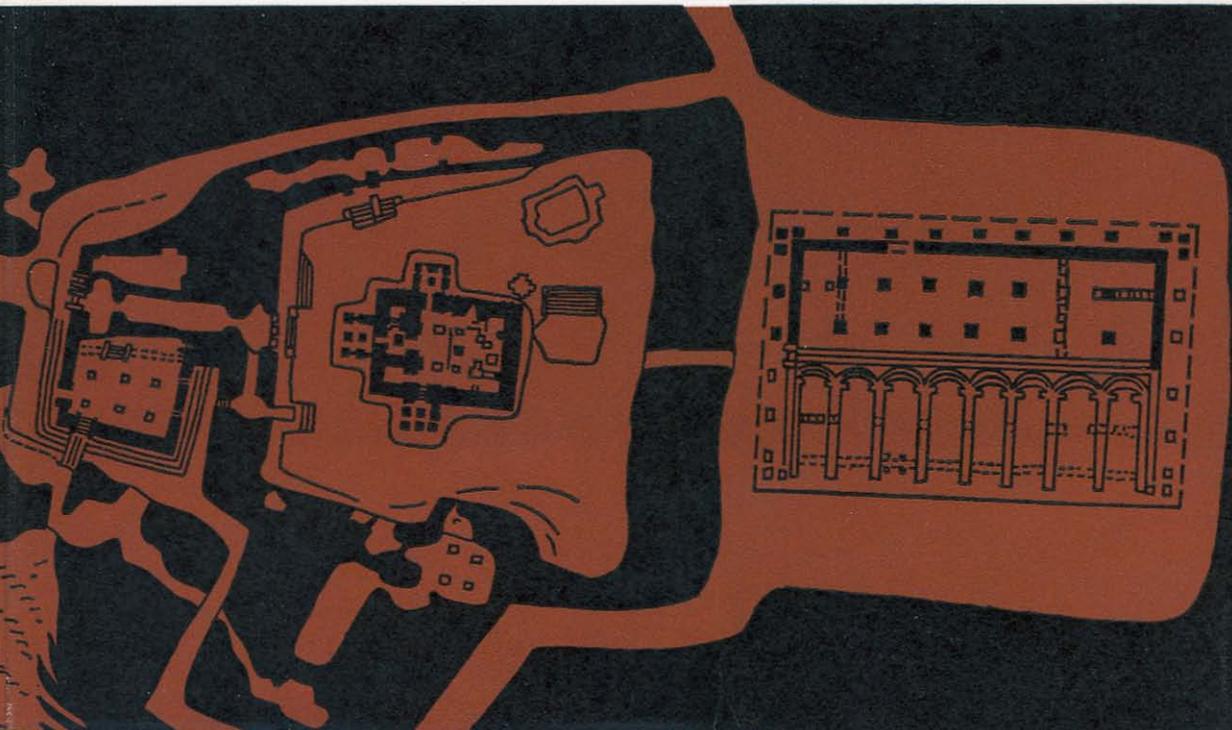


INTERNATIONAL FUND FOR MONUMENTS, Inc.

LALIBELA - PHASE I



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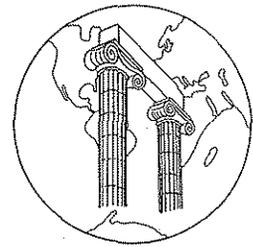
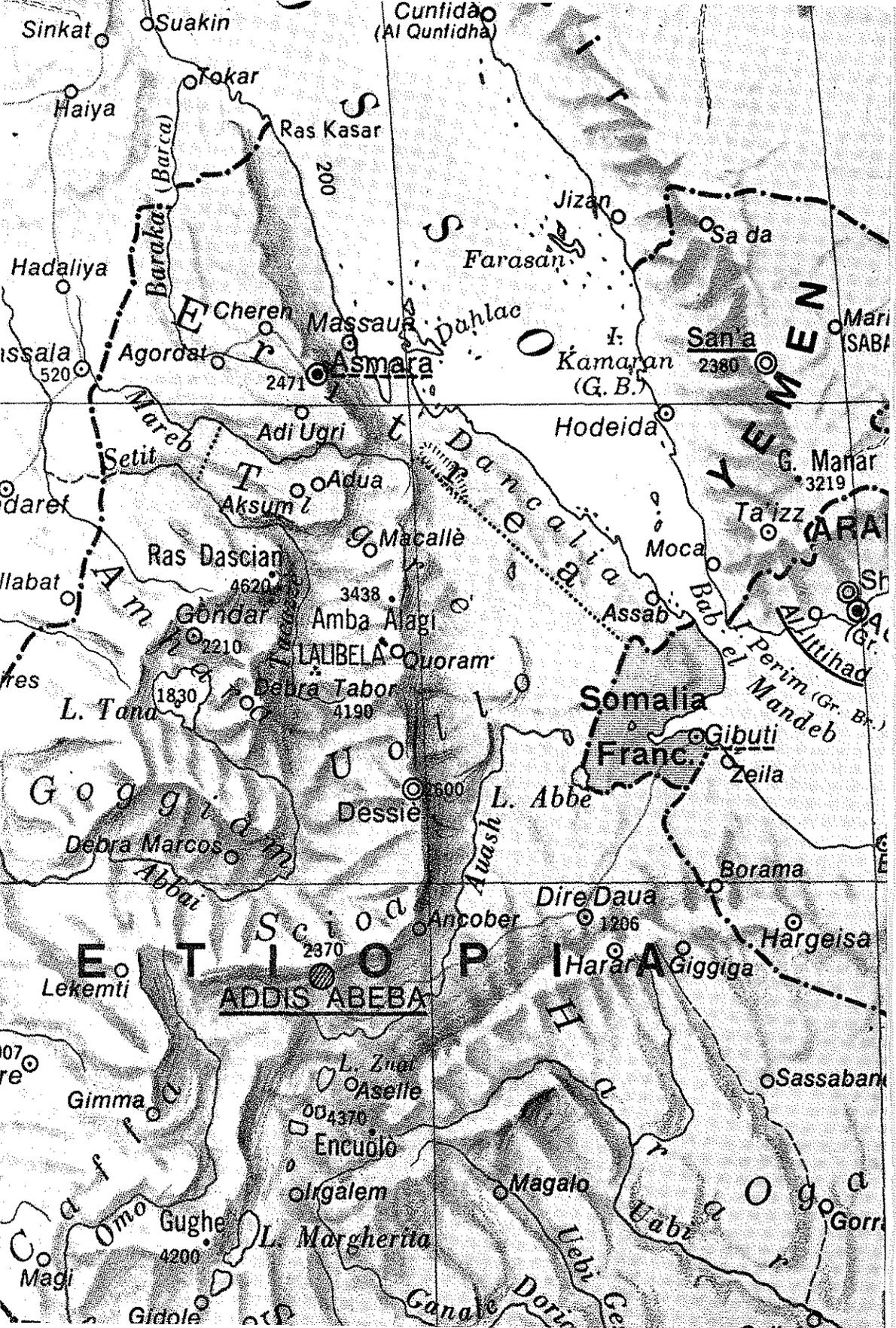
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INTERNATIONAL FUND FOR MONUMENTS, Inc.

LALIBELA-PHASE I

ADVENTURE IN RESTORATION

NEW YORK 1967

New York, NY.,
August 31, 1967

The International Fund For Monuments, Inc. is a private organization whose program is based upon the concept that the world's great artistic, historic and archaeological monuments are part of the cultural heritage of all mankind, and that the preservation of these treasures is an international responsibility.

The International Fund was formed on March 15, 1965 by a group of individuals who recognized the need, long expressed by UNESCO, for an organization to assist in the costs of preserving monuments in those countries which lack the financial means of doing so alone.

Our program has so far been supported by contributions from individuals in sympathy with the aims of the organization. We also use, where possible, locally-held funds generated by the sale of U.S. agricultural surpluses, in a seeding process which preserves the monument for posterity, and at the same time stimulates the flow of tourist dollars into the economy of the host country.

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The project in Lalibela is a splendid example of this arrangement. It is a joint effort involving close collaboration with the Imperial Ethiopian Government on a fund-matching basis. The International Fund engaged and paid the technical staff and provided the hard currency for the purchase of machinery and equipment. The Ethiopian Government, utilizing Counterpart Funds, paid the local workers and supplied the local currency for the purchase of materials and supplies.

The completion of Phase I of this work has been the source of great personal satisfaction to the founders and Trustees of the International Fund who now look forward to a final phase in Lalibela and then hope to move on to the preservation of other threatened monuments of world interest.

Charles M. Grace

Charles M. Grace
Chairman of the
Board of Trustees

« . . So great is my desire to make known this splendor to the world . . »

Francisco Alvarez, 1540 A. D.

The extraordinary architecture and engineering of the Coptic Christian churches of Lalibela in northern Ethiopia, and their remarkable history as the nucleus of the « New Jerusalem » place them amongst the world's great cultural monuments and religious shrines.

The slow but steady disintegration of these monolithic churches, each of which was sculptured in one piece down into the mountain about 800 years ago, represents a great loss to mankind.

The International Fund's concern about the churches dates back to 1965 and a letter written by His Imperial Highness Merid Asfa Wossen, Crown Prince of this ancient Christian kingdom, Ethiopia, to Professor John O. Brew, Chairman of UNESCO's Committee on Monuments (and Trustee of the Fund) asking for financial and technical assistance for their restoration and preservation.

Bas-relief « Riders of Light » on exterior wall of Biet Mariam.



Dr. Edmundo Lassalle, Vice Chairman of this organization, visited Ethiopia in the fall of 1965 to confer with the Crown Prince and with U. S. Ambassador Edward M. Korry. Out of these consultations came an agreement in principal to use U. S. « Counterpart Funds » in Ethiopian currency to finance half of the costs of the preservation work, and the formation of the « Committee for the Restoration and Preservation of the Churches of Lalibela » as the legal entity with which the International Fund might collaborate.

