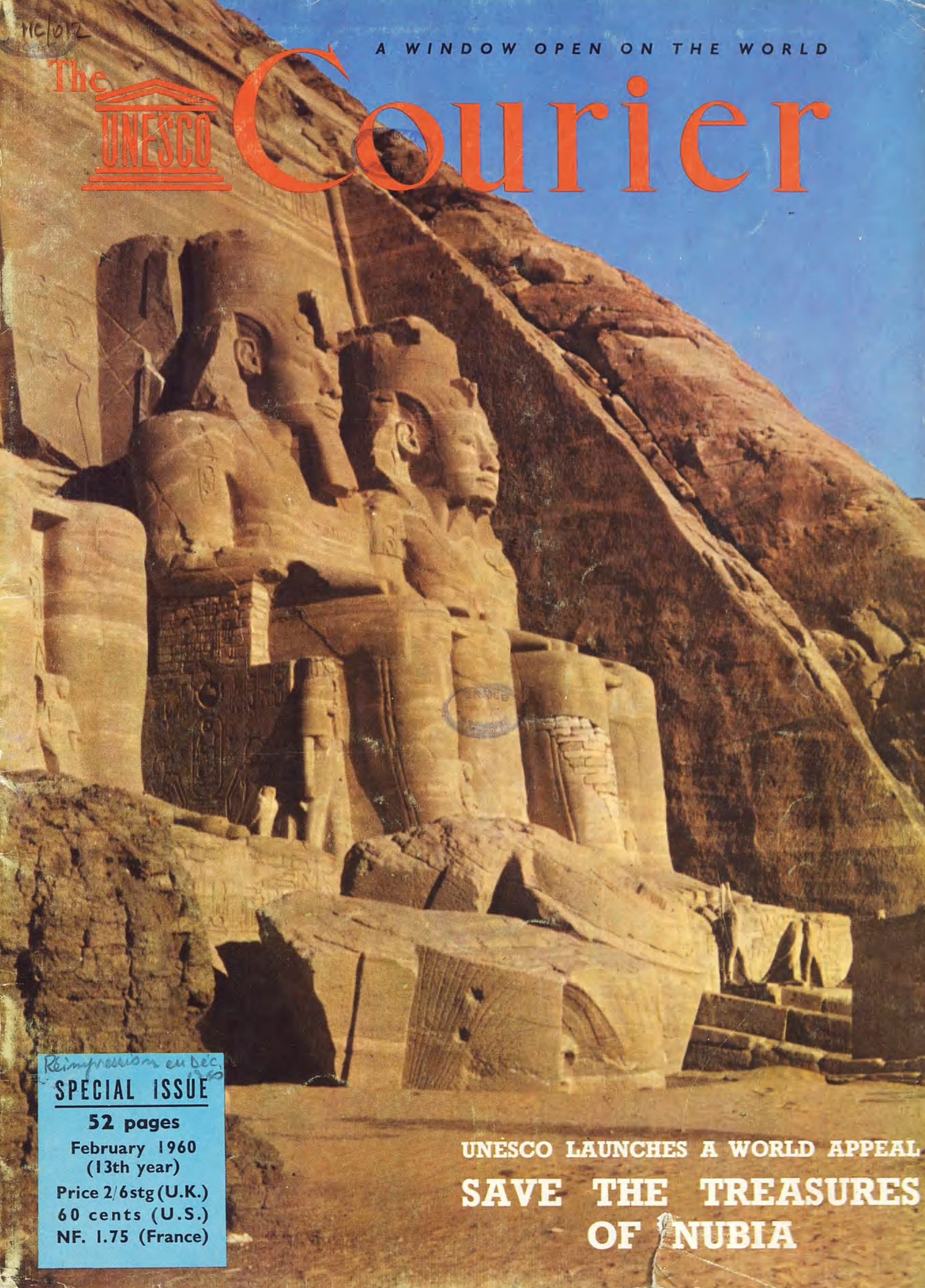


HC/012

A WINDOW OPEN ON THE WORLD



# Courier



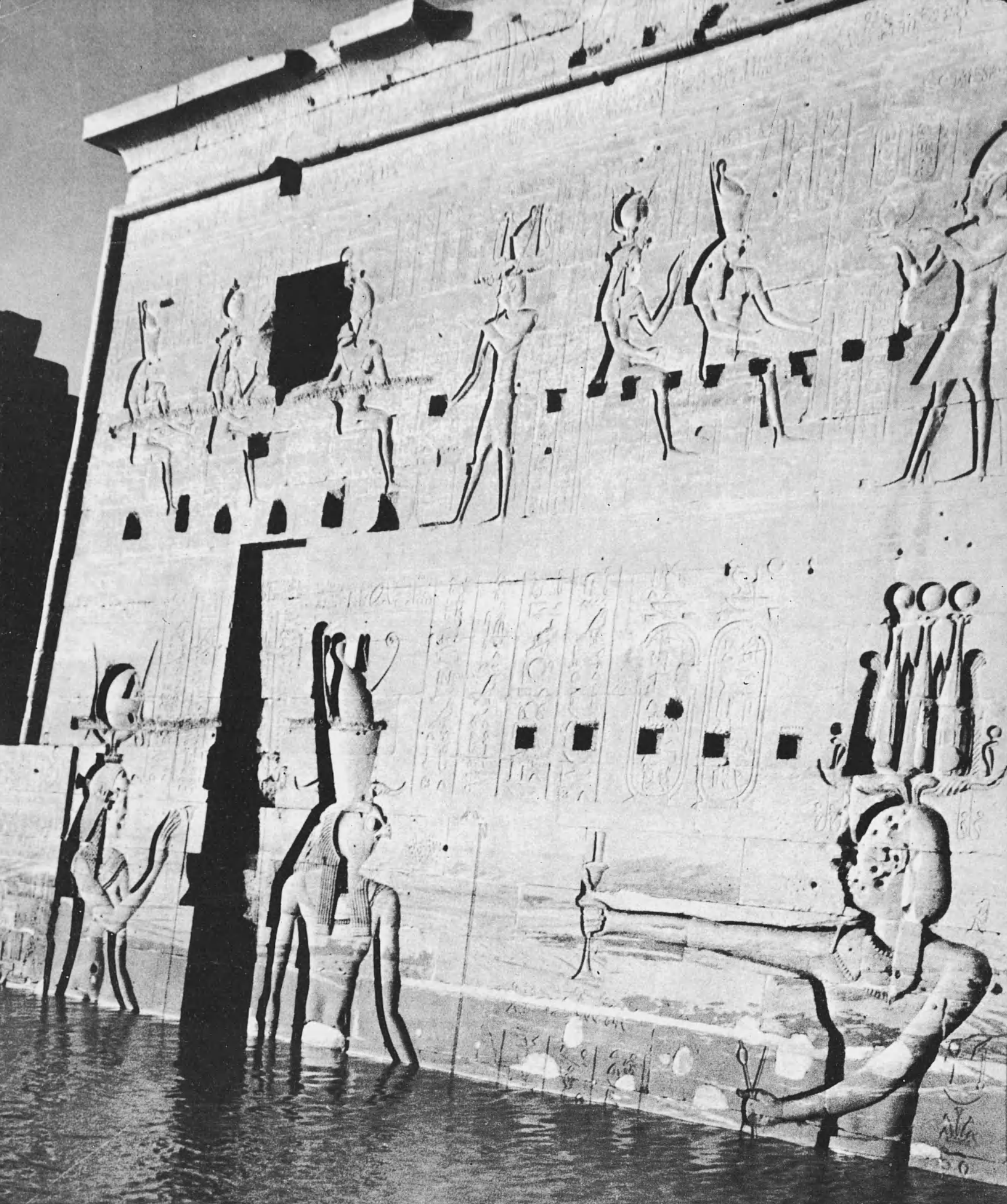
*Reimpression en dec. 1960*  
**SPECIAL ISSUE**

