

A- R O M A N C A T H O L I C P A R I S H C H U R C H
in Bedford, Massachusetts

August 20, 1956

Submitted as partial fulfillment
of the requirements for M. Arch.
by:

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B.Arch., University of Oregon, 1953

to:

Prof. L.B. Anderson
Dept. of Arch. and Planning, MIT

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A ROMAN CATHOLIC PARISH CHURCH
in Bedford, Massachusetts

by
PETER G.A. VAN DIJK

Submitted to the Department of Architecture in partial fulfillment of the requirements for the degree of Master in Architecture.

ABSTRACT

The present day confusion which first led to the nineteenth century imitation of every possible style and has now gone on to create so called modernistic churches, demands that we return to basic principles and rethink the genuine ideas of what a Catholic church building should be. An understanding of the liturgical requirements precedes the elaboration of any design. The tradition and rubrics governing the building and furnishing of Catholic churches have been established to free rather than constrain those who obey them. This thesis is an attempt to design, primarily, a truly delightful church building, but one which respects the discipline of tradition and the liturgy.

Arch. Jan. 2. 1957

Thesis supervisor: Laurence B. Anderson
Title: Head of the Department of Architecture, MIT

August 20, 1956

Pietro Belluschi, Dean
School of Architecture and Planning
Massachusetts Institute of Technology
Cambridge, Massachusetts

Dear Dean Belluschi:

In partial fulfillment of the requirements for the degree, Master in Architecture, I herewith respectfully submit a thesis entitled "A Roman Catholic Parish Church in Bedford, Massachusetts".

Sincerely,

Peter G.A. van Dijk

A C K N O W L E D G M E N T S

For the advice, criticism and encouragement that I have received during the process of this thesis design, I wish to thank

Dean Pietro Belluschi

Professor Lawrence B. Anderson

Miss Celia T. Hubbard
Executive vice president, the Botolph Group,
Boston.

Mrs. Edward M. Pickman
President, the Botolph Group, Boston

Rev. Father McDermott
Pastor of St. Michael's parish, Bedford.

Mr. Joseph J. McGraw
Instructor at the University of Notre Dame
School of Architecture

My wife and the members of my class.

T A B L E O F C O N T E N T S

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T H E P R O G R A M

The subject of this thesis is the design of a Roman Catholic parish church. The Catholic parish church is primarily a Eucharist (wedding, funeral) and a Baptism (penance) church. It should differ in design from a cathedral, an abbey church, a convent chapel, a shrine of a saint, and a pilgrimage church.

This design is a new and larger church for St. Michael's parish in Bedford, Massachusetts. The parish requires a church seating 550 persons. A rectory and parish hall will be needed later. This thesis does not include the design of these buildings other than their consideration in the site development plan. The site of the present church will be used for the purposes of this problem. The property is located along the north side of Great Road (Rt. 4) east of the center of Bedford.

The general principles that should govern the planning of the parish church are derived from the nature of the church as a sacred place, as the shrine of an altar and of a baptismal font, and as the scene of the worship of the community.

A Catholic Church is built primarily to house an altar. This should be the optical and architectural focus of the building. The second focal point is the baptistry. The plan is also affected by the necessity to provide for and encourage the active participation of the worshipers in the Sacred Liturgy. After the altar and baptistry in importance come side altars, the pulpit, confessionals and such non liturgical features as statues, shrines and Stations of the Cross.

The High Altar

The altar is the table on which the Holy Sacrifice of the Mass is offered. A Catholic church cannot exist without an altar. The high altar because of its importance is the focal point of the church, and the attention of the worshipers should be directed to it. A parish church will require at least one side altar in addition to the high altar, but it is proper to have only one altar in the sanctuary. Side altars should be away from the high altar and should not distract attention from it. Great care must be taken to respect the essential character of the altar and maintain its dignity, austerity and its holiness. The high altar is not a mere support for the tabernacle, much less a pedestal for a statue, or a stand for candlesticks and flower vases. The tabernacle, despite its sacred contents is secondary in relation to the altar. It is and ought to appear as something distinct from the altar itself.

The Sanctuary

The sanctuary is the area in which the high altar is located and in which the ministers function during the Mass. It is separated from the laity by the communion rail because it is a sacred place. The importance of the sanctuary should be emphasized through its position and size.

Preaching should be primarily an extension and explanation of the Epistle and the Gospel. Therefore like the Epistle and Gospel, the sermon should be given from the sanctuary.