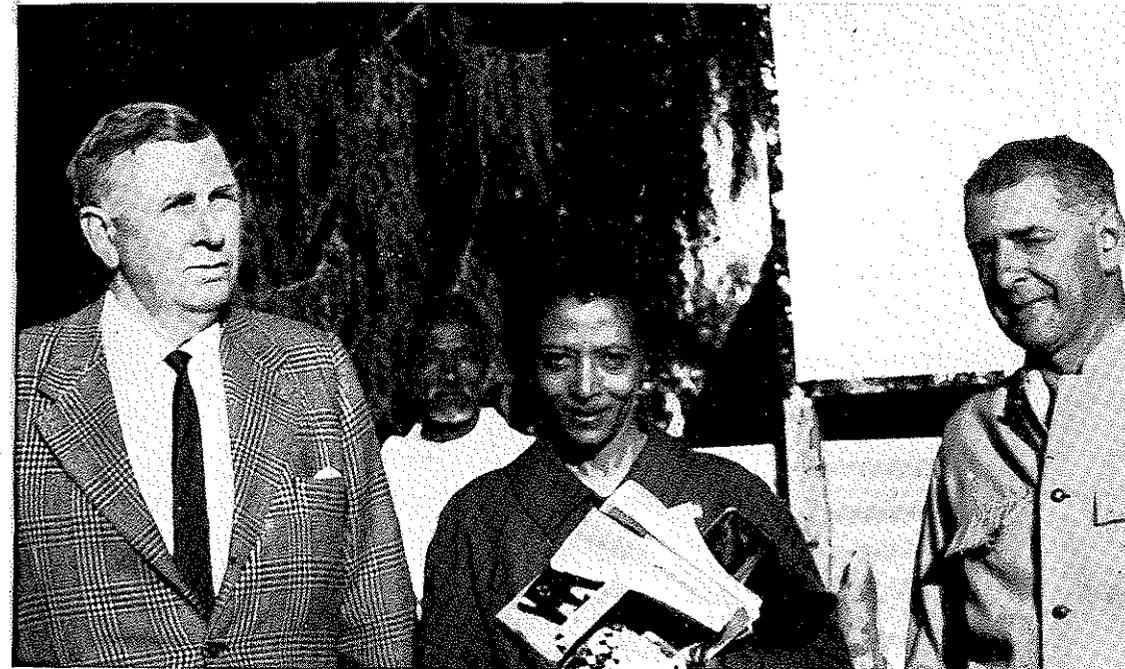
In the spring of 1966 the Fund's Executive Director, James A. Gray flew to Addis Ababa to consult with the Committee's Chairman, Her Highness Princess Ruth Desta, granddaughter of His Imperial Majesty, Emperor Haile Selassie.

On the recommendation of Professor Piero Gazzola, an Italian expert on the salvage of antiquities and another Trustee of the Fund, the Executive Director engaged Dr. Sandro Angelini, an architect specialized in monument restoration and Director of the Archaeological Museum of Bergamo, Italy to conduct a survey and draw up a cost estimate of the Lalibela project.

The survey was completed in July 1966, and when it was subsequently approved by the Ethiopian Committee and the International Fund, Dr. Angelini was authorized to proceed with the work. He recruited a team of five technicians, all from Bergamo, and took them to Lalibela. Actual work began on December 19, 1966 and was halted on March 31, 1966 well in advance of the rainy season which renders the area inaccessible.

Basically, the Ethiopian Committee utilized U. S. Counterpart Funds to pay for the transportation and board of the European staff and the wages of the Ethiopian workers, while the International Fund paid the salaries and fees of the technicians and purchased the bulk of the heavy equipment and supplies, most of which were brought in from abroad.

With the completion of Phase I, the International Fund



Princess Ruth Desta, Committee Chairman, with James A. Gray, Executive Director of the International Fund, and Architect Sandro Angelini, Lalibela Project Director.

must express its gratitude to Princess Ruth Desta for her deep dedication and unflagging interest in the project; to Ambassador Edward M. Korry for his encouragement and valued counsel. To Dr. Sandro Angelini and his hard-working team goes our highest commendation for their superb performance in the face of many difficulties.

Our grateful thanks are extended to the American contributors, who prefer to remain anonymous, but whose generosity made the project possible. We hope that we may count on their continued interest and that of others in the completion of a final phase to save these treasures, which are in daily use, as they have been over the centuries.



King Lalibela.
A canvas in Biet Micael XVII Century.

Fronterspiece of first issue of
Portuguese chronicle of Padre Alvarez 1540 A.D.



Verdadera informaçam das terras do Preste
Joam segundo vto e referenço do padre Francisco Alvarez capellã del Rey no
Reyno de Portugal. E agora novamente impresso por mandado do Sr. Rey em casa de Luis
Rodriguez Martiro de sus altezas.

HISTORY OF THE CHURCHES

The exact origins of the eleven churches of Lalibela are shrouded in the mists of time. They may have been created over a long period of time by successive regimes, but an Ethiopian legend has it that they were produced during 23 years by Emperor Lalibela of the Zagwe dynasty, which ruled the country in the 12th Century A. D. There is evidence that Copt craftsmen from Egypt or Jerusalem did the main « construction » work, and that Indian artisans may have decorated the interiors.

Some think that the churches may have been inspired as the result of a visit of the Queen of Sheba to Jerusalem about 1,000 B. C., but it is more widely believed that they were dug out to form a new Jerusalem after Moslem conquests halted the Christian pilgrimages to the Holy Land. Some substantiation for this theory is found in the place names such as: River Jordan and Mount Tabor (in Lalibela) and Bethlehem and other Biblical names scattered about Ethiopia, which remained Christian since the Fourth Century - the only country in Africa to do so. An old Ethiopian chronicle relates: « To save sinners from perdition, the Saviour of the World made this promise to King Lalibela: *Whoever comes*

in pilgrimage to your sanctuary will acquire the same merits as those who have made the pilgrimage to the Holy Sepulchre (Jerusalem).. and so he continues confirming the value of Lalibela as a Holy City. »

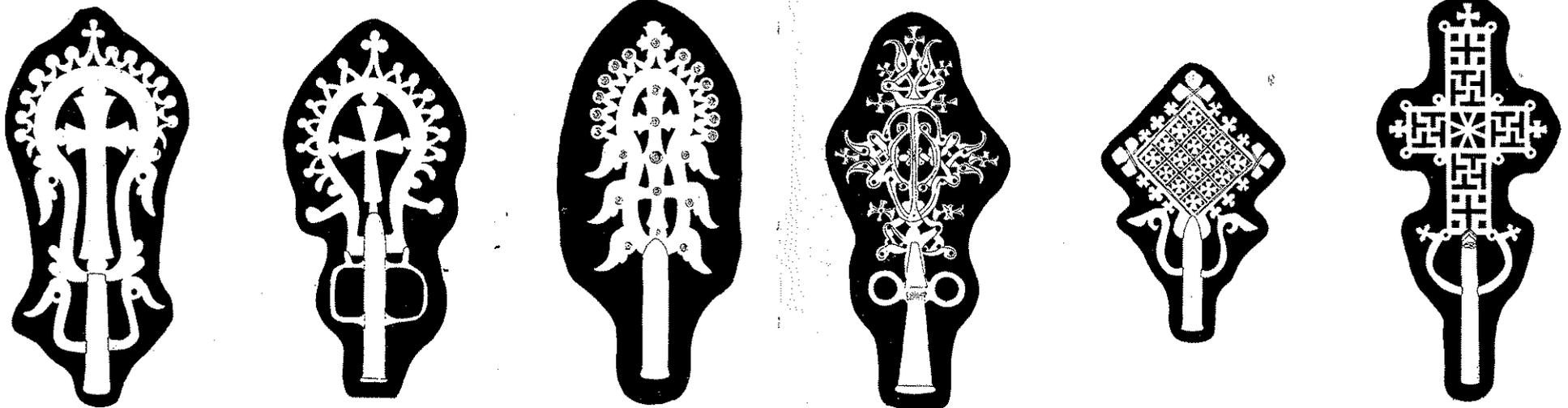
What little is known of the history of the churches comes from early travellers, scholars and archaeologists. The Portuguese Jesuit explorer Francisco Alvarez wrote about 1540: « Buildings the like of which and so many cannot be found in the world . . I weary of writing more about them because it seems to me I would not be believed . . »

DESCRIPTION OF THE CHURCHES

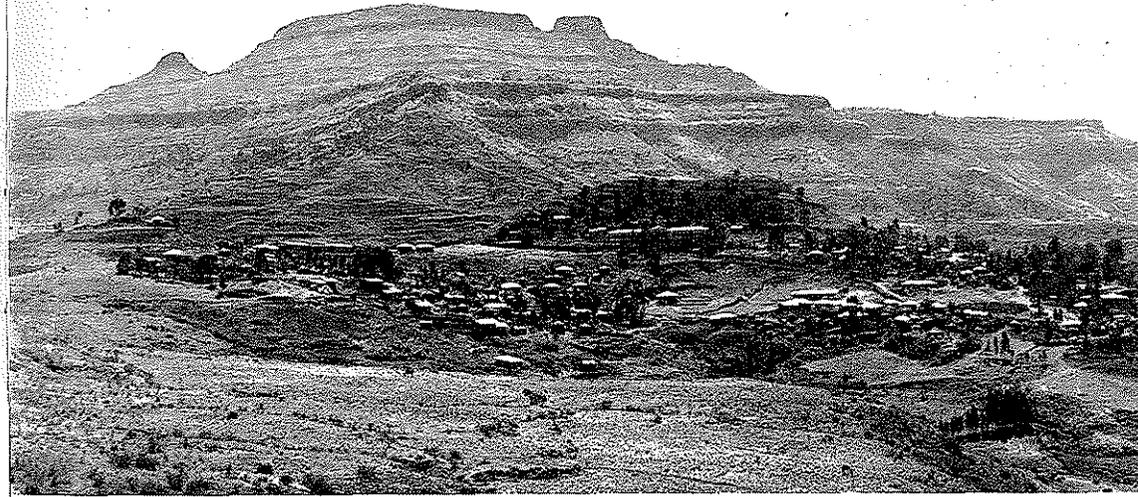
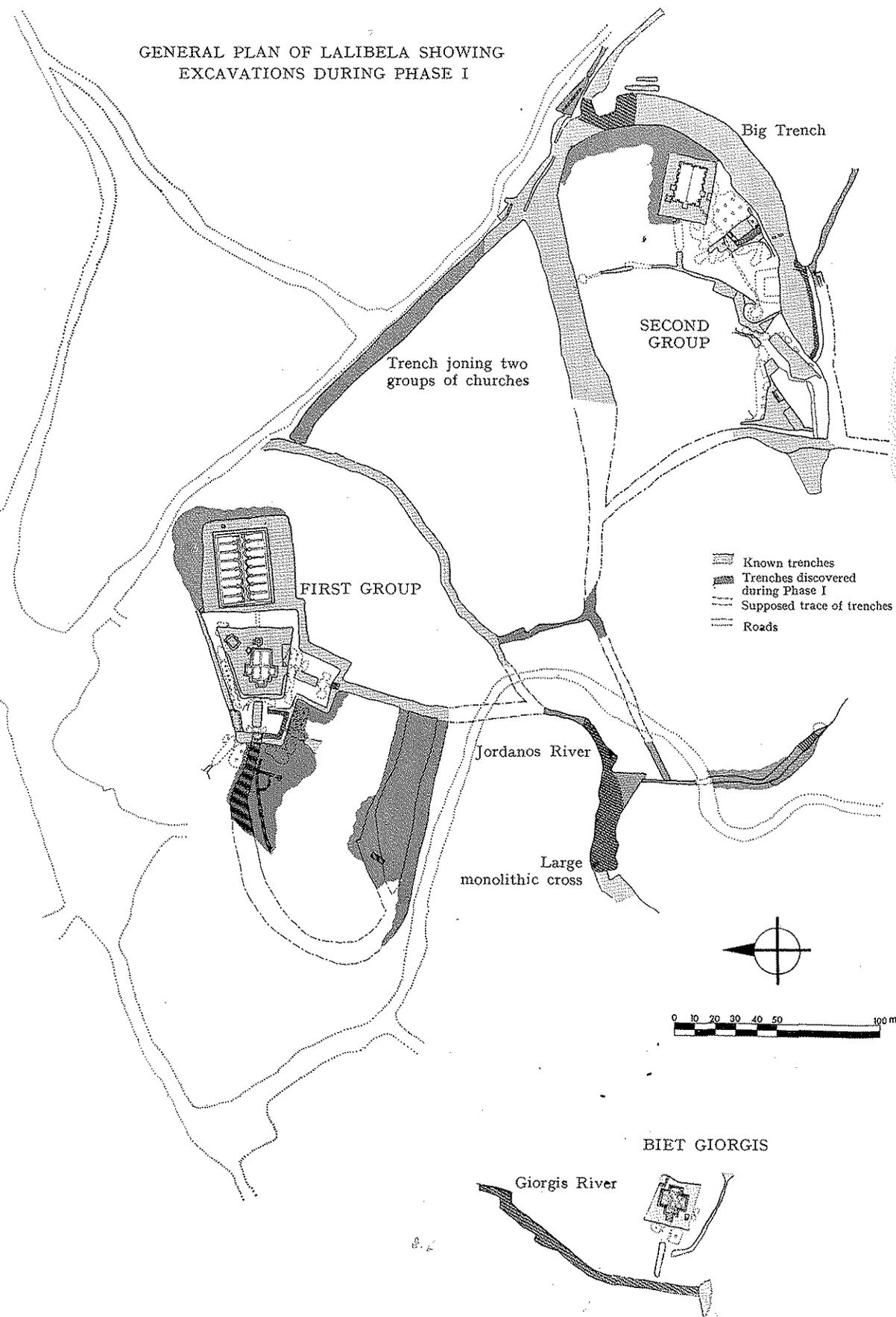
As Alvarez discovered, the churches were not constructed according to traditional methods but were hewn from the living rock in massive rectangular blocks. Out of these blocks the

