

#### CHURCH OF THE HOLY SEPULCHRE

IN JERUSALEM

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Arquitecto, Escuela Superior de Arquitectura de Madrid, 1957

Submitted in partial fulfillment of the requirements for the Degree of Master of Architecture at the Massachusetts Institute of Technology.

Signature of the Author School of Architecture, Massachusetts Institute of Technology, August 1959

Accepted by Lawrence B. Anderson Head, School of Architecture, Massachusetts Institute of Technology

Thesis S upervisor

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#### Abstract

The existing Church of the Holy Sepulchre in Jerusalem is falling into ruins. All the religious groups involved in this temple realize the necessity of rebuilding the entire edifice. There is presently a group of architects who represent the different religions working on this design.

<u>Scope of the Problem.</u> To restore the dignity of the places there honored, providing the adequate architectural expression and environment. The function would be the coordination of the different litrugical performances.

#### Existing Conditions.

- Jerusalem, with its religious and historical background, is a strong dramatic environment.
- The walls that surround the Old City define clearly the entire religious space.
- The Holy Sepulchre is shared with unequal rights by

LatinsCopticsGreeksSyriansArmeniansAbyssinnians

#### Anglicans

- Since the time of the Emperor Constantine there has always been a series of temples, whose traces are evident in the present structure.

- This shrine is considered as a focal point of pilgrims from all over the world.
- Weather conditions.

#### Solution.

- Clear expression with evaluation of hierarchies of the

Sepulchre proper

Calvary

Votive churches of the different religions.

- Realization of the ground, use of its dramatic power.

- Strong relationship with the environment provided by the Old City.

395 Marlborough Street Boston 15, Massachusetts August 23, 1959

Dean Pietro Belluschi School of Architecture and Planning Massachusetts Institute of Technology Cambridge 39, Massachusetts

Dear Dean Belluschi:

I herewith submit my thesis report entitled "Church of the

Holy Sepulchre in Jerusalem" in partial fulfillment of the require-

ments for the degree of Master in Architecture.

Respectfully,

Mariano Marin Rodriguez-Rivas

## Dedication

This work is dedicated to my father, to whom I am deeply grateful.

### Acknowledgements

I would like to express my appreciation to all the people who have helped me through this thesis, in particular to Professor Imre Halasz, Professor Paul Nelson, and to the Reverendo Padre Fr. Jose Barriuso, who supplied me with the pertinent information which made this work possible.

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#### The Site

The religious background of the city of Jerusalem, and it historical implications, sets this town on a high level of interest and casts over its name a powerful spell which appeals to all, no matter how far their cultural background might be from this Arab city at the present time. Poetry, painting and music frequently deal with images that are suggested by the name of Jerusalem, which has grown in the imaginative world of Italian or Flemish paintings, polyphonic music or poetry and which appears to be developing s strong, new idealistic personality that is very far from the actual city, and divorced from any reality.

Jersulam is consider a "holy city" by people of different races, cultures, languages, and also religions. The Jews, Christians, and Mohammedans keep, and in many cases share, important landmarks of their beliefs. For the Jewish people, this town means the throne of King David, the brightness of Solomon's Temple, many facts that show the predilection of God for these people. The Christians revere the scenery of the Passion and death of Christ, and the visual message of the city's landscape. The environment is considered by them as a "fifth Gospel" providing complementary information about the main fact of the Redemption.

"Jerusalem is situated on a badly watered and somewhat sterile plateau of limestone, which is connected towards the North with the main range of the mountains of Palestine; and it also lies on the road leading from north to south through the lofty central region of the country, and nearly following the watershed. The city lies in  $31^{\circ}$  47' N. latitude and  $35^{\circ}$  15' E. longitude of Greenwich, 32 English miles from the seacost and 14 miles from the Dead Sea. The Temple hill is 2441 feet and the old upper city 2550 feet above the level of the Mediterranean. The town is enclosed by a wall with thirty-four towers, forming an irregular quadrangle of about two and one-half miles in circumference. The town possesses few open places, the streets are ill-paved and crooked, many of them being blind alleys ... "(1)

The layout of the city is typically Arab, with two important influences in its latter historical development; first of all, the Roman domination saw important levelling projects, changing mainly the natural topography of the site of the Passion. Then out of walls they built on this spot the Forum of Adriano, including important structures for the cult of the pagan gods, which is served by the two typical main streets, via Cardo and via Necumenis, whose pattern still remains with the same important in the present day city.

The walls that surround the city are of the sixteenth century and have seven gates which open into the newest sector of Jerusalem or to the country:

Yafa Gate - the only one on the west side of the city Damascus Gate - the basic center of communications Herode's Gate - only opened once a year

St. Steph'an's Gate - opens the city to the Olives Garden and is used by the pilgrims on their way to the via Dolorosa

The Golden Gate - long since walled up

The Moghrebiu's Gate - over the stables of Solomon's Temple

The Gate of Zion - close to David's Tomb at the southeast corner of the city.

Damascus Gate is the main center of communication of the walls and is the entrance best related to the "old city" with the Church of the Holy

(1) Baedeker, Karl, Palestine et Syrie, p. 22.

Sepulchre, in spite of the fact that the "via-crucis", which runs along the sacred places, starts at St. Stephan's Gate. The hostility between Arabs and Jews affects the city adversely, such as the sealing of the Zion Gate and Jafa Gate.

The scale in which the old area of the city is laid out allows the precarious circulation of cars in very restricted sectors within the walls. "Owing to the scarcity of wood, the houses are built entirely of stone. The Court with its cisterns forms the central point of each group of rooms. A genuine Jerusalem dwelling house consists of a number of separate apartments, each with an entrance and a dome-shaped roof of its own. The rooms are of different heights, and very irregularly grouped. Some houses have flat roofs, but under these is always concealed a cupola."<sup>(1)</sup>

The weather in Jerusalem is especially mild in comparison with the nearest cities. There are extreme temperatures in summer time, but during the evening the heat recedes. In other seasons of the year, this city enjoys very agreeable weather, based on good temperature and scarce rains.<sup>(2)</sup>

(1) Baedeker, p. 161.

(2) Baedeker, p. 161:

January	49.4 <sup>0</sup>	May	73.8 <sup>0</sup>	September	77.0°
February	54.4 <sup>0</sup>	June	75.2 <sup>0</sup>	October	74.2º
March		July	79.1°	November	63.80
April	61.4 <sup>0</sup>	August	79.3 <sup>0</sup>	December	54.5 <sup>0</sup>

Mean temperatures.