**52 pages**

February 1960  
(13th year)

Price 2/6stg (U.K.)  
60 cents (U.S.)  
NF. 1.75 (France)

**UNESCO LAUNCHES A WORLD APPEAL  
SAVE THE TREASURES  
OF NUBIA**



Unesco-Laurenza

**THE TEMPLE OF ISIS**, marvel of the island of Philae, is inundated by the Nile for nine months of the year. Photo, taken last October, shows the waters held back by the present Aswan Dam slowly invading the temple. The monuments of Philae are among the hundreds of historic treasures in Nubia which are now threatened with inundation by the construction of the new High Dam at Aswan. Unesco is launching a world appeal to save them.

# A Message from the Director-General of Unesco

**F**OR countless centuries the Nile has given life to the lands through which it flows. Today, the inhabitants of these lands, who are increasing rapidly in number, must ask their mighty river to give more than in the past. The High Dam which is soon to rise at Aswan will usher in a new era of economic progress destined to provide more food for millions of people.

These are the people to whom we owe one of the greatest civilizations in history. On the banks of their river they raised edifices the beauty and grandeur of which have never been surpassed. But with the new dam a vast lake will be created in Nubia, a lake which threatens to engulf some of the most glorious of these monuments for ever.

An agonizing dilemma therefore faces the authorities charged with developing the Nile Valley: how are they to choose between the needs and welfare of their people and the treasures which belong not only to their country but to humanity as a whole?

The authorities are fully aware that they are the depositaries, before all the world, of the monuments of the Nubian Valley, and they are eager to ensure their safeguard. It is these motives which led the United Arab Republic and the Government of the Sudan to appeal to Unesco for the purpose of obtaining the international aid which is indispensable.

As soon as I received these appeals, I recognized that Unesco could not possibly fail to respond. The action it is being asked to undertake is in full conformity with the essential objectives of the Organization. We cannot allow temples like Abu Simbel and Philae, which are veritable gems of ancient art, to disappear; nor can we abandon forever the treasures which lie buried in the sand on sites not yet systematically excavated.

Here is an exemplary occasion for demonstrating the international solidarity which Unesco has been striving to make a reality in all domains. No one, indeed, can deny the urgency of this cause and the effort required, or the need for sharing the burden among as large a number of countries as possible.

Moreover, in return for the international assistance given, the Government of the United Arab Republic is offering not less than fifty per cent of the finds excavated in Nubia, authorization to carry out further excavations in other parts of Egypt, and the cession of precious objects and monuments, including certain Nubian temples, for transfer abroad. The Government of the Sudan, for its part, is offering fifty per cent of the finds from excavations to be made in its territory.

An International Consultative Committee will be responsible for advising the competent government authorities on the plans for prospective excavations, on the use made of financial contributions, and on the distribution of counterparts offered by the United Arab Republic.

There can be no doubt that the preservation and excavation operations which can, and must, begin within the next few months, will provide a new impetus to archaeology. The history of civilizations, religions and art, and our knowledge of prehistoric times will be immeasurably enriched as a result.

At my proposal, the Executive Board of Unesco has decided that I should issue an appeal for international co-operation. This appeal, which I intend to launch in the very near future, will be addressed not only to governments and to the public and private institutions concerned, but also to public opinion in all countries of the world.

A group of Patrons and an International Action Committee will support Unesco in this world campaign. I feel certain that all those who clearly understand what is at stake will wish to participate, for they will recognize that an unprecedented task calls for an unprecedented effort.

VITTORINO VERONESE

**Contents**

No. 2



**FRONT COVER**

Part of the façade of the Great Temple of Abu Simbel, one of the great architectural masterpieces of the world and the most monumental ensemble of ancient Nubia. It has been called the "Cathedral of Notre Dame" of ancient Egypt. Abu Simbel is threatened to be flooded by the waters of the Nile within the next four years.



**BACK COVER**

One of the stone figures from the sacred avenue of sphinxes leading to the Temple of Wad es Sebaa. Ever since the first Aswan Dam was thrown across the Nile early in this century, it has been partially under water nine months out of the year. The new dam, however, will flood it for ever.

Cover photos Christiane Desroches-Noblecourt.