craftsmen chiseled and carved edifices with ornate roofs and ceilings, walls 30 to 50 feet high, floors on varying levels, individual rooms, windows, columns and arches. They surrounded the churches with an extensive system of drainage ditches and defensive trenches in a finished work that was a gigantic accomplishment in engineering and architecture. As one basis of comparison, and not counting the extensive additions uncovered by Dr. Angelini, it is startling to note that the volume of rock dug out was five times that involved in the creation of the two temples of Abu Simbel in Upper Egypt.

Architecturally, the work seems to have been influenced more by the underground Coptic churches in Egypt than by the cave churches which abound throughout Ethiopia. The Lalibela churches exhibit traces of Byzantine influence and their workmanship and design must have originated in the artistic centers of the Eastern Mediterranean. The end result is a complete church in a single mass attached only at the base to the contiguous mountain.



GENERAL PLAN OF LALIBELA SHOWING
EXCAVATIONS DURING PHASE I



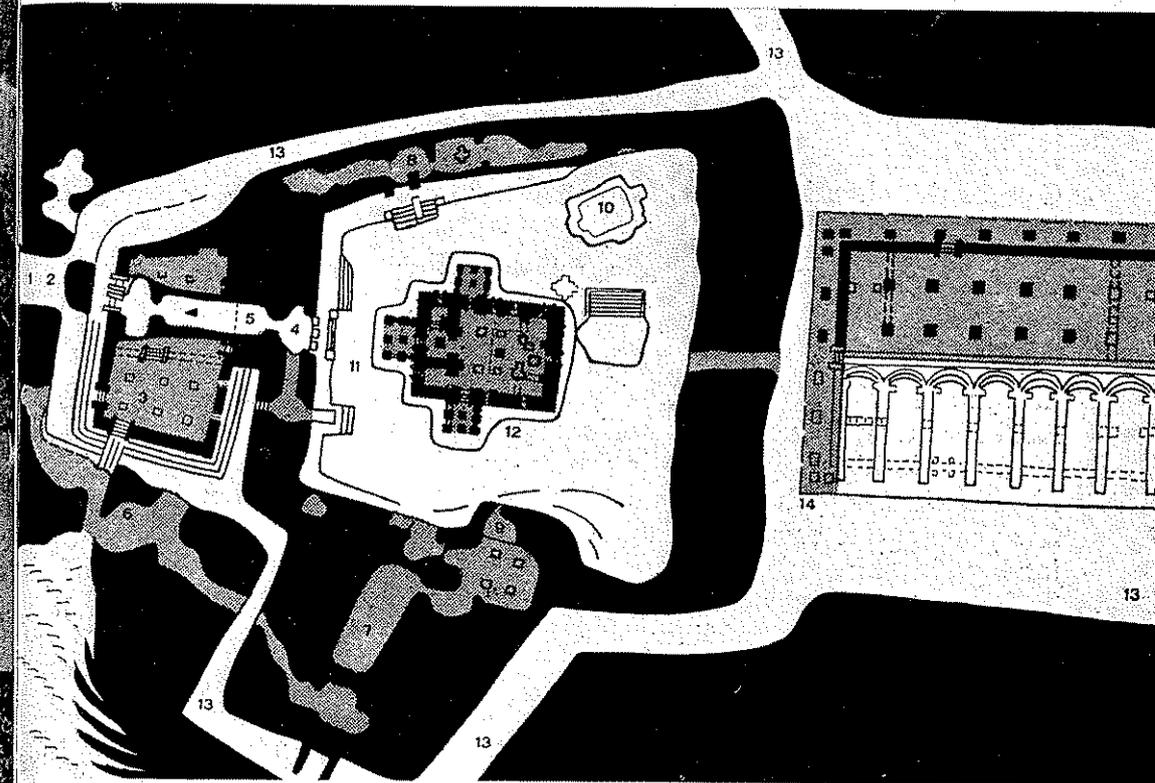
A general view of Lalibela.

The eleven churches of Lalibela are congregated in two main groups with one straggler. The first group is comprised of Biet Medani Alem (House of the Saviour of the World), Biet Mariam (House of Mary), Biet Mascall (House of the Cross), Biet Denagel (House of Virgins), and Biet Golgotha Micael (House of Golgotha Michael). The other group consists of Biet Amanuel (House of Emanuel), Biet Cheddus Mercoreos (House of St. Mercurious), Biet Abba Libanos (House of Abbot Libanos), Biet Gabriel Raphael (House of Gabriel Raphael), and Biet Lehem (House of Holy Bread). The eleventh is Biet Giorgis (House of St. George) sitting in lonely splendor across the River Jordan.

The churches are connected by trenches and tunnels which are pockmarked with small caves that must have once been used as cells for monks or rooms for pilgrims. Many of these



PLAN OF FIRST GROUP OF CHURCHES



1. Trench.
2. Tomb of Adamo.
3. Biet Golgotha Micael.
4. Crypts.
5. Passage to tomb block.
6. Ancient subterranean passages.
7. Entrance to courtyard of Biet Mariam
8. Biet Mascal.
9. Biet Denagel.
10. Small pool.
11. Courtyard of Biet Mariam.
12. Biet Mariam.
13. Courtyard of Medani Alem and trenches.
14. Medani Alem.

(From Della Corte and Biddev).

Opposite page: Aerial photo of First Group courtesy of National Geographic Magazine 1965.

niches were utilized as tombs for highly-venerated priests and one can observe mummies in them even today.

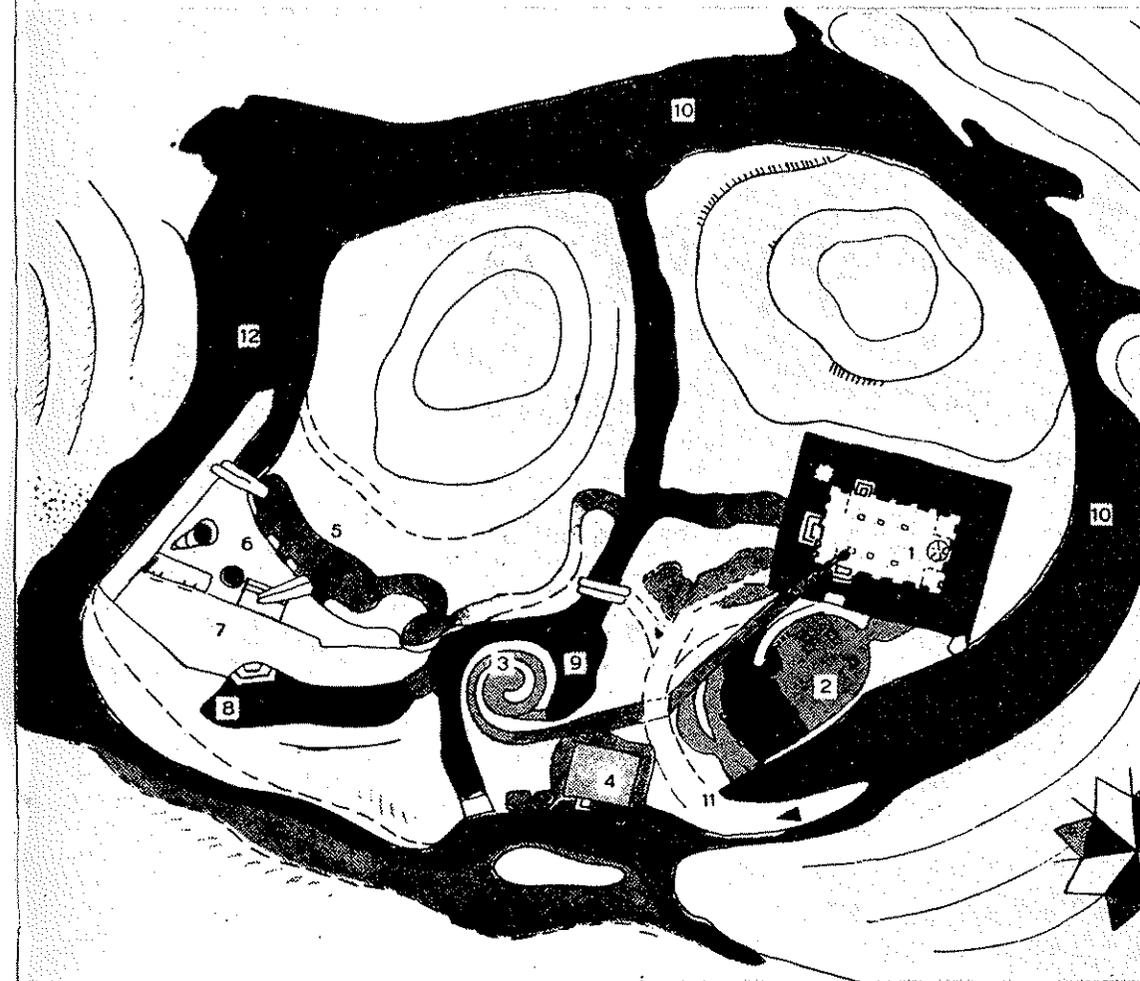
The interiors are adorned with numerous frescoes, bas-reliefs and paintings which, although not of great artistic merit, are of considerable historic and iconographic interest. One of the churches, Biet Mariam, displays on an exterior wall, a striking bas-relief portraying two mounted lancers called «The Riders of Light». The ceilings and arches of many are covered with brilliantly colored geometric designs which can best be appreciated under artificial illumination.