Snow and frost are uncommon in Jerusalem.

It is interesting to point out that Jerusalem is "the city of tombs". It is possible to find anywhere graves from any period. For many years Jews from all over the world have wanted to be buried in their beloved city. The number of graves which cover that sector at present makes a peculiar landscape very well fitted to the mystical implications of the entire city, in which the Holy Sepulchre provides the climax.

#### The Holy Places

It has not yet been resolved with historical certainity where the Holy Sepulchre and the Calvary were supposed to have stood. But it seems highly probable that the tradition would have kept the correct idea of the location, which also does not fail to fulfill all the requirements demanded by information kept from the early times of Christianity. The Gordon Calvary and Garden Tomb, which for the last years of the nineteenth century drew the attention from the traditional site, are now completely discredited, and again scholars seem to agree at least on a general location and less strongly on the exact point of the Grave and Calvary. On the other hand it seems hard to believe that the Christians would easily forget the places related to the redemption, although it is true that the Christian Community had to leave Jerusalem, the first time during the Jewish insurrection of 66-70 and again in a second revolt in the year 131.

From the time in which the Emperor Constantine ordered the laying

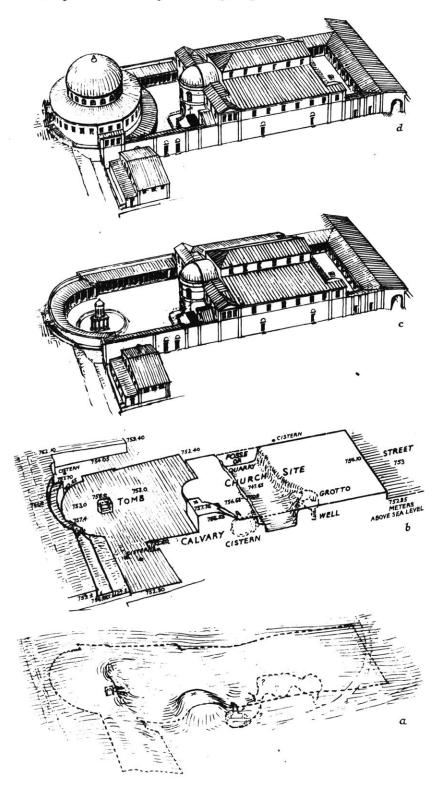
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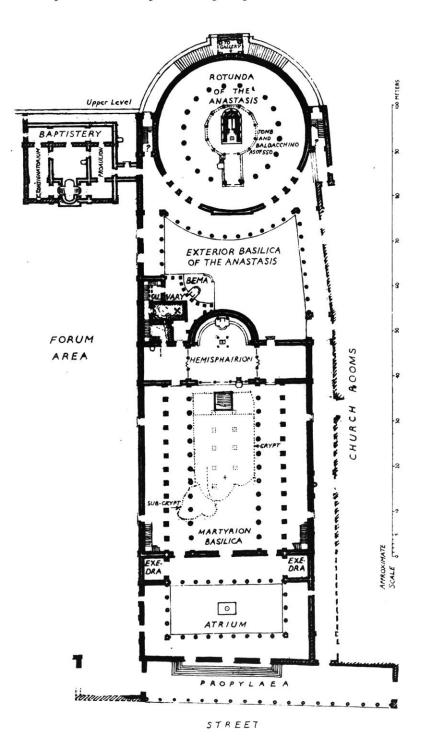
of the foundations of a building "on a scale of rich and imperial costliness" to "make conspicuous, and object of veneration to all, the most blessed places of the Saviour's resurrection", the site has been well kept, although it suffered many exploitations. More precisely, the scenery had been changed again in Constantine's time, mainly by the Roman domination during which, according to Andre Parrot,

Jerusalem was being turned into the roman city of Aelia Capitolina, with the layout and monuments of a western city. What is more the emperor Hadriam seems to have brought about a systematic replacement of the old temples and holy places with pagan edifices. The cult of Adonis was established on the site of the Navitivity in Bethlehem; at the terebinth of Mamre a market was installed; at the pool of Siloam a nymphaeum was constructed; on the site of the Holy of Holies in the temple were set up two statues, one of Jupiter and one of the Emperor. Was it merely a chance consequence of the customary town-plan that the Forum of Aelia Capitolina was sited on the Golgotha platform, nor far from the "square" which was already taking shape in front of the gate of the old wall? The construction of the Forum on this uneven promontory necessitated its levelling, which was done by lmeans of covering it and its tombs with earth. Thiswhile it masked the tombs, also preserved them. The Capitol with its divinities, Jupiter, Juno and Venus, set the seal on this disruption. It also served, however, to mark the position of what lay buried beneath it. (1)

Ciryl of Jerusalem gave the earliest description of the proper tomb before the works of the architects of Constantine began:<sup>(2)</sup> "Rock cut with an orifice facing east, is a well-known Jerusalem type. Since it was cut into a slope, it probably had a short dromos. Next there was a projecting hood of living rock, as Parrot contends, rather than an outer chamber. The hood was cut away, and the hemicircle excavated beyond, leaving the tomb itself a shell of rock standing free".

- (1) Parrot, Andre, Golgotha and the Church of the Holy Sepulchre, 1957.
- (2) Connant, Kenneth John, Original Buildings at the Holy Sepulchre in





The Calvary stands close to the Sepulchre, about fourteen feet in height, and was relegated to a secondary place in the first Church of Constantine. Even for some time it was not appreciated by travelers and those who wrote about the Holy Places, such as Eusebious, because it had been considered as a minor relic in relation to the Sepulchre. The present liturgy would actually consider the Calvary as the most important of the places of the Passion; it is properly the altar, the focus of the real sacrifice. It is my assumption that the deep feeling of the early Christians for the symbolic language caused them to over-emphasize the Sepulchre. (an an expression of Resurrection, triumph of eternal life over death) and thus to de-emphasize the real meaning of the place in which the redemption was consummated.