**SAVE THE TREASURES OF NUBIA**

PAGE

- 3 **A MESSAGE FROM VITTORINO VERONESE**  
Director-General of Unesco
- 5 **THE DRAMA OF NUBIA**  
By Georges Fradier
- 8 **THE LEGACY OF NUBIA**  
By Christiane Desroches-Noblecourt
- 16 **THE TEMPLES OF RAMESES II AT ABU SIMBEL**  
Marriage of the colossal and the beautiful
- 20 **FREED FROM A GRAVE OF SAND**  
The saga of the discovery of Abu Simbel  
By Louis A. Christophe
- 23 **COLOUR MAP OF THE NILE VALLEY**  
Waterway of art and history  
By Rifaat Nasr
- 24-30 **SPECIAL COLOUR SUPPLEMENT**
- 31 **THE SUN WAS A WITNESS AT PHARAOH'S MARRIAGE**  
By Jaroslav Cerny
- 34 **PHILAE, THE SACRED ISLE**  
By Etienne Drioton
- 39 **IN THE STEPS OF GREECE AND ROME**  
By André Bernand & A. Ahmed Aly
- 40 **UNDER THE SIGN OF MAAT, GODDESS OF PRECISION**  
Documentation Centre on Ancient Egypt
- 44 **THE MODERN PYRAMID OF ASWAN**  
The Sadd El Aali on the Nile  
By Albert Raccah
- 46 **SUDANESE NUBIA, 'TERRA INCOGNITA'**  
By Jean Vercoutter
- 50 **QUESTION MARKS IN THE DESERT**  
By Anwar Shoukry & François Daumas

This issue was prepared with the collaboration of Madame Christiane Desroches-Noblecourt, Curator of Egyptian Antiquities, Louvre Museum, Paris, and Unesco Consultant at the Documentation Centre on Ancient Egypt, Cairo.

**Published monthly by**  
The United Nations Educational, Scientific and Cultural Organization

**Editorial Offices**  
Unesco, Place de Fontenoy, Paris 7\*, France

**Editor-in-Chief**  
Sandy Koffler

**Associate Editors**  
English Edition : Ronald Fenton  
French Edition : Alexandre Leventis  
Spanish Edition : Jorge Carrera Andrade  
Russian Edition : Veniamin Matchavariani

**Layout & Design**  
Robert Jacquemin

*All correspondence should be addressed to the Editor-in-Chief.*

THE UNESCO COURIER is published monthly (12 issues a year) in English, French, Spanish and Russian. In the United States of America it is distributed by the UNESCO Publications Center, U.S.A. 801 Third Avenue, New York 22, N.Y., Plaza 1-3860. Second-class mail privileges authorized at New York, N.Y. (M.C. 59.1.144 A).

Individual articles and photographs not copyrighted may be reprinted providing the credit line reads "Reprinted from THE UNESCO COURIER", plus date of issue, and two voucher copies are sent to the editor. Signed articles reprinted must bear author's name. Unsolicited manuscripts cannot be returned unless accompanied by an international reply coupon covering postage. Signed articles express the opinions of the authors and do not necessarily represent the opinions of UNESCO or those of the editors of THE UNESCO COURIER.

**Annual subscription rates: \$ 3.00; 10/-stg.; 7.00 New Francs or equivalent. Single copies 1/-stg. 30 cents (U.S.); 0.70 New Francs.**

**Sales & Distribution Offices**  
Unesco, Place de Fontenoy, Paris 7\*.



Unesco-Laurenza

**TWO NILE GODS** wreathing the floral emblems (papyrus and lily) of Lower and Upper Egypt round the hieroglyphic symbol for "to unite." These carvings decorate two thrones of the colossi of Rameses II on the façade of the Great Temple at Abu Simbel.

# THE DRAMA OF NUBIA

by *Georges Fradier*

**S**OMEONE once said that it is best to announce a great calamity like a fire, a massacre or a tidal wave, in measured tones and in simple words. I shall therefore say quite simply: The monuments of ancient Egypt, among them Philae, Amada, Kalabsha and Abu Simbel, are in danger.

But I wonder if the full significance of this sentence will not escape some persons. What it really means is that we ourselves are in danger. The construction of the High Dam at Aswan threatens to engulf these monuments, or to disintegrate them. In other words it will obliterate them completely and amputate a portion—one of the most extraordinary portions—of our memories.

I say "memories" advisedly. By definition as well as etymologically, a monument is something that reminds us; it is a memorial, a remembrance (the Latin verb *monere* from which it comes means "to remind").

To the artist and the historian, a monument even creates memory, and is sometimes the foundation of a whole branch of learning.

Painted caves and rock carvings are monuments: they do more than recall the world of hunting and magic in which men lived ten thousand years ago. They alone have revealed this world. Before they were discovered, this world was completely unknown and did not exist.

In its place were all sorts of preposterous suppositions. But when we discovered it, we added thousands of years of knowledge, of conscious and unconscious adventures, to our past. In fact, the revelation is still so new that we have not had time to glean all it can teach us about our distant ancestors, that is, about ourselves.

The Upper Nile has hundreds of prehistoric sites, mostly unexplored. Three or four rivers of the world, and the tenacity and genius of those who first lived along them, are the sources of what we call our arts and our sciences. But it was hardly fifty years ago that we began systematically excavating prehistoric strata in the valleys of the Tigris and Euphrates, the Indus and the Nile. Such excavations are expensive and yield no gold or ivory treasures. But there was plenty of time to dig or so we thought.

CONT'D ON NEXT PAGE

# These great testaments in stone cannot be allowed to perish

Suddenly the Aswan dam project has raised a cry of alarm; within five years, within four years, the unexplored sites of Egyptian Nubia will be forever beyond our reach. According to further plans which have already been announced, the artificial lake will rise southward as far as the Dal (third) Cataract, and most of Sudanese Nubia will also be swallowed up in its turn.

In the Sudanese part of Nubia, more than 400 kilometres of alluvium, sand and sandstone hold the secrets of the first colonists of the Nile. They built their villages at the edge of a Sahara which was probably still savanna; no doubt it was they who were the preceptors of Egypt. Will we now abandon hope of piercing the mysteries of that remote culture buried at the junction point where the Mediterranean world and the African world meet, and the study of which can throw so much light on the origins of both and on the links which perhaps unite them?

To resign oneself to such a loss would mean blithely accepting a kind of partial amnesia, like that of a man who has no memory of his early childhood or of his parents. It is quite possible that he may be happy without it. But we should pity him for having been emptied of his history and for not knowing where he came from. On the excavation sites which must be opened up immediately in Nubia, archaeologists and prehistorians may find the memories we lack (and this lack is cruelly felt, as soon as we are aware of it), memories which give dimension and proportion to mankind.



