwork partitions is a very important element of construction in countries with a warm and humid climate. (Kanene Mudimubadu, Paul Dequeker, 1992) This method favourably replaces the bay window and allows permanent ventilation inside the building. the porous wall allows a good light distribution provided that it is painted white (Kanene Mudimubadu, Paul Dequeker, 1992), a panel must necessarily have a surface area 3 to 4 times greater than the surface of the window it replaces to ensure air and light.



FIGURE 201: INTERIEUR DE SAINT AUGUSTIN, PHOTO : PAUL DEQUEKER, SOURCE: ARCHITECTURE TROPICALE



V.4.5. The concrete portal frame: a "Dequeker" method.

The portal frame is a reinforced concrete structure used by Paul Dequeker to provide both structural stability and roof support. This method has since been called the 'Dequeker roof' as it is also recognised as unique. In St Augustine's, the reinforced concrete porticos that follow the slope of the roof anchor the beams and form an elegant roof creating large open spaces throughout the height of the building, thus promoting a more lively interior atmosphere and, above all, increasing the volume of air needed to combat overheating due to the high temperature of the exterior and the heating of the interior due to the many songs and dances (the main activity on the way to prayer in the Congo).

The search for good ventilation would be the main argument for the composition of this church; indeed, to ensure the proper functioning of the ventilation, Paul Dequeker combined cross ventilation and ventilation by chimney effect. The screens on the south façade draw in fresh air and, due to the shape of the frame, the warm air is evacuated through the north-facing transoms to ensure the chimney effect, while the side panels on the north façade ensure direct evacuation by means of cross ventilation. This same method also meets the concern for lighting, since, as we know, light is a decorative material in the church. To highlight this natural material, he imposes superimposed impositions on Saint Augustine to accentuate the effect of light inside the church.



FIGURE 202: LIGHT AND VENTILATION ARE PART OF SAINT AUGUSTINE'S ASSETS. PHOTO BY VICTOR BAY 2021



You have to be inside this church to feel the technical perfection. For reasons of convenience, he tried to adapt the functions to the proposed forms, taking into account the terrain, the morphology of the site and also the economic aspects. The construction of Saint Augustin is quite impressive in terms of the economy of the building, despite the delicacy of the forms to be achieved. Paul Dequeker once again called upon his genius for poverty to produce very economical techniques, such as the immense wooden scaffolding that covered the project throughout the construction period.

FIGURE 203: THE SCAFFOLDING OF SAINT AUGUSTIN REMAINS ONE OF THE MOST FAMOUS PICTURES OF PAUL DEQUEKER'S BUILDING SITES



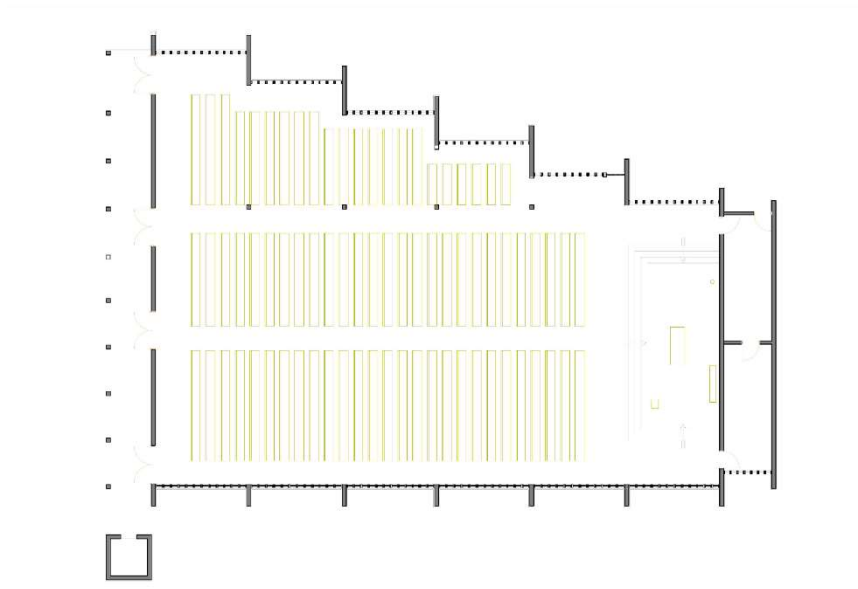


FIGURE 204: VUE EN PLAN DE SAINT AUGUSTIN, DESSIN DE VICTOR BAY

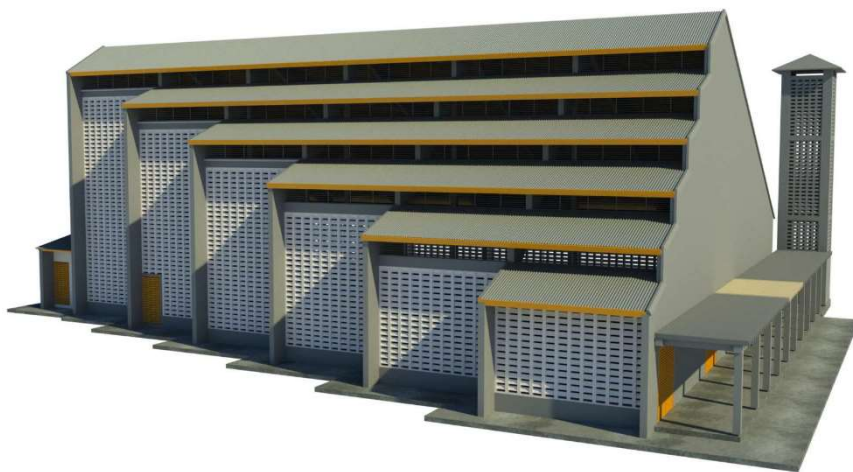


FIGURE 205: PERSPECTIVE DE SAINT AUGUSTIN, DESSIN DE VICTOR BAY



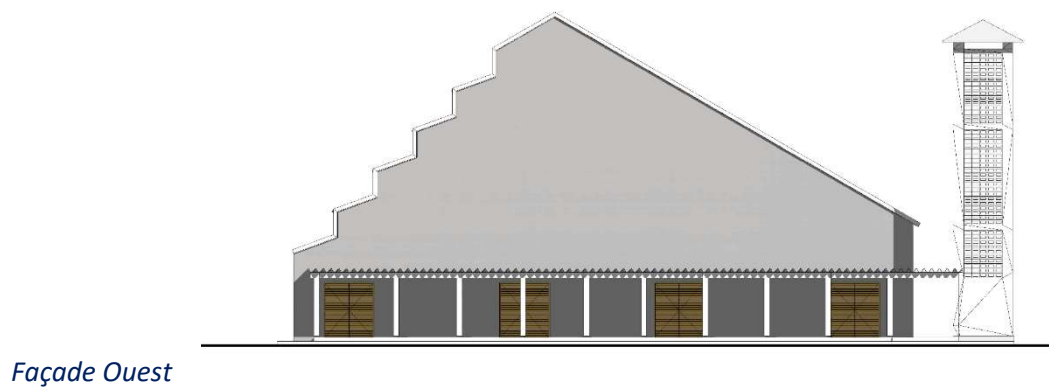
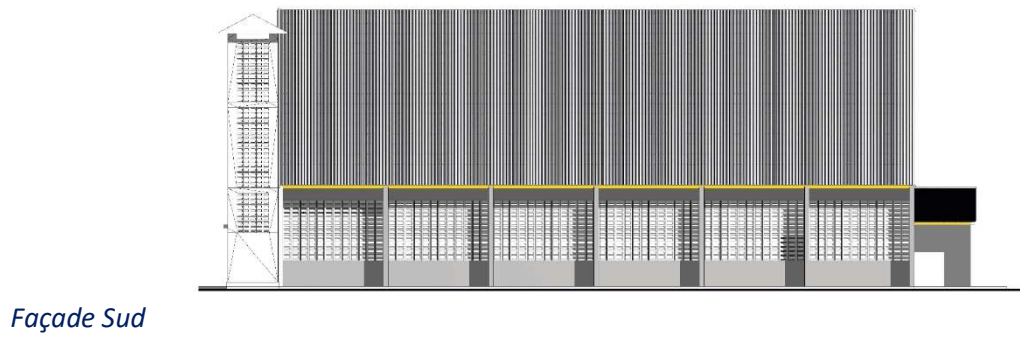
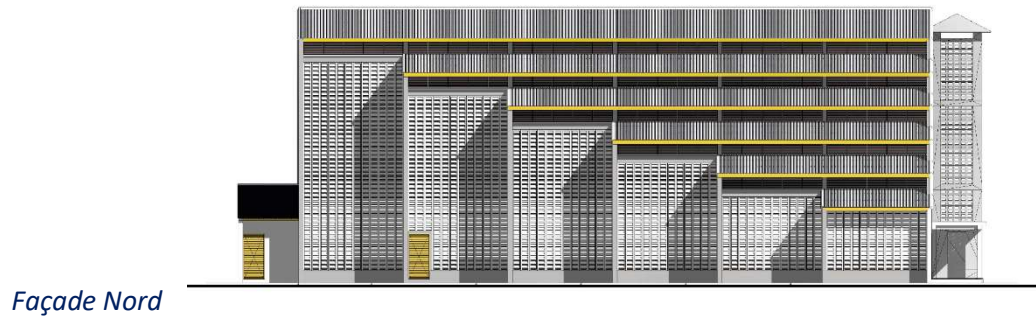


FIGURE 206: FAÇADES DE SAINT AUGUSTIN, DESSIN DE VICTOR BAY



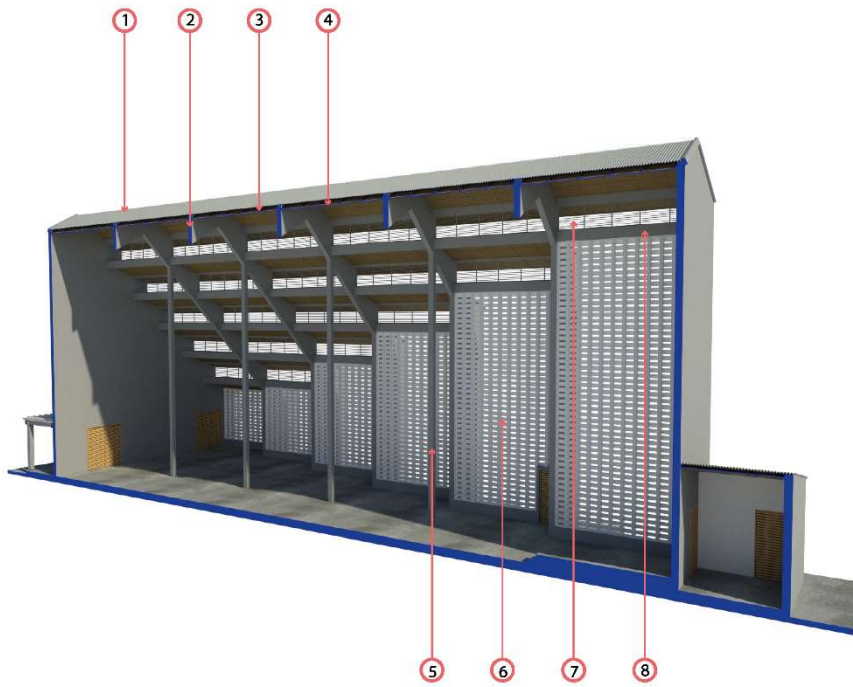
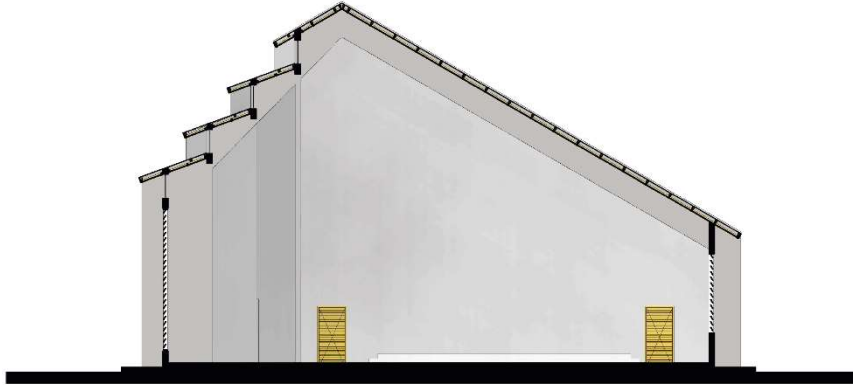


FIGURE 207: SECTION AND DETAILS OF SAINT AUGUSTINE, DRAWING BY VICTOR BAY



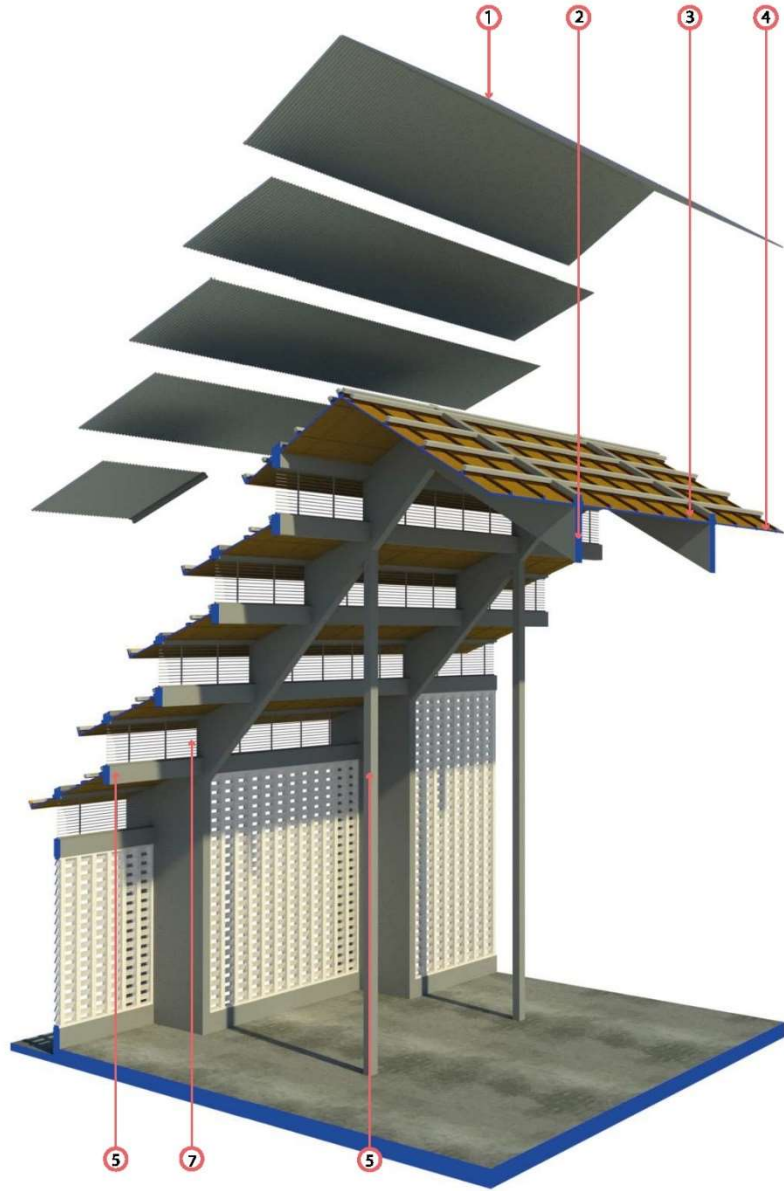


FIGURE 208: PORTICOES AND CONCRETE FRAMEWORK AND ROOFING OF SAINT AUGUSTIN, DESIGN BY VICTOR BAY



V.5. SAINT ANTOINE 2 (1982)





FIGURE 209: SAINT ANTOINE 2, PHOTO VICTOR BAY 2021

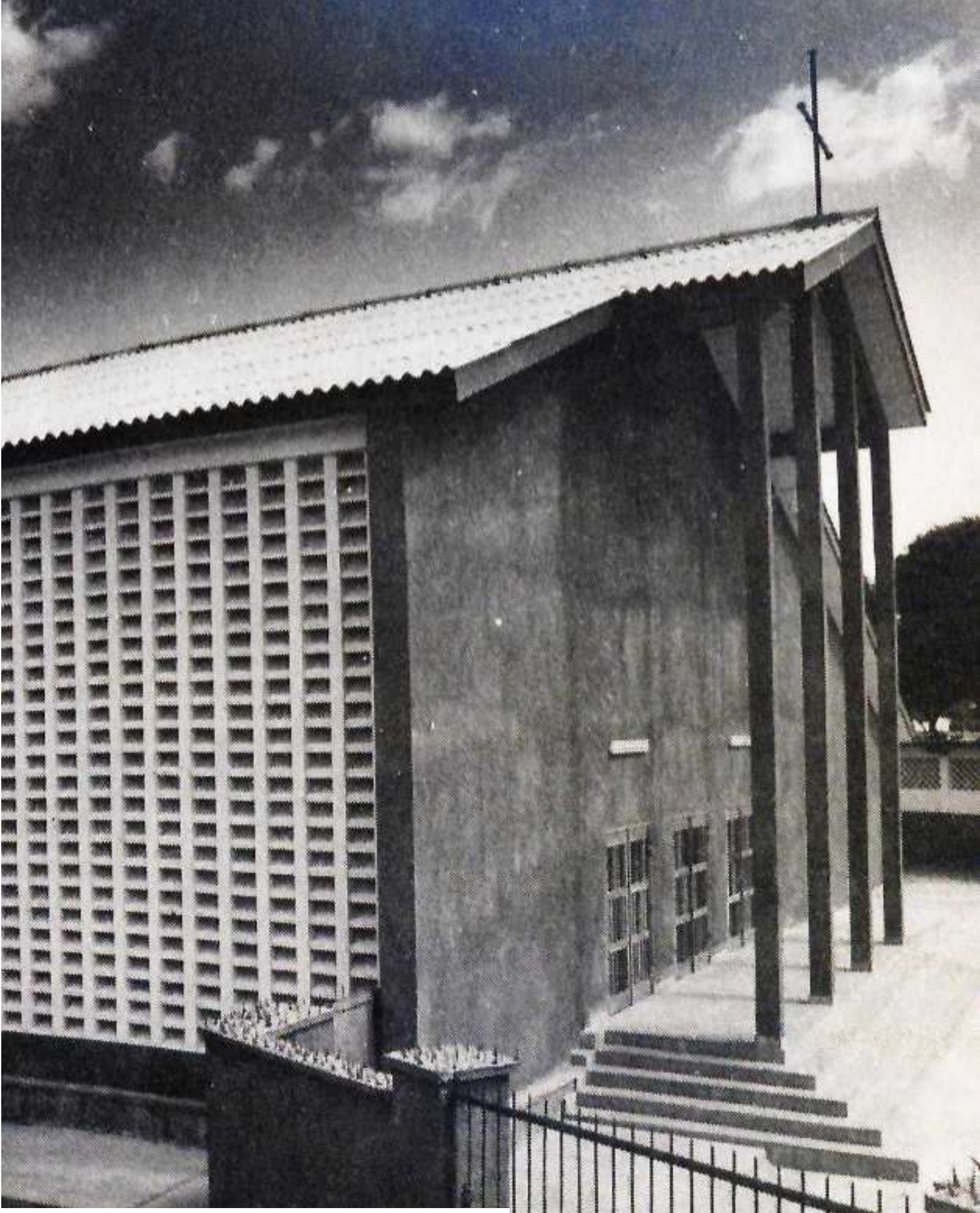


Figure 210: Saint Antoine 2, Photo Paul Dequeker, source Kadoc 2018

Twenty years after the construction of the first church of Saint Anthony, the present Church of Saint Anthony was built by Paul Dequeker and blessed on August 8, 1982 by Cardinal Malula. (P. Madimba Mbombo et o. Manisa Muloki, 1994).