#### The Church of the Holy Sepulchre

The Church of the Holy Sepulchre stands above the old city, overlooking the roofs and terraces of the different kinds of buildings that make this town so interesting. Because of the lack of any important open space, which from the the visitor could look on the building as a whole, he must walk around the narrow streets observing with an inquisitive mind so as to understand the architectural meaning of this hugestructure. It is probably not possible today to take a walk along the perimeter. Visiting many minor buildings, included without forethought, would interfere with one's purpose, although sometimes they provide interesting situations, so

peculiar to this medieval town. The opportunity still remains of getting inside and trying to grasp an overall picture of the spaces enclosed there, but this would also be difficult because of the forest of bracings that would interrupt one's observation.

To understand this complicated building, it is necessary to realize that it has been growing since the early temple of Constantine, with many changes and additions. The best current information are the studies made by Vincent and Abel, Andre Parrot, and Kenneth John Conant, to whose work I shall refer.

The earliest testimony we posses on the subject is that of Eusebius Bishop of Caesarea, who in his Life of Constantine (written between 337 and 340) gives what is at first sight a somewhat reticent version of the events: "After these things (the emperor) beloved of God undertook another memorable work in the province of Palestine ... It seemed to him to be a duty to make conspicuous, and object of veneration to all, the most blessed place of the Saviour's resurrection in Jerusalem. And so forthwith he gave orders for building a house of prayer ... For ungodly men set themselves to consign to darkness and oblivion that divine monument of immortality ... Having expended much labour in bringing in earth from outside, they cover up the whole place; and then having sided this to a certain height, and having paved it with stone, they entirely conceal the divine cave beneath a great mound. "

Now the Emperor orders the whole site to be completely cleared and tidied up: "And as one layer after another was laid bare, the place which was beneath the earth appeared; then forthwith, contrary to all expectation, did the venerable and hallowed monument of our Saviour's resurrection become visible, and the most holy cave received what was an exact emblem of His coming to life".

The building as it now stands is the composite work of several periods, in which the following successive stages are recognizable: the original constantinian building (fourth century); two restaurations - that of the patriarch Modestos (seventh century), after the burning down of the church by the Persians in 614, and that of Constantine Monomachos (eleventh century) who attempted to repair the depredations of the caliph Hakim (1009); lastly the extensive reparations carried out by the Crusaders, who devoted half a century (1099-1149) to restorations of the dilapidated structures to the dignity, if the the splendour, that was theirs in the time of Constantine. Leaving out of account all alterations, repairs and consolidations that have been carried out, and confining ourselves to the decisive phases, we can briefly say that the Church of the Holy Sepulchre bore and still bears double witness to a Byzantine foundation and Romanesque tradition. While the second is visible at once in both structure and ornament, the first is much less obvious, and close study is necessary if it is to be recognized with certainty and character appreciated." (1)

Through the centuries, the desires and imagination of the pilgrims in many cases have found around the main holy places points that referred to the facts of Passion or Resurrection and which had value as proper relics. In spite of the reluctance of the Church to acknowledge these imagined miraculous spots around the true holy places. The landmarks which are to this day confidently and credulously pointed out are, according to the Rev. Robert Willis:

1) Holy Sepulchre

- 2) The hole in the rock in which the Cross was fixed
- 3) The holes on each side in which the thieves' crosses were fixed
- 4) The spot upon which the Crucifixion or actual nailing to the Cross took place, which the Latins assert to have been previously done to the elevation of the Cross.
- 5) The stone upon which the Body was laid after it was taken down from the Cross, and when he was wrapped in linen and spices.
- 6) The place where the soldiers divided the vestiments.
- 7) The spots where the friends of our Lord stood afar off during the Crucifixion.

- 8) Where the women stood during the anointing of the Body.
- 9) Where the women stood over against the sepulchre.
- 10) Where Our Lord appeared to Mary Magdalena as a gardener
- 11) Where He appeared to Mary Virgin
- 12) The prison in which He was detained while the preparations were made for Crucifixion.
- 13) The place where the Cross was discovered by Helena
- 14) The place where She sat while the digging was proceeding to the purpose.

Besides these places there are relics moved from other places.

With the exception of (1) the Holy Sepulchre, (2) the hole for the Cross and (3) the place where the Cross was found, no one of the above "stations" are mentioned by any writer previous to the conquest of Jerusalem by the Crusaders at the end of the eleventh century.<sup>(1)</sup>

The complicated historical circumstances in which the Church of the Holy Sepulchre has been involved through the centuries have made it necessary that the liturgical activities and dominion of this building be un shared by several different groups, whose/equal rights and obligations are maintained by a "status quo". The groups that participate in the internal activities of the Church are:

> Latins Greeks Armenians Coptics Syrians Abyssinians

All of them share the main spaces, and some of them have complete control

(1) Willis, Rev. Robert, Church of the Holy Sepulchre, p. 5.

over specified portions of the structure. The lack of understanding and good will between these religious groups has in many cases created undesirable situations inside the Church, which is in a precarious physical state.

The reasons of the structural ruin that today is a dangerous menace are explained by the technician William Harvey in his Final Report of the structural survey made in 1935.

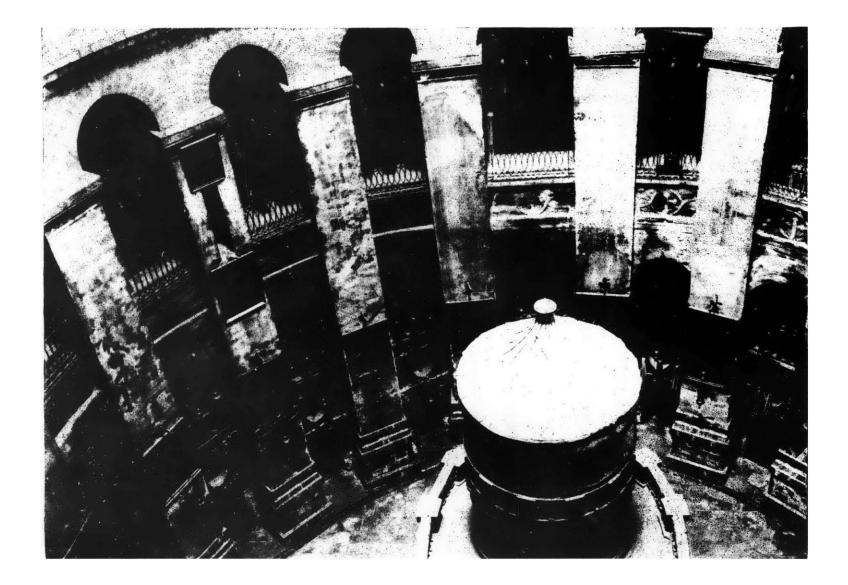
In order to describe clearly how the building has come to its present dangerous state, it is necessary first to enumerate the main causes of decay, and further to follow out their effects. The prime causes will be dealt with in order of importance: it should be noted that there seems to be no question of faulty foundations, as the solid rock is very close to the present ground-floor levels of all parts of the structure.