The village of Lalibela, which surrounds the churches, lies in Lasta Region, about mid-way between the capital Addis Ababa, and the next largest Ethiopian city, Asmara. It is far off the main highway connecting these two cities, and isolated high in the rocky hills at an altitude of 8,600 feet. Until a few years ago it could be reached only by a four-day, bone-jarring ride by muleback across 85 miles of rugged terrain. Today one can land a few miles from the center on an airstrip served by Ethiopian Airlines, and complete the journey by Landrover jeep.

DISINTEGRATION OF THE MONUMENTS

Although some of the churches are in fair condition, all show signs of breaking up at the hands of time, weather, and even man. Some of the damage is similar to that which might be found in conventionally constructed buildings of the same age. More is due to the static nature of the monolithic masses and to uneven settling over the centuries. Many large crevices,

PLAN OF SECOND GROUP OF CHURCHES



1. Biet Amanuel.
2. Biet Mercoreos.
3. Biet Lehem.
4. Abba Libanos.
5. Gallery.
6. Deep pit with subterranean cistern and well.
7. Biet Gabriel Raphael.
8. Original entrance to Biet Gabriel Raphael.
9. Central trench.
10. Great outer trench.
11. Entrance path.
12. Approach to «Path to Heaven».
13. Road.

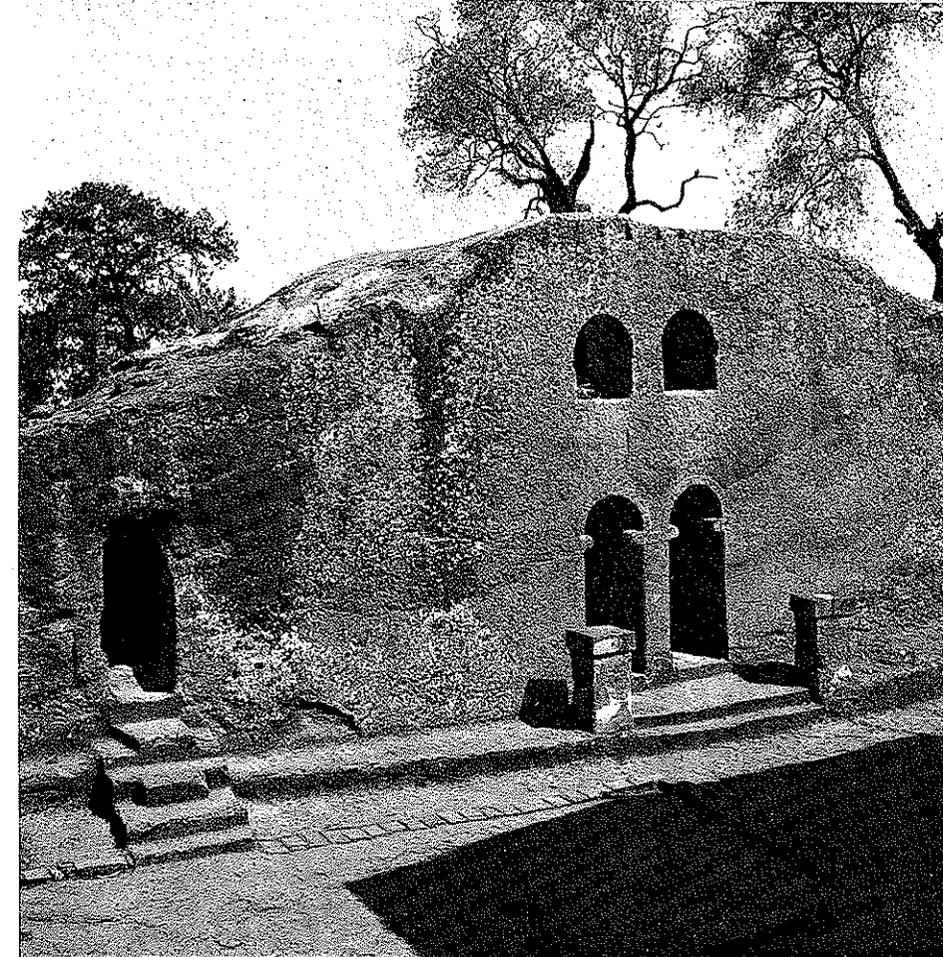
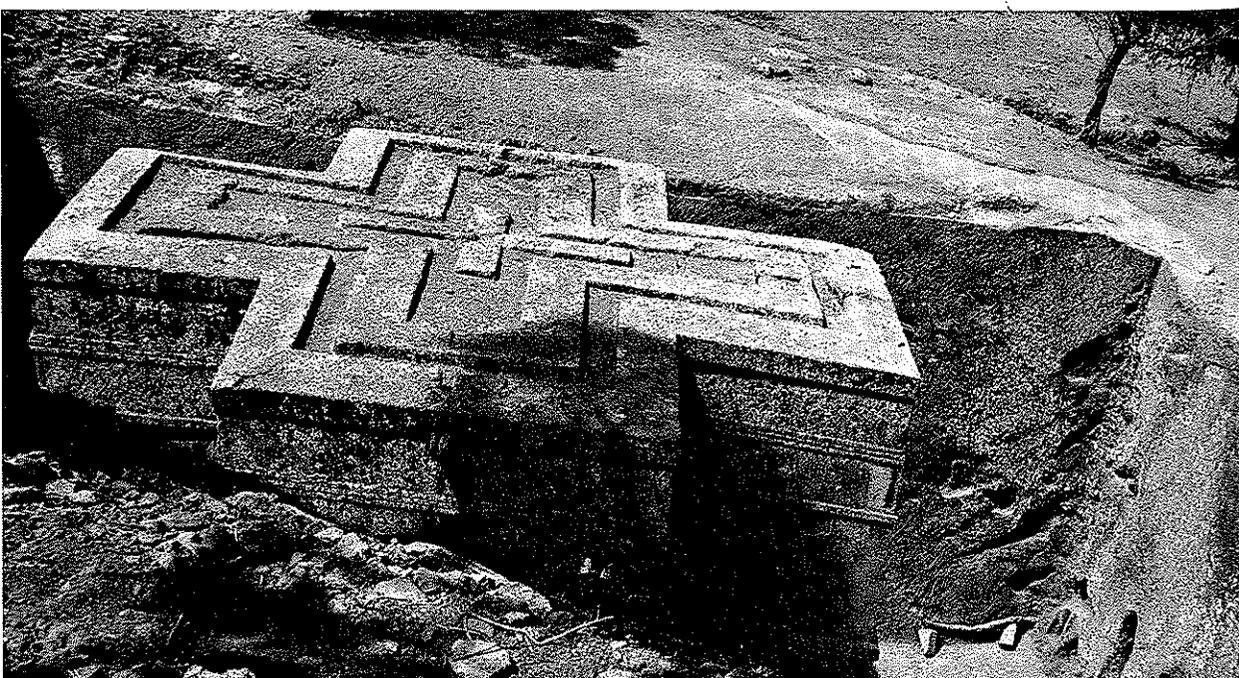
(From Della Corte and Bidder).



Biet Mascal.

cracks and fissures have opened up - some of geological origin, and others the result of shifting of sections of rock. The principal villain has been the intensive rainfall during summer months throughout the centuries. Another element of destruction has been the slow, constant penetration of roots into the crevices, as at Angkor Wat in Cambodia, and to lichens and microvegetation attacking the walls and roofs.

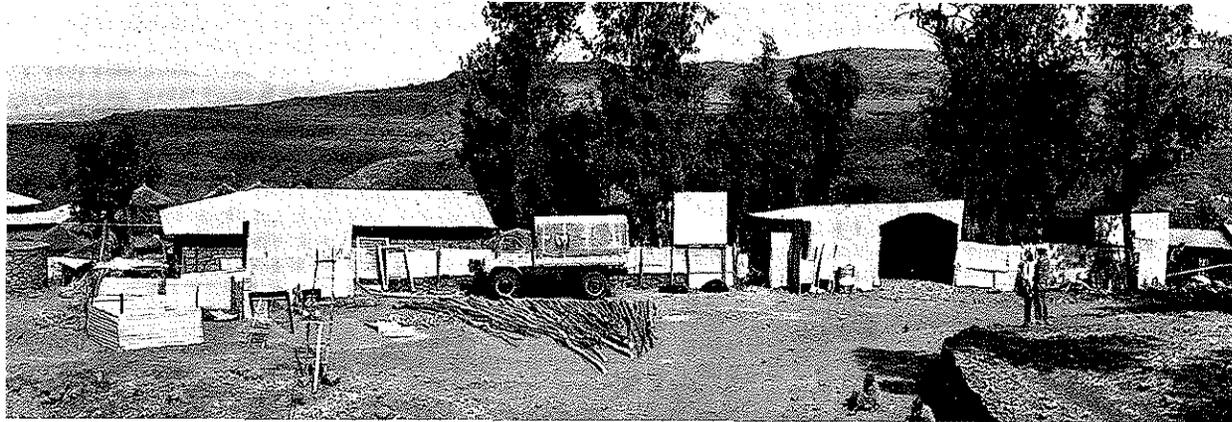
Biet Giorgis.



Sculptured mound viewed from courtyard of Biet Mariam.

« RESTORATIONS » OF THE PAST

Many « restorations » have been undertaken, most within the past few decades, and have generally injured, rather than improved the monuments. Some works, such as the construction of stairways and partitions, were done for the convenience of the priests and have disturbed the artistic integrity of the churches. In two cases, Biet Amanuel and Biet Medani Alem, the exterior walls were coated with tar and then covered with an incongruous red paint - a treatment



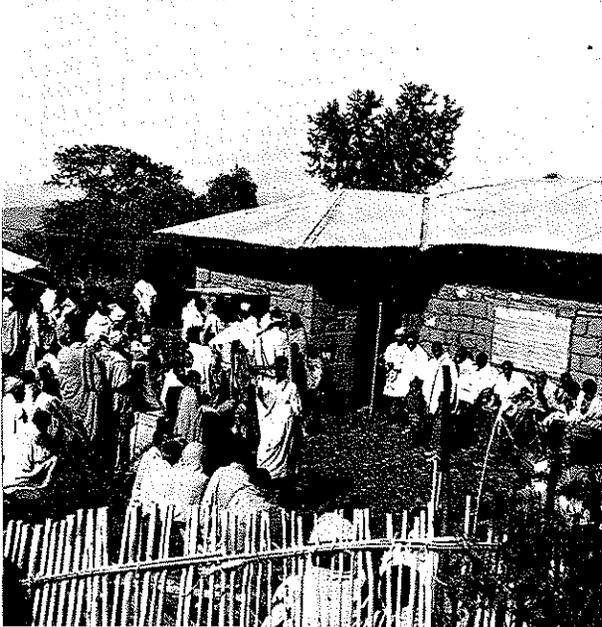
Project headquarters.

which halts the natural breathing of the rock. The roofs of these two churches were sheathed with corrugated metal, completely destroying their original monolithic appearance. Here and there cornices and pillars were rebuilt with little grace but with much cement.