When Paul Dequeker was called upon to build this new building in the same concession as the first church built in 1962, his approach was different and would evolve as he proposed another church closer to his masterpieces like Saint Augustine built in 1977. The attitude of Paul Dequeker justifies that the most important in any project in Africa was the respect of the climate and habits that induces a way to organize the space whatever the form chosen at the beginning.



FIGURE 211: INTERIOR OF ST ANTHONY'S CHURCH 2 (1982) ; PHOTO BY VICTOR BAY 2021

V.6.1. Is this the confirmation of a critical regionalism?

For the second church ST. Antoine, the regionalist architect adopted a more critical attitude. Instead of imitating the form, it looks at what is best suited to the terrain. The claustras validly replace the traditionally bearing walls and the roof is highlighted. Paul Dequeker takes what he has understood from tropical architecture and translates it into requirements: in general, the walls are porous and the roofs are ventilated for the bioclimatic



need. The forms are simple and the techniques available to most inhabitants. The materials are local and inexpensive. Contrary to those who think that the Belgian architect was limited to material concerns, it is the requirement of socio-cultural functions that has made most, if not all, of his churches so precious that we can speak of a "Dequeker style".

V.6.2. Return to authenticity

Dequeker built Saint-Antoine 2 at a time when we relied on authenticity. Vatican II advanced the integration of local characteristics in the liturgical celebration and in many other areas such as the name and dress of the nun. In constructing the second parish building, Dequeker apparently goes against what one might think of the use of authenticity. But in fact, he did it right because Bumbu in 1982 was no longer a village but a commune in the city, the buildings should no longer resemble the old huts in an obvious way. The load-bearing walls are validly replaced by isolated structures filled with claustras, the roofs are always more remarkable than the walls and retain this characteristic in all Dequeker's works.

The spans that line between the posts offer both functional and aesthetic advantages. You can also see the posts extending into beams to give rhythm to the false ceiling. The exterior walls are covered with a Tyrolean coating that goes well with the inclined screens often painted white. Inside, as he writes, large architectural spaces formed in the height of the perforated walls function more or less like real cathedral windows. Gradually dimmed lighting gives the whole a perceptive tension that gently animates and sanctifies the inner atmosphere" (MUDIJI Malamba and Paul Dequeker, 1984)

The second church has a different aesthetic. And to respect the integration of works of artists proper to the era of authenticity, a sister adds frescoes to the constructions after discussing the themes with the parishioners. Dequeker uses the designs of Kasai



velvet, as some architects did at world fairs. Far from being a simple decoration, these precisely woven wall mats extending above the chief's box are a sign of wealth and nobility as seen in the Kuba culture (Kenneth, 1995) (Figure)

V.6.3. Towards a critical regionalism.

The question of architecture specific to the Congo was central to the work of architect Paul Dequeker. A comparison between his first church ST. Antoine and the second seems to show the evolution of the architect's regionalist approach. This thesis highlights the European vision of Africa on the one hand, and the vision more in tune with modern Africans on the other. Paul in his two churches Saint Anthony translates his thought and confirms that it is not necessary to be Congolese to build a regionalist architecture. The notion of regionalism refers to an approach that favours the particularities of the place to mark the architecture and vice versa. Regionalists and traditionalists agree in their acceptance of the established model and its transmission from generation to generation according to more or less known rituals (Bidima, 2009, p.114).

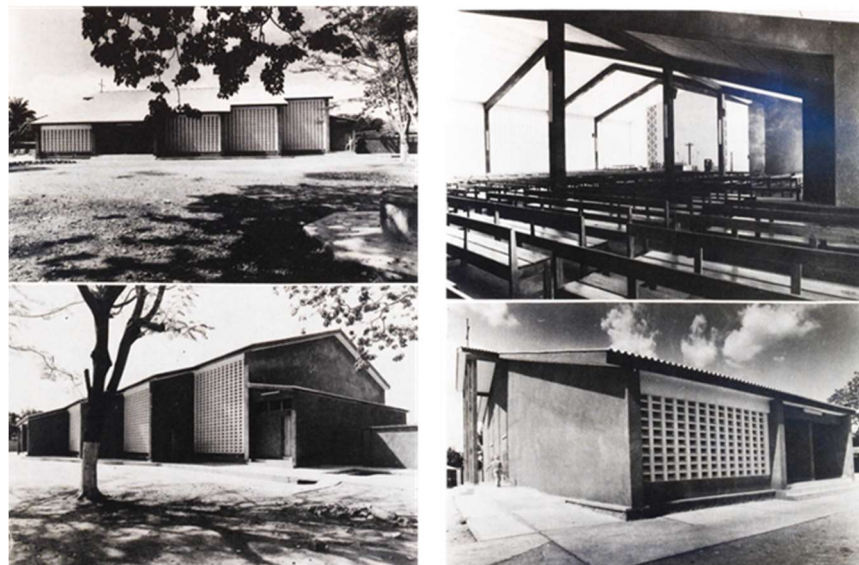


FIGURE 212: SAINT ANTOINE 2, THE ORIGINAL STATE OF THE BUILDING CAN BE SEEN, PHOTOS BY PAUL DEQUEKER, SOURCE: ARCHITECTURE TROPICALE





FIGURE 213: CURRENT VIEW OF THE EXTERIOR AND INTERIOR OF SAINT ANTOINE 2, PHOTO BY VICTOR BAY 2021





FIGURE 214: ON THIS PHOTO THE CHURCH OF SAINT ANTOINE 2 KEEPS ITS ORIGINAL CONFIGURATION, PROOF THAT IT ADAPTS TO ITS ENVIRONMENT. PHOTOS BY VICTOR BAY



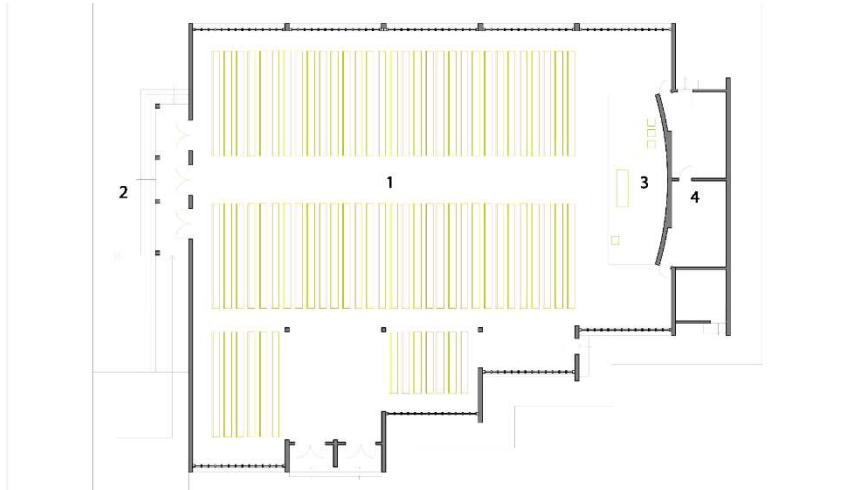


FIGURE 215: PLAN VIEW OF THE CHURCH OF SAINT ANTOINE 2, DRAWING BY VICTOR BAY

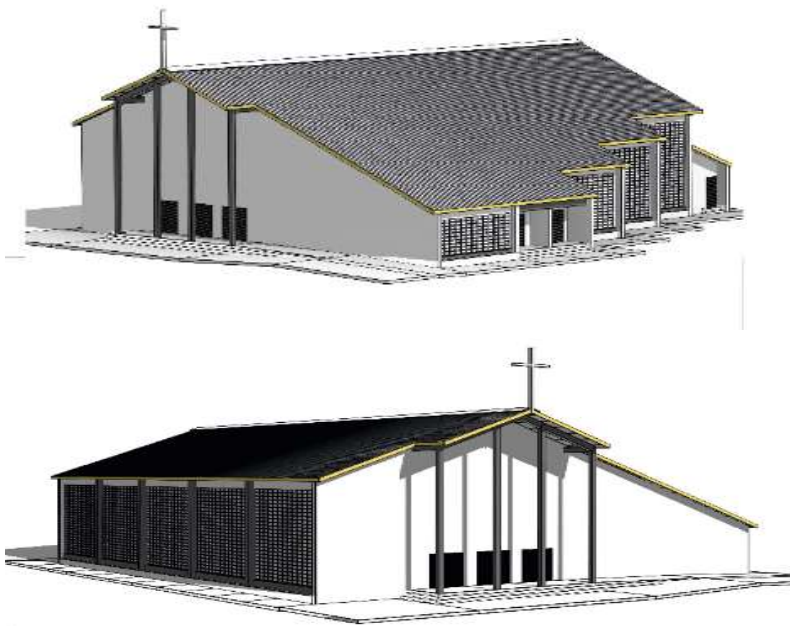


FIGURE 216: PERSPECTIVES DE SAINT ANTOINE 2, DESSIN DE VICTOR BAY 2021



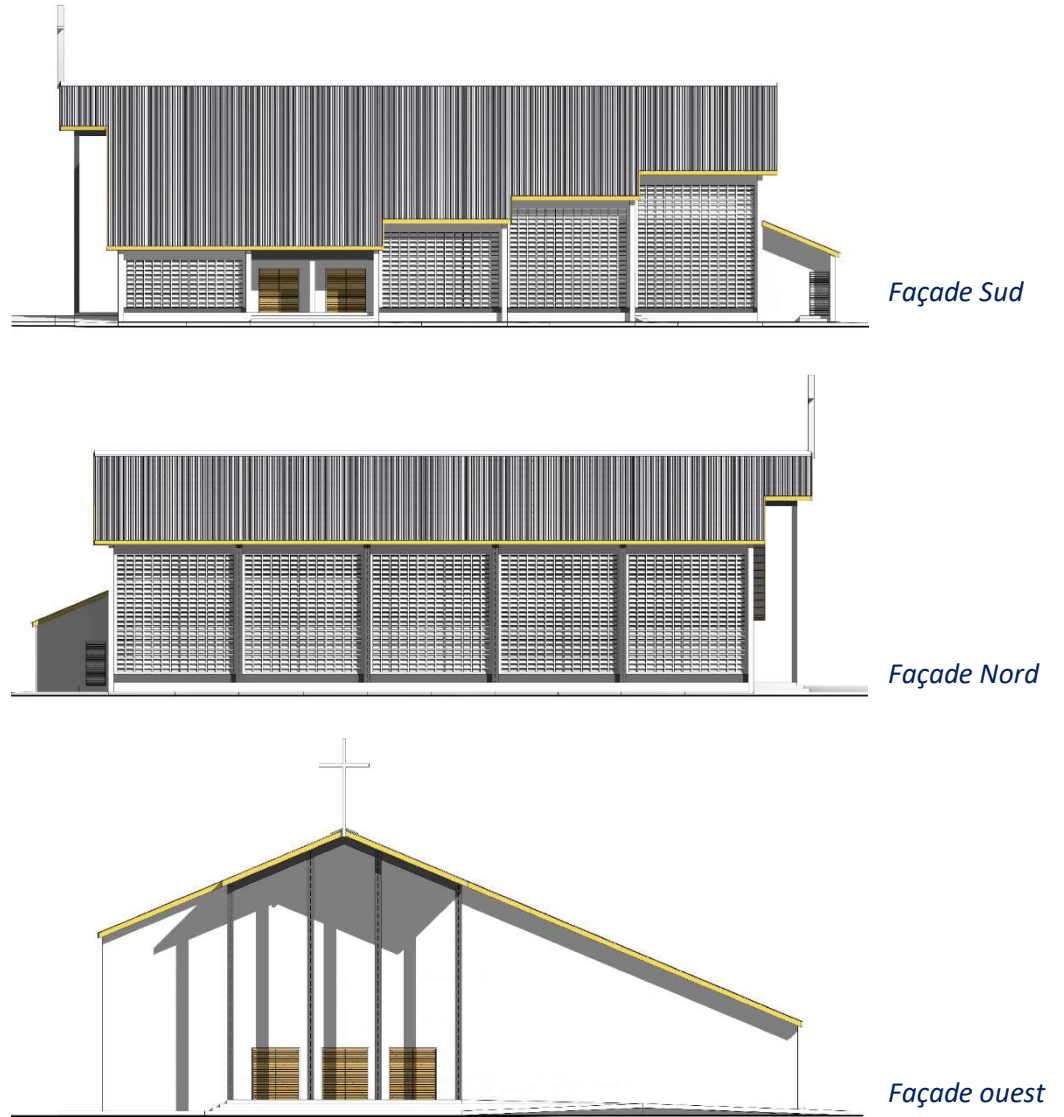


FIGURE 217: FAÇADES DE L'ÉGLISE SAINT ANTOINE 2, DESSIN DE VICTOR BAY



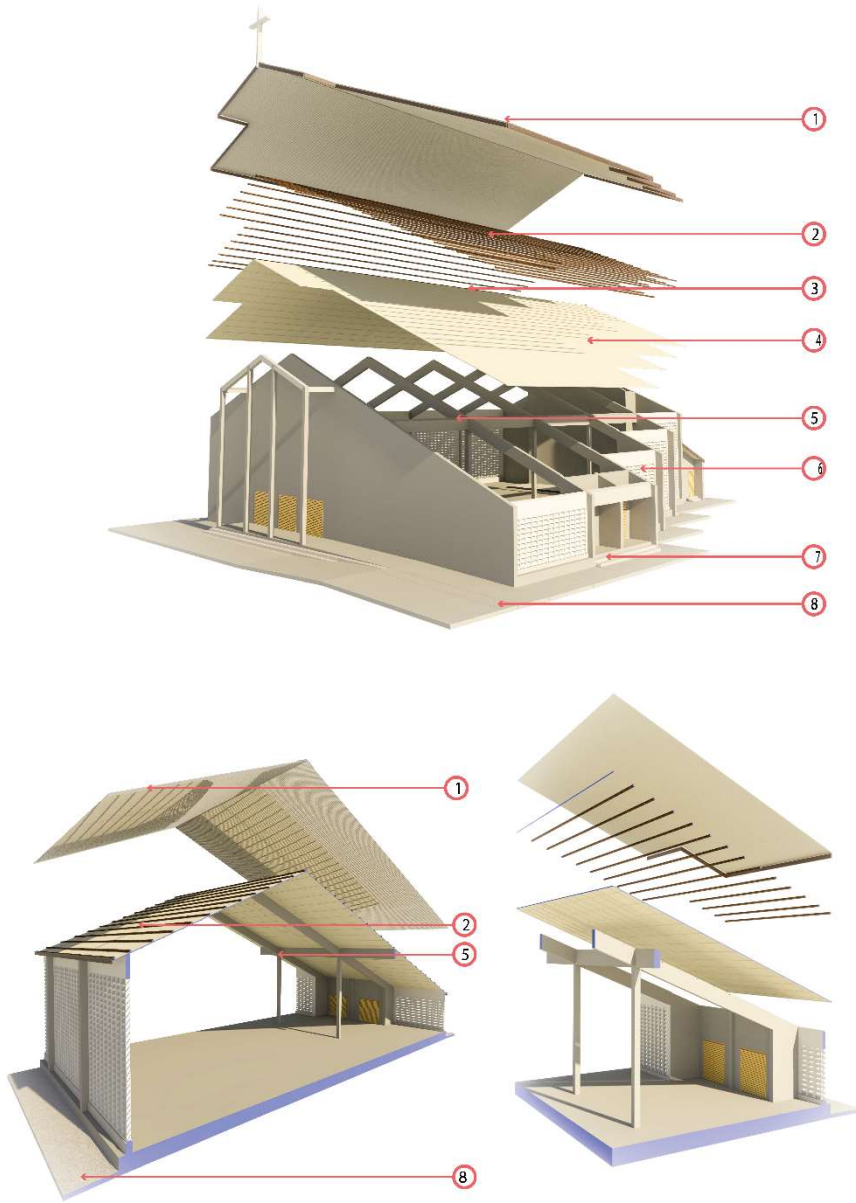


FIGURE 218:

TECHNICAL DETAILS OF SAINT ANTOINE 2, DRAWING BY VICTOR BAY



V.6. SAINT RAPHAEL CHURCH 1988





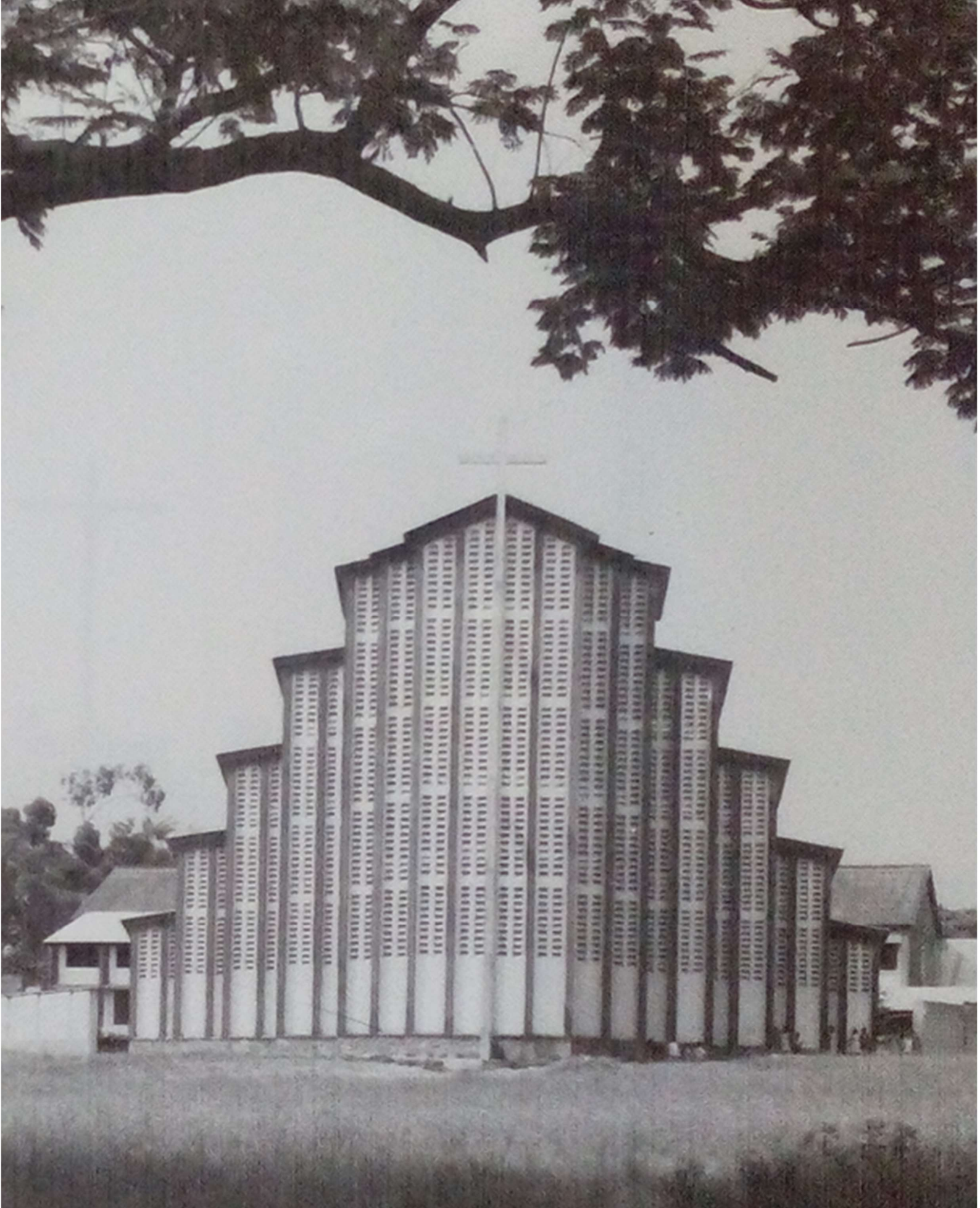


FIGURE 220: SAINT RAPHAEL 1992, PHOTO PAUL DEQUEKER, SOURCE KADOC

V.6.1. Historical Context

Founded by Father Raphaël De La Kethule de ryhove, CICM in 1957 responded to the name of his patron saint and the desire of Bishop F. Scalais to dedicate three churches to the three archangels: Raphaël, Gabriel and Michel. Initially, a room was set up within the Saint-Raphaël school to serve as a place of worship. Over time, the parish community grew and this place of worship was established as a parish in 1958. But parish activities continued in the school buildings. In 1974, at the decision of the government, the school became a public school. Thanks to Mr Mwamba, parish assistant, the parish obtained on May 12, 1984 a large lot near the school Saint Raphael, it is the triangular land that carries the present church Saint Raphael blessed on November 24, 1988⁴⁷. (P. Madimba Mbombo et o. Manisa Muloki, 1994)

V.6.2. Urban Context

The parish of Saint Raphaël is located in the town province of Kinshasa, in the town of Limete, at the 1st street of the residential district at the intersection of the avenue of universities and the small boulevard Lumumba.