The causes of movement are therefore inherent in the building itself: the part played by recurrent earthquakes has been one of intensification of the initial damage originating in the internal stresses. Weather conditions have been responsible also for a similar adverse effect, though to a lesser degree.

In addition, most of the Church was affected by the fire of 1808, which calcined much of the masonry, certain portions of which only were restored or rebuilt as a result. Almost all those portions built in the twelfth century suffer to a greater or lesser extent from the poor quality of the mortar used - it has in places completely disappeared, allowing the stories to sink, and deep cavities to appear. A further source of weakness is that no true butresses were employed here in the twelfth century, and very few of the arches are adequately restrained by tie-bars.

Proceeding the main causes of the movements, these are: in the first place the weight and thrusts derived from the dome and drum over the kotholikou, and secondly those of the roof of the rotunda, until 1808 a wooden cone, then replaced by a dome, since renewed in 1867 with one of iron resting on a new masonery drum. "(1)

 Harvey, William, Church of the Holy Sepulchre: Structural Survey Final Report, 1935; "The Present State of the Fabric and the Causes of Decay".



#### Liturgies

The different religious groups that share the Church of the Holy Sepulchre have developed their own liturgy, and to some extent the requirements for of their architecture are different. Because/the common roots of their faiths, it is possible to find a common denominator for the essence of their architecture, and these would be the early structures of each of the churches.

All of them have an altar or an elevated structure on which sacrifice is offered, very deeply related with the table of the Last Supper. There are slight changes in the different areas that surround the altar, its accessibility and hierarchy, that we can realize in the following descriptions of oriental churches taken from classic booksdealing with liturgy.

I would first of all like to give an early account of a church building given in the Book of Church Orders from the third century:

The presbyters! seats in the part of the house which is turned to the East, the bishop's throne in the midst of them, the laymen also sitting in another part turned to the East behind the presbyters, the women behind them, so that when they stand to pray, the rulers rise first and after them the laymen, and then the women. All pray towards the East.

The church which is oblong and turned to the East is like a ship, with the bishop as helmsman, the deacons in their garments as sailors and head rowers, the laymen as passengers.(1)

The Christian Church did find its expression during the early centuries in the bas¢ilica, a structure that performed the most important role in religious architecture throughout time.

(1) Didascalia, Book of Church Orders, sometime in the third century.

In plan the early Christian basilica was an oblong rectangular structure, fronted on its narrower western end by a cloistered court, the atrium, in the open center of which was often placed a fountain for ceremonial ablutions. Since the atrium was generally square in plan and as wide as the front of the basilica itself. the arcade which formed its eastern side, that is, the only one of the four arcades which actually adjoined the church, was incorporated in the facade of the latter to serve as vestibule or narthex In the interior the basilica was divided into a central nave and flanking side-aisles by ranges of columns parallel to the longer or main axis of the building. The longitudinal divisions thus formed were usually three in number, although the larger churches, such as San Paolo or the old Basilica of St. Peters in Room, had five, that is, two aisles on each side of the central nave. Above the inner range of columns which flanked the nave on each side a wall was corried up, and in each wall a row of windows opened outward above the sloping lean-to roofs which covered the aisles. The purpose of this double range of lofty windows, the clearstory, was to provide light and air for the long central nave; and the wall spaces below and between these windows also afforded a broad and continuous field, well adapted to the display of rich decorations in fresco or mosaic. The aisles of the church were, of course, lighted by windows in the outer walls, to the north and south, while the lofty central nave was covered by a wooden roof of double pitch, where trussed timbers were often concealed by an elaborately coffered ceiling. Nave and aisles were usually payed with slabs of antique marble laid in formal patterns, and the marble columns of the nave arcade were often spoils from ruined pagan temples. (1)

R. Janin gives us a clear description of the churches of the Armen-

ians:

The churches of the Armenians are of oblong shape, and always looking to the East. Inside they are divided in four sections in depth. First of all we find the vestibule, which is isolated from the whole building by a wall which used to retain the penitents; today there is only a simple lattice. Close to it are the aisles and the central nave, destined to the faithful who are always separated, the men on one side and the women on the other.

(1) Swift, Emerson H., Roman Sources of Christian Art

The practice of leaving the women at the tribune began to disappear in the country also. The nave, usually covered with a narrow cupola that reminds one of the hair-do of the unmarried monks. They are always the same, especially in Turkey. The choir, used mostly by the priests, is raised one step above the floor of the nave and is surrounded by a fence to the height of the elbow. The clergy and the singers make two separate groups that alternate with the singing. The four th section of the church is basically integrated by andais on which is located the main altar. This is isolated in such a way as to make it possible to walk all around. It is raised about four or five steps above the level of the church.

The great churches have several chapels which allow the celebration of more masses. The only purpose of the two little altars at both sides is ornamentation. Behind the main altar there is a little alcove, dimly lit, where the "holy bread" is kept in a tabernacle and also a little table that is used by the priest during the mass. All the churches must have two sacristies; the one from the right keeps the baptismal equipment, while that on the left holds the sacred garments and the different elements for the religious services...

The clergy do not use chairs or benches; they sit on the carpets and cushions. The laymen must stand." (1)

There is no marked difference between the religious rites of the

Coptics and Abyssinians. Therefore the architecture is similar.

The description of the Abyssinian liturgy by a Portuguese traveler

is quoted in the book entitled Explication de la Messe, by LeBrun:

The churches scarcely differ from those of the Coptics and the Greeks. Alvarez thus has the plan of several. The majority are hewed from rock with admirable skill, and they all have three naves. Poncet confirms that the churches are very clean, and that one finds there pictures and paintings, but no states or images in relief.

They are all oriented from the west to the east so that in praying one may face the east.

(1) Janin, R., <u>Les Eglises Orientales et les RitesOrientaux</u>, Paris, 1954, p. 470.

There is only one altar, which is isolated in the sanctuary, under a sort of dome supported by four columns.

There are at the front of the sanctuary two thick curtains which leave the entrance free in the middle and at the two extremities.