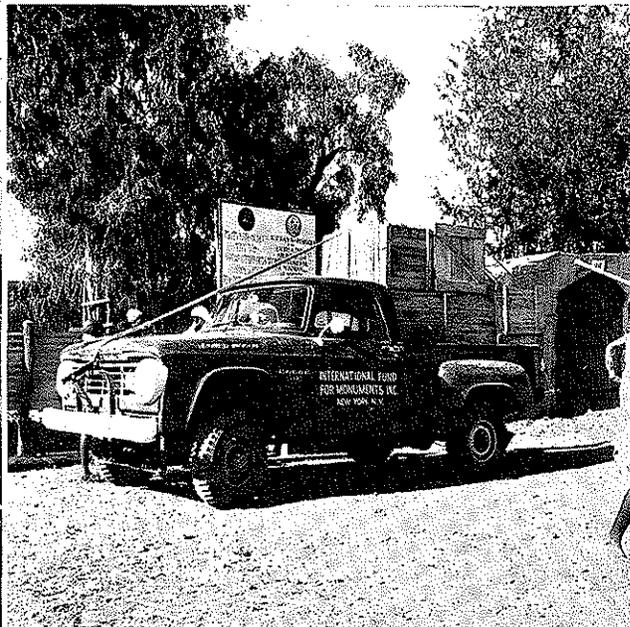
PROGRESS REPORT ON PHASE I

Dr. Angelini reports that, without an additional dollar in costs, the Ethiopian workers and his team of Italian specialists were able to complete three times the extent of restorations and excavations foreseen in his estimate - this

Pay Day.



Arrival of equipment.



despite the problem of training the workers, the poor communications, slow arrival of equipment, and the fact that the work had to be conducted in the midst of daily services in the churches.

The guiding principle of his preservation effort is to safeguard the churches from further deterioration, remove false additions, and to reestablish where esthetically permitted, the monolithic form and character that they once had. This latter is effected by a build-up of damaged or destroyed areas with a mixture of crushed local stone and neutral cement molded to the original form and color but with a different exterior texture.

Although much static strengthening remains to be done during a second phase, the team consolidated many cracks and fissures in places that showed imminent danger of collapse. This was done by injecting a cement of high adhesive and expanding qualities and, where indicated, by inserting steel reinforcing rods. In the case of one church, Biet Mariam, heavy repairs of this nature were necessary after the removal of recent additions which had covered gaping cracks and seriously weakened walls.

In the field of protective restoration, the team applied a water-repellent solution to the worst areas of the roofs of four churches - Biet Mariam, Biet Medani Alem, Biet Denagel, and Biet Micael. As an additional measure, they covered the roof of Medani Alem with sheets of polyethylene, a plastic shield which will be removed when we complete the restorations during Phase II.

In the sector of correcting previous « restorations », the most tedious and time-consuming task was the removal of the tar-based paint from the exterior walls of Medani Alem and Biet Amanuel. The tar coating foiled efforts to clean the surface by scraping, sanding, burning, or the use of chemicals (acids and solvents) because the heat thus generated imbedded the tar more deeply into the porous stone.

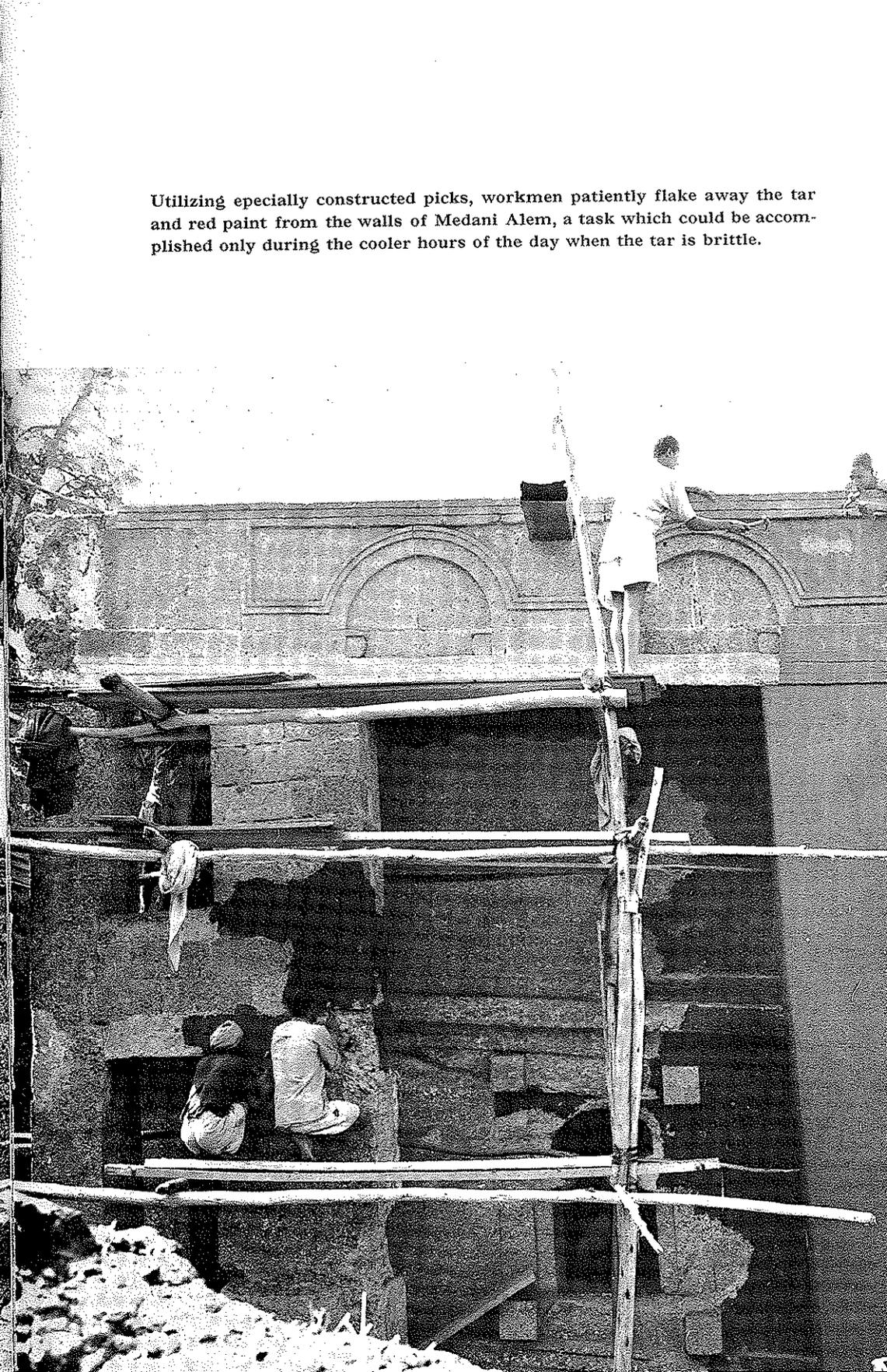
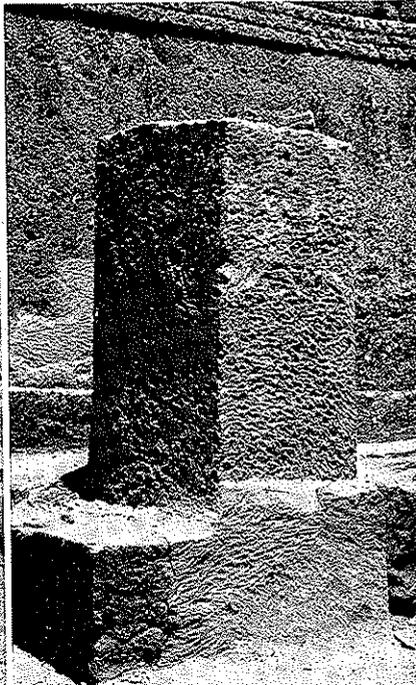
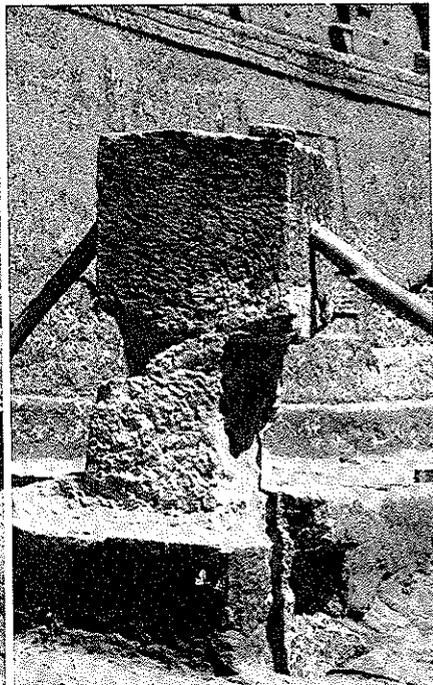


A corner of Biet Mariam reconstructed with modern brick and cement.



Same corner after removal of incongruous additions but before restoration to monolithic form and appearance.

Lower photos: A small pillar in the courtyard of Biet Mariam; before, during, and after restoration.



Utilizing specially constructed picks, workmen patiently flake away the tar and red paint from the walls of Medani Alem, a task which could be accomplished only during the cooler hours of the day when the tar is brittle.



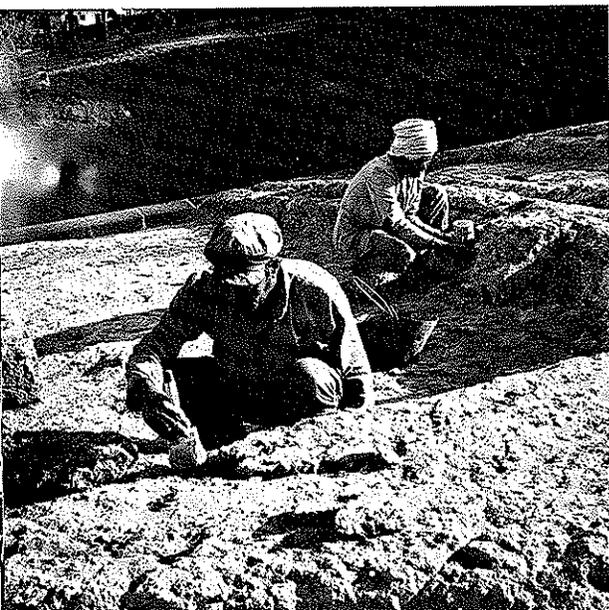
The heavy layer of grey cement being carefully chipped away from the roof of Medani Alem to expose the original monolithic surface.

Fortunately, it was discovered that during the cooler hours of the day when the tar was brittle, by lightly tapping the surface with a pointed instrument, the tar flaked away about a square inch at a time, carrying with it the red paint. Fifty small picks with case-hardened points were flown in from Italy and the slow and systematic job was begun. At the end of Phase I, about two-thirds of the more than 30,000 square feet of painted surface had been cleaned.

The corrugated metal covering of the roof of Medani Alem was removed and a heavy layer of cement underneath was

Workmen sealing and binding cracks and crevices found in roof of Medani Alem.

A section of the roof of Medani Alem after removal of «recently» added layer of cement, and showing the details of the bas-relief of large arches.