V.6.3. Architectural Responses

Saint Raphael is the last church built by Paul Dequeker in Kinshasa and DR Congo. It could be given the status of the culminating project of the tropical churches because it would be the conclusion of all these years of trial and improvement as we can see through the resumption of all the characteristic components of the tropical churches following the example of the triangular corolar form of the site, the use of the claustras on the north and south faces, the blind walls for the east and west faces, the concrete porticoes

⁴⁷ Fr. Madimba Mbombo and o. Manisa Muloki, origin of the parish titles of the Archdiocese of Kinshasa. Edition of the Archdiocese of Kinshasa, 1994. Page 48



forming the frame, the upper ventilation transoms, the modesty and sobriety of the church. In addition to these technical criteria, Paul Dequeker wants to respect the landscape and the environment of the site that supports the project. Indeed, Paul Dequeker is certainly influenced by the shape of the ground to compose his last church. In this logic of wanting to associate the shape of the plan with the shape of the site, the church of Saint-Raphaël is a triangle that fits so well in the site that one would even believe that it completes the natural void and would be the missing element that would grow in this place (figure). Assimilated by some faithful to steps that carry the prayers to heaven, others allude to the notion of human smallness in the face of God's greatness while the majority of observers associate this form with the flight of an angel. Only Paul Dequeker would have given us the fundamental idea that guided him to conceive of this church.



FIGURE 221: TOP VENTILATION TRANSOM WINDOWS ALSO ALLOWING NATURAL LIGHTING, PHOTO BY VICTOR BAY, 2021

In the absence of an authentic answer, this thesis sketches a response in reference to a letter addressed to Father J.C. Michel in which he justifies the form of the church of the Sacred Heart of Bujumbura. Indeed, on November 8, 1999, 11 years after the construction of Saint Raphael, Paul Dequeker replied to Father J.C.



Michel in these words: What is the form of the heart of Jesus? The stereotypical representation of a heart is just a stylized symbol that looks little like a human heart. (...) The Dequeker Plan truly symbolizes the morphology of a human heart both inside and outside" (DEQUEKER P., letter to Pere J.C. Michel, 1999).

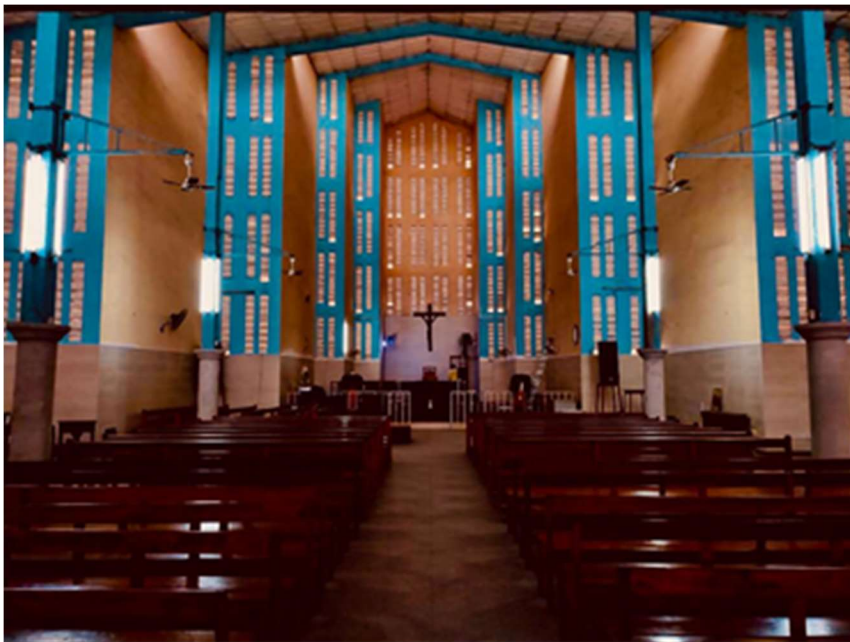


FIGURE 222 : INTERIOR OF SAINT RAPHAEL'S CHURCH, THE EXALTATION OF TROPICAL LIGHT, PHOTO BY VICTOR BAY, 2021

With this reply, Paul revealed the idea he had sketched at the time of the conception of Saint-Raphaël because in fact the two churches are similar. It should be noted that since the late 1960s, Paul Dequeker has been on several attempts at triangular churches following the example of Saint Gabriel of Kinshasa (1965), Luisa Cathedral in Kasai (1969), Bukavu Cathedral (1974), Saint Trinity of Moanda (1983), Atakpamé Cathedral in Cameroon (1983), until the construction of Saint Raphael which he considers as the prototype of his future churches for which he will majestically represent the heart of Jesus as the main form. And since then, these great attempts after 1988 are mainly triangular to the example of the chapel of the Sacred Heart of Bujumbura (2003) where he immortalizes his postconciliar liturgical furnishing thought and the conceptual conclusions of the tropical churches. (Figure). The heart



of Jesus is so motivating that he will still use it for the proposal to build the China Cheng De Church in China (2005) (Figures)



FIGURE 223: CONTRARY TO THE ORIGINAL IDEA OF THE ARCHITECT PAUL DEQUEKER, WHO USED UNPAINTED WALLS, THE WALLS ARE NOW PAINTED. PHOTO: VICTOR BAY 2021



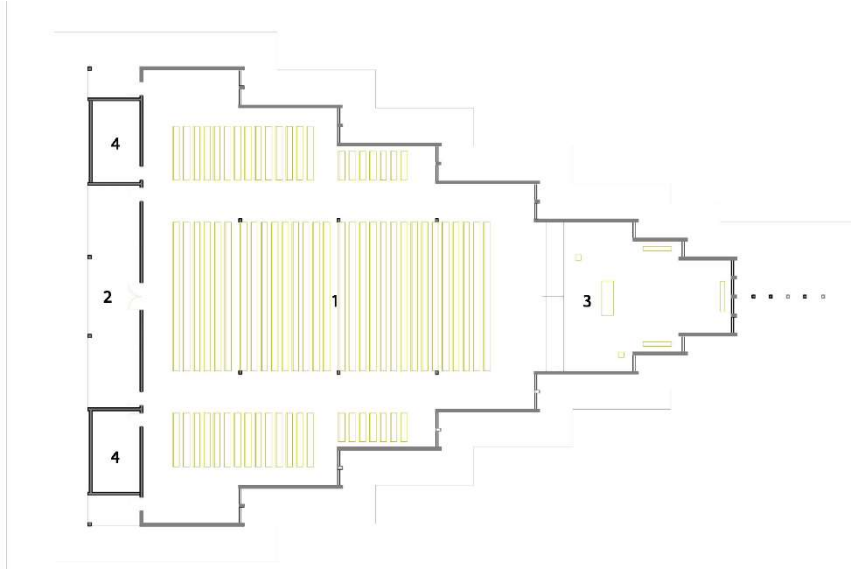


FIGURE 224: PLAN VIEW OF THE SAINT RAPHAEL CHURCH, DRAWING BY VICTOR BAY

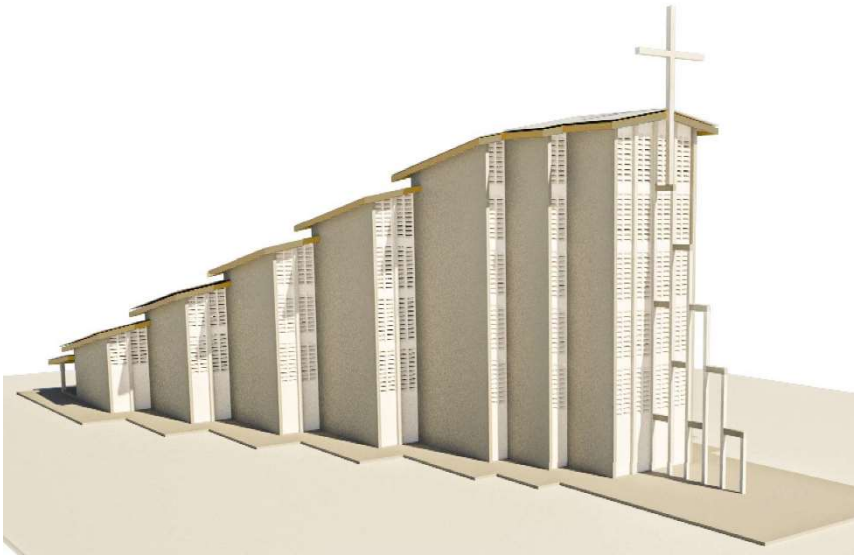
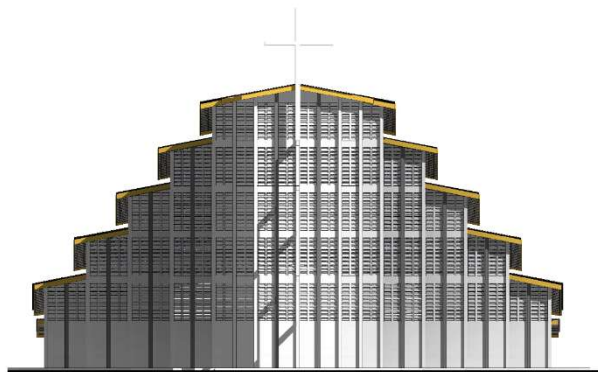


FIGURE 225: PERSPECTIVE OF THE CHURCH OF SAINT RAPHAEL, DRAWING BY VICTOR BAY





South facade



North facade



East facade

FIGURE 226 : FAÇADES OF SAINT RAPHAEL (1988), DESIGN : VICTOR BAY

IT CAN BE SEEN THAT THE EAST-FACING FAÇADE HAS NO OPENINGS TO PREVENT SUNLIGHT FROM ENTERING THE CHURCH



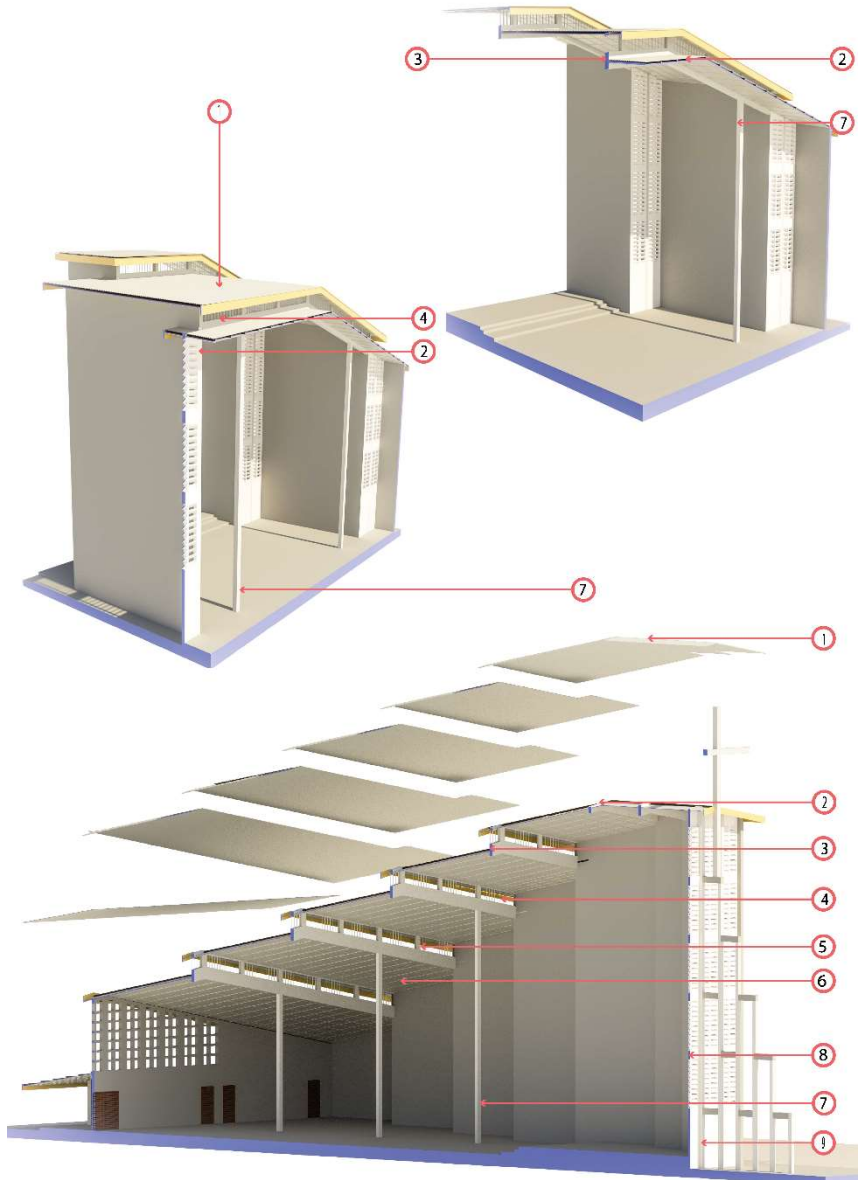


FIGURE 227: DETAILS CONSTRUCTIFS DE SAINT RAPHAEL, DESSIN DE VICTOR BAY 2021



CONCLUSION



1. Summary of results

After going through the various case studies, the results of this thesis affirm the theory that all architectural composition is related to the foundations of ethnicity and universality of human culture (DEQUEKER P. Exhibition of 30 Years of Career, 1987). Starting from an architectural expression, Paul Dequeker has come to associate climate and culture

Indeed, taking local habits, especially the way of praying, as a key to composition, Paul Dequeker puts into play, in an exceptional way, the general characteristics of a tropical architecture to build tropical churches. Thus, due to the way of praying in tropical Africa, the application of these features offers a pleasant microclimate to users.

Looking at the 20 years between the construction in 1962 of the first church of Saint Anthony and the second church built in 1982, we note a very critical approach of the architect of the churches of tropical Africa, which, now had matured and confirmed a personal and particular architecture that some do not hesitate to call «Dequeker style»

Climate resolutions

Knowing that in tropical environments protection against overheating and heat dissipation by natural ventilation is a conceptual basis of buildings, this thesis demonstrated how Paul Dequeker protects the building from solar radiation by using natural means such that the path of the wind through the room is not influenced by the speed of the wind, but only through the building's own geometry and the creation of pressure and depression zones. The air speed is proportional to the outside wind speed and the maximum air speed is obtained with the maximum number of openings. However, indoor air velocities greater than



the outside air velocity can be obtained by air outlets much larger than the air intakes.

Ventilation and natural light

According to Paul Dequeker, natural ventilation is an obligation in tropical areas, it requires appropriate and effective techniques. this thesis therefore highlights the use of ventilation by stack effect and cross ventilation employed by Paul Dequeker as fundamental principles of ventilation in tropical areas. To optimize thermal comfort in the building, this research points out that Paul Dequeker recommends large bays arranged on the North and South facades with filled screens or slats to facilitate air circulation; this resolution is also applied to ensure natural lighting inside the building.

Thus imitating the practices of traditional construction, the projects of Paul Dequeker studied in this thesis respond to the use of sunscreens, large eaves or galleries on openings facing east or west to reduce the penetration of the sun and fight against overheating inside the building. in order to release the heat in the best possible way in the church, Paul Dequeker recommends ventilated ceilings to increase the volume of air circulating in the building by disadvising the flat ceiling.

Arrangement of the assembly

in all of Paul Dequeker's projects, the provisions conform to the requirements of good liturgical practice and above all to involve the faithful in full worship. this thesis, by presenting the Zairian rite as a conceptual basis for the arrangement of its churches, underlines the fact that the layout of the furniture favors local practices, knowing that in Africa people pray by singing, shouting and dancing. all the arrangements used by Paul Dequeker are therefore linear or concentric and also respond to the liturgical requirements of the reform of the Second Vatican Council which favors the full participation of the assembly in the Eucharistic celebration.



Everyone must find through the furnishing of the church a part of the traditional mysticism at the service of the liturgy. This is how Paul Dequeker, in his conciliar essay, proposes stone or concrete furniture directly integrated into the building and wooden furniture borrowed from the Kuba sculpture of the Kasai. This model soon became the model of liturgical furniture in tropical churches.

Local culture:

Starting from the assertion of Paul Dequeker that «to live the serenity of traditional «rural» architecture, while remaining aware of the evolution of the so-called "orthodox" architecture, it is necessary to create new relations that correct the derisory architecture, Mediocre, unusable and disconnected from cultural realities.”, the fundamental question of this thesis has given rise to the elucidation of the conceptual logic of Paul Dequeker, which consisted in “going beyond historical architecture” and “great architecture” to integrate a new way of doing more at the margins with society, He thinks, “there exists beyond this great architecture another architecture that is more varied, more multifaceted, little concerned about schools and strict definitions.” (DEQUEKER P. , architcture tropicale, 1992)

This thesis, also based on the questioning of Professor Mudiji who wonders about the possibility of conceiving by substitution a valid way of relating to the world and of organizing it, borrows the attitudes of Paul Dequeker to justify that it is possible that A foreigner to a place designs an architecture adapted to the local tradition of this place.