To save the temples  
international  
aid is necessary

OTHER monuments were destined for more solemn purposes. The kings who created Phylae, those who had colossal statues and halls carved deep in the rock of Abu Simbel, those before them who built the pyramids, believed they knew and sought to proclaim until the end of time "whence we come, who we are, whither we are going." We do not share their conviction, but we do not smile at it either. We know it to be the most precious depository of our collective memory: what we have come to call culture, or as we used to say, the humanities.

No progress or decline of civilizations has prevailed against this beauty, which remains irresistible today even to the most ignorant men. These temples and statues are still, after twenty or thirty centuries, the models of the beauty they served to define. One does not need to grasp their whole historic significance in order to realize that they are among the highest works of man—among the really great achievements which justify our speaking of humanity and make us feel, in 1960, beholden to the architects, the painters, the sculptors, the priests and even the workmen of the divine pharaohs.

There are other bonds, too. Anyone may if he so desires have brotherly feelings in his heart for the thousands of millions of men who preceded us on earth; or be moved by the thought of the long, slow development of technical mastery. Yet a nobler kinship is revealed to us by the most ancient masterpieces of art; they are manifestations of a need to go beyond what was done before, of a fervour and a pride about which history, without them, would tell us practically nothing.

These irreplaceable monuments (and irreplaceable they are, for no museum can ever be substituted for a temple, the sacred ground about it and the sky that bathes it) are more valuable than all the gold mines of the world. And there are not so many such monuments. The true

masterpieces of art, and especially of architecture, are rightly said to be universal: they are part of the heritage of all peoples, and that means that all of us need them.

Only a few cities, however, only a few periods in history have reared them. A few countries hold what remains of the marvels which it was the privilege of certain centuries to amass along the shores of the Mediterranean, in China and in Egypt. Time, conquerors and merchants have destroyed so much already that there is dangerously little left.

We need only a bit of violence, a bit of neglect, a bit of avarice, and Greece, China and Egypt herself will have no more to show us than formless ruins—like those in a little town of Burgundy where, 160 years ago, there still stood the greatest of Romanesque churches, the masterpiece of the European Middle Ages, Cluny.

Today, an international institution exists which would have opposed the demolition of Cluny, even if the destroyer had invoked public necessity as his excuse. This institution is UNESCO; one of its tasks is to safeguard the cultural and scientific heritage of mankind. It has heard the appeals of the United Arab Republic and the Republic of Sudan. For indeed no one desires to destroy the glories of Nubia. The authorities who have decided to build the high dam are the very ones who are trying to do everything to preserve the monuments in the valley that will be submerged. But to do everything means to have the financial and technical resources which the authorities regrettably do not possess. International aid is therefore indispensable.

No one should imagine that this campaign was conceived on the spur of the moment, that it is just panic at the eleventh hour. The Government of the United Arab Republic, thinking of the fate of Nubia, turned to UNESCO nearly five years ago. A Documentation and Study Centre on the history of the art and civilization of ancient Egypt was then founded; it has been working under steadily greater stress to carry out a full scientific survey of the monuments in jeopardy. (See page 40.)

However, saving the temples themselves, with their sites and, in some cases, the cliff they form part of, requires resources on a much vaster scale. Furthermore, even before the rescue operation can begin, thorough geographical and geological studies of the ground must be made.



Excavation expeditions  
in Egypt & Sudan  
to receive 50% of finds

IN July 1959, UNESCO sent a special mission to the authorities of the United Arab Republic and shortly afterwards, in agreement with them, asked the Institut Géographique National in Paris to make a photogrammetric survey of the area, both from the air and from the ground. In October, UNESCO convened in Cairo an international committee of Egyptologists, archaeologists and engineers. The experts journeyed up the Nile from the Aswan district as far as the Sudanese frontier and explored most of the monuments along the valley which is to be submerged a few years hence.

At the first meeting of the committee, the Egyptian Minister of Culture and National Guidance, H.E. Serouf Okasha, made an extremely important declaration on behalf of his Government. In exchange for the international assistance requested, the United Arab Republic has offered (1) to surrender at least half of all future excavation finds made in the threatened area except for certain

specimens which may be considered unique or essential to Egyptian museum collections; (2) to authorize excavations on other Egyptian sites; (3) to cede certain temples of Upper Nubia and permit them to be shipped abroad; (4) to give up an important collection of ancient objects which are State property.

The Government of the Sudan, in exchange for international assistance, has offered, with the same reservations, 50 % of the finds made in the area.

Today, the Director-General of UNESCO, after a unanimous decision by the Executive Board, is launching a solemn appeal to governments, appropriate public and private institutions and to the citizens of all countries to take part in this great international rescue operation.

The Director-General now is in possession of the experts' outline of the first emergency steps envisaged in the plan to rescue the monuments of Nubia. This plan includes a detailed list of all the threatened monuments, and what must be done to save each of them from destruction. Frescoes must be taken down; bas-reliefs must be cut out; small temples must be taken apart stone by stone and rebuilt in a safer place, some in oases which the dam waters will create, others abroad.