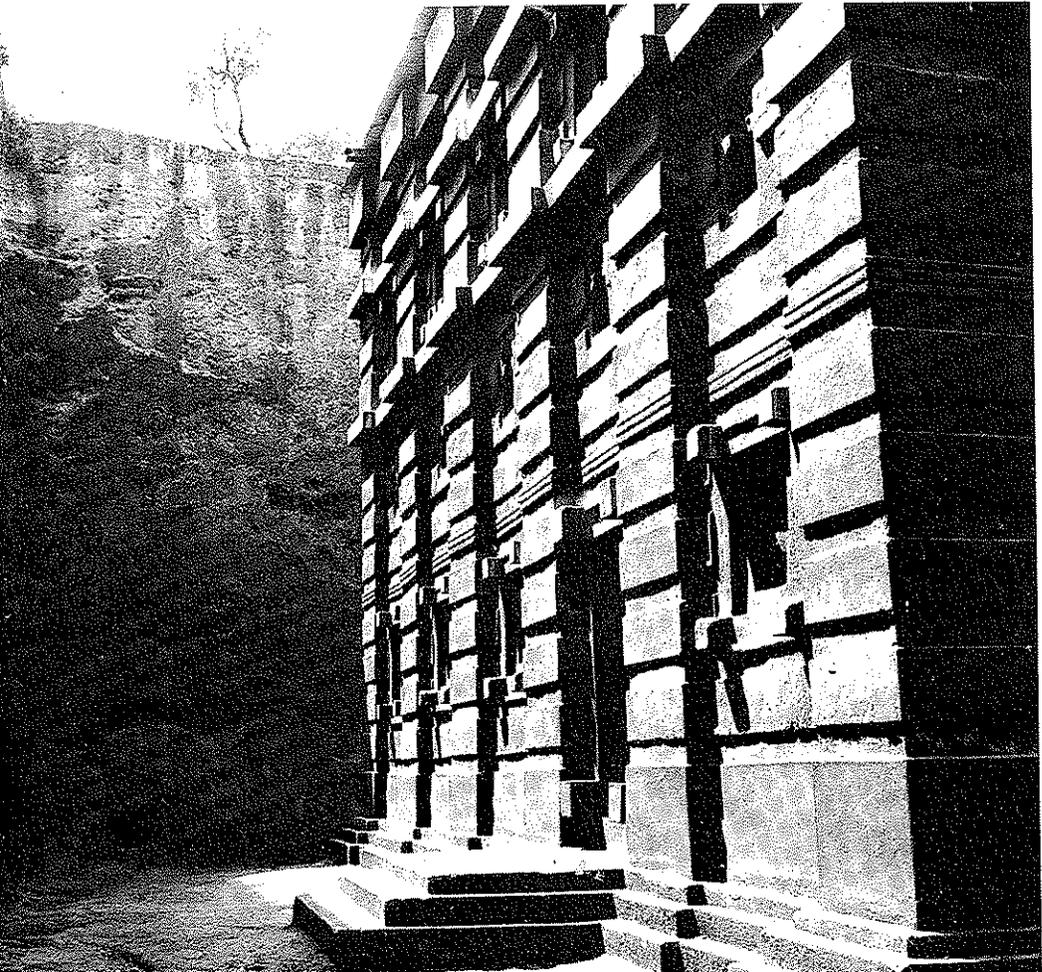
Biet Mercoreos: View between supporting pillars. Left photo showing «recently» added partitions which we removed during Phase I (right photo) to restore original floor plan.



painstakingly chipped away to expose once more the original naked stone with its bas-relief of large crosses and arches. Here and there on the various churches the team removed sections of cornices and pillars that had been crudely rebuilt with modern brick and cement. Much of the work to restore these features to their original monolithic appearance will be done during the second phase.

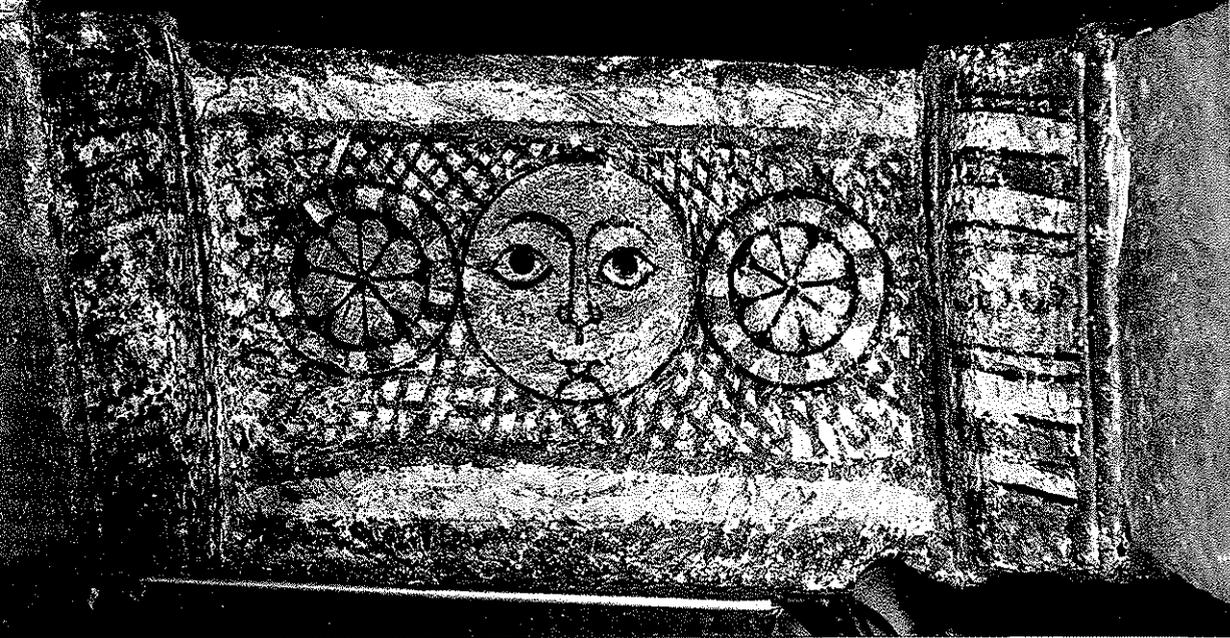
The team's art restorer devoted most of his time to saving the frescoes and paintings in Biet Mariam, the richest repository of such art, and completed 95% of the task of cleaning, «fixing», and restoring (where indicated) these

Biet Amanuel, which at first glance appears as though it were constructed rather than sculptured, and with an architecture of a much later period, but actually a splendid example of Axumite style.

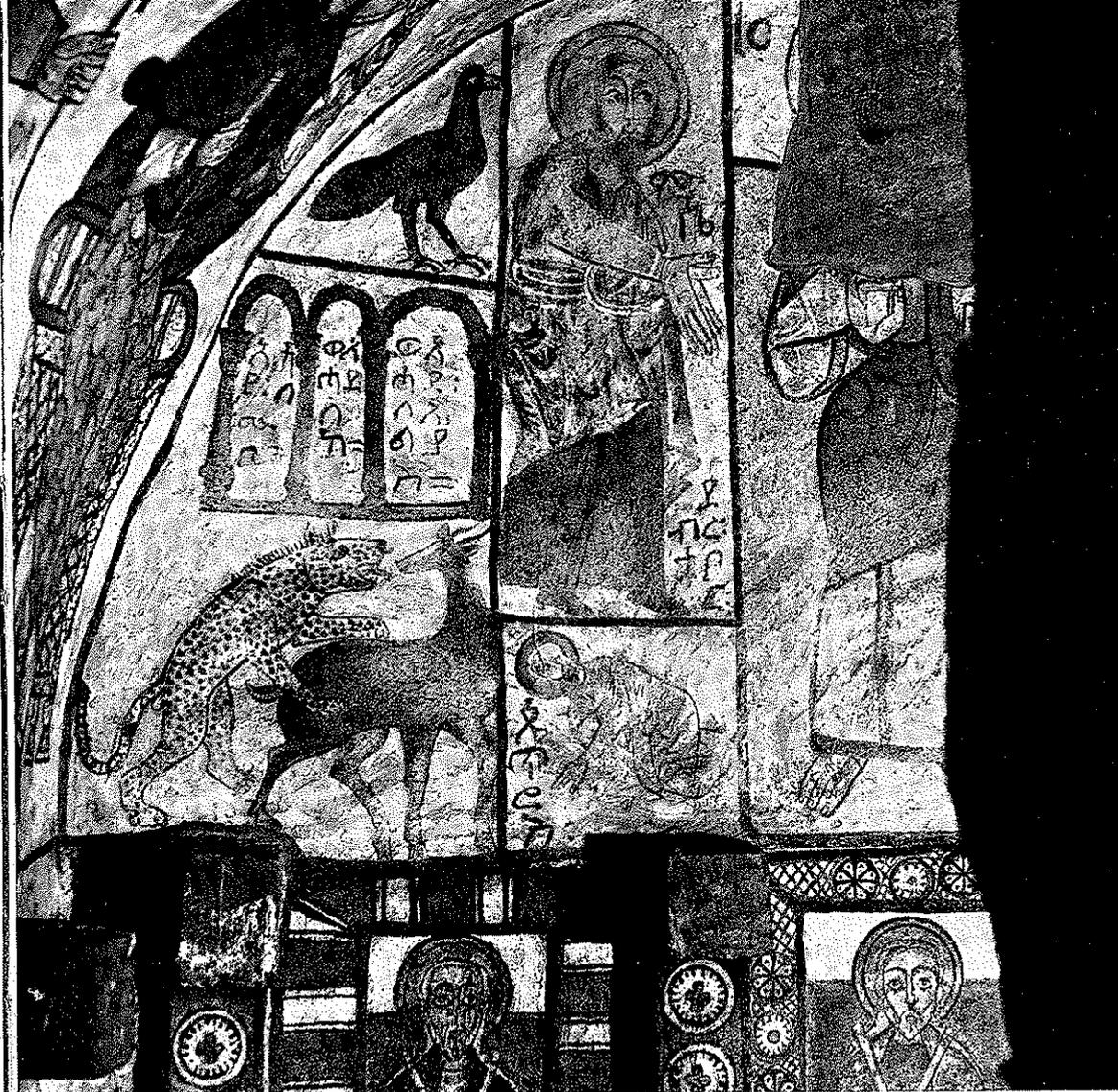
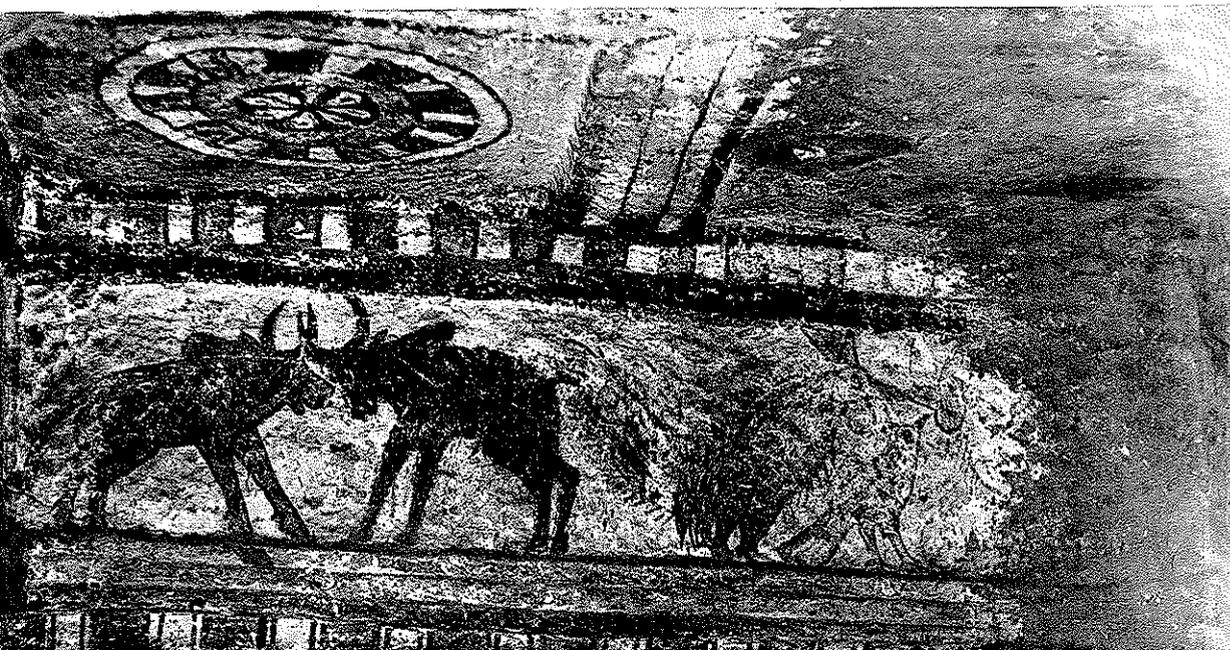


A fresco within Biet Mariam after restoration.

works. Various other art objects, such as canvases, decorative shields, small tables and screens have been stored in the Governor's headquarters to await restoration during the second phase.