In addressing the question of whether or not there is an African sacred space, this thesis has shown that the Western sacred space is highly ornate, gigantic and impressive, but undergoes transformation with time and the need for reform, whereas the African sacred space is already sober to begin with! The African



man meets God in his intimacy! With the arrival of the white man this perception of divinity is destroyed, the African sacred space is transformed into a church, "should we meet God in an unknown space? "

This thesis demonstrated the contrary motivations of Paul Dequeker who believed in a typically African architecture. The vision of Paul Dequeker was not singular because going in the same direction, Sante Ortolani to speak of an architecture of the sacred place in Africa evokes in his book "essays of an authentic Zairean architecture", that unlike Europe, where Christianity would have led to congregations of the faithful in places of worship, in Black Africa, the conception of the gods and place of worship is not yet an architecture that offers an immediate expansion because, in Africa, the first religious services are celebrated inside the priest's house or outside his house. The sacred space is therefore still understood as a privileged place of encounter with the divine being without being absolutely a building designed for this purpose. The African therefore believes that benevolent spirits are present around us, in shrines arranged for the occasion and that God's will takes place there, thus making sacred space, a place more functional than aesthetic because African religious architecture is seen as a "useful object"; the emphasis is on functionalism. By affirming that "the black in its traditionalist conception of architecture does not brave the sky and conquer space, it occupies a sufficient space that it believes useful to inhabit"

Sante ORTOLANI sketches the hypothesis that the sacred space in Africa is essentially different from that of Europe. Africans should therefore affirm this vision of space instead of letting themselves be influenced by the import of foreign architectures as Niang Souleymane says "a nation that is content to digest imported techniques without being able to make original improvements or participate in their invention will be destroyed". (ORTOLANI, 1975)



Ortolani's assertions on the management of sacred space in Africa are supported by the demonstrative analyses of Olivier Bidounga in his article "Kimuntu, source of wisdom Kongo" where he explains the spatial functions related to Kongo rituals and mystics; speaking of "Muntu" and "Kimuntu", he thinks that according to Kongo wisdom, one cannot speak of God without "Kimuntu", in other words, God is in man! The architectural space dedicated to God is therefore a space without frills or ornaments, but just useful to express his "Kimuntu". According to Olivier Bidounga, the "Kimuntu" represents a set of highly cultural and spiritual values: one can have the "Kimuntu" as a gift, some are indeed from an early age predisposed to common sense and wisdom. But this set of values is precisely what the ancient Kongos always wanted to transmit to their successors and spread through what we call the "Lusantu", that is to say the education to which we attach great importance. A child can be observed from birth: does he sleep well, sucks well, shows vitality, how does he react to the demands of the environment? But this is not enough, at some point, it will be necessary to provide for its education, which implies learning a set of rules and prohibitions that will make it possible to positively shape its personality at the heart of society. (Bidounga O. 2009)

General characteristics of tropical churches

After 30 years of experience in Zaire, Paul Dequeker has become a master of simplicity and the adaptation of traditional techniques to modern design. Combining tradition and modernity, Paul Dequeker's architecture is utilitarian, whose rich repertoire is an example of modest architecture. This thesis therefore elucidates the four fundamental characteristics of tropical churches, namely

- sobriety
- simplicity
- austerity
- and bioclimatisation.



These characteristics are therefore the consequence of his search to satisfy 4 fundamental requirements for a tropical architecture which are

- the bioclimatic requirement
- the requirement for local materials and techniques
- the requirement of economic factors
- the requirement for socio-cultural functions

The form

Paul Dequeker's churches often have a rectangular shape with a length/width ratio of 1.5, but also a square, hexagonal, octagonal or trapezoidal shape. The choice of these shapes is usually not accidental, but is primarily dictated by the desire to better gather and unite the congregation around the altar. An obvious aesthetic could be reflected in the effects of the facades or the external fittings. This thesis elucidates that all tropical churches are of the Halles type, noting that this choice favours large gatherings of people singing and dancing to worship God, regardless of the circular, rectangular or triangular shape.

Foundations, walls, structure and roof

After the investigations and analyses carried out on Paul Dequeker's churches, it turned out that all these buildings constructed in Kinshasa in particular and in the other provinces of the Democratic Republic of Congo have a foundation of natural stones. These foundations are also reinforced by the reinforced concrete bases and posts of the elevations.

Contrary to André Lhote, who found vain the architecture that had facades devoid of painting or sculpture. (Bouillier, 2007, p.6), the walls of the tropical churches are plastered cement blocks covered with unpainted Tyrolean plaster (originally) and bare fired bricks.



- All walls exposed to the sun (east or west) are lined and without openings or covered with natural stones to mitigate the effect of the sun's heat from the sun's rays. Walls that are open in the direction of the sun have protected openings (brise-soleil);
- Mandatory use of porous walls; blind vents and vertical concrete slats.
- In the majority of the tropical churches, a logic of apparent structure is put forward as a source of satisfaction and through the projects of Paul Dequeker. Exposed reinforced concrete porticos can be seen in all these churches as a component of the project.

With regard to roofing and covering, this thesis notes the different forms of roofing and the particular character of the missionary architect's choice, indeed, in the tropical project;

- The roofs are exceptionally composed of either a wooden frame, a metal frame or simply, as in most of his constructions, of concrete porticos on which the chérons or planks are fixed.
- In most of these churches, the roof is made of fibre cement or galvanised corrugated sheet metal. In order to prevent water from seeping through the roof, all tropical churches are built on a slope without a valley, and to avoid mosquito and dirt nests, Paul Dequeker does not recommend gutters in tropical areas.

According to Paul Dequeker, the roof of a tropical church is therefore a functional element that constitutes the essential part of the architecture, as its function is to protect against solar heat, wind and tropical rain. On the inside, wooden, concrete or metal trusses should leave large open spaces over the entire height of the church to create a more lively interior atmosphere (Dequeker P. 1992, p. 138)



2. Contribution of the thesis

Besides climate issues, the question of African spirituality as a conceptual basis for Paul Dequeker's project in the tropics makes this thesis the analysis of a unique compositional process guided by sobriety and simplicity; it bears witness to an architectural approach developed in hot and humid areas that consists in materializing the «tools» of a traditional tropical architectural «vocabulary» used in a context of modern architecture.

Based on an in-depth study of the concept of the sacred project in the tropics, this research aims to project the methods applied by Paul Dequeker, whose aim is to provide a scientific sample necessary for the formation and teaching of an architectural expression specific to the tropics and useful for future generations. This thesis also becomes an instrument for reflection on the teaching of bioclimatic architecture in the tropics with more authentic ambitions through the establishment of a teaching programme for architecture at the Institut Supérieur d'Architecture et d'Urbanisme de Kinshasa based on the climate and local culture.

This thesis also contributes to the spread of tropical architecture that takes into account the natural site, locally available materials, local know-how, traditions or customs or culture with a consideration of the climatic and spiritual dimension by supporting the assertion that traditional architecture had solved the problem of good-be of use in the habitat despite hostile climates, despite the materials used in bequeathing to future generations processes generated by a long experience and a spontaneous intelligence that is not the result of linear expressions of thought reduced to mere reflection.

Finally, this research helps guide Congolese architects to a tropical architecture typically oriented towards the economic, cultural and climatic social factors of the environment, particularly in the development of African Christian architecture that must, by



necessity, to materialize with materials considered as poor and vulgar, it is a way towards the pan-African awakening question through which African solutions could find better results.

3. Conclusion Générale

In order to obtain better results, this research has developed a first historical approach because the study of Paul Dequeker's achievements finds its foundation in the testimonies of those who knew him. In addition, the second method based on the exploitation of images, photographs of the architect brother's achievements and cartographic data that, thanks to preliminary investigations, allowed the interviews to be combined, Discussions and stories of life on the ground in order to obtain precise information about Paul Dequeker's discreet journey.

Starting from the general problematic of this thesis and relying on its fundamental question, namely: How the question of authentic traditional architecture confronted with inculturation and the evolution of constructive techniques a-Was it approached by architect Paul Dequeker in the tropical zone? Three sub-questions emerged;

- Is there authentic African traditional architecture?
- Why does Paul Dequeker not build in the tropics like all other missionaries and architects?
- Is Paul Dequeker the inventor of this way of doing things or has he been subject to particular influences?

Several hypotheses have helped to answer this question, notably the personal statements of Paul Dequeker which show that he had not invented a style, but that he was influenced by the great architects of modernism such as Emil Steffan, Le corbusier, Alvar Aalto, Justu Dahinden, Maxwell Fry and Jane Drew who in their manual "Tropical Architecture in the Dry and Humid Zones" present a set of processes and experiences in tropical environment and Claude Laurens for these major projects in the Belgian Congo, These include the Sabena towers built in 1954, but giving a



personal dimension that is the spirit of poverty, modesty and sobriety.

Addressing the question of an African spirituality perceived differently from that of the West, the fundamental questions of this thesis focused on the complexity generated by the construction of churches not adapted to local habits in the face of the adoption of populations living in these environments. It is clear that this situation was influenced by the strength and submission of the colonizer. The problem also raises the socio-cultural discomfort caused by this inculturation, and finding no answer throughout the colonial period, the appearance in the 1960s of a church architecture different from that of the churches of the first missions and at the same time brings an answer to this problem and gives a different reading of an African church built for Africans. This thesis demonstrated the behaviour and characteristics of tropical architecture through the sacred projects of Paul Dequeker by drawing the innovative tools necessary for the formation and teaching of an architectural expression appropriate to the tropics. After 30 years of mission in the Democratic Republic of Congo, Paul Dequeker published in 1992 his famous architecture manual entitled "tropical architecture" which puts in theory all the practices carried out in his projects in tropical areas, mainly in the Democratic Republic of Congo.

This new way of doing churches was not born of nothing, The desire to understand why these churches built in the Democratic Republic of the Congo between the 1960s and 1988 are structurally and morphologically different from the first churches built by the Catholic mission in Africa highlighted the influence of the architect Paul Dequeker who, in this thesis by considering him as the parent and father of tropical churches.

Divided into five chapters, this thesis demonstrated in its first chapter the existence of Christian architecture in Africa for Africans. Indeed, after juxtaposing the reflections of eminent scholars such



as Ron Eglash with theories of sacred geometries and belief in the forces of nature in Africa, the thesis intuitively returned to the conclusion that Paul Dequeker was inspired by local (tropical) practices to design churches in Africa by lending the principles of modernity to make them "tropical churches".

To better understand the philosophy of Paul Dequeker, the second chapter of this thesis was mainly based on the testimonies of those who lived with him to present his vision for an architecture in Africa for Africans. This part of the thesis is complemented by a study of spatiality and temporality that has highlighted the evolution of Christian architecture, from these origins to Vatican Council 2 and the chronological evolution of the architecture of churches in the Congo to tropical churches. To elucidate the fundamental question of the DNA of tropical churches, the third part of this thesis traced the genetics and genealogy of the architecture of churches built by Paul Dequeker in the tropics, the choice of the constructive system and the different types of churches. It clarifies the genetics of Paul Dequeker's tropical project characterized by his personal simplicity and the sobriety of his work. Paul Dequeker's genetic aspiration is above all to work in rural areas with the poorest populations and where construction problems are acute.

Evoking the Spirit of Poverty in this thesis, The ambition was to elucidate Paul Dequeker's response to the aspirations of the African peoples for whom he composes with great creativity an art of building that contributes in a dignified and beautiful way to the splendour of worship according to the genius of the time and of the indigenous peoples. This thesis thus evoked the differences between the churches of Paul Dequeker which are part of an adaptive architecture unlike the churches built by the Office of the African Cities OCA, notably Saint Alphonsus in Matete, Saint Joseph to Matonge who borrowed an imported language. To support this argument, the thesis confirms the kind statements of Herbert Mathissen on the works of Paul Dequeker which are bridges between cultures and generations, Professor Han Verschure states



that Paul Dequeker is a great Belgian architect of modernism who radiates simplicity, clarity and a context conducive to construction. Based on Victor OLGAY's Charter, Paul Dequeker produces a document reflecting his experience of the tropical environment by proposing construction methods adapted to a place, the climate of the place and especially to the user. The demonstration of the concept «tropical churches» through six cases of churches realized by Paul Dequeker closes this thesis by the development of tools necessary for a tropical architecture.

This research is largely focused on the essential works that trace the life of Paul Dequeker and his career, in this case the book «the tropical churches» published in 1984 by Professor Mudiji with the preface of Cardinal Malula, the newspaper Elima in 1987 under the interview of Tumba Kekwo on the occasion of the exhibition on the 30 years of career of Paul Dequeker in which he delivers his vision and his attachment to the spirit of poverty demonstrates the relevance of the concerns of Paul Dequeker for an architecture contextualised in a warm and humid environment which it will summarize in the famous manual «tropical architecture, a theory put into practice in tropical humid Africa» published in 1992 with Professor Kanene Mudimubadu. Also noteworthy is the album of Paul Dequeker's works produced in 2012 by Maria, Luc and Jan Dequeker, with the participation of the Congregation of Scheuts and Kadoc (Centre for Documentation and Research on Religion, Culture and Society) Edited by Professor Luc Dequeker entitled «Architectuur en missie in Afrika» published in 2014 with a critical analysis by Professor Johan Lagae.

Taking up Professor Mudiji Gilombe's conclusion that the tropical churches of Paul Dequeker fit perfectly within the framework of the modern renewal of architecture and plastic language in general, (MUDIJI Malamba and Paul Dequeker, 1984) this thesis presented the tools of a tropical architecture divided mainly into two essential data which are the materials used for the construction of these churches and form. Characterized by their simplicity and sobriety,



these churches fulfil the major conditions of convenient and happy functionality, responding to the material and spiritual need for true prayer. As with dwellings, the architects of modernism took into account local building habits, knowing that in the culture of the tropics one lives open doors and windows (Boghemans, 1921, p.146). Paul Dequeker also understood that for a tropical church it is also necessary to include the special conditions to contain under a strong heat a people that sings, celebrates and dances to worship God! The technical details presented in this paragraph demonstrate the particular attention paid by the architect of the tropical churches to respond to this profound aspiration.



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ANNEXES

List of tropical churches by Paul Dequeker between 1960 and 1988

1.	Kangu Institute Chapel	1960 Boma	Bas Congo
2.	Mbata-Mbenge	1961 Boma	Bas Congo
3.	Christ Roi	1961 Kinshasa	Kinshasa
4.	Charles Loanga	1961 Kinshasa	Kinshasa
5.	Sainte Marie Goretti	1961 Kinshasa	Kinshasa
6.	Saint Jacques	1961 Kinshasa	Kinshasa
7.	Mayidi Major Seminary	1962 Mayidi	Bas Congo
8.	Roby	1962 Roby	Equateur
9.	Saint Marc	1962 Kinshasa	Kinshasa
10.	Saint Antoine	1962 Kinshasa	Kinshasa
11.	Saint Etienne	1962 Kinshasa	Kinshasa
12.	Saint Christophe	1962 Kinshasa	Kinshasa
13.	Sainte Famille	1962 Kinshasa	Kinshasa
14.	Saint Luc	1963 Kinshasa	Kinshasa
15.	Saint Felix	1963 Kinshasa	Kinshasa
16.	Saint Michel	1963 Kinshasa	Kinshasa
17.	Saint Mathias Mulumba	1964 Bulumbu	Equateur
18.	Saint Mathias	1964 Bumba	Equateur
19.	Notre Père	1965 Kananga	Kasai
20.	Christ Roi	1965 Kananga	Kasai
21.	Saint Bonifase	1965 Gwema	Kasai
22.	Miabi	1965 Mbuji-Mayi	Kasai
23.	Mbujimayi	1965 Mbuji-Mayi	Kasai
24.	Saint Gabriel	1965 Kinshasa	Kinshasa
25.	Monastere De L'assomption	1965 Kinshasa	Kinshasa
26.	Chapelle Nganda	1965 Kinshasa	Kinshasa
27.	Saint Pie X	1965 Kinshasa	Kinshasa
28.	Saint Gabriel	1965 Kinshasa	Inshasa
29.	Saint Rombaut	1966 Kinshasa	Kinshasa
30.	Centre Interdiocesain	1966 Kinshasa	Kinshasa
31.	Saint Carmel	1966 Kinshasa	Kinshasa
32.	Institut De Sciences Religieuses	1966 Kinshasa	Kinshasa
33.	Cathedrale Notre Dame	1967 Bujala	Equateur
34.	Saintt Paul	1967 Kinshasa	Kinshasa
35.	Saint Adrien	1967 Kinshasa	Kinshasa
36.	Saint Eloi	1967 Kinshasa	Kinshasa
37.	Saint Paul	1967 Kinshasa	Kinshasa
38.	Saint Adrien	1967 Kinshasa	Kinshasa
39.	Chapelle Du Grand Seminaire	1967 Bukavu-Muresa	Kivu
40.	Saint Jean	1967 Inongo	Bandundu
41.	Saint Paul	1968 Bandundu	Bandundu
42.	Chapelle De Idiofa	1968 Idiofa	Bandundu
43.	Chapelle Josephite	1968 Kikwit	Bandundu
44.	Eglise De Okola	1968 Okola	Cameroun
45.	Eglise De Evodoula	1968 Evodoula	Cameroun
46.	Modjamboli	1968 Modjamboli	Equateur
47.	Yemo	1968 Lisala	Equateur



48. Notre Dame De Grace	1968 Tshimbulu	Kasai
49. Eglise de tshimbulu	1968 tshimbulu	kasai
50. Saint martin	1968 Kananga	kasai
51. Saint philippe	1968 Kinshasa	kinshasa
52. Saint pierre	1969 demba	kasai
53. Cathedrale saint vincent	1969 luisa	kasai
54. Saint paul nganda-tsundi	1970 mayumbe	bas congo
55. Mukungu	1970 luisa	katanga
56. Chapelle de tolosingo	1971 tolosingo	bandundu
57. Cathedrale notre dame	1971 kananga	kasai
58. Chapelle de kutu	1972 kutu	bandundu
59. Fatundu	1972 Bandundu	bandundu
60. Cathedrale marie reine d'afrique	1972 bokungu	equateur
61. Mwamba mbuyi	1972 mwamba mbuyi	kasai
62. Saint paul	1972 kananga	kasai
63. Saint paul	1972 Lubumbashi	katanga
64. Bene leka	1973 bene leka	kasai
65. Lubunga	1973 lubunga	kasai
66. Saint mbanga	1974 kinshasa	kinshasa
67. Saint kaggwa	1974 kinshasa	kinshasa
68. Saint laurent	1974 kinshasa	kinshasa
69. Cathedrale de goma	1974 goma	kivu
70. Sainte marie	1975 ukalaba	kasai
71. Chapelle de lubuyi	1976 lubuyi	kasai
72. Saint bonifase	1976 kinshasa	kinshasa
73. Saint augustin	1977 kinshasa	kinshasa
74. Christ molobeli	1977 kinshasa	kinshasa
75. Saint vincent	1978 bumba	equateur
76. Bukulukutu	1978 bikulukutu	equateur
77. Sainte croix	1978 kinshasa	kinshasa
78. Assoption	1978 kinshasa	kinshasa
79. Sainte marie	1979 mashala	kasai
80. Paroisse universitaire	1979 Lubumbashi	katanga
81. Sainte trinite	1979 kinshasa	kinshasa
82. Bukasa	1980 muene-ditu	kasai
83. Saint kibuka	1980 kinshasa	kinshasa
84. Salongo	1981 gemena	equateur
85. Saint pierre Canisius	1981 kimuenza	kinshasa
86. Chapelle de soshu	1982 matadi	bas congo
87. Saint antoine	1982 kinshasa	kinshasa
88. Sainte trinite	1983 muanda	bas congo
89. Saint raphael	1988 kinshasa	kinshasa
90. Bitanda	1965-197 5 Kananga	kasai
91. Kambote	1965-1975 Kananga	kasai
92. Saint bruno	1965-1975 Kananga	kasai
93. Kimpanga	1965-1975 Kananga	kasai
94. Musangana	1965-1975 Kananga	kasai
95. Lubunga	1965-1975 Kananga	kasai
96. Tshibungu	1970-1980 Kananga	kasai
97. Lukono	1970-1980 Kananga	kasai
98. Tshisenge	1970-1980 Kananga	kasai
99. Kapinga	1970-1980 Kananga	kasai
100. Dibinga	1970-1980 Kananga	kasai
101. Tokulamba	1970-1980 Kananga	kasai
102. Tshimala	1975-1980 mwene ditu	kasai
103. Tshibangu-mpata	1975-1980 mwene ditu	kasai
104. Masaula	1975-1980 mwene ditu	kasai