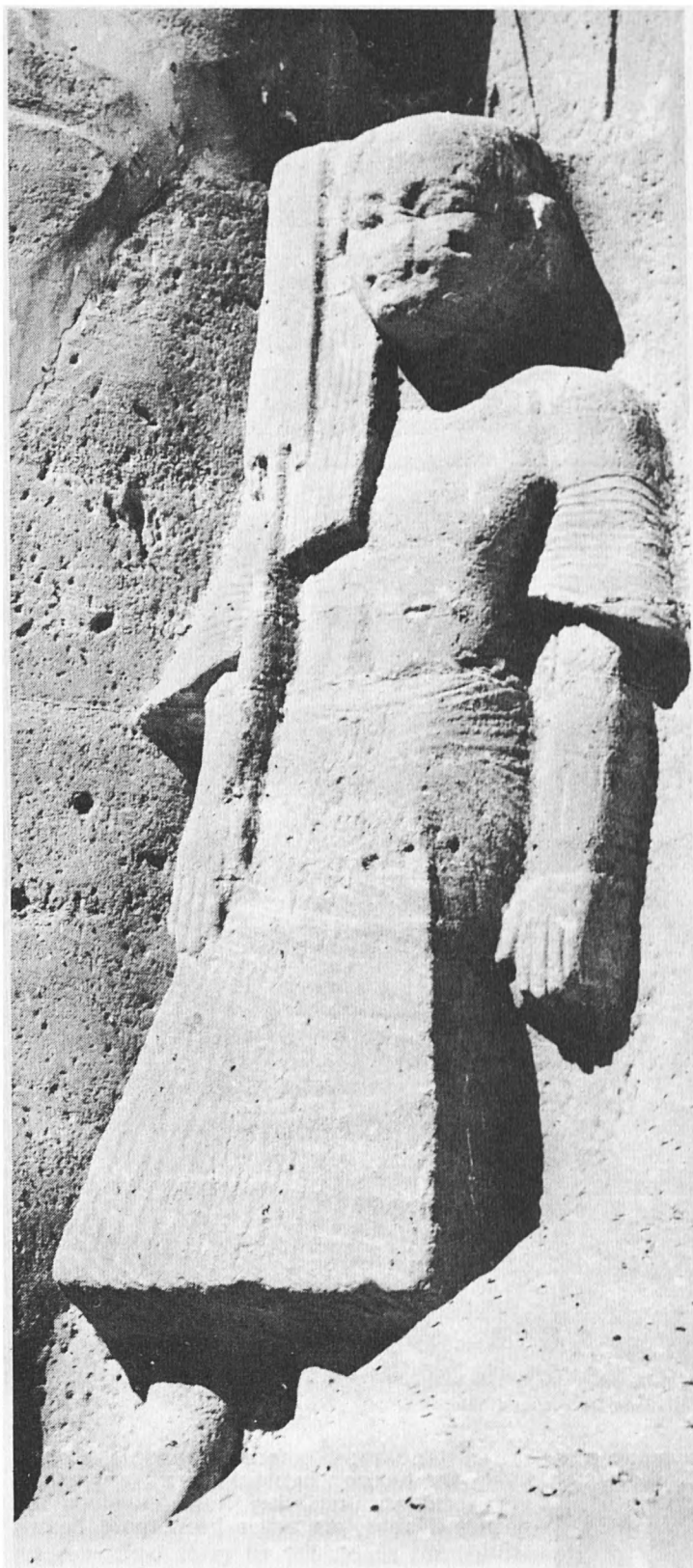
One would not  
dismantle  
Westminster Abbey

**H**OWEVER, as regards the famed ensembles of Philae and Abu Simbel, the verdict of the experts is categorical: the only solution is to preserve them where they stand. One would not dismantle Westminster Abbey and set it up again elsewhere. One cannot "save" the Parthenon by reconstituting the Acropolis in an open air museum.

The Island of Philae, tragically flooded nine months out of the year since the first Aswan dam was built in 1902, can, on the contrary, become an island again. The rock of Abu Simbel can and must escape the muddy waters which need only to lick the feet of its colossal statues to cause them to disintegrate within a few years. The most imposing and most urgent task is the one to be undertaken here. A group of engineer-advisers at this very moment are on the spot making the necessary surveys and studies.

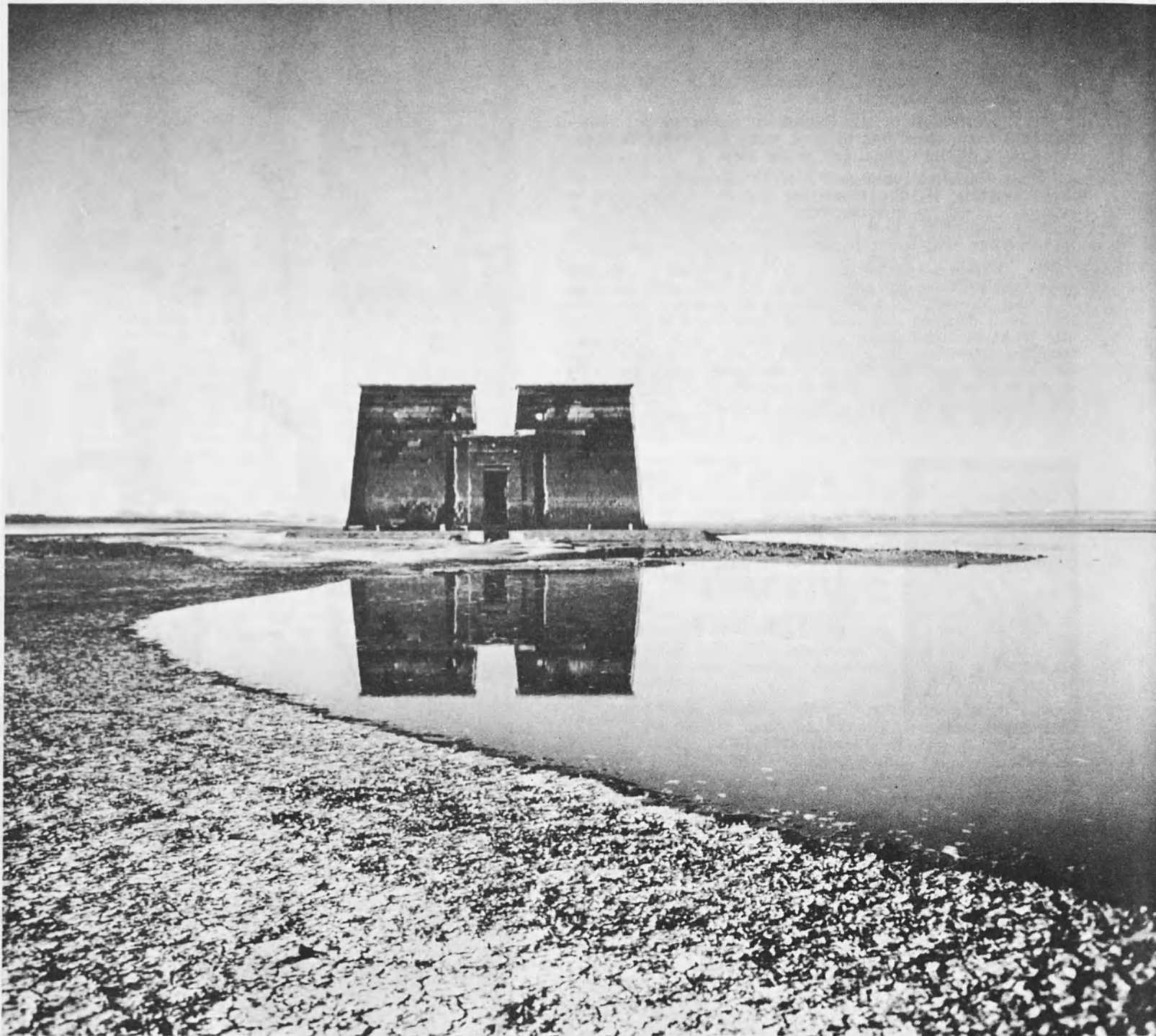
To build dikes between the high dam and the artificial lake, downstream, so that Philae may find its purity and native sun again, to raise a rampart off Abu Simbel, so as to preserve not only the most majestic temple of the Upper Nile but also the light and shadow which make its statues live—this undoubtedly will cost money. Much more money than we are in the habit of giving to archaeologists, art historians and museum curators. The sum may reach \$30,000,000. But when we think that it is being asked of 81 States, among which are the richest and most powerful countries in the world, it seems hard to feel frightened by such a figure. One is even irresistibly tempted to compare it with that of the most modest armaments' budget... However, comparisons of this kind are, it would appear, in bad taste and frowned upon as unrealistic...