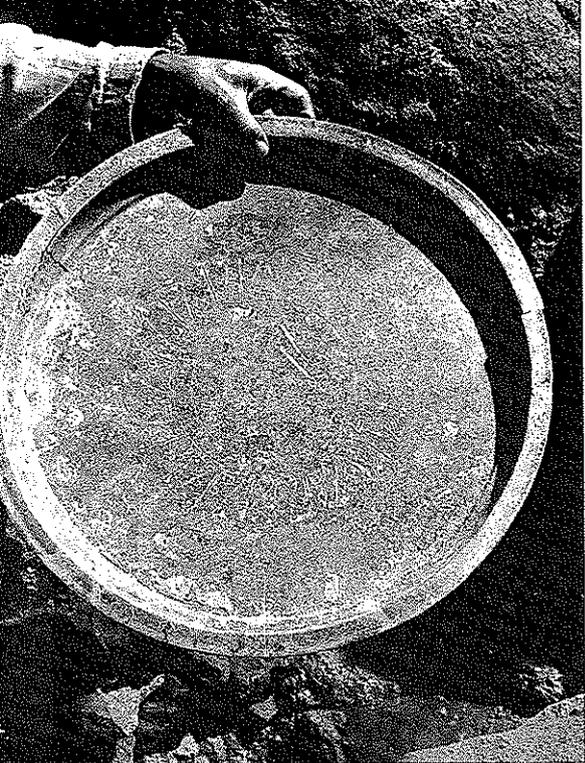


Biet Mariam: Above, frescoes painted on undersurface of interior arch showing sun and two flower designs. Below, two bulls with white bull symbolizing good and the black bull evil. On the right, a fantasy of bird figures.

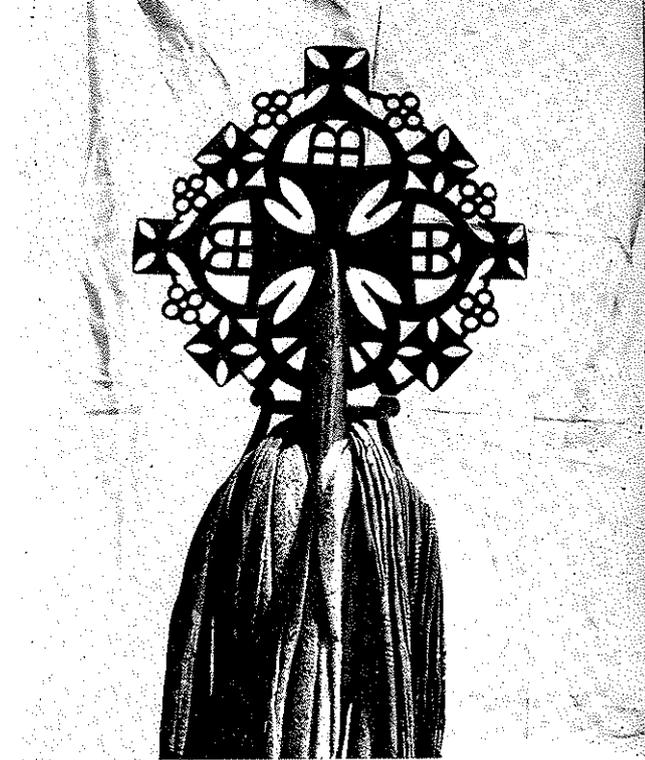


Biet Mariam: Wall above altar after restoration.

Interiors of all churches of Lalibela are highly decorated with saints, holy scenes, symbols, and geometric designs.



Copper plate unearthed at Biet Mercoreos.



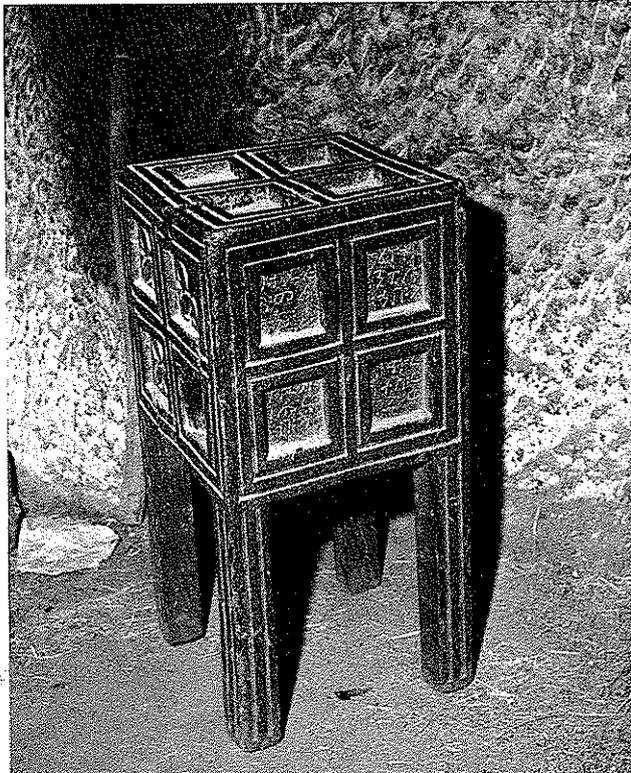
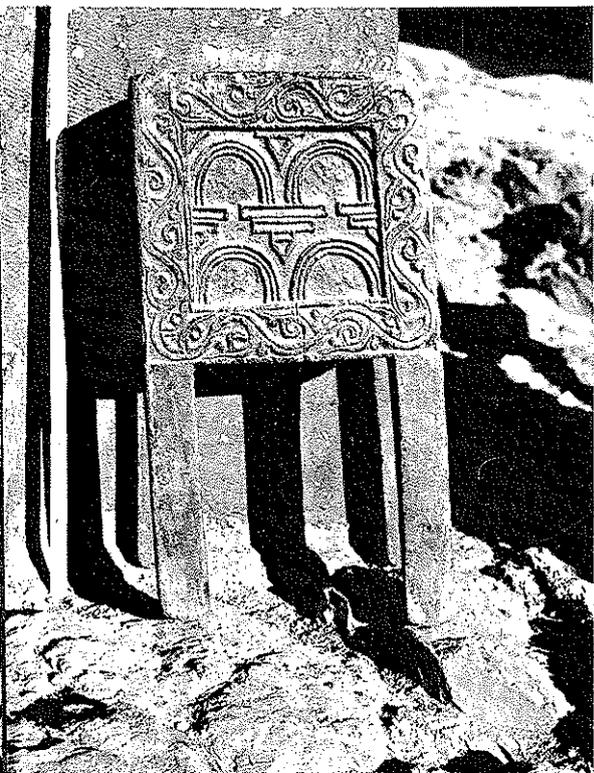
A typical cross of Lalibela.



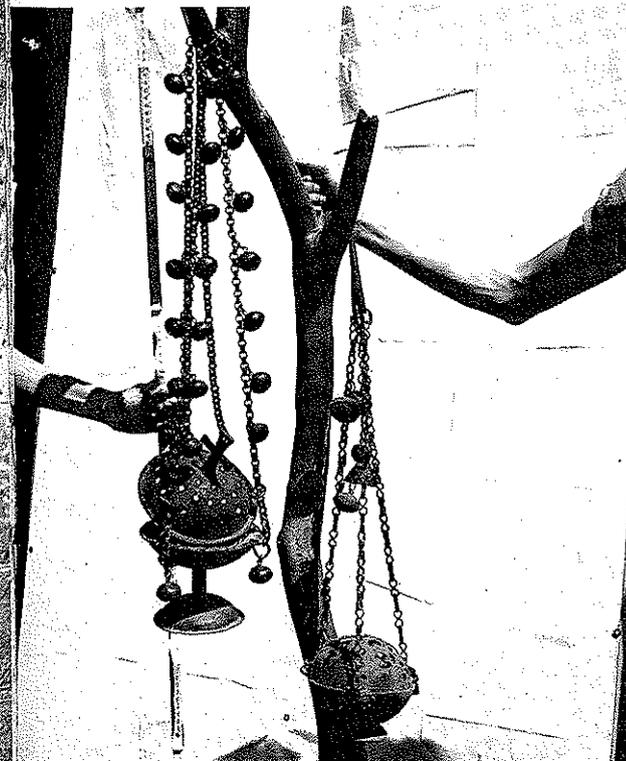
Above: Two of the decorative shields from Medani Alem.

This page and opposite: Articles within the churches which became part of photographic inventory and must be preserved as essential and configurative elements in the life of the churches.

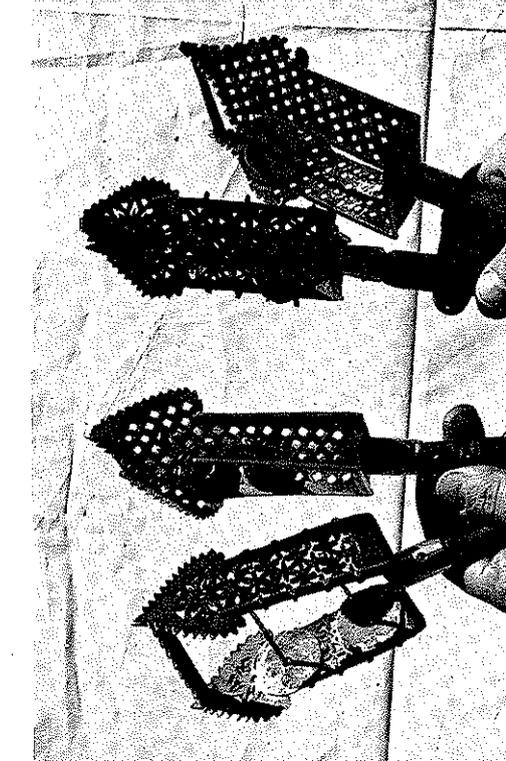
Below: Two examples of sacred stools called «menvers».