The Baptistry

After the high altar, the baptistry is the most important part of a parish church. It is the second focal point. There is good reason for locating the baptistry near the entrance to the church, making it one of the first things viewed on entering the church. It is through baptism that the individual receives his first sacraments when he becomes a member of the Church. The baptistry should be open to view from the main body of the church so that the people may see the ceremony that takes place there.

The Nave

The nave is the space where the congregation gathers around the altar to attend the Mass. It should be a space that encourages maximum active participation of the faithful with the celebrant. The spacial arrangement should be directed towards the high altar so that there can be an exchange of address and response between the priest and the people. The worshipers should be near enough to the altar so that they can see and hear easily. The concentration of the nave area upon the high altar should not be disturbed by side altars, confessionals, stations of the Way of the Cross, statues or elaborate windows.

For seating of the congregation, fixed pews have several disadvantages. They turn the church into an auditorium, they immobilize the congregation physically and bring in a psychological feeling of regimentation. The congregation becomes an audience of spectators instead of enthusiastic participants.

The Choir

The task of the choir is to lead the congregation in prayers and hymns and to alternate with the congregation in the responsorial chants. It should be placed in front of the congregation near the sanctuary. A mixed choir must be screened from the view of the congregation. The function of the organ is to support the chant of the choir and the congregation.

The Confessionals

The confessional is a space in which a penitent confesses privately to the priest in the sacrament of penance. Confessionals should be located near the baptistery and entrance doors.

The Sacristies

There should be a sacristy wherein the vestments and sacred vessels are stored and wherein the ministers vest for the ceremonies. Also there should be a general sacristy for storage of ceremonial items, maintenance items and supplies for the sanctuary. The general sacristy is also used for robing of the altar boys.

The Devotional Furnishings

Devotional furnishings such as Stations of the Cross, statues and shrines should be located in perimeter areas out of the main nave, preferably in the side aisles as they appeal to privacy and individual meditation. The stations of the Way of the Cross, 14 in number, are a devotion contemplating the passion of Christ and His Crucifixion.

THE SOLUTION

This design wants to be a magnificent building which recognizes the definite liturgical and traditional requirements for a Catholic church and relates the various elements of the church to each other with proper accent of importance.

The altar, by its proportion and material, its relative elevation, and its isolated placement in a spacious sanctuary at the most lightsome point, appears as the most sacred object and becomes the heart of the entire environment. The tabernacle stands by itself away from the altar, because it is secondary in relation to the altar. The crucefix and candlesticks are slender in design. The position of the priest is between the altar and the tabernacle facing the altar and the congregation. To celebrate the Mass turned to the people is more logical, especially in regard to the parts directly addressed to them. It makes it easier to see and hear the celebration and thereby renders active participation by the people more feasible.

The roof over the sanctuary is the highest part of the building and forms a canopy or civory over the altar and tabernacle. A clerestory provides a higher intensity of light in the sanctuary than in the body of the church. The clerestory windows are of stained glass, opaque at the bottom and almost clear toward the top. A small lecturn is also located in the sanctuary.

The people gather around the sanctuary in a fan shaped nave. This area is covered by several roof bays rather than by a single large span. These bays, together with the bays over the choir and baptistry, form a large undulating square surface which is lower than the roof over