So let us look at the photographs in this issue of the dwellings built for the gods thousands of years ago and which have suddenly become so fragile. Men and women of all ages, of every rank and language, will be looking at them with us. But not one of us is without responsibility: not one of us is powerless in our country, our community, our city. While we turn these pages, we cannot be indifferent to the fate of these great testaments of stone, these proud, tragic affirmations of an eternal, invincible will to ennoble mankind.



Photos Documentation Centre on Ancient Egypt, Cairo

Prince Amen-her-Kepshef, one of the two hundred children of Rameses II, nestles between the feet of the second colossal statue of his father on the façade of the Great Temple at Abu Simbel. At some unknown date, the head and torso of this colossus broke off from the mountain side in which the figure had been carved. The story goes that a hole was bored into the chest at neck level and wood hammered and pounded in. Water was then poured inside causing the wood to expand until the top of the statue split off. The headless figure is seen in the large colour photo on centre pages (26-27) with the fallen rock at its feet and boring gashes at shoulder level.



Christiane Desroches-Noblecourt

L

IKE a landscape before a terrible storm, when the horizon lights up in a translucent glow and an unearthly hush envelops all nature, Nubia has never been more beautiful.

The danger hanging over Nubia, it is true, has never been so great for it is now doomed to total obliteration. Despite the countless tragedies it has known up until the present, it has managed, for several weeks of the hot summer months each year, to preserve the general aspect that thousands of years of succeeding civilizations have given it. During these summer weeks, all the temples strung out along the banks of the Nile are visible and emerge from the waters which, since the beginning of the century, submerge many of them most of the year.

It may be difficult for those who have never set eyes on the extraordinary shores of the Nubian Nile to imagine the majesty of the sites, the fascination of the sanctuaries, and the charm of the villages—difficult, in fact, to grasp the immensity of the tragedy. Many persons are undoubtedly familiar with Pierre Loti's poetic description of the "Death of Philae", and have heard about the building of the Aswan Dam and the raising of its level on two occasions.

At the beginning of the century it was found necessary to raise the Aswan Dam in order to provide a more systematic irrigation system for Egypt and to prevent the river from draining away into the sea. The iron sluice-gates in the huge dam wall (made out of the same pink granite and taken from the same quarries nearby which the ancient Egyptians used for their giant obelisks) are closed almost all year long. They are opened only at the end of July when the river has turned red from the thick alluvion collected upstream, and the fields are then flooded and only the causeways and a few villages perched on arid hillocks emerge from the waters.

In Nubia meanwhile, the level of the water now drops and the narrow strip of land along the river turns green again. The inhabitants attend to their farming, and the fields are soon thick with millet and water-melons. When, during this brief three-month respite, the river keeps to its bed, the harvest can be gathered. In mid-October, when the dam is closed, the waters again invade the stubble-fields, now parched and cracked by the drought and the extreme heat. The palm-trees are engulfed up to their tousled heads, and from the far-off banks seem to be floating on the surface. Beneath these waters the great sanctuaries lie buried.

It is not easy to visualize this extraordinary open-air



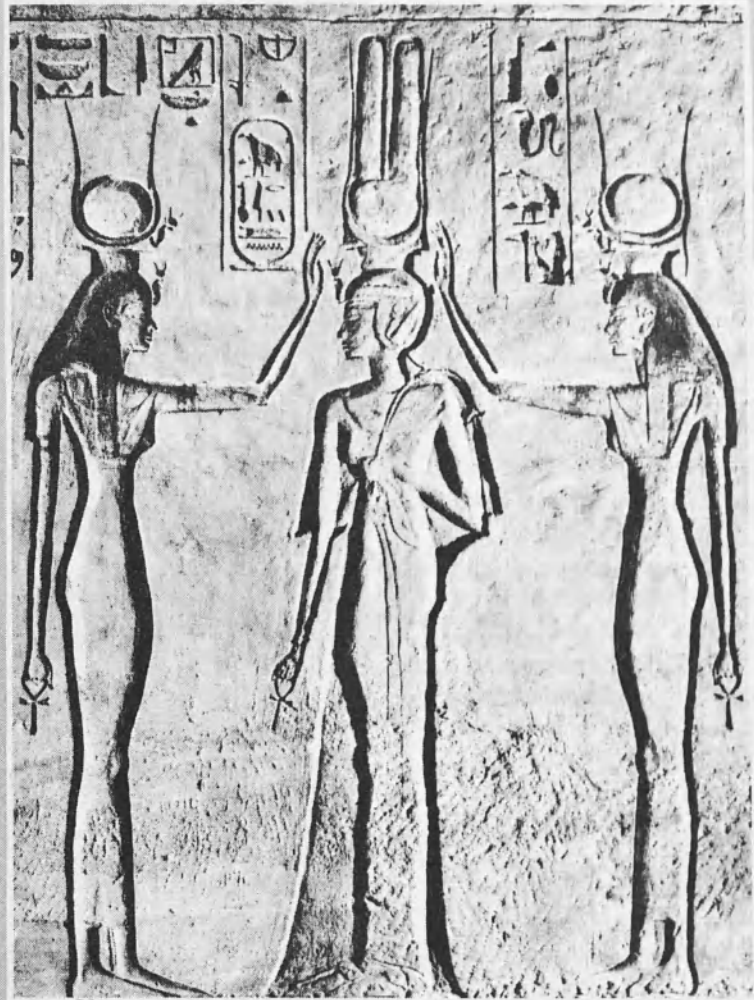
## THE LEGACY OF NUBIA

# JOURNEY TO A LAND CONDEMNED

by *Christiane*

*Desroches-Noblecourt*

Curator, Department of Egyptian Antiquities,  
Musée du Louvre, Paris



Documentation Centre on Ancient Egypt, Cairo

**THE TEMPLE OF THOT**, Egyptian god of wisdom and writing, at Dakka (left). Photo was taken just before the start of the temple's annual inundation in October. By the end of November all that can be seen above the water are the cornices of the temple pylon. To save the temple of Dakka it is proposed to dismantle it stone by stone and rebuild it in the safety of a nearby oasis. Above, in the Temple of Nefertari at Abu Simbel, a bas-relief depicts the Queen receiving the protection of the two goddesses Isis and Hathor. The work has conserved the full tones of its original colouring.