List of paul dequeker's projects in congo between 1958 and 1991

1958-1960

1. Bosondjo: Parish Church
2. Kisantu: Jesuit College
3. Mashala: Nurses' monastery
4. Pendjua: Parish Church
5. Boma: School complex
6. kabinda: professional school
EAP
7. Kalemie: minor seminary
8. kasenda: Minor seminary
9. Kasangu : experimental school
10. Kinshasa Gombe: school of our
lady regent
11. Kinshasa-Lemba: Missionaries of
the Scholasticate of Scheut
(Nkongolo)
12. Kisantu: Teacher's residence
13. Kisantu: Teacher's residence
14. Likasi: Kikula elementary school
15. Ilebo: elementary school for
girls
16. Lodja: secondary school
17. Ngandajika: secondary school
18. Kangu: school chapel
19. Kasangulu : professional school
20. Kikwit : Jesuit College
21. Kimpese: Normal school for girls
22. Kindu: Bishop's residence
23. Kinshasa-Kalamu: Atundu
private residence
24. Kinshasa-Kinkole: Saint Jacques
Church
25. Kinshasa-Livulu: Kindergarten
26. Kafubu: Don Bosco technical
school
27. Lubumbashi: parish church
28. Lubutu: professional school
29. Sola: pedagogical school
30. Sona-Bata: home school
31. Tshilomba: school chapel

1961-1963

32. Kananga-Katoka: professional
school (extension)
33. Kasongolunda : Jesuit College
34. Kenge: Bishop's residence
35. Kinshasa-KasaVubu: Christ the
King Church
36. Kinshasa-Bandalungwa: Saint-
Charles-Loanga Church
37. Kinshasa-Barumbu: Church of
Saint Paul
38. Kinshasa-Binza: The teachers'
home

39. Kinshasa-Binza: Saint-Christoph
Church
40. Kinshasa-Kalamu: Maria-Goretti
Church
41. Kinshasa-Kimbanseke: Saint-
Martin Church
42. Kinshasa-Kimwenza: Normal
school for girls
43. Kinshasa-Kingasani: Saint-Marc
Church
44. Kinshasa-Limete: Convent of the
sisters
45. Kinshasa-Masina: Church of the
Holy Family
46. Kinshasa-Ngaliema: Church of
Saint Luke
47. Kutu: secondary school
48. Lukula: secondary school
49. Mbata-Mbenge: parish church
50. Miamba: parish church
51. Moba: Domestic school
52. Moba: Teacher's house
53. Semendua: parish church
54. Shabunda: Don Bosco Institute
55. Bukavu: Presbytery of the
cathedral
56. Bukavu: Center for social and
apostolic formation
57. Inongo: Presbytery
58. Isangi: minor seminary
(extension)
59. Kangu: houses of four teachers
60. Kibula: Minor seminary
(extension)
61. Kinshasa-Gombe: Radio Star
Studio
62. Kinshasa-Kimbanseke: Sinte-
Agnes Church
63. Kinshasa-Kimbanseke: Sint-
Theophile
64. Kinshasa-Kintambo: Monastery
of Carmel Castle
65. Kinshasa Kisenso: Church of
Saint Stephen
66. Kinshasa-Limete: Center for
Pastoral Studies
67. Kisantu : Dispensary and
hospital (extension)
68. Kisantu: nurse's monastery
69. Matadi: Saint Bernadette
Church
70. Mbandaka: convent of sisters
71. Mbujimayi: minor seminary
72. Mikalayi: school chapel
73. Bolumbe : Sint-Mathias-
Mulumba church



74. Bumba: parish church
 75. Gwaka: parish church
 76. Kananga: Coordination office for education
 77. Kananga: Church of Mary
 78. Kangu: Regent School
 79. Kangu : secondary school for girls
 80. Kangu: nursing school
 81. Kele: Saint Joseph Church
 82. Kinshasa: Retirement home
Kinshasa-Bandalungwa: Church of Saint Michael
 83. Kinshasa-Gombe: Provincial house of the Scheuttists
 84. Kinshasa-Gombe: Distribution center
 85. Kinshasa-Gombe: Teachers at the Theresian home
 86. Kinshasa-Kimwenzu: Novitiate for sisters
 87. Kinshasa-Kingansani: Monastery for nurses
 88. Kinshasa-Lemba: Vicariate
 89. Kinshasa-Lemba: Convent of the Sisters
 90. Kinshasa-Matete: Secondary school for girls
 91. Kinshasa-N'Djili: Jesuit College Bonomi
 92. Kinshasa-Ndjili : Secondary school for girls
 93. Kinshasa-Ndjili: Saint Theresa Church
 94. Kinshasa-Ngaba : Saint-Felix Church
 95. Kinshasa-Ngiri-Ngiri: Pius X Church
 96. Kinshasa-Yolo: Saint-Gabriel Church
 97. Kinzundu: Parish Church
 98. Kisantu: Print shop
 99. Kisantu: Centre for social training Kyondo: Hospital
 100. Mangembo: Sanatorium
 101. Mbujimayi: Franciscan monastery
 102. Mondombe: art school
 103. Nganza: sister convention
 104. Tshibuyi: Village church
- 1964-1966**
105. Kangu: Presbytery
 106. Kinshasa-Gombe: Saint Paul bookstore (renovation)
 107. Kinshasa-Gombe: Rehabilitation center for handicapped people)
Kinshasa-Kingansani: Maternity ward
 108. Kinshasa-Kinshasa: JOC restaurant
 109. Kinshasa-Limete: Apartments for teachers Saint Raphael
 110. Kinshasa-Limete: Brother's Monastery
 111. Kinshasa-Limete: Higher religious institution
 112. Kinshasa-Limete : Garage Scheutist
 113. Kinshasa-Selembao: Parish hall of Saint John
 114. Kinshasa-Yolo: Monastery of Sister
 115. Lisala: Monastery for the diocesan sisters
 116. Djokopunda: Parish Church
 117. Inongo: Saint James
 118. Kabinda: monastery for the sisters
 119. Kamina: Church of Our Lady of Fatima
 120. Kananga: Church of Christ the King
 121. Kananga: monastery of the Carmelites
 122. Kananga: Notre-Dame cathedral
 123. Kananga: church of our father
 124. Kananga : Saint-Clément parish school
 125. Kananga-Katoka : Pius X College
 126. Kananga-Katoka : Fraters van Tilburg residence
 127. Kananga-Katoka : Convent of the sisters
 128. Kinshasa-Barumbu: Monastery of the Oblates
 129. Kinshasa-Djelo Binza: Nursing Center
 130. Kinshasa-Kintambo: Presbytery (extension)
 131. Kinshasa-Limete: Diocesan laboratory and pharmacy
 132. Kinshasa-Limete: Higher School of Commerce
 133. Kinshasa-Mombele: Vicariate
 134. Kinshasa-Ndjili: Convent of the Sisters
 135. Kinshasa-Ngaliema: Jean XXIII Major Seminary
 136. Kinshasa-Ngiri Ngiri: Sister Convention
 137. Kolwezi: Saint Paul's Church
 138. Mbujimayi: Monastery for the diocesan sisters
 139. Ngwema: Saint Boniface Church
 140. Tshela: technical school
 141. Tshikapa: Medical Center
 142. Bandundu : Saint Paul College with boarding school
 143. Bandudu: social center for youth
 144. Bolombe: Sisters' convention
 145. Bosumanzi: Presbytery



146. Budjala: Residence of the bishop
 147. Budjala: Notre-Dame Cathedral
 148. Bukavu: Institute of Higher Education
 149. Bukavu: Centre de formation Amani Bumba: Collège Saint Andreas
 150. Buta: Minor Seminary
 151. Kafakumba: maternity hospital and dispensary
 152. Kinshasa-Barumbu: Saint-Rumbold Church
 153. Kinshasa-Binza: Our Lady of Providence Institute
 154. Kinshasa-Binza: Monastery of Sisters
 155. Kinshasa-Gombe: Apartments for teachers St. Anna
 156. Kinshasa-Gombe: Our Lady of Fatima Party and meeting rooms
 157. Kinshasa-Gombe: Télé-Zaire television studio
 158. Kinshasa-Kalamu: Small seminary
 159. Kinshasa-KasaVubu: Lycée for girls Motema-Mpiko
 160. Kinshasa-Kimbanseke : Dispensary
 161. Kinshasa-Kimbanseke : Parish hall
 162. Kinshasa-Kimwenza : Institute for deaf-mute
 163. Kinshasa-Kimwenza : Retreat and education center (extension)
 164. Kinshasa-Kimwenza : Nganda training center
 165. Kinshasa-Kisenzo : Social welfare
 166. Kinshasa-Lemba : Norbertine Abbey
 167. Kinshasa-Lemba : Social complex
 168. Kinshasa-Ngaba: Saint-Adrien Church
 169. Kinshasa-Limete: residence of the bishop
 170. Kinshasa-Limete: private residence Mabolia
 171. Kinshasa-Limete: Sister's Monastery
 172. Kinshasa-Matete: Sewing school
 173. Kinshasa-Matonge: Saint Joseph's parish hall
 174. Kinshasa-Ndjili: convent of the Sisters
 175. Kinshasa-Selembao: Saint Jean Baptiste
 176. Kisantu: Higher School of Nursing
 177. Lukala: Presbytery
 178. Mbandaka: Radio Starlette
 179. Mbeo: Model piggery
 180. Mundongo: Agricultural school
 181. Sandoa: Secondary School
 182. Kananga: Saint-Luc church
 183. Kananga-Katoka II: presbytery
 184. Kananga-Katoka: Scheutist printer
- 1967-1970**
185. Kananga-Katoka : Saint-Martin Church
 186. Kananga : Presbytery (extension)
 187. Kananga : Trappist Abbey
 188. Kinshasa-Bandalungwa: Church of Saint Philip W 3S]
 189. Kinshasa-Barumbu : new Saint Paul
 190. Kinshasa-Barumbu: Saint Eloi Church
 191. Kinshasa-Barumbu : Convent of the sisters
 192. Kinshasa-Gombe: School of sewing
 193. Kinshasa-KasaVubu: Residence for non-specialist assistants
 194. Kinshasa-Kingabwa: Saint Kizito Church
 195. Kinshasa-Kingasani: School of sewing and tailoring
 196. Kinshasa-Lemba: Monastery for teaching brothers
 197. Kinshasa-Limete: Convent of Saint Theresa for diocesan sisters
 198. Kinshasa-Makala: Presbytery
 199. Kinshasa-Matonge: Presbytery (renovation)
 200. Kinshasa-Ngaliema: Bols private residence
 201. Kisantu: Celebration hall Kubama College
 202. Kutu: Parish church



203. Lisala: Residence for non-professional assistants
204. Mawanga: Sister's Monastery
205. Modjamboli: Parish Church
206. Pamu: parish church
207. Tolo: parish church
208. Various national clinics
209. Dozens of village churches
210. Bandundu: social center
211. Boende: Doctor's house
212. Bokungu: Cathedral of Our Lady of Africa
213. Bominenge: training center
214. Bongolu: parish church
214. Bwamanda : Small Seminary (extension)
215. Ifwanzongo: training center
216. Kabinda: Small seminary school
217. Kabwe: Minor seminary (extension)
218. Kananga-Katoka: Retirement home (renovation)
219. Kananga-Katoka: restaurant
220. Kangu: doctor's house
221. Kangu: secondary school with boarding facilities
222. Kasongo: chapel near the bishopric
223. Kinshasa-Binza: presbyterian seminary
224. Kinshasa-Kimwenza: youth house
225. Kinshasa-Kisenso: Presbytery
226. Kinshasa-Limete: private apartment
227. Mawanga: maternity dispensary
228. Muamba-Mbuyi: Parish church
229. Nganda-Tshundi: Saint Paul's Church
230. Nkolo: Monastery building
231. Tshikapa: social center
232. Tshimbulu: Our Lady of Grace Church
233. Vaku: Presbytery
234. Vaku: sister monastery and novitiate
235. Yakoma: reception center
236. Yalifafu: Hospital
237. Yangambi: parish church
238. Yemo: Rural parish church
239. Dozens of chapels in rural villages
240. Bukavu: Higher Pedagogical Institute. Homes for teachers
241. Bunia: Institut supérieur pédagogique
242. Kananga: École normale supérieure
243. Kinshasa-Kasa Vubu: Sint-Muse Church
244. Kinshasa-Kingasani: Retirement home
245. Kinshasa-Lemba: Lovanium University - Kinduku Village
246. Kinshasa-Limete: Diocesan dispensary
247. Kinshasa-Masina: Presbytery
248. Kinshasa-Ngaliema: American school TASOK (extension)
249. Lubefu: Animation Center
250. Luiza: Saint-Vincent cathedral
251. Mbanza-Ngungu: parish meeting room
252. Mikalayi: Dominique-Savio Institute
253. Ndemba: Saint Peter's church
254. Yangambi: nursing school
255. Dozens of village schools
256. Gbadolite: secondary school for girls
257. Bandundu: secondary school for girls
258. Boende: ecumenical hospital
259. Bominenge: Leprosarium
260. Bukavu: Higher Institute of Agricultural Development. Student house
261. Bunia: Medical Center
262. Buta: Monastery and novitiate
263. Bwamanda: Animation center CDI
264. Kambundi: Teacher's house
265. Kananga: Auxiliary Church of Saint Bruno [104] (one of the twelve auxiliary churches of the diocese of Kananga in the period 1965-1975.
266. Kananga: Higher Technical Institute.
267. Kananga: The priory of Saint John.
268. Kananga-Katoka: Notre Dame Cathedral
269. Kasenyi : Health care center
270. Kinshasa: Higher Technical Institute for Girls
271. Kinshasa-Bandalungwa: Meeting room Kinshasa-Gombe: Church of Christ in Zaire. Headquarters of the Protestant Council [42].



272. Kinshasa-Kimbanseke: Saint-Mbaga [52]
273. Kinshasa-Kingasani: Dispensary
274. Kinshasa-Limete: Imprimerie Scheutist
275. Kinshasa-Limete: Paulisten Monastery
276. Kinshasa-Binza: Champagnat Institute Marist Brothers
277. Kinshasa-N'Djili: Presbyterian Temple
278. Kinshasa-Ngaliema: House of the teacher
279. Kinshasa-Ngaliema: District Church
280. Kinshasa-Ngiri-Ngiri: Pius-X meeting rooms
281. Kinzundu: convent of the sisters
282. Kolwezi: Two parish churches
283. Lodja: Centre for social training
284. Luebo: Sisters' monastery (extension)
285. ukula: Home for college teachers
286. Malole: Major Seminary, Theology
287. Mangembo: Boarding school for secondary schools
288. Mbujimayi: Institute of Higher Education
289. Mikalayi: Regional Medical Center
290. Nioka: Bishop's Residence
291. Ntambwe: BISOKA Soya Biscuit Factory
- 1971-1975**
292. Banga: Presbytery
293. Bokungu: Housing for lay assistants
294. Bunia: Multi-purpose parish hall
295. Cahi: parish church
296. Dizi: parish church
297. Gwaka: Normal school
298. Idiofa: Party hall
299. Idiofa: Center for the development of the people
300. Kinshasa-Kisangani: Carpentry
301. Kinshasa-Lemba: Convent of the Teaching Sisters
302. Kinshasa-Limete: Church of Christ in Zaire O
303. Kinshasa-Limete: Diocesan economic offices (extension)
304. Kinshasa-Limete: Centre d'accueil des étudiants Missionnaires Steyl Kinshasa-Limete: Couvent des Soeurs
305. Kinshasa-Lukunga: Parish Church
306. Kinshasa-Makala: St Mathiaswijk Church
307. Kinshasa-Ndjili: Teacher's house
308. Kinshasa-Ndjili: Presbytery of Saint-Martin
309. Kisangani: Lycée Sainte-Monique
310. Laba: Parish meeting rooms
311. Llebo: secondary school for girls
312. Lukula: College (extension)
313. Matadi: Seamen's day care center
314. Mbanza-Ngungu: Presbytery
315. Mbata-Mbenge: Dispensary
316. Mbulungu: Monastery Church
317. Pimbo: Agricultural school
318. Tshela: Technical school (extension)
319. Tshikapa: Maternity ward (extension)
320. Tshikapa: Secondary Pedagogical Institute
321. Tshikapa: Commercial center
322. Beneleka: parish church
323. Bosoio: Presbytery
324. Bukavu: Saint Theresa Pastoral Center
325. Gandajika: parish church
326. Gemena: social work for young girls
327. Goma: Cathedral
328. Kananga: social center for women kings
329. Kananga: Saint Paul's church
330. Kangu: Monastery for nursing sisters
331. Kangu: Sisters of the Monastery of the Hunt [86]
332. Katumbwe: Library
333. Kikwit: residence of the bishop
334. Kikwit: residence of the Jesuits
335. Kikwit: Teacher's residence
336. Kinshasa-Binza: Evangelical Bible Center



337. Kinshasa-Gombe: Procure des Scheuts
338. Kinshasa-KasaVubu: The Passion of Christ the King
339. Kinshasa-Lemba: Methodist Temple
340. Kinshasa-Livulu: Social Center
341. Kiveva: Diocesan College (project)
342. Lubumbashi: St. Paul's bookstore
343. Lubumbashi: Saint Paul's Church
344. Luiza: Bishop's residence
345. Luiza: Secondary School
346. Luiza: School of Nursing
347. Mbujimayi: Sint-Mbagakerk
348. Panzi: parish church
349. Tshibombo: Parish Church
350. Tshidimba: Secondary School
351. Campaign for dispensaries and national medical centers
352. Dozens of village schools
353. Bashimike: parish church
354. Bashimike: Parish hall
355. Bunia: Presbytery
356. Ebonda: Technical school
357. Idiofa: Coordination center for women
358. Idiofa: Medical center
359. Idiofa: Public development center and flour mill silos
360. Idiofa: Hospital ward to be confirmed
361. Kai-Mbaku: houses of two teachers
362. Kambote: parish church
363. Kamilabi: medical center
364. Kananga: Belgian school
365. Kananga-Katoka: primary and secondary school complex
366. Kangu: houses of two doctors
367. Kindu: hospital operating room
368. Kinshasa-Binza: Maternity ward
369. Kinshasa-Gombe: health insurance and pharmacy
370. Kinshasa-Gombe: Institute of Higher Education
371. Kinshasa-Gombe: Caritas offices (extension)
372. Kinshasa-Kimbanseke: maternity and dispensary
373. Kinshasa-Kisenzo: art school
374. Kinshasa-Lutendele: dispensary
375. Kinshasa-Masina: Church of Our Lady of Peace
376. Kinshasa-Matete: Malumba private residence
377. Kinshasa-Matete: Mokambi private residence
378. Kinshasa-Ozone: Primary school
379. Kisangani: Regional Seminary
380. Kisangani: Restoration and renovation of the cathedral
381. kisangani: Training house for teachers
382. Mangembo: School of Nursing
383. Mbeo: Agricultural education center
384. Mbujimayi: École normale supérieure
385. Mikalayi: Meeting center
386. Mbamba-Mbuyi: Presbytery
387. Muanda: retirement home (extension)
388. kananga: kite promotion center
389. yangambi: nursing school
390. Bwamanda: Soybean factory
391. Essebi: training center
392. Kananga: Carmel Castle Monastery
393. kananga: House of teacher training
394. Kananga-Katoka: Vicaraiat
395. Kangu: Pastoral Center
396. Kasende: Orphanage
397. Mbombo: Village church
398. kinshasa-Gombe: Institute for the blind
399. kinnasa-Limete: Usuma office
400. kinshasa-Matete: Sewing and cutting school
401. kinshasa-Mbudi: Novitiate Scheutist
402. kinshasa-Ngaba: Saint-Laurent church
403. kisangani: students' home
404. Lubumbashi: university parish church
405. Luebo: Cathedral
406. Lualaba: Notre-Dame church
407. Malebo: Saint Paul's church
408. Mbanza-Ngungu: secondary school (extension)
409. Mbata-Kiela: Minor Seminary (extension)
410. Mbujimayi: Dispensary