No one being able to enter the sanctuary unless he is at least a deacon, the emperor is ordained a deacon in order to be admitted.

There are no benches in the churches because one stands up during the services.

The bread called "corban" is made with yeast as by the Coptics.<sup>(1)</sup>

The Coptic liturgy and its relation to form in architecture is discussed by R. Janin:

The Coptic churches present an appearance very different from the Latin and Greek churches. They ordinarily form a rectangle divided into four sections which occupy the entire interior surface of the edifice. The first is the sanctuary or holy of holies, separated from the rest of the church by wood paneling often very valuable, incrusted with mother of pearl and ivory. In the middle of the paneling is a door in which is hung a large drapery with a cross in the middle. The sanctuary contains the altar, a table of stone around which one can move, and which has no step. One may enter the sanctuary only if one is at least a deacon. The second section is reserved for the priests and the clergy who assist them. It is here too that the prominent people of the nation meet. It is separated from what follows by a partition two or three meters high, with a passage in the middle. The third section is occupied by the men and separated from the last, designated for the women by a close wodden grating. In a corner of the church or behind the sacristylis a sort of oven and a press where the clergy prepare the bread and the wine which will be served at the mass.

The edifice is almost always surmounted by one or several cupolas. Inside one sees no vaulting or coffers, nor ornamentation. The framework seems to be floating in air. (2)

(1) Le Brun, Pierre, Explication de la Messe, page 555.

(2) Janin, R., Les Eglises Orientales et les Rites Orientaux, p. 469.

# Program for the Church of the Holy Sepulchre

The purpose of this religious structure will be to express the dignity of the Holy Sepulchre and Calvary, both of them located in the heart of the present Old City of Jerusalem, and to stimulate its respect and veneration from all the pilgrims of the Christian world. At the same time it will provide proper housing for liturgical activities performed around these relics.

The main facts that must be expressed by the architecture are:

Resurrection - the triumph of the spiritual power of Chris-

tianity over death

<u>Redemption</u> - the sacrifice by Christ, who offered himself, on behalf of mankind, perpetuated at the altar, Calvary.

It would also be an opportunity to express the basic common thinking and aims of the different Christian churches. The environment must be evaluated as a rich experience for the visitor, upon which will be founded the adequate complementary information concerning the facts of the Passion of Christ. The site selected for this thesis is historically the stage on which Christ suffered his Passion and burial. Presently on this site are located:

> Church of the Holy Sepulchre PatriarchateCoptic Monastery Coptic Monastery St. Abraham Hospice Russian

Except for the Holy Sepulchre the above buildings will be relocated outside of this area.

The area of the lot is about 193,000 sq. ft., and there is a difference of elevation. The west side is 33 feet higher than the elevation of the east side. There is no access by car, and connections with the gates of the city are complicated.

It is requested to propose structures that include:

A. <u>SANTUARY or MARTYRIA</u>, where the Tomb of Christ stands. This must be the area of preeminent hierarchy. The actual grave, raised in the manner of an altar, makes possible liturgical performances of any of the faiths that share this place. Hence it must be provided with:

- <u>Chancel</u> or wide area for the movement of eight priests around the altar, that would be detached and stand out clearly in the middle of the Sanctuary. 2,000 sq. ft.
- Nave for close participation of the congregation with the liturgy, and for the possibility of processional movement.
  5,000 sq. ft.

- 3. <u>Two main sacristies</u> to be shared by the different priests; considered as an enlargement of the activities of the altar proper. 800 sq. ft. each.
- 4. Four vestries 400 sq. ft. each.

The connection of the sacristies to the chancel must be wide enough for three persons standing abreast, and high enough to permit a mitred prelate or the processional cross to pass without difficulty.

B. <u>CALVARY</u> must be the secondary place in the hierarchy of the structure, expressing the outdoors condition of the events that took place at this point. The requirements are:

- <u>Chancel with altar</u> at the point on which the cross stood and fitted for the celebration of the mass and ceremonies performed by four priests. 1,000 sq. ft.
- <u>Nave</u> for the attendance of the people at these performances.
  3,000 sq. ft.
- 3. Vestry 200 sq. ft.

In this sector will be located the Rodd, **a** triumphal cross (generally in wood) ornamented at the end of the arms with the symbols of the four evangelists. The Rodd may be used as the strong symbolic element that distinguishes the entire place.

C. <u>THE CHAPEL OF ST. HELEN</u> will indicate the place in which the Holy Cross was found by St. Helena, and she will also be honored on it as the sponsor and personal assistant to the so-called "invention of the Holy Cross". 1. <u>Chancel</u> with main altar and related to the cistern on which the relic was found. 1,200 sq. ft.

2. <u>Nave</u> for people attending the liturgies. 2,000 sq. ft. This spot is of particular interest to the pilgrims and should have some relation to the processional route.

D. <u>MAIN NAVE</u> for the laymen attending religious services taking place at the Sepulchre or the Calvary. 20,000 sq. ft.

E. <u>CHOIR AND ORGAN TRIBUNE</u> for sixty musicians and singers belonging to the "Schola Cantorum". 1,500 sq. ft.

F. <u>LATIN CHURCH</u> This must be an area fitted for the liturgical functions of the Roman Credo, performed every day by the "custodians of Terra Sancta". The historical implications of this community make them deserving of a prominent place in the structure along with the churches of the Armenians and Greeks. Here the Catholic pilgrims will receive spiritual attendance and information. The scheme of this church requires

- 1. Atrium a transitory space from a point outdoors to the Nave proper of the Church. 1,300 sq. ft.
- 2. <u>Nave</u> will be the place for the attendance and participation of the pilgrims in the acts executed at the altar. 3,000 sq. ft.
- 3. <u>Chancel</u> or part reserved for the Clergy close to the altar. The Holy Communion will take place at the delimiting rail. The High Altar will be in a prominent place on the east side of the church and must be raised several steps above the

level of the nave. The altar reserved for the celebration of the mass and other liturgical acts must be so arranged to eliminate the possibility of practicing the mass facing the congregation. 500 sq. ft.

- 4. Choir for the clergy and also for the lay singers. 200 sq. ft.
- 5. <u>Sacristy</u> not a sacred place but part of the church closely attached to the chancel. It will embody the vestry or place where the priests ready themselves for the services, and where the sacred implements are kept in security. 300 sq. ft.
- 6. <u>Baptistery</u> must be a complete separate chapel and located below the floor level. Since the preliminary rites are begun on the porch, the baptistery must be near the entrance. 300 sq. ft.