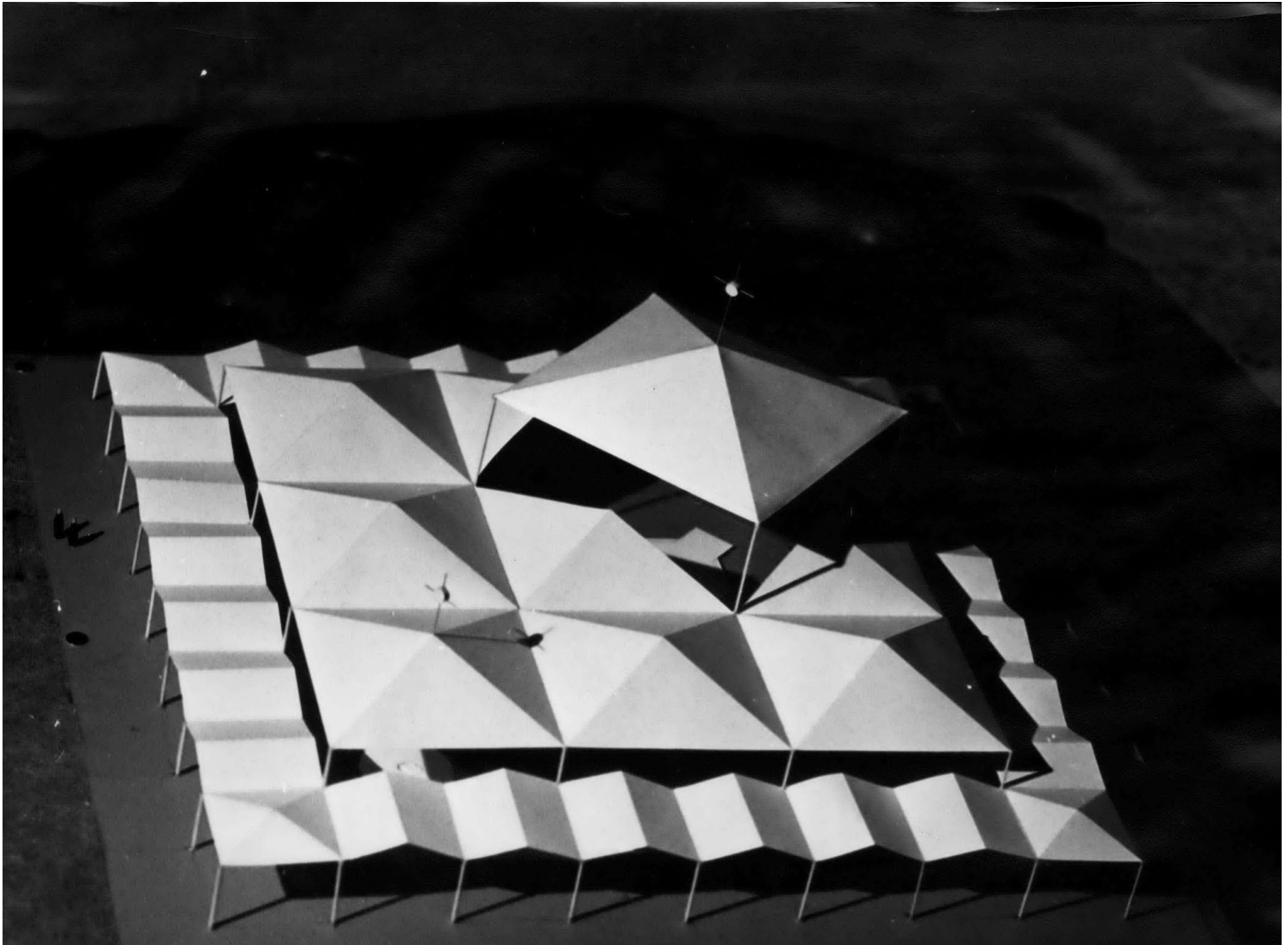
the sanctuary. The roofs are sheathed by 2x2, 2x4, 2x6, and 2x8 boards randomly spaced and covered with wooden shingles, and are supported on slender laminated wooden columns and beams. The columns pierce the nave but do not interfere with the view towards the altar. They help to give a pleasant scale to the large nave area. Tension rods triangulate the bays and are visible. The intensity of illumination in the nave will be much lower than in the sanctuary. The walls around the body of the church consist of two rows of spaced vertical boards with glass between the outside and inside rows allowing light to filter through. The nave and sanctuary are devoid of side altars, shrines, and statues. Seating for the congregation will be on individual chairs with kneelers. The choir and organ are located under a roof bay behind the sanctuary and the sacristies, lavatories and rooms for the mechanical equipment are on a lower level.

The baptistry, as the second most important architectural element, occupies a corner bay in a prominent position near the entrance vestibule. The font is at the center of a circular floor, 12 feet in diameter, which is depressed one step below the floor of the church and encircled by a railing. The floor throughout the church is of terrazzo with a surface pattern. The baptistry is the first thing viewed upon entering the church and can also be seen from the main body of the church.

Surrounding the nave, baptistry, sanctuary and choir is a wide ambulatory with a lower roof than the body of the church. Within this aisle space are located the side altar and confessionals and all the private devotional furnishings such as Stations of the Cross and votive shrines.

Attached to the ambulatory near the baptistry is an entrance vestibule and a porch which opens onto a forecourt or atrium separating the church from the street. The atrium allows the people to pass through a zone of quiet before entering the church and may be used for outdoor ceremonies and processions.

PRELIMINARY STUDY MODEL



B I B L I O G R A P H Y

1. O'Connell, J.B. Church Building and Furnishing. Notre Dame, Indiana: University of Notre Dame Press, 1955
2. Reinhold, H.A. Speaking of Liturgical Architecture. Notre Dame, Indiana: Liturgy Program, 1952.
3. Thiry, P., Bennet, R.M., and Kamphoefner, H.L. Churches and Temples. New York: Reinhold, 1953.