411. Mokala: Hospital
 412. Muene-Ditu: Parish church
 413. "Ganza: Meeting room
 414. Bamalia: Major Seminary
 415. Bikuku: Sisters' monastery
 416. Boma: Bishop's residence (extension)
 417. Idiofa: bank branch
 418. Kalenda: retirement home
 419. Kamayi: Maternity ward
 420. Kasenga: Cathedral
 421. Kindu: Bishop's residence
 422. Kindu: Katako Training Center
 423. Kinshasa: Executive Council program, four elementary school, twelve secondary schools
 424. Kinshasa Camp Cito: Woni
 425. Lubuyi: Chapel
 426. Luiza: Nursing School
 427. Maluku: parish church
 428. Mikonga: Village church
 429. Mwene-Ditu: second parish church (2nd)
 430. Tshela: Rest home
 431. Tshumbe: Medical school
 432. Yakoma: Soybean factory

1976-1980

433. Bandundu: Church of Our Lady
 434. Beneleka: Presbytery
 435. Idiofa: dam and hydroelectric plant 270 KVA
 436. Kinshasa-Bandalungwa: Presbytery (extension)
 437. Kinshasa-Gombe: Sewing workshop Institut supérieur des arts et métiers Kinshasa-Gombe: Orthopedic workshop
 438. Kinshasa-Kingabwa: Saint Nganza Church
 439. Kinshasa-Lemba: Saint-Augustin Church
 440. Kinshasa-Limete: Office building of the CEP
 441. Kinshasa-Limete: private high school
 442. Kisangani: university of origin of the students
 443. Mondongo: higher school of agriculture Muamba-Mbuyi: teacher's house
 444. Muamba-Mbuyi: medical and social center
 445. Mulundu: Monastery of the Sisters
 446. Mwene-Ditu: parish church of Tshiamala
 447. Bandudu: Multipurpose hall
 448. Benadibele: care for the elderly
 449. Kinshasa-Lemba: Parish of Saint Augustin
 450. Bokungu: Rice collection
 451. Cibandishi: convent of the Dibashk Monastery Sisters Gemena: diocesan office
 452. Idiofa: ILIM printing house
 453. Ifwanzono: 75 KVA hydroelectric plant
 454. Ilebo: Church of Our Lady
 455. Kabondo: Presbytery
 456. Kangu: brother's monastery
 457. Kangu: parental home for priests
 458. Kangu: Home for the elderly and retirement home
 459. Kangu: Sales Center
 460. Katende: Training Center
 461. Kimbanseke: Multipurpose hall
 462. Kinkondja: Parish church
 463. Kinshasa-KasaVubu: Social center
 464. Kinshasa-Kauka: Multipurpose hall
 465. Kinshasa-Kikimi: Holy Cross Church
 466. Kinshasa-Kimwenza: Canisius Institute (extension)
 467. Kinshasa-Kimwenza: Monastery Sisters "Notre Dame" (extension)
 468. Kinshasa-Kingasani: Maternity ward (extension)
 469. Kinshasa-Kingasani: Parish hall
 470. Kinshasa-Kingasani: Presbytery (extension)
 471. Kinshasa-Kingasani: Professional school of automobile mechanics
 472. Kinshasa-Kintambo: Hostel for trainees
 473. Kinshasa-Kisenso: Maternity ward
 474. Kinshasa-Limete: Teacher's residence
 475. Kinshasa-Makala: Christ-Mediator Church



476. Kinshasa-Makala: Prison dispensary
477. Kinshasa-Masina: Saint-Kibuka Church
478. Kinshasa-Matete: Holy Trinity Church
479. Kinshasa-Mokali: Parish hall
480. Kinshasa-Mont Amba: Presbytery of the university parish
481. Kisangani: Procedures and administration (extension)
482. Kisangani-Mangobo: Presbytery
483. Kisantu: diocesan administrative center
484. Kisantu: Emmaus Pastoral Center
485. Lisala: Museum
486. Malebo: Parish hall
487. Malemba: Parish church
488. Mangembo: Hospital (extension)
489. Mangembo: Teacher's residence
490. Matadi: Beatitude Social Center
491. Ngandu: School complex
492. Vaku: Reception center
493. Bamania: seminary chapel
494. Bandudu: Teacher's residence
495. Bandudu: Steyl Missionaries Residence (extension)
496. Beneleka: Medical Center
497. Boma: Major Seminary, Philosophy
498. Boma: Presbytery of the Cathedral
499. Bukavu: Church of the Resurrection
500. Ifwanzondo: Oblate Study Center
501. Kenge: Sisters' Monastery
502. Kibunda: parish church
503. Kinshasa-Gombe: Our Lady of Fatima Nursery School
504. Kinshasa-Gombe: Novitiate Sisters
505. Kinshasa-Kauka: parish hall
506. Kinshasa-Barumbu: St. Eloi Church
507. Kinshasa-Kintambo: Saint-Kaggwa Major Seminary
508. Kinshasa-Kintambo: Monastery of Carmel Castle
509. Kinshasa-Makala: Vicariate
510. Kinshasa-Makala: Church of Saint Christina
511. Kinshasa-Matete: Church of the Apostles of Saint John
512. Kinshasa-Matete: Institute for Molende girls
513. Kinshasa-Mont Ngafula : Church of St Mawagali
514. Kinshasa-Mont Ngafula: Sister's Monastery with novitiate
515. Kinshasa-Ngaba: Baptist Temple
516. Kinshasa-Ngaba: House Mokambi of Saint Adrien
517. Kinshasa-Ngaliema: Church of the Ascension
518. Kisangani: Presbytery
519. Likasi: Saint Charles Loanga church
520. Lusambo: Reception center for orphans
521. Maluka: Parish Hall
522. Mashala: Animation Center
523. Mashala: Church of Our Lady
524. Mikalay: doctor's house
525. Miabi: Maternity ward
526. Muanda : Presbytery
527. Mwene-Ditu: Bukasa parish church
528. Mweso: Hospital
529. Panzi: parish church
530. Sapo-Sapo: District church
531. Tshikapa: Reception center
532. Tshumbe: Passionist monastery with training house
533. Tshumbe: parish church
534. Tshumbe: Pastoral Center
535. Bakali: Catechetical Center
536. Bandundu: Saint Paul Vicariate
537. Bandundu: EDIMBA printing house (extension)
538. Banzalute: Maternity ward
539. Bokoro: Nursing school (extension)
540. Boma: Folklore library
541. Bukavu: Teachers' houses
542. Bunia: CANDIP radio studio
543. Dikunga: social meeting center
544. Ebonda: secondary school for girls (project)
545. Iyonda: training and retreat center
546. Kabinda : Hospital (extension)



547. Kabinda : Nursing school with boarding facilities
548. Kamilabi: maternity clinic
549. Kananga: multipurpose hall
550. Kananga-Katoka: training center
551. Katende: sister monastery with novitiate
552. Kenge: high school for girls (project)
553. Kinshasa-Limete: Catholic University, Faculty of Theology
554. Kinshasa-Makala: dispensary
555. Kinshasa-Ngaliema: private high school
556. Kitomesa: Meeting room
557. Kolokoso: Sister's monastery
558. Lisala: Diocesan pharmacy
559. Lisala: folklore library
560. Luiza: Office of diocesan works
561. Lusambo: Orphanage
562. Matamba: social meeting center
563. Muamba-Mbuyi: House of the Parent
564. Mwene-Ditu: Pastoral Center
565. Yonda: Training Center
566. Beneleka: Parish Hall
567. Beneleka: Meeting room
568. Bukavu: Biscuit factory
569. Bunia: Regional seminary
570. Idiofa: Hydroelectric plant
571. Idiofa: Biscuit factory
572. Kabondo: Christ-King Church
573. Kabondo: Health Center
574. Kananga: Institute of Religious Education
575. Kananga-Katoka: Yukadi Rehabilitation Center
576. Kansangulu: Salvation Army Health Center
577. Kavumu: Norbertine Abbey (project)
578. Kikwit: Catechetical Center
579. Kikwit: Diocesan Office for Agricultural Development
580. Kinkondja: Surgery pavilion
581. Kinshasa: A podium for the Pope's visit
582. Kinshasa-Bumbu: Saint-Antoine Church (2nd)
583. Kinshasa-Gombe: Library of CEPAS (extension)
584. Kinshasa-Kinsuka: Retirement home for young people
585. Kinshasa-Gombe: Diocese Maison voyageurs of Mbujimayi
586. Kinshasa-Kimwenza: Retirement home for Sisters
587. Kinshasa-Kintambo: Scholasticate Oblate
588. Kinshasa-Limete: Office of Apostolic Works
589. Kinshasa-Matete: Center for the handicapped
590. Kinshasa-Matete: House for young people
591. Kinshasa-Ndjili: Reception of the village for the handicapped of Bondeko
592. Kinshasa-Ndolo: airport, aircraft hangar CEZ Parentavia
593. Kisantu: generalist diocesan sister congregation
594. Kizu-Pfundi: double arch bridge over the Lubuzi
595. Kole: Sisters' monastery
596. Luambo: health center
597. Lubumbashi: Catechetical Center
598. Muamba-Mbuyi: Sisters' monastery with novitiate (extension)
599. Samba: parish church
600. Tshumbe: Cathedral

1981-1985

601. Bikuku: Sisters' monastery
602. Boende: Maternity ward
603. Idiofa: novitiate of the monastery Sisters of Holy Family
604. Idiofa: Reception Center, in the formation center Luzingu
605. Wumbe: rice mill
606. kananga: Bisoka Bakery
607. kananga: health center
608. kananga: Institute of Agricultural Development
609. kananga: Carmelite monastery
610. Demba: Health Center
611. kinshasa-Badiadingi: Saint-Ignace church
612. kinshasa-Bumbu: Saint-Matthieu church
613. kinshasa-Ngaba: Saint-Matthieu church
614. kinshasa-Gafani: parish halls



615. Kinshasa-Kalamu: Saint-Vincent Church.
616. Kinshasa-Kikimi: Social meeting center
617. Kinshasa-Kimbanseke: Maternity clinic [extension]
618. Kinshasa-Kingabwa: Nurse - contained nurse
619. Kinshasa-Lemba: Church of the Holy Christ
620. Kinshasa-Lemba: Norbertine Abbey (extension)
621. Kinshasa-Limete: Diocese of Bokungu
622. Kinshasa-Limete: Saint-Raphael parish hall
623. Kinshasa-Limete: Stacking center for folk development - Idiofa
624. Kinshasa-Limete: Monastery of Sisters
625. Kinshasa-Makala: Local center for disabled people
626. Kinshasa-Masina: Meeting room
627. Kinshasa-Mbudi: Scholastic Norberts
628. Kinshasa-Ndolo: House of the passengers of bis-dom Borna
629. Kole: Bishop's residence (extension)
630. Lisala: New cathedral (unfinished)
631. Luango: Leprozerie
632. Luiza: Institute of propaedeutics
633. Lumbi: Sisters monastery with novitiate
634. Lusambo: Presbytery
635. Lusambo: Presbytery (renovation)
636. Malebo: Presbytery
637. Masamuna: health center
638. Mbandaka: diocesan coordination office
639. Mikalayi: Village for neglected elders
640. Mondongo: Integrated Development Center
641. Mont Ngafula: parish elementary school
642. Muanda: Church of the Holy Trinity
643. Ngondi: Missionary Monasteries (extension)
644. Tshikapa: parish church (2nd)
645. Tshikula: Social meeting center
646. Kinshasa: Saint Antoine church
647. Basankusu: Travelers' house (extension)
648. Bokungu: Training Center
649. Bokungu: Sisters' monastery and novitiate
650. Ifwanzondo: Hydroelectric power station
651. Lyonda: social center for newlyweds
652. Katende: auxiliary church
653. Kibibi: Sisters' monastery
654. Kikwit: Sadisana Jesuit College (extension)
655. Kimbuka: operating room (extension)
656. Kimpanga: Medical Education Center
657. Kinshasa-Kimwenzu: Franciscan monastery and convent
658. Kinshasa-Kimwenzu: Novitiate of Christ Roi
659. Kinshasa-Kimwenzu: Josephite Scholasticate
660. Kinshasa-Kindele: Health center
661. Kinshasa-Kingasani: Passionist Scholasticate
662. Kinshasa-Kintambo: Carmelite monastery
663. Kinshasa-Kintambo: Theresianum Institute
664. Kinshasa-Lemba: Intercongregational Philosophy
665. Kinshasa-Lemba: Wednesday
666. Kinshasa-Ngaliema: Salle Saint Christophe
667. Kole: Bishop's residence (extension)
668. Lodja: Major Seminary
669. Luandana: parish church
670. Lubunga: Presbytery
671. Malole: Carmelite scholasticate
672. Masimanimba: parish center
673. Mbuyi Mayi: Novitiate of the diocesan nuns
674. Nioki: Operating room
675. Uvira: Minor seminary
676. Bokonzi: Operating room (extension)



677. Bokungu: Bishop's residence (extension)
678. Bukavu: Presbytery
679. Gandayika: nursing school
680. Kananga: Medical Center
681. Kananga: Tshipanda House
682. Kananga: University parish
683. Kangu-Vungu: 7 m masonry bridge over the Mfubu River
684. Kasangula: Salvation Army Clinic
685. Kikwit: Hospital Rehabilitation Center
686. Kikwit: Sisters of the Annonciat Novitiate
687. Kikwit: Parish Church
688. Kinshasa-Gombe: Jesuit House
689. Kinshasa-Gombe: Karibuni House for lay assistants
690. Kinshasa-Gombe: Sisters' House
691. Kinshasa-Kimwenza: Novitiate of the Sisters of the Immaculate Conception
Kinshasa-Kimwenza: Comboni scholastics
692. Kinshasa-Kinshasa: Bondeko Formation Center
693. Kinshasa-Limete: Sewing and tailoring workshop
694. Kinshasa-Masina: Church of St. Bartolomeo
695. Kinshasa-Mikondo: Church Mama wa Bosawa
696. Kinshasa-Mikunga: Social Center
697. Kinshasa-Mont Gafula: Convent of the Sisters
698. Kinshasa-Yolo: Study and meeting room
699. Kisangani: Parish office
700. Kisantu: Brother's house
701. Lomela: maternity clinic
702. Mangembo: Medical Institute (extension)
703. Mbujimayi: Accommodation center for students
704. Mikalayi: Two doctors' houses
705. Panjamutombo: Presbytery
706. Tshonia: Operating theatre
707. Uvira: Bishop's residence (extension)
708. Vunda: Monastery of the Sisters
709. Boma: Presbytery
710. Bukavu: Presbytery
711. Fumu-Mputu: Student house
712. Ifwanzondo: Mission Garage
713. Kambote: Novitiate Sisters
Kikwit: Kinduku
714. Kikwit: Diocesan Development Agency of the Slaughterhouse
715. Kinshasa-Kimwenza: Carmelite Novitiate
716. Kindu: Bishop's residence
717. Kinshasa: Small Health for All dispensary
718. Kinshasa-Bandalungwa: Convent of the Sisters
719. Kinshasa-Gombe: Housing for disabled people (extension)
Kinshasa-Gombe: Diocese of Buta Passenger House
720. Kinshasa-Gombe: Diocese of the House of the Passenger of Kananga
721. Kinshasa-Gombe: Workshop for disabled people
722. Kinshasa-Kingansani: Dispensary (additional extension)
723. Kinshasa-Kintambo: Saint Albert Church
724. Kinshasa-Lemba: Party and meeting rooms
725. Kinshasa-Limete: Administration of the pastoral center
726. Kinshasa-Limete: Saint Joseph Hospital (adjustment)
727. Kinshasa-Livulu: Church of the birth
728. Kinshasa-Matonge: Social Center
729. Kinshasa-Ngaliema: Church of Saint Leonard
730. Kinshasa-Nsele: Caged Monkey Zoo
731. Kinshasa-Selembao: Medical Center
732. Kinshasa-Selembao: Convent of the Sisters
733. Kipushi: residence and procession of the bishop
734. Kisantu: Sisters' monastery and novitiate
735. Koleango: Sisters' monastery
736. Lukula: provincial refuge for students
737. Mayidi: Regional Major Seminary (extension)
738. Mbujimayi: social housing center



739. Molegbe: Bishop's residence
740. Pweto: Minor Seminary
741. Tshikapa: Presbytery
742. Tumikia: Presbytery
743. Banda: Teacher's house
744. Banda: Sisters' monastery
745. Boma: Mama Wa Luzingu
746. Bunia: Scholasticate for the diocesan brothers' congregations
747. Bunkonde: Medical Center
748. Buta: Sisters' Monastery
749. Goma: Minor Seminary
750. Idiofa: popular cafeteria
Center for popular development
751. Inongo: Agricultural technical school (project)
752. Kamayi: Presbytery
753. Kananga: Centre d'accueil Scheutisten (extension)
754. Kananga-Katoka: Twelve cottages for the homeless
755. Kimpangu: Hospital for office medical service
756. Kinshasa: Second visit of the pope
757. Kinshasa-Gombe: Workshop on solar energy diffusion
758. Kinshasa-Kikimi: Monastery of Sisters
759. Kinshasa-Kimwenza: The Lazarist scholasticate
760. Kinshasa-Kingabwa: Hospital (extension)
761. Kinshasa-Kinkole: Sisters' house
762. Kinshasa-Kintambo: Brothers of the Christian Schools Novitiate (extension)
763. Kinshasa-Kintambo: Chapel of the Theresianum
764. Kinshasa-Limete: Diocese of Lisala (extension)
765. Kinshasa-Masina: Church of Saint Francis Xavier
766. Kinshasa-Ngaliema: Church of Saint Albert
767. Kinshasa-Nsele: Superimposed Diocese of Tshumbe
768. Kinshasa-Salongo: Church of the Resurrection
769. Kisangani: Monastery of the Sisters
770. Kisantu: Hospital operating room (extension)
771. Koshibanda: Hospital
772. Lusambo: parish church
773. Malole: Major Seminary (extension)
774. Masimanimba: St. Paul's Church
775. Mbanza-Ngungu: Place of prayer
776. Mbanza-Ngungu: Medical center
777. Tshumbe: Health center
778. Tshumbe: Pastoral Center
779. Yaga-Bongo: Maternity ward
- 1986-1991**
781. Budjala: agricultural school with boarding school
782. Bukama: St. Peter's Church
783. Kinshasa-Kintambo: Theresianum training center
784. Kinshasa-Limete: Faculty of Theology (extension)
785. Kinshasa-Limete: Saint Joseph Hospital (extension)
786. Kinshasa-Limete: Maternity ward at St Joseph's Hospital
787. Kinshasa-Limete: Saint-Raphael Church [70]
788. Kinshasa-Makala: Church of Saint Clara
789. Kinshasa-Maluku State: Presbytery (extension)
790. Kinshasa-Masina: Presbytery
791. Kinshasa-Matete: Saint Magdalene Church (extension)
792. Kinshasa-Mikondo: Monastery of the Picpus
793. Kinshasa-Mikondo: Picpus Scholasticate
794. Kinshasa-Mont Gafula: Sisters of the novitiate of Saint Vincent
795. Kinshasa-Nsele: District Chapel
796. Kinshasa-Ozone: Vicariate of Saint Cyprien
797. Kisantu: Home for foreigners in hospitals
798. Lodja: spirituality center
799. Loto: minor seminary
800. Malole: residence of the bishop
801. Mbandaka: office of the diocese of Mbandaka