museum nearly 300 miles long, containing monuments often surpassing Gothic cathedrals in size, submerged most of the year round. Under the waters lie not only temples but tombs by the hundred, quarries and numerous fortresses. The fortresses were built as trading posts and strongholds to defend vitally strategic points along the caravan routes, such as the centres fed by the gold-mines, the relay stations to distant deposits, the settlements specializing in artifacts, and the administrative centres of the country.

But in this land of eternity, even the inundation of the monuments is not permanent, for like the cycle of rebirth in Nature itself, they reappear regularly every summer, if only fleetingly.

At the time of the first Aswan dam at the beginning of the century, excavations and "soundings" were made to test the vulnerability of the menaced fortresses and necropolis centres built out of unbaked clay. For the temples, hurried missions were sent to make copies and descriptions of them before they were engulfed. The consolidation work, feverishly yet carefully executed under Gaston Maspero and continued subsequently, proved to be truly effective.

Not only did the temples remain intact when submerged, but the water even helped to remove their corroding salts

and incrustations. Only the ancient paintings were washed away, sometimes actually enhancing the beauty of the carvings underneath. The monuments built of unbaked clay, however, could not resist the waters and were washed away by the floods for the most part.

The temples erected in this region had been built of blocks of sandstone hewn from the finest quarries of Nubia, and this stone is most resistant. The situation is quite different for the sanctuaries located further to the south outside of the present flood zone. The temples here were built into the sides of the cliffs of the Libyan and Arabian mountain chains bordering the Nile. They were cut out of stone so friable that they cannot possibly hope to resist the action of water.

It is these temples that the waters of the Sadd el Aali high dam will engulf—if nothing is done to save them. Since the new water level, once reached, is not expected to drop again appreciably, everything that is submerged will be covered up for all eternity.

Thus all of Nubia will become a vast lake and an entire country will shortly vanish definitely and irrevocably. The inhabitants will be able to move into the lands freshly reclaimed from the desert, and into the oases especially created near the largest *wadis* (valleys) of western Nubia. But the ribbon of land 300 miles long,

# THE LEGACY OF NUBIA

(Continued)

## THE EPIC OF KADESH.

Carved on the northern wall inside the Great Temple of Abu Simbel are scenes from an epic of Egyptian history—the battle of Kadesh (1285 B.C.) where the courage of Rameses II saved Egypt's army from defeat at the hands of the Hittites. Central panel shows Rameses on his throne before battle is joined holding a council of war with his vizier and officers. Lower panel shows the Egyptian camp with the soldiers' shields arranged around it in a kind of stockade; in centre two spies are forced to yield their secret. In upper section we witness the charge of the Hittite cavalry; curved line represents Orontes River in Syria which flowed round the citadel of Kadesh. On far right are mounted archers of Rameses. (See also pages 31-33.)

Documentation Centre on Ancient Egypt, Charles Nims



with its remains of the creative genius of ancient Egypt which have withstood the elements for thousands of years, will be lost.

Egypt is the cradle of Mediterranean civilization and the archaeologist's living book of history. Its scattered pages, discovered one by one, were pieced together and read with patience and devotion and now constitute the most prodigious and profound chapter on remote antiquity. But despite the wealth of material found, many pages are still missing. Some of the most valuable are now lost, like the famous library at Alexandria, destroyed by fire, or, what is less known, the ancient papyrus scrolls which until the last century peasants were wont to burn when scouring the ancient ruins for fertilizer.

No effort should therefore be spared to find and preserve all the vestiges which may throw light on the history of our forbears, for was this not the crucible in which the basic elements of Western civilization were forged?

Not all the treasures of Nubia have yet been discovered. Those that do remain are of such vital significance that it is our duty, regardless of nationality, to help in preserving them. For they are the links in a great chain which is significant and meaningful only by their cohesion.

What does Nubia have to offer? The imprint of more than four thousand years on a narrow, semi-desert land

bordering the Nile, left by men who gradually absorbed a coherent civilization through their growing contacts with the Egyptians of the north. Nor is this all. It also brought a foreign contribution to Egypt proper, enriching the land of the Pharaohs by acting as the intermediary for trade with the more southerly regions. It was a reservoir of skilful craftsmen, of brave soldiers and officers, of diligent and honest civil servants; even brilliant statesmen who came to be so influential that with the rise of the New Empire in the 14th century B.C. their power steadily rose until they could help new dynasties to mount the throne of the Pharaohs.

If we sail up the Nile in summer, when the flood-waters have receded, we can see all the remaining monuments and in the end have a vivid, impressive image of the past. Our journey will not be in strict geographical order, but does this really matter? Perhaps it will be all the more attractive since our pilgrimage into the realm of antiquity will be made not with some futuristic "time machine" but through the magic of hieroglyphics, that ingenious mechanism which Champollion revealed to us.

No sooner have we passed the First Cataract than Philae looms up out of the water, iridescent amidst the blue-pink reflections of the Nile. It looks almost like a bird which is perched on an island pointing straight south.



Here is a group of sanctuaries we must always see preserved in its religious and geographical context, inseparable from the sacred site on which it was built to proclaim its message to the world.

Sailing around the island, the great colonnade moves past us with its individualized capitals which announce the Hellenistic period of Egypt's Pharaohs. We pause a moment to admire the romantic Kiosk of Trajan and then spy the first gigantic pylon of the temple itself, pierced on the west by the "mammis" gate where the Great Isis gave birth to the young god Horus. What an amazing itinerary the goddess Isis has followed down the centuries. She was the presiding deity of Philae, the supreme Mother-Goddess, and her cult extended all the way to the shores of the Western world, penetrating into the sanctuaries of the boatmen of Lutetia (the arms of modern Paris still bear an image of the boat which can be traced back indirectly to her).