G. <u>GREEK CHURCH</u> must be a place fitted for the liturgical functions of the Greek clergy in the Holy Places, sponsored by the Patriarchate of Jerusalem. The hierarchy of this congregation is similar to that of the Latins and Armenians, so its location must be equally related.

Basically the pattern of this church is similar to the previous one:

- 1. Atrium 1,300 sq. ft.
- 2. Nave 3,000 sq. ft.
- 3. <u>Chancel</u> there will be three altars: the high altar separate from the middle of the sanctuary, the preparatory altar, and the altar of the Holy Cross, located on both sides. 500 sq. ft.

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- 4. <u>Choir</u>- will have parallel dimensions and values that of the Latin Church
- 5. Sacristy 300 sq. ft.
- 6. Baptistery 300 sq. ft.

H. <u>ARMENIAN CHURCH</u> This space will be like, in dimensions and hierarchy, those provided for the Latin and Greek cults, suited for the liturgical functions of the Armenian Christians. Its orientation must be rigorously respected, keeping the axis of the temple in an east-west direction, with the altar on the eastern side. The scheme of this church requires:

- 1. Vestibule as a transitory space. 1,000 sq. ft.
- Nave arranged in two halves for the segregation of sexes.
  3,000 sq. ft.
- 3. <u>Chancel</u> or area in which the altar with two lateral accesses is located. The main altar is raised four or five degrees over the chancel and must be isolated all round. There are two other altars for ornamental purposes. 500 sq. ft.
- 4. Choir for the clergy. 300 sq. ft.
- 5. Two Sacristies one on the right for the baptism, and one on the left, which is actually a vestry where the vestments and priests are readied for the services. 200 sq. ft.

In a related but secondary space

I. CHURCH OF COPTS.

1. The <u>Sanctuary</u> always at the eastern side of the church. The altar is enclosed in it, at the same level. 50 sq. ft.

2. Area or nave for the priests and prominent people. 150 sq. ft.

3, Area for the men. 200 sq. ft.

4. Area for the women. 200 sq. ft.

5. Sacristy which serves as a vestry at the sametime. 150 sq. ft.

J. <u>CHURCH OF ABYSSINIANS</u> with the same dimensions and arrangement as that of the previous one of the Coptics.

K. <u>ANGLICAN AND SYRIAN CHAPELS</u>. Two spaces enclosing chapels with only one altar in each. It is advisable to keep the traditional orientation. 200 sq. ft. each.

L. <u>MEETING ROOM</u> for general purposes. Can be used for any church. 2,000 sq. ft.

M. <u>THREE MEETING ROOMS</u> for the Latin, Greek and Armenian churches. 800 sq. ft. each.

N. MAINTENANCE AREA AND MISCELLANEOUS SERVICES. Must be considered a sequence of spaces creating a processional route for the "Stations of the Cross" that are located inside the shrine, from the way of the Cross that runs through Jerusalem. These stations include

X. Jesus stripped and given gall to drink

XI. Jesus nailed to the Cross

XII. Jesus dies on the Cross

XIII. Jesus is taken from the Cross

XIV. Jesus is laid in the sepulchre.

#### Proposed Solution

The basic idea throughout this design has been worked out so as to express clearly:

- 1. The fact of the Resurrection as the definitive triumph of Christ
- 2. The fact of Redemption. Action and suffering of Christ.
- 3. The ties between these basic facts and mankind through the Christian churches.

These three themes are expressed architecturally in three independent volumes, easily readable, providing the basic expression of the monument: Resurrection, as an escape from the earth and physical laws, is materialized in a shape that suggests an escape from the ground. The Redemption is suggested by its symbol, the Cross, located on the spot in which the sacrifice actually took place. These surroundings are worked out as a dramatic element. The third theme is treated in the volume that integrates the different churches, emphasizing what they have in common. These diverse elements are unified by a structure that covers the area proper of the entire sanctuary, and at the same time defines the monumental expression of the shrine.

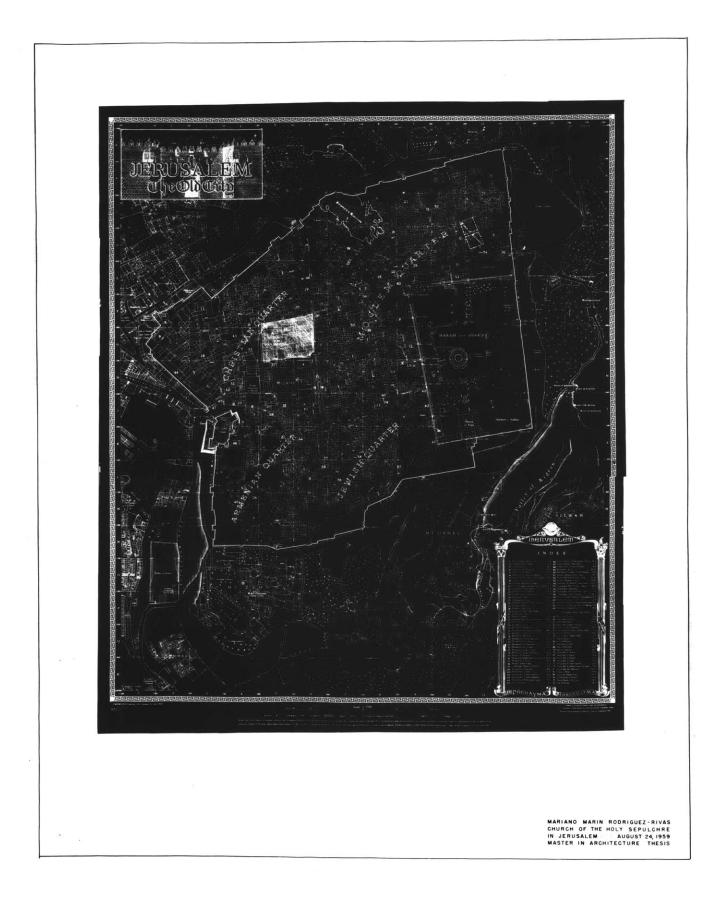
The spiritual power of the ground of Jerusalem, its poetical tension, is used as a dramatic element which will provide a certain richness of experience and a constant appeal to asceticism. The landscape of the city is visually incorporated as an enclosure of the spaces under design in many cases. Actually the walls of the city provide a first definition to all the space endowed with a proper religious meaning. Thus it is not expected to find another strong delimitation of ambiance; the temple is open to this enclosed environment, making it participate with the life of the building.