802. Mbanza-Lemba: Sinte-Bernadette church
803. Mosango: Oblate monastery
804. Ngondi: Missionary Monasteries of Steyl (extension)
805. Tshumbe: Broederhuis Passionisten
806. Tshumbe: Hospital (extension)
807. Bononzi: Hospital (extension)
808. Kananga: Benamu-Tabuli Women's Center
809. Baranga: Christ the King Church (extension,
810. orphanage
811. Kananga-Katoka: reception center for people with heart problems psc
812. Kikwit : Monastery of Saint Joseph
813. Kinshasa-kimbansoke: Saint-kaggwa presbytery
814. Kinshasa-Kimwenza: Monastery Missiona Bel-air
815. Kinshasa-Kingabwa: Saint-Kizito Church
816. Kinshasa-kingasani: Saint Boniface Church
817. Kinshasa-Limete: Saint Joseph Hospital
818. Kinshasa-Lukunga: Saint Gyavira Church
819. Kinshasa-Masina: center for disabled people
820. Kinshasa-Mokali: Saint Athanaas church
821. Kinshasa-Mont Ngafula: Opnecertrum student
822. Kinshasa-Ngaba: Saint Adrian Church
823. Lisala: inter-diocesan novitiate for Sisters
824. Livulu: Retention School
825. Lodja: Institute of propaedeutics
826. Lubumbashi: Spirituality Center
827. Masamuna: Scholasticate for sister congregation
828. Menkau: Village Church
829. Mosanga: parish church
830. Popokabaka: Spirituality Center
831. Kinshasa Selembao: Juniorate
832. Wamba: memorial chapel
780. Bokungu: Lycée Bokela
781. Bukavu: Scolasticat Carmélite
782. Bunia: Maison des anciens Présidents
783. Butembo: Centre médical
784. Gbadolite: Maison des Jésuites (extension)
785. Idiofa : extension du Centre pour le développement du peuple
786. Idiofa : Centre de développement petites cultures de fermes modèles
787. Idiofa : Centre de formation Ntolo-Nzingo
788. Inongo: Centre d'accueil
789. Inongo: Maison de retraite
790. Inongo: Centre de formation pour formateurs
791. Kananga: Monastère des Sœurs du Christ Roi
792. Kananga: Garderie pour orphelins
793. Kananga-Katoka: Centre de formation Mama Cato
794. Kasongolunda: Centre de formation
795. Kikwit : Résidence de l'évêque
796. Kimbuka: Centre d'action sociale
797. Kindu : Internat du Lycée
798. Kindu : Sanctuaire marial
799. Kinshasa-KasaVubu: Garderie pour enfants des rues
800. Kinshasa-Kimbansoke: Église Saint-Frédéric
801. Kinshasa-Kimwenza: Hôpital des religieux
802. Kinshasa-Kimwenza: Institut Canisius II, théologie
803. Kinshasa-Kimwenza: Jardin d'enfants
804. Kinshasa-Kimwenza: Le scolasticat Notre-Dame
805. Kinshasa-Kingabwa: Ecole primaire
806. Kinshasa-Kingabwa: Usine de lait de soja Sojapro
807. Kinshasa-Kingasani: Presbytère (extension)
808. Kinshasa-Kintambo: théologie oblate
809. Kinshasa-Kisenzo: Eglise Saint-Félicité
810. Kinshasa-Kisenzo: Salle paroissiale Saint-Félicité
811. Kinshasa-Limete : Bureau de coordination Scheut



812. Kinshasa-Limete : Maison des passagers pour les Sœurs Usama
813. Kinshasa-Limete : Vicariat Saint-Raphaël
814. Kinshasa-Masina : Vicariat Saint Kibuka
815. Kinshasa-Mont Gafula: Confrères Conboniens
816. Kinshasa-Mpumbu: Centre de soins médicaux
817. Kinshasa-N'Djili: Maison des enseignants jésuites (extension)
818. Kinshasa-Ngaliema : Centre d'accueil de Bondeko
819. Kisantu: hôpital (rénovation)
820. Kisantu: jardin d'enfants
821. Kisantu: Lyceum Nfuki
822. Kasangulu: centre spirituel
823. Kikwit : Centre pour personnes handicapées
824. Kikwit : Institut de formation technique
825. Kikwit : Sœurs monastiques salésiennes
826. Kikwit : Saint-Pierre
827. Kikwit : centre social et d'alphabétisation
828. Kikwit : Abbaye de trappistes
829. Kilembe : Hôpital
830. Kimpoko: chapelle du village
831. Kinshasa: Siège Education à la vie
832. Kinshasa : Cathédrale-Notredame : cave funéraire du cardinal Malula
833. Kinshasa-Gombe : Institut pédagogique supérieur, Foyer pour étudiants défavorisés
834. Kinshasa-Gombe : Centre paroissial
835. Kinshasa-Kingabwa: Menuiserie pour défavorisés
836. Kinshasa-Kinshasa: Centre social "Education à la vie"
837. Kinshasa-Lac de ma Vallée : Centre de conférence et restaurant
838. Kinshasa-Lemba: Monastère Combonien
839. Kinshasa-Lemba: Eglise Saint-Bernard
840. Kinshasa-Maluku: Salles de réunion
841. Kinshasa-Masina: centre Damian
842. Kinshasa-Mikondo: Presbytère
843. Kinshasa-Mikondo: Centre social
844. Kinshasa-Mokali: Centre hospitalier
845. Kinshasa-Mombebe: Église paroissiale
846. Kinshasa-Mont Ngafula: Scholasticat RSV
847. Kinshasa-Mont Ngafula: Église Saint-Norbert
848. Kinshasa-Mont Ngafula: Monastère de Sœurs
849. Kinshasa-Mont Ngafula: Nouvelle planification des Facultés Catholiques de Kinshasa
850. Kinshasa-Mpumbu: Vicariat
851. Kinshasa-Ngaliema: Eglise Sainte-Lucie
852. Kinshasa-Yolo: Eglise Auxiliaire
853. Kisantu: Centre de développement pastoral
854. Kisantu: Institut Kubakama
855. Kongolo: Services de bureau et d'accueil Lisala: Résidence générale
856. Lodja: Grand séminaire
857. Lolo: Centre Bondeko
858. Lubumbashi: Hôpital Don Bosco
859. Malole: Maison de retraite
860. Mikalayi: centre médical (extension)
861. Nyangesi: église paroissiale
862. Tshilundu: Institut technique
863. Bokungu: Minor Seminary
864. Bokungu: Institute of propaedeutics
865. Bumba: Lolo Residential Center
866. Idiofa: Sisters of the Holy Family Monastery (extension)
867. Idiofa: Holy Family Reception Center
868. Ifwanzondo: Oblate Novitiate (extension)
869. Ikela: monastery novitiate
870. Ikela: Scholastic Missionaries of the Sacred Heart
871. Inkisi: Social Center
872. Kananga: Credo Abbey
873. Kikwit: Diocesan Medical Office



874. Kikwit: pastoral center (extension)
875. Kikwit: home for IFAC trainees
876. Kinshasa-Binza: Church of the Martyrs of Uganda
877. Kinshasa-Kalamu: coordination office
878. Kinshasa-Kalamu: private school
879. Kinshasa-Kikimi: Church of the Salvation Army
880. Kinshasa-Kimpoko: Village chapel
881. Kinshasa-Kimwenza: Chapel of the Lazarist monastery
882. Kinshasa-Kimwenza: The Kapucian scholasticate
883. Kinshasa-Kingabwa: Presbytery
884. Kinshasa-Kintambo: Novitiate Sisters
885. Kinshasa-Kintambo: Redemptorist student residence
886. Kinshasa-Kisenso: Offices and reception service
887. Kinshasa-Kisenso: Novice Sisters of the Immaculate Conception
888. Kinshasa-Kisenso: Center for the formation of students
889. Kinshasa-Lemba: Sales center and carpentry Norbertine
890. Kinshasa-Limete: Sisters of the house of the passenger of Isangi
891. Kinshasa-Makala: Lazarist Scholasticate
892. Kinshasa-Maluku: Parish hall
893. Kinshasa-Mankanza: Formation Center
894. Kinshasa-Masina: Monastery of the Sisters of the Sacred Heart
895. Kinshasa-Masina: Church of the Immaculate Conception
896. Kinshasa-Mbudi: Youth Center
897. Kinshasa-Mikondo: Social Center
898. Kinshasa-Mont Ngafula: Monastery of the Paters
899. Kinshasa-Mont Ngafula: Assumptionist Scholasticate
900. Kinshasa-Mont Ngafula: Meeting rooms
901. Kinshasa-Mpumbu: Animation center
902. Kinshasa-Mpumbu: Student residence of the RSV monastery
903. Kinshasa-Ndjili: Center for missionary service
904. Kinshasa-Ndjili: Center for women
905. Kinshasa-Ndjili: Monastery of Sisters
906. Kinshasa-Ngaliema: Presbytery
907. Kisangani: Saint Paul's Church
908. Kisantu: Mother Theresa Charity Relief Center
909. Mambasa Technical School
910. Mbanza-Ngungu: Novicat du Rédempteur
911. Mbanza-Ngungu: Residence for students
912. Nsanda-Yasa: Village chapel
913. Bandudu: Kivulu Institute
914. Bunia: Novitiate for diocesan sister congregation
915. Drodo: School of Nursing
916. Ikela: Teacher's house
917. Kabinda: School of Nursing
918. Kalemia: diocesan pharmacy
919. Kananga-Apolo: parish church
920. Kankala: Youth house
921. Katende: Chapel of the monastery
922. Kinkole: Center for reflection
923. Kinshasa: Reception center for single mothers
924. Kinshasa-Bandalungwa: Saint-Charles-Loanga parish hall
925. Kinshasa-Gombe: spiritual center
926. Kinshasa-Kalamu: Shelter for street children
927. Kinshasa-KasaVubu: Christ the King Church (extension)
928. Kinshasa-Kinkole: Slaughterhouse for pigs
929. Kinshasa-Kintambo: Novitiate of the Sisters
930. Kinshasa-Lemba: Our Lady of Africa
931. Kinshasa-Lemba: Sisters of Charity, passengers' houses
932. Kinshasa-Lemba: Saint Benoît parish hall
933. Kole: cathedral
934. Mambasa: technical school



List of Paul Dequeker's projects in Africa

Angola

- 935. Luanda: Church of Our Lady (1966)
- 936. Malange : Parish church of the Sacred Heart of Jesus (1966)

Burundi

- 937. Bujumbura: Minor Seminary 1959:
- 938. Bujumbura: Formation Center 1976:
- 939. Bujumbura: Saint Spirit High School 1980:
- 940. 1983: Bujumbura: Center for retreats.
- 941. : Bujumbura: H. Spirit lyceum, H. Heart Chapel 2003

Congo-Brazzaville

- 942. Grand Seminary (1972)

Cameroun

- 943. Evodoula : prish church (1969)
- 944. Okola : Promotion center for women (1968)
- 945. Okola: Parochial center, parish-church (1968)

- 946. Ngoya: Center for evangelical research (1974)
- 947. Ngoya: Cultural center (1976)
- 948. Nkondongo: Parochial center (1976)
- 949. Yaoundé-Nkondongo: Meeting hall (1989)
- 950. Yaoundé:Multimedia center (1996)
- 951. Yaoundé:Scheut Provincialate (1999)
- 952. Nkol Bikon:Christ-King Church (2000)

Rwanda

- 953. Butare: Dominican monastery (1968)
- 954. Nyundo: Art School (1976)
- 955. Kigali-Kimironko: neighborhood chapel (2003)

Senegal

- 956. Dakar-Pikine: parish church (1979)
- 957. Diamagueune: parish church (1979)
- 958. Palmarin: Church of Our Lady (1979)
- 959. : Sebikotane: Grand Seminary (1979)



P R E F A C E

C'est avec plaisir que nous encourageons la publication du livre "Eglises Tropicales" du Frère Paul Dequaker. Le nombre des églises réalisées par celui qui mérita plus que tout autre le titre d'architecte de l'Eglise du Zaïre est vraiment impressionnant. On admirera la complaisance avec laquelle il a cherché à répondre à l'aspiration de notre peuple qui veut rencontrer son Seigneur dans des lieux de culte bien adaptés au rassemblement des foules croyantes.

Le Concile Vatican II avait décrété que "dans la construction des édifices sacrés, on veille soigneusement à ce que ceux-ci se prêtent à l'accomplissement des actions liturgiques et favorisent la participation active des fidèles" (Constitution sur la Liturgie, 128). Le Frère Dequaker a vraiment répondu à cette décision. Il a prouvé avec beaucoup de créativité un art de construire qui constitue de façon digne et belle à l'égard du rite selon le génie de notre époque et de nos peuples.

Nous remercions et félicitons le réalisateur de tous ces édifices. Et nous espérons que le chemin étant ainsi ouvert, une multitude abondante d'œuvres d'art mènera dans notre Eglise. Que beaucoup s'inspirent leur voie à cet admirable concert pour le louange de Dieu dont le Frère Dequaker a donné les premiers accords.



Kinshasa, le 31 mars 1984
Cardinal Malba
Archevêque de Kinshasa

Pour des multiples raisons, on trouve des spécialistes et des profanes qui se déclarent satisfaits ou bien en désaccord avec un style moderne d'églises inspirées depuis un quart de siècle en Afrique Centrale et au-delà. Une évidence cependant s'impose : ce style désigné "style Dequaker" existe et continue à faire son chemin. Le concept théorique des églises appartenant à ce style — nous ne traitons ici que des défis culturels — les matériaux utilisés, l'articulation aux conditions ambiantes et les principes de fonctionnement intérieur lui confèrent une identité plastique nettement définie. Les valeurs architecturales qu'il traduit témoignent de son autonomie vis-à-vis de l'inspiration paléo-chrétienne et néo-romane des églises des premières missions. On trouve par exemple des solutions plus répétées et souvent locales, dont la facture est, soit hésitante ou transitoire, soit en accord tacite ou déclaré avec certains éléments déterminants de ce style d'une constante unité dans la variété et la fécondité de ses formes.

Ce style relève de l'architecture nouvelle tout en rentabilisant au maximum les possibilités offertes par les outils, les matériaux et les techniques accessibles. C'est une recherche destinée à répondre aux besoins et aspirations tant vitaux et psychologiques que spirituels. Ces besoins et aspirations sont ceux d'un peuple qui a sa vision du monde et de sa tradition. Il s'agit d'un peuple en cheminement et qui se situe au carrefour d'une histoire mondiale, où l'Africanité traditionnelle fait sérieux en droit et en fait, les acquisitions technoscientifiques de l'humanité et les valeurs universelles du Message salvifique de Jésus-Christ.

Les œuvres que ce style vient introduire dans l'espace organique du monde africain du XXe siècle sont des miroirs imaginés et réalisés en fonction de la perception et de l'usage de l'homme africain de ce temps. Mais elles sont "cristallinement" l'œuvre d'un non-Africain, le Frère Paul Dequaker, architecte de nationalité belge, membre de la Congrégation des Missionnaires de Saint-Esprit, depuis 1950, est au service de l'Épiscopat du Zaïre. Ceci fait tout de suite venir à l'esprit de certains la question de savoir s'il est possible de concevoir par substitution une manière valable de se rapporter au monde en vie l'ougaïster. Cela revient à se demander si les critères architecturaux pour Africains — les édifices culturels en l'occurrence — peuvent être engendrés par un non-Africain et satisfaire pleinement les attentes intimes de l'âme des des habitants. En d'autres termes, une architecture africaine existe-t-elle ou non des architectes qui soient Africains ?

À la question posée, l'architecte Dequaker donne une réponse pratique dans les prémisses théoriques se nouant aux fondements même de l'ethnicité et de l'universalité de la culture humaine. Nous tentons ici d'en rendre compte par nos considérations sur les églises tropicales qu'il a conçues et qui ont été construites pendant les vingt-cinq dernières années. Pour ce faire, nous commencerons par donner le profil biographique de Frère Dequaker. En second lieu, nous exposerons les principes conceptuels et techniques de ses ouvrages culturels tropicaux. En troisième lieu, nous si- tuerons son projet théorique face à l'architecture moderne et à la manière typiquement africaine d'envisager un édifice sacré. Enfin, nous évaluerons son apport définitif à l'histoire du bâtiment religieux sous les tropiques.

Paul Dequaker est né à Roulers, ville ouest-flamande en Belgique, le 15 janvier 1930. Il fait ses humanités modernes au St. Pieters Collège à Leuven et y obtient le diplôme d'humanités complètes en 1948. Il entre les études d'architecture au Hoger Instituut St. Lucas de Gent où il est diplômé architecte en 1954. A l'issue d'une spécialisation post-universitaire à Londres en Grande Bretagne à l'Architectural Associa-



tion School of Architecture, Tropical Department, il obtient, en 1957 son certificat d'architecte tropical. Il achève sa formation par un diplôme en Sciences Africaines à la Katholieke Universiteit de Leuven en 1958. Membre de la Congrégation des Missionnaires de Scheut depuis 1955, le frère Paul Dequeker est affecté depuis août 1958 comme architecte au service de l'Évêché de Zaïre.

Il est l'auteur de plusieurs publications et articles comme :

- "Architecture Scolaire au Pays Tropicaux", dans *Revue Africaine de Pédiologie*, Juillet - Septembre 1959.
- "Le sanctuaire et l'instruction de la Constitution sur la liturgie", dans *Orientalis Occidentalis*, septembre-octobre 1965.
- "Le tabernacle au terme de la création eucharistique", dans *Orientalis Occidentalis*, mars-avril 1966.
- "La profession d'architecte au Congo", dans *Édificatio Moderna*, n° 89-90, 1966.
- *Guide Pratique pour le calcul des prix unitaires pour travaux de bâtiment*, Ed. CEP, Kinshasa 1974.
- "A Bioclimatic Approach to Tropical Architecture", dans *World Hospitals, International Hospital Federation 1975*.
- *Puncta Vocata in Mapponeis*, Ed. Acta, Luven 1978.
- Le Frère Dequeker a pris part et est intervenu à plusieurs congrès internationaux et nationaux en ce qui concerne :
- l'U.I.A. Séminaire "Les architectes de l'Afrique Inter-tropicale", Lumé, Topo, mars 1974.
- l'International Public Health Seminar, Nairobi, Kenya, novembre 1974.
- "Health Facility Planning and Design in the Developing Countries", New York, décembre 1975.
- U.I.A. Séminaire "Integration of Educational and Community Facilities", Athènes, octobre 1976.
- "Baum für die Dritte Welt", Frankfurt, novembre 1977.
- U.I.A. - U.I.E.S. "Espaces Educatifs", Dakar, mars 1978.
- Conférences sur "Bioclimatic treatment and architecture in Central Africa" et "Dispersing economic architectural solutions in sympathy with the climatological environment of Zaïre", University of Nairobi, Kenya, avril 1980.

Au niveau de Zaïre :

- O.P.E.Z. "Séminaire pour entrepreneurs de construction", Kivu, 1977/78
- À partir de 1978 chargé de la coordination sur "Architecture Tropicale" à l'Institut du Bâtiment et des Travaux Publics, Section Architecture de l'Université Nationale de Zaïre.

Il est correspondant scientifique de :

- "Building Research Station", Warford, England.
- Centre Scientifique et Technique de la Construction", Bruxelles
- ATOTI et IFC - KILL, Louvain, Belgique.

Il a écrit de nombreuses réalisations et ouvrages :

Au Zaïre :

- nombreux bâtiments scolaires pour l'enseignement primaire, secondaire, technique et universitaire; centres de formation sociale et agricole;
- constructions hospitalières rurales et urbaines; dispensaires, centres de santé et maternités;
- centres de rééducation pour handicapés physiques;
- centre de radio et de télévision;
- nombreux édifices religieux : cathédrales, églises, chapelles, séminaires, couvents, et

séminaires, scolaires et noviciats;

- immeubles d'habitation, quantités de maisons d'habitation;
- usines de soya, meuneries, rizeries, fermes agricoles;
- ports maritimes et châteaux d'eau.