It is in this region that Lower Nubia is at its most arid, a phantom river flowing between rock banks, bare of all but the scantiest vegetation, like a landscape in hell. Now we drive deeper into Africa and soon come upon the little kiosk of Kertassi near the famous quarries which yielded the stones for the temples of Philae. The removal of this kiosk should present no very serious difficulties. The rear wall is covered with old Greek inscriptions, and

busts in niches are cut directly out of the rock. The earliest ones date from the time of the quarrying of the stone for Philae.

Here now is the Graeco-Roman temple of Debod. It is completely under water in winter as are the small chapels built in the region where the Nile narrows sharply before reaching a point where the rocks, purple-hued on the eastern side and sand-yellow on the western, form a gorge which the Egyptians call the Gate of Handcuffs (Bab Kalabsha). Beyond this gorge, Nubia becomes more fertile: a thin ribbon of cultivable soil on the edge of the desert. Here, Augustus had the temple of Kalabsha rebuilt in the style of those of the Pharaohs. The largest of the Roman temples in Nubia—after Philae—it is almost intact, as are the chapels surrounding it. Its inner walls are covered with religious representations dominated by figures of the young god Mandulis, the Nubian form of Horus, and numerous versions of the bountiful Isis (Wadjet) in all her radiance.

It is often a tiny detail in this wealth of monuments that discloses invaluable information. Thus, for instance, a pilgrim's votive offering (a simple image clumsily engraved at the foot of a column) showed us the popular form in which the local deity was worshipped, and enabled us recently to identify a figure found on an object amidst the treasure of a tribal chief (the Blemmyes of Kustul) who had terrorized the Nubians when the region was under Christian influence. This picture, in its turn, showed that the Blemmyes continued to venerate certain debased forms of the ancient Egyptian gods long after the religion of the Pharaohs had officially disappeared.

Kalabsha is a temple that must not be permitted to perish. It could be dismantled and transported elsewhere stone by stone. The little nearby sanctuary of Beit el Wali, founded by Rameses II, must also be rescued at all costs. But it presents an entirely different problem, for it stands at the top of a cliff and is almost entirely hewn in the rock. The stone will have to be cut into, and blocks of the cliff-face removed—an operation the experts assure us is perfectly feasible.

### Elephants' tusks, ostrich feathers & sacks of gold

THE monument is well worth the trouble. If the colours on the two side walls of the entrance hall have disappeared, the reliefs themselves are admirably preserved. They depict Rameses' army in action in the northern regions as well as scenes extraordinarily rich in detail on life in ancient Nubia. One panel shows a village with Pharaoh's chariots approaching to restore law and order. Another shows tribute paid by Nubia to the lord of the whole Nile down almost to the Fourth Cataract.

Alongside sacks of gold, ostrich feathers, elephants' tusks, leopard skins, tame animals led on a leash, and ebony woods, are depicted various articles produced by Nubian craftsmen. Famed for their skill, they worked for Pharaoh's court fashioning pieces of furniture and other objects in pure Egyptian style. They produced inlaid gold ornaments of bold design which depicted whole scenes from the everyday life of Nubia as well as the fauna and flora of "The Land of Gold." The walls inside the temple of Beit el Wali are adorned with religious paintings, their colouring as fresh today as when the artist applied them several thousand years ago.

Continuing southwards we cross the Tropic of Cancer and stop at the little temple of Dendur, leaving behind a number of important monuments. Standing high above the Nile it is entered by a monumental stone doorway preceded by a broad terrace. The temple is dedicated to two heroes who drowned and were later deified. Augustus himself worshipped them.

Like nearly all the monuments of Nubia, Dendur was "Christianized" by the Copts. One inscription tells us that a certain Presbyter Abraham erected a cross here at the command of the Nubian king. Dendur is one of the temples the United Arab Republic proposes to offer as a grant, in return for foreign aid.

We are approaching an important religious centre where Rameses II had no less than six temples hewn out of the Nubian mountainside. At the top of a cliff, between two wadis a sanctuary with terrifying colossi juts out over the river at Gerf Husein which must have commanded the trembling respect of the local inhabitants.

The Nile valley now broadens and the cliffs give way

# Will the palace of Heka Nefer be found before Nubia is engulfed?

to a spacious plain covered with desert sand. A hundred yards from the water stands an elegant temple with its main axis parallel to the Nile (the only one in Nubia with Philae, oriented north-south). This is Dakka, dedicated to Thot, god of writing (hieroglyphics) and wisdom. It belongs to the late Egyptian period and was the last edifice reconstructed by the Nubian king Ergamenes in the reign of Ptolemy IV on the ruins of a much earlier sanctuary. It contains charming reliefs which have added many new details to our knowledge of Egypt's past. Dakka stands at the border of the empire established by the Greeks in Lower Nubia. It could be dismantled and removed.

This will probably not be possible for the temple of Wadi es Seba, partly hewn in the rock by Rameses II. Lying on a bend of the Nile and silhouetted against a background of bluish hills reminiscent of an Alpine lake scene, it is the only sanctuary in Nubia which still possesses its "dromos" (sacred avenue flanked by sphinxes). It was later transformed into a church the remains of which are of major importance. There are several Christian paintings done in Byzantium-inspired style which could be removed along with the sphinxes.

In the Holy of Holies recess of the temple, Rameses can be seen offering large bouquets of flowers to the gods of the sanctuary, but in the bottom central part the god Amon is now covered over by a painting of Saint Peter holding an enormous key in his hand.

A few miles to the north, excavations have laid bare one of the many towns of mediaeval Nubia—the fortress of Ikhmindī—preserved on the top of a cliff. It is surrounded by a thick stone wall, except on the river face where the steepness of the cliff was considered protection enough. The inner streets have vaulted roofs and a church stands in the heart of the town.

In a small Christian chapel just south of Ikhmindī's walls, a foundation stone was discovered last year inscribed with the name of the governor of the fortress-town and explaining that it had been built to protect the people and their cattle from the attacks by the Blemmyes.

We should have to stop every mile if we were to indicate