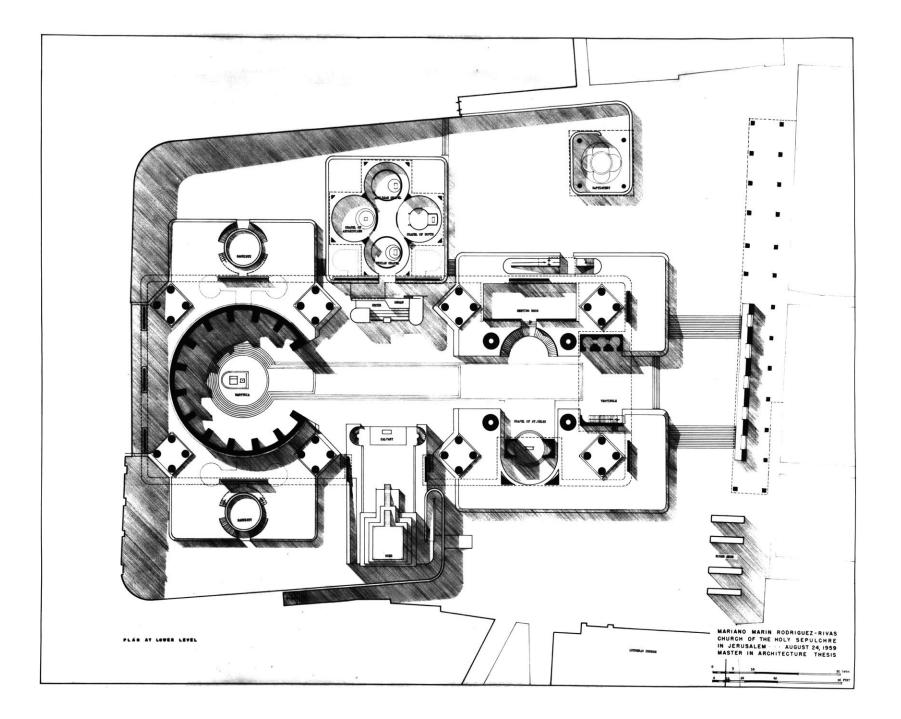
The architectural scheme on which this structure is based lies upon the successive churches which from the time of Constantine have been standing on that spot. And like them it includes a sequence which begins on a Parvis and goes through - Atrium, Katholicon, open space with the Calvary and finally the rotunda, where the Tomb itself stands as the element of highest importance. The Calvary, as in the early churches, is expressed as a volume sustaining a monumental cross.

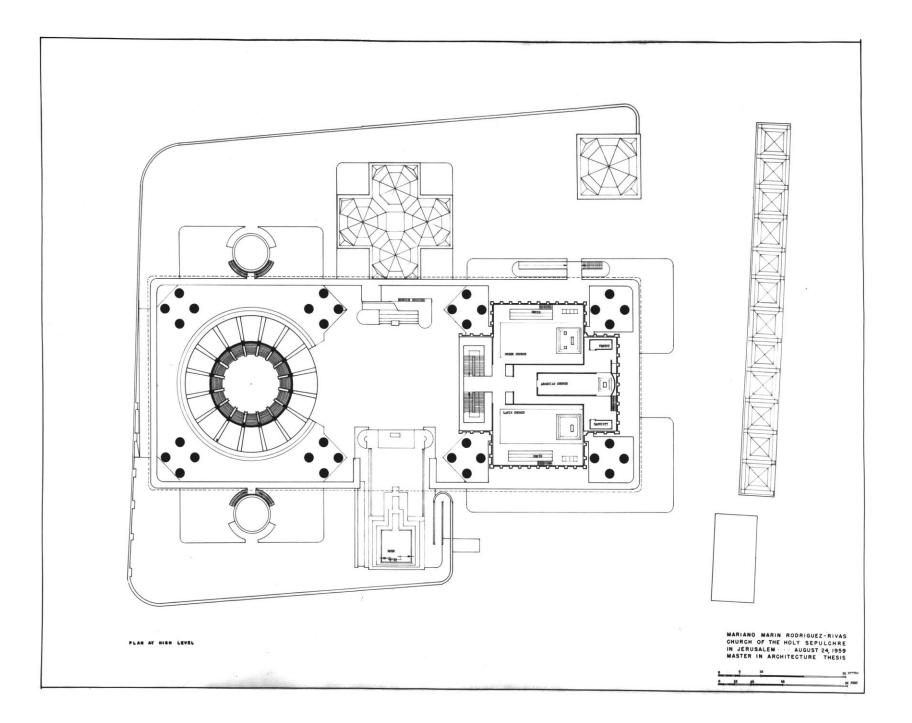
A certain richness of psychological reactions, suggested by the play of natural illumination, the quality of the spaces, and the texture of the lower surfaces, is expected.

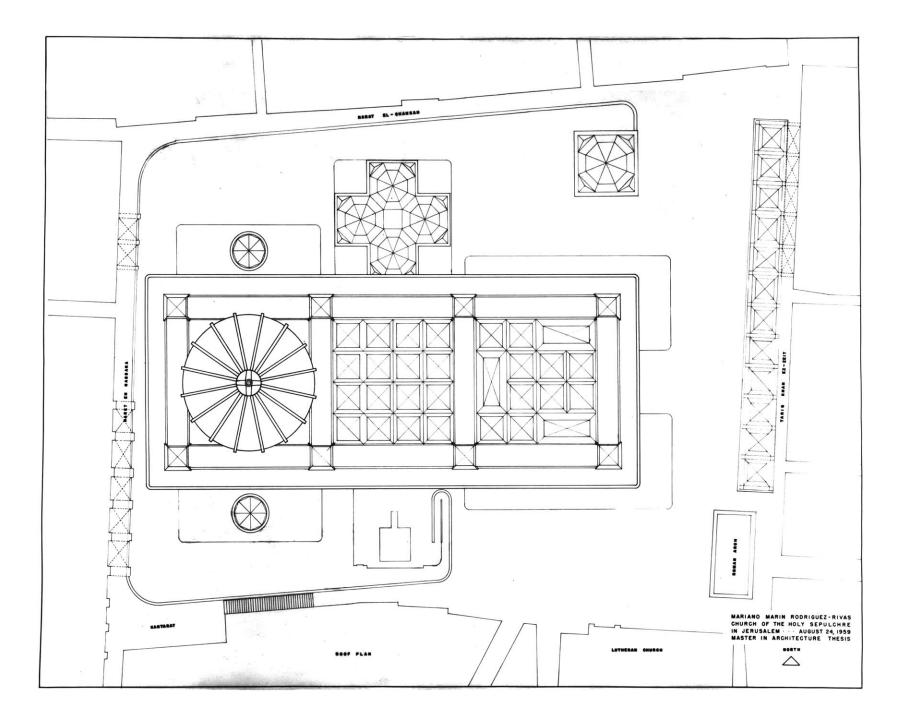
The structure of the building distinguishes: a ground level with its own movement and elaboration, treated as a static element using the ground or the volumes created with the characteristic limestone of Jerusalem; superstructure, using reinforced concrete in a structural system based on groups of columns, sustaining a folded slab according to the requirements of the spaces enclosed and the demands of the diagrams of the moment; the rotunda or martyria in its upper portion is structured