En dehors du Zaïre :

- quelques ouvrages en Belgique, Haïti, Congo, Angola, Cameroun, Nigeria, Topo, Sénégal, Burundi et Rwanda.

Les constructions tropicales de notre architecte s'appuient notamment sur des principes de base qui visent à satisfaire quatre exigences fondamentales :

1. l'exigence bioclimatique,
2. l'exigence des matériaux et techniques,
3. l'exigence des facteurs économiques,
4. l'exigence des fonctions socio-culturelles.

Les édifices religieux qu'il conçoit, tout en se préoccupant de la fonction culturelle, ont l'intention de concilier la sécurité et le confort avec les qualités plastiques.

Ainsi, au Zaïre où sont implantées dans leur grande majorité les églises que nous considérons ici, il est possible de réaliser un schéma bioclimatique de construction qui combine en un seul diagramme les exigences bioclimatiques d'un lieu déterminé pour toutes les heures et mois de l'année. Continuons dans ce domaine des recherches faites par l'architecte Victor Olgyay de l'Université de Princeton aux États-Unis; il a su imaginer et vérifier des solutions qui satisfont aux conditions climatiques de ventilation et de radiation pour pouvoir permettre à l'usage d'un local de se protéger contre les excès du climat et profiter au maximum des éléments naturels de confort.

Les matériaux traditionnels en usage des avantages évidents qu'ils présentent dans le contexte du passé en permettant d'équilibrer les températures inférieures et extrêmes, posent par ailleurs de sérieux problèmes de priorité. La solution ne les remplacent pas de l'achèvement de sécheresses rocheuses pour se procurer des matériaux modernes à une source à la portée des gens et les affecter en un tirage le meilleur parti possible. Il en va de même des techniques de construction qui demandent d'être adaptées pour correspondre aux possibilités, avantages et besoins locaux de l'économie.

Les facteurs économiques ont leur impact sur la capacité réelle des populations, tant pour les infrastructures que pour atteindre leurs propres constructions modernes, contrairement à l'architecte à faire preuve de réalisme et de mesure.

Enfin l'homme appelé à faire usage du bâtiment se trouve en rapport direct avec la société et l'environnement dans un environnement avec lequel il doit s'harmoniser. Il ne peut se contenter de construire à l'aveugle sans tenir compte de la capacité de la population et de son comportement. Il faut donc concevoir des bâtiments qui soient adaptés à l'usage du lieu de la culture. Partant de ces considérations, l'architecte Dequeker tient grand compte de la proximité de l'équateur et des conséquences majeures qui en découlent. Le soleil se tient haut dans le firmament pendant la journée. L'air naturel est chaud et humide. Il y a peu de vent. Dans la journée le degré de chaleur et l'humidité est fort élevé. Sur les hauteurs planes, le climat est plus tempéré. En saison sèche par contre il fait froid le matin et la nuit. Face à un local, les rayons du lever et surtout du coucher du soleil sont les plus ennuyeux. Les pluies et les orages provoquent constamment de l'eau.

Le choix très limité des matériaux locaux en liaison avec qui sont aptes à résoudre la quasi totalité des problèmes soulevés : la pierre naturelle, les blocs en ciment, le

béton armé pour poutres et linteaux, le bon bois pour la charpenterie, portes et fenêtres, les plaques ondulées alvéolaires ou galvanisées pour la couverture. A cette liste il faut ajouter les briques cuites dont la technique de fabrication exigeant une grande quantité de bois de chauffage décourage l'emploi généralisé. Dans les zones volcaniques à Gombe au Kivu par exemple, la lave de volcan durcie a donné un matériau de qualité pour les constructions durables. Ces recherches réduisent à très peu les éléments à importer pour achever et entretenir les bâtiments.

En outre, sur le plan technique, l'exécution des travaux est conçue de manière à ne nécessiter que peu ou pas du tout de main-d'œuvre spécialisée, et d'ouvriers spécialisés. C'est ainsi qu'on peut élever avec la balle et grandes églises St Augustin de Lemba à Kinshasa et tout d'autres semblables ainsi que construites sans le recours à un équipement mécanique, sans crues, mais avec une simple besace et de bons échafaudages métalliques ou souvent en bois, sous la supervision d'un frère constructeur. Basé sur ces principes, l'édifice religieux tropical de l'architecte Dequeker respecte la zone géographique de son implantation et s'y soumet en veillant à l'ombrière par sa forme. On sait facilement le reconnaître et y accéder. Il suit le paysage et ne le démolit pas.

Les fondations sont essentiellement en pierres naturelles.

Les murs sont élevés au moyen de blocs en ciment ou bien en briques cuites. Les murs est et ouest qui sont inévitablement exposés au soleil, restent aveugles. Le vent quant à lui est facilement dévié pour pénétrer transversalement de préférence, à travers les ouvertures pratiquées dans les murs nord et sud.

L'isolation thermique des murs pignons est assurée par son épaisseur et la capacité thermique de la maçonnerie.

L'isolation thermique de la couverture est assurée, quand c'est financièrement possible, grâce à un sous-plafond.

L'ombrière des murs à fenêtres est assurée par un générateur avancé latéral du toit.

En zone rurale, le charpente est couramment en bois, tandis qu'elle est métallique ou en béton armé en zone urbaine. Le sous-plafond est prévu inévitablement dans quatre-vingt-cinq pour cent des églises. Là où il y en a, il est en triple, absent-ciment, ou moins souvent en plaques de fibres comprimées, en dernière étant fort onéreuse à l'atteinte des termes. La toiture est couverte en blocs galvanisés, ou parfois en plaques ondulées en absent-ciment surtout en zone urbaine.

Le pavement en ciment lissé d'avant intéressant et propre. Les briques et blocs reconstituent les murs ou le cloisonnement syrien à l'extérieur surtout, produisant un effet décoratif appréciable. L'usage fluide de cloisons à pente inclinée présente également des avantages fonctionnels et esthétiques surprenants. En effet, les larges fenêtres ainsi réalisées fournissent une ventilation transparente, permanente, idéale et confortable dans un local où la température ambiante est naturellement en raison de l'air chaud et humide, ainsi que de la faible température de l'air. Ensuite, l'éclairage illumine à l'intérieur de l'église, surtout abondamment, se trouve fortement adouci : la lumière, en effet, pénètre obliquement de haut en haut, et sature remarquablement les retraits du plafond et du contenu mobilier de l'église. Enfin, ces larges espaces architecturaux formés dans les bas-reliefs des murs ajoutent fonctionnellement à peu de choses près comme de véritables vitraux de cathédrale. La variété égale des tonalités des cloisons et des intervalles entre les panneaux formés par ces derniers, ainsi que l'éclairage généralement atténué, procurent à leur ensemble une tension perceptuelle qui anime en douceur l'atmosphère intérieure et la sacréité.

Les églises du Frère Dequeker forment en plein terrain des figures géométriques variées, simples ou combinées, allant du polygone à la circulaire parfaite. A titre d'exemples : l'église de Christ-Roi (Kinshasa 1961) est en forme de croix à bras trapézoïdaux, le plan de la Cathédrale de Bukuru (Equateur 1972) est en forme de croix en T, le toit de St. Laurent (Kinshasa 1961) est constitué par un rectangle en largeur surmonté par un autre rectangle en hauteur flanqué sur le côté droit de l'abside de l'église, et coiffé par un troisième et petit rectangle longitudinal relevé aux dépendances de l'église. Les premières églises St. Antoine (Kinshasa 1962) à une seule nef et un chœur ont une coupe associée d'un rectangle sur lequel s'élevait le campanile. St. Luc (Kinshasa 1963) et l'église de Toukamba (Archidiocèse de Kananga 1968) sont de forme hexagonale. Une autre figure de plan, c'est la pyramide à gradins sur les deux côtés latéraux St. Gabriel, Kinshasa 1965 et St. Trinité à Muanda 1983 ou sur un seul côté (Christ Roi) St. Augustin, 1977, et la seconde église St. Antoine 1983, toutes à Kinshasa. C'est également la pyramide hexagonale à base et sommet rectangulaires (Cathédrale à Gombe) à Atakwari au Topo (1969), St. Romuald (Kinshasa 1969), St. Paul (Kinshasa 1969) et l'église de Tomboko au Cameroun (1968) ont un plan carré. La Cathédrale de Gorra au Kivu (1976) est triangulaire et celle de Luiza au Kivu (1980) est érigée sur un secteur circulaire. L'implantation de l'autel dans le chœur comme lieu focal de l'action liturgique, est toujours bien situé en vue de la nef et des bancs y convenant. La capacité d'accueil de l'une des plus belles des églises, la Cathédrale de Gorra, est de 2.000 places.

Les murs construits sur les plans en lignes brisées ou rectilignes sont verticaux. Ils portent dans la grande majorité des cas une toiture à pente unique ou double, souvent prolongée d'une avancée par laquelle la lumière pénètre obliquement dans l'église (Cathédrale Notre-Dame de Baudela 1977, l'église de Okala au Cameroun 1968, etc.). Le mur de l'église St. Antoine (Kinshasa 1962) est circulaire; le toit est un dôme coiffé d'une calotte transdiscale par laquelle la lumière jaillit en faisceau et avande d'un haut l'église. L'espace intérieur est oblong et simple, il s'ouvre avec bonheur un mobilier et une décoration sobres ainsi que l'exploitation du motif boucle. Là où, comme dans la chapelle de Centre Nigeria, la communication avec l'extérieur est permise grâce à un mur-fort dominant sur la nef, c'est tout l'environnement qui semble participer à l'action qui se déroule à l'intérieur.

À quelle architecture appartiennent les églises de l'architecte Dequeker ? Il ne s'en cache pas lui-même, mais affirme au contraire qu'elles sont de la conception moderne. Et de nous indiquer les architectes et églises modernes dont il s'est inspiré ainsi que ceux qui l'ont le plus marqué :

En Belgique : René Bastin : Église de Heer-Abjunct, 1902
Marc de Saverge : Chapelle St. André, Loppin, 1903
Jean Coes : Église St. Paul, Waterloo, 1866

En Allemagne : Egon Eiermann : Église de Pforzheim, 1963
Rudolf Schwarz : Église Ste. Anna, Düren, 1949

En Suisse : Emil Steffan : Église Maria in den Benden, Dinseldorf 1968
Ernst Dählinger : St. Paul Dinseldorf, 1964
Ernest Gisel : Église d'Effretikon, 1961

En France : Le Coustou : Notre-Dame de Ronchamp, 1954

En Finlande : K. A. Siren : Chapelle d'Uusimäki, 1966
Aivar Kallio : Église d'Imatra, 1958.



La source d'inspiration moderne occidentale étant établie, bien ne voudrait ignorer le nécessité de l'apport typiquement africain à ses créations en Afrique tropicale. De quelcun préférence voir en face le problème de l'actualisation des formes architecturales traditionnelles dans cette Afrique en mutation. Il s'écrit qu'il ne faut ni tomber dans le passéisme, ni céder à la tentation d'adopter inconsidérément les notions importées, mais répondre aux exigences spécifiques des populations locales à la modernité. Et selon lui, ces populations vivent dans l'impulsion de constructions de style moderne un symbole et un accueil de modernité et de progrès. Il situe l'équilibre judicieux dans la recherche de la promotion du matériel local à exploiter sur la base d'idées nouvelles, attentives à la sensibilité et mentalité des usagers et aux exigences postiques.

Voici une occasion intéressante où le Frère architecte a eu à faire le point sur sa vision des choses autour de la symbiose à réaliser entre la conception architecturale traditionnelle et celle moderne. Révélons dans sa lettre du 10 novembre 1983 à l'architecte Prof. Dr. J.F. Thiel (Zoothrop Institut, Sankt Augustin, Allemagne Féd.) qui aurait souhaité voir en Afrique une architecture plus "à la manière typiquement africaine", le Frère architecte (suyez ainsi) :

" Comme anthropologue vous cherchez des idées 'de ein bisschen afrikanisch bzw. afrikanisch modern'. Mais cette manière africaine de concevoir est en fait de changer quelque chose des matériaux employés, du style et de donner une autre technique, une nouvelle technique et pas nécessairement traditionnelle africaine. Puis les formes dérivent le plus souvent des techniques employées.

Toutefois il des formes architecturales purement africaines qui n'ont pas été employées ailleurs, en Asie, en Australie, en Polynésie ? Inhérentement, l'architecture africaine, en se développant en fonction de l'homme africain, cherche l'image que le monde occidental s'est formé sur son caractère africain.

Mais sera-t-elle pour cela moins africaine ? Quant à l'architecture en elle-même, dans la population africaine, où elle vient comme du ciel et où elle se matérialise avec les matériaux disponibles sur place, elle sera moderne, donc africaine en Afrique, asiatique en Asie, etc. Différentes autres cultures les hommes et les circonstances seront autres. Qui elle puis se sentir la seule à l'apogée du cœur artistique des auteurs et du goût de plaisir tout entier.

L'architecture africaine n'a pas de grands monuments historiques mais possède dans son architecture domestique un patrimoine culturel riche, dans un sens plus vaste s'inspire, sans le copier, les architectes africains modernes.

Les églises tropicales de l'architecte Dequeker s'inscrivent parfaitement dans le cadre de renouveau moderne de l'architecture et du langage plastique en général. Il s'agit d'un renouveau qui renvoie à la fin du XIXe siècle, au moment où est abolie la dictature du langage plasticien de la civilisation artistique grecoromaine dans ses arts, les renouveaux s'ouvrent à la Renaissance et après. Pendant la période qui précède, les renouveaux s'ouvrent aux sources préhistoriques, à celles grecoromaines, à celles arabes, à celles extra-européennes, en particulier aux arts traditionnels d'Afrique et d'Océanie, à l'art précolombien.

Or dans les cas de l'architecture des sources extra-européennes, on se trouve bien devant deux données essentielles à distinguer : la matière, c'est-à-dire les matériaux et l'espace dans le cadre d'une vision du monde. A travers cette dernière dimension l'esprit et se transmet, grâce à l'œuvre artistique, le dialogue et le message de l'homme et de son monde.

On doit transmettre la modernité et la précarité sans matérialiser que techniques des constructions africaines traditionnelles en l'occurrence, tout en se penchant vers

attentes sur l'originalité de leurs valeurs formelles et décoratives. C'est là une voie vers la réalisation conjointe des impératifs fonctionnels et des valeurs spirituelles. Par elle, la forme originale pourra traverser le fil du temps et devenir à jamais patrimoine de civilisation. Elle pourra poursuivre son chemin en inspirant d'autres formes qu'y découvriront l'invention et la liberté créatrice.

La forme de l'église tropicale devra émerger dans son originalité sur un fond naturel et unatmosphérique qui l'accueille sans nuire à son dynamisme. L'écologie d'une véritable vieillesse des valeurs locales suppose en ce domaine la prise en considération des caractères originaux des valeurs existantes dans le milieu et pour une bonne part, des souvenirs des préférences de ce milieu. Dans l'air et l'espace on lit à la fois des exemples qui peuvent servir de référence. On ne songe aux cases en coupole qui balayent dans le paysage des contours tels que celles des Haïti, des Féroé ou Zaïre ou encore celles des Saïes en Nigéria au Tchad, etc. Ces cases sont affectées à des usages variés, profanes et sacrés, habitation, conservation des récoltes et attributs cheffaux, greniers, lieux d'initiation, fonctions culturelles. Il existe des structures parfois minuscules, ou des cubes sacrés analogues selon les styles convergences, à redécouvrir et à apprécier pour leur actualisation chrétienne. Ceci dans le souci de ne pas adopter la lettre dans l'ignorance de l'esprit, c'est-à-dire faire des imitations sans lien avec les réalités locales plastiques en présence. Ceci également dans le but de comprendre les raisons et motivations profondes qui porteront les solutions des consultants autorisés appelés à dialoguer avec l'acteur d'un projet original ou d'une oeuvre d'inspiration religieuse.

A ce propos, on connaît des églises construites selon des plans adaptés aux propositions par les populations locales. Ainsi, à Kalo, dans le Hochland (Zaïre), les chrétiens se sont inspirés à l'architecte en exigeant "une église comme celle de Mosala", un pasteur suisse : ils ont adopté l'usage des matériaux locaux et leur forme circulaire. Ceux de la sous-région de Bukamba près d'Idiole (Zaïre) ont proposé un plan rectangulaire en un lieu où l'usage de la pierre est la pierre et du "sacré" des Français qui réalise la fin. L'œuvre de l'architecte Dequeker, le second de la pierre et du "sacré" des Français qui réalise la fin. L'œuvre de l'architecte Dequeker, le second de la pierre et du "sacré" des Français qui réalise la fin. L'œuvre de l'architecte Dequeker, le second de la pierre et du "sacré" des Français qui réalise la fin.

En conclusion, une église, en tant qu'édifice à destination cultuelle, doit remplir, parmi les conditions matérielles, celles d'un fonctionnement commode et heureux, répondre aux besoins matériels et spirituels d'une prière vivante et vraie. Outre le fait de respecter les qualités techniques qui lui procurent la fiabilité nécessaire, elle devra traduire et intégrer une mystique et une spiritualité : celle du monde qui en use. Elle viendra ainsi, à sa manière, répondre à la question "qui elle est, que elle est, que elle est ?" pour ce monde.

Or prior en Afrique tropicale, c'est prioritairement : chanter, être, célébrer et même dans le communautaire, dans le domaine de communion. Tout et tout entier au mystère du sacré qui nourrit la vie personnelle et la transitive. Et dans le cadre du mystère de Saint du Christ, l'église représente l'endroit privilégié de la prière par excellence : le liturgical qui est le sommet et le source de la vie de l'église (Sacro-sacramentum, concilium, n.10). Le liturgical est donc le lieu de l'événement de la fonction sacerdotale de Jésus-Christ, exercée dans lequel la sanctification de l'homme est signifiée par signes sensibles, est réalisée et en même temps à chacun d'eux, et dans lequel le culte public intégral est exercé par le Corps mystique de Jésus-Christ, c'est-à-dire par le Christ

et par ses membres" (Ibid., n.7). Dans le premier cas, comme dans le second la prière vise à ses conditions et ses principes; le lieu de son exercice possède également les mêmes. Mais le croyant chrétien africain aspire à trouver dans "son" église concrète, une demeure adéquate à son corps et son âme religieuse profondément unies à Dieu par le Christ dans l'Église.

L'impressionnisme éminent d'églises tropicales du Frère architecte Dequeker — il compte au total près de 200 édifices de culte — constitue une tentative réussie de réponse concrète à l'aspiration de nombreuses communautés chrétiennes résidant sous les tropiques. Depuis 25 ans déjà, le Frère architecte du Bureau d'Architecture de l'Épiscopat du Zaïre a tendu et est parvenu à associer entre eux les principes de l'architecture moderne qui satisfait aux conditions matérielles, techniques, esthétiques et spirituelles des lieux. Il est, à bon droit, à compter dans nos continents, parmi les dignes artisans de l'art religieux dans la Corée de l'Est. Il est, à bon droit, à compter dans nos continents, parmi les dignes artisans de l'art religieux dans la Corée de l'Est. Il est, à bon droit, à compter dans nos continents, parmi les dignes artisans de l'art religieux dans la Corée de l'Est.

Son ardent souhait de voir les architectes africains modernes s'inspirer du riche héritage de leur architecture domestique pour créer des formes nouvelles dignes de leur destination, est pour nous le vœu d'un vœu sage : il s'agit d'avant mieux indiquer à nos successeurs le sens de la voie à suivre, qu'il la connaît et la parcourt de longue date. Et ce n'est pas par simple hasard qu'il y a une parole à son collègue architecte africain en terminant la lettre citée plus haut.

Dr. MUDHU MALAMBA GIMBO
Professeur à la
Faculté de Théologie Catholique
de Kinshasa