A censer.



Sistrums.

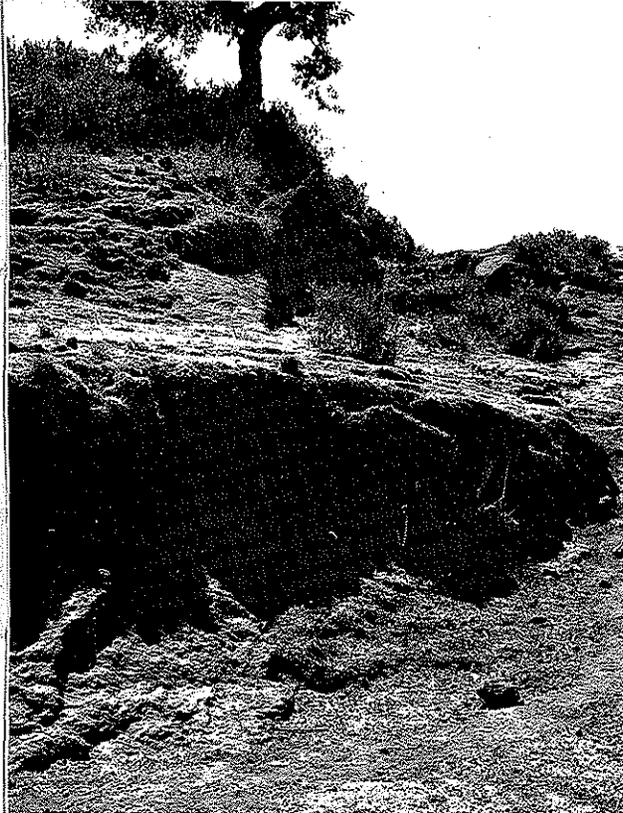


EXCAVATIONS

By ingenuity, Dr. Angelini and his co-workers were able to achieve a much greater volume of archaeological excavations than originally planned. The native work force was increased from 200 to 400 and a primitive trolley-and-cable bucket system was introduced to enable them to reduce radically the time and effort to remove the excavated earth to a satisfactory distance from the site - always a major problem in an archaeological excavation.

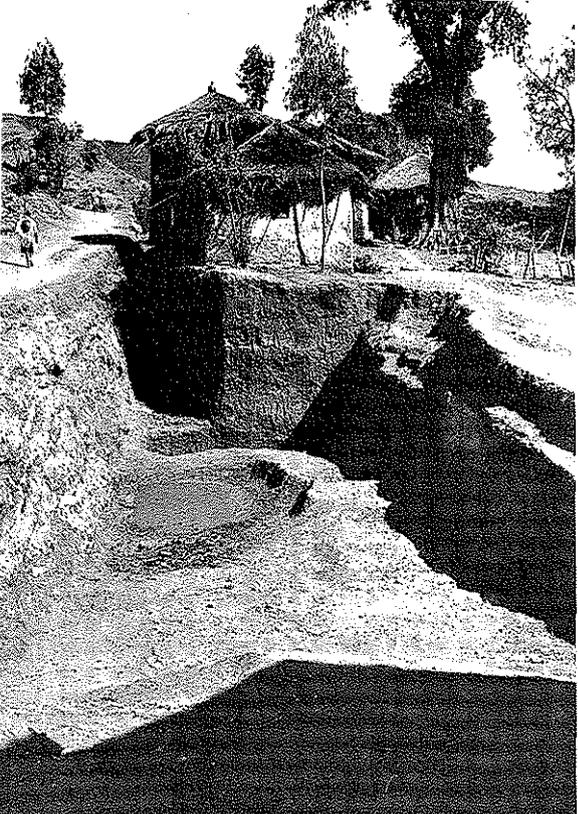
Although the bulk of the 15,000 cubic yards of digging was designed to ensure adequate drainage of rainwater by exposing again the portions of the complex which had been covered over, and to impede the washing of rubble and stones into the courtyards, Dr. Angelini reports that he soon became fascinated with important historical discoveries. Digging in the area adjacent to Biet Mercoreos uncovered fragments of ancient pottery, a large copper plate of Oriental origin (probably from India), and iron tethers for chaining prisoners. Dr. Angelini believes that these findings support his theory that Biet Mercoreos was originally not a church, but the civil palace of a ruler who may have predated King Lalibela.

The project director adds that, with the uncovering of many deep trenches and ditches, nearly all of the perimeter of this walled and moated city has been traced, and that if these excavations are adequately pursued, the aspect of the eleven single churches will be converted into a gigantic, integrated shrine and a sculptured mountain - an important attraction for tourists, a laboratory for scholars, and a great cultural gift to the world.

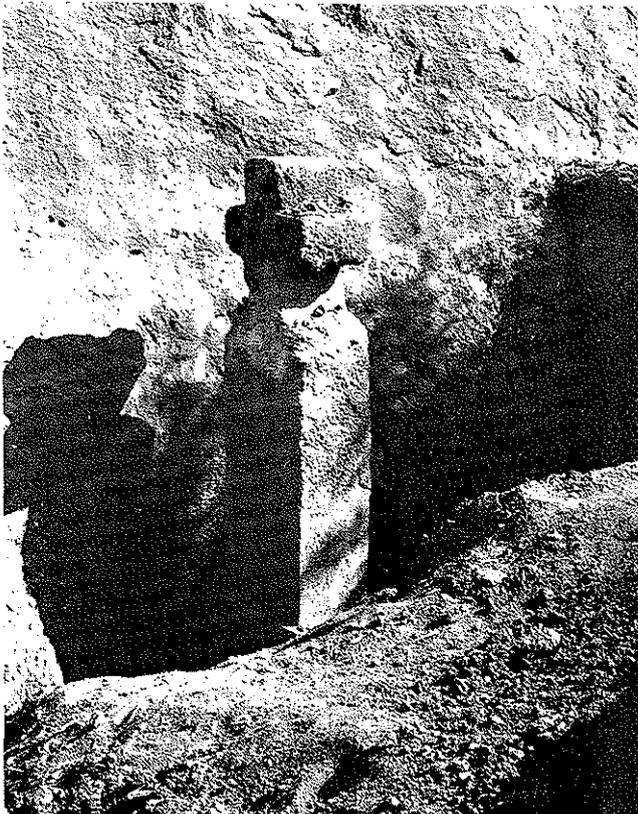


Upper photos: A previously unknown trench below Mount Tabor uncovered during Phase I. Before and after. Lower photos: Another section of the same trench. Before and after excavations.





Another previously unknown trench which connects the two groups of churches on their high side.



The large monolithic cross uncovered in River Jordanos and believed to have played a part in religious ceremonies.



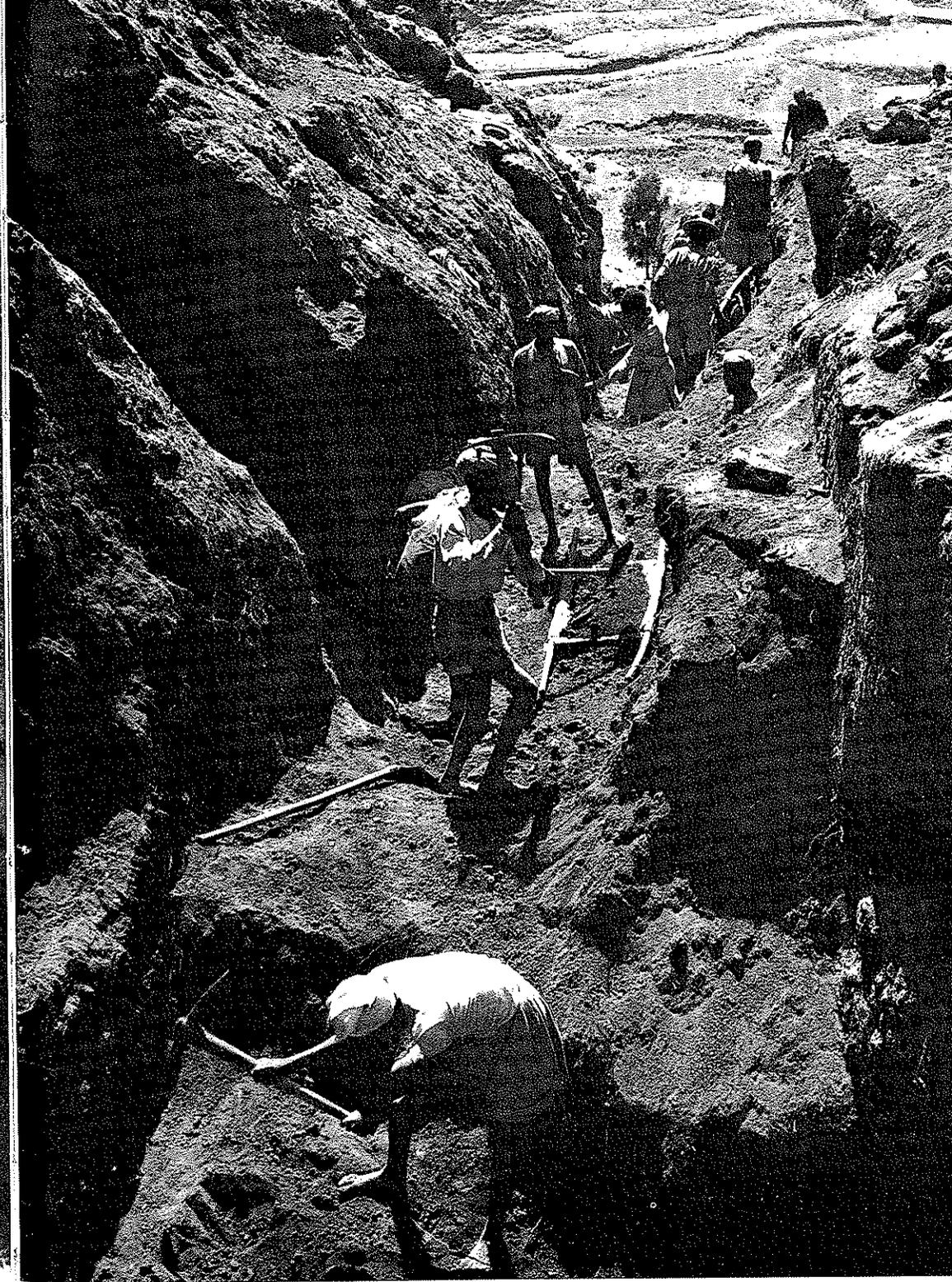
A trench connecting Mount Tabor with River Jordanos and which was completely covered over and unknown.



Below Biet Mascial: Part of a trench system previously entirely unknown.



Courtyard of Biet Mercoreos and the adjacent deep pit which was excavated during Phase I and revealed important archaeological information which supports the theory that Biet Mercoreos was originally not a church but a civil palace.



After the « Big Rains » which made the area inaccessible during summer months, preservation work will be resumed along with further excavations to uncover entire trace of extensive trench system of this ancient holy city.

Additional copies of this booklet
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