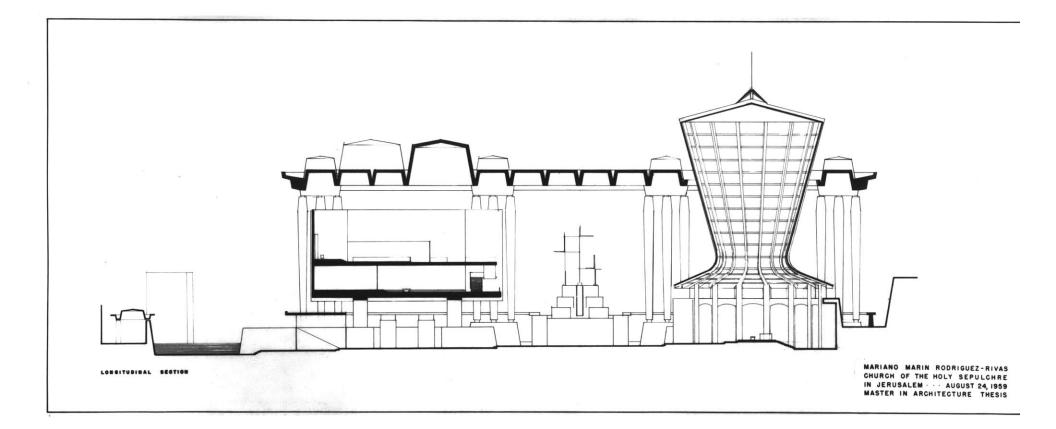
with aluminum, using as enclosing material any other light alloy with the dark quality of bronze.

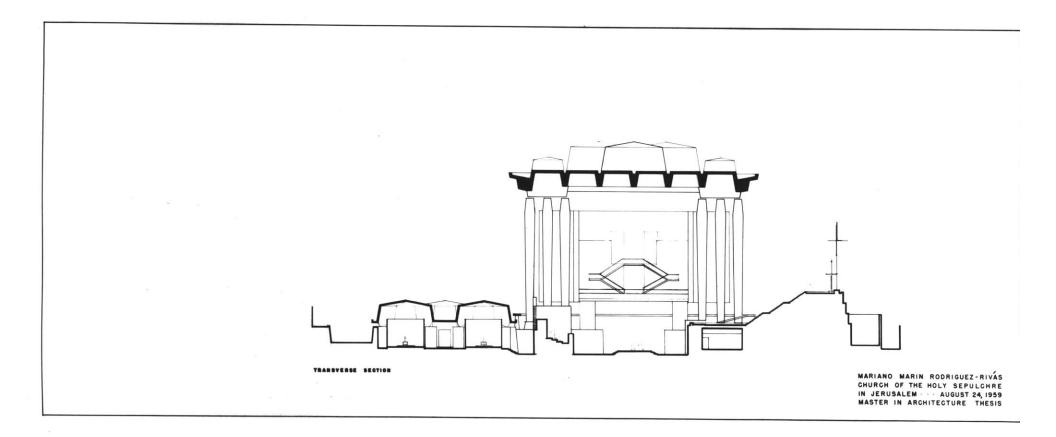


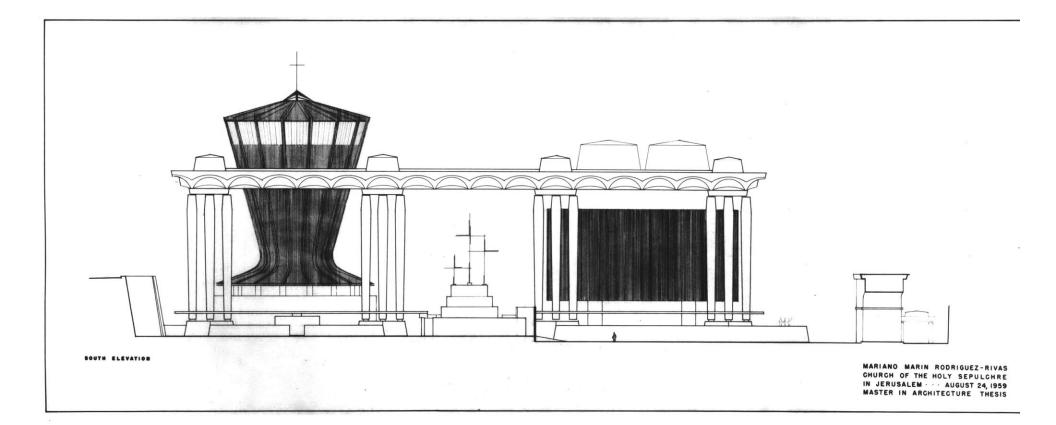












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Map of Jerusalem, compiled, drawn, printed under the direction of F. J. Salomon, Commissioner for land and surveys, Palestine, 1936.

#### Illustrations

1. Jerusalem, from Scopus - <u>Picturesque Palestine</u>, Vol. I, H. Fenn, Delt., C. Cousen, Sculpt.

2. Original Buildings at Holy Sepulchre in Jerusalem

3. Original Buildings at Holy Sepulchre in Jerusalem - from Speculum, Kenneth John Conant, January, 1956.

4. Rotunda of the Anastasis - from Golgotha and the Church of the Holy Sepulchre, Andre Parrot, 1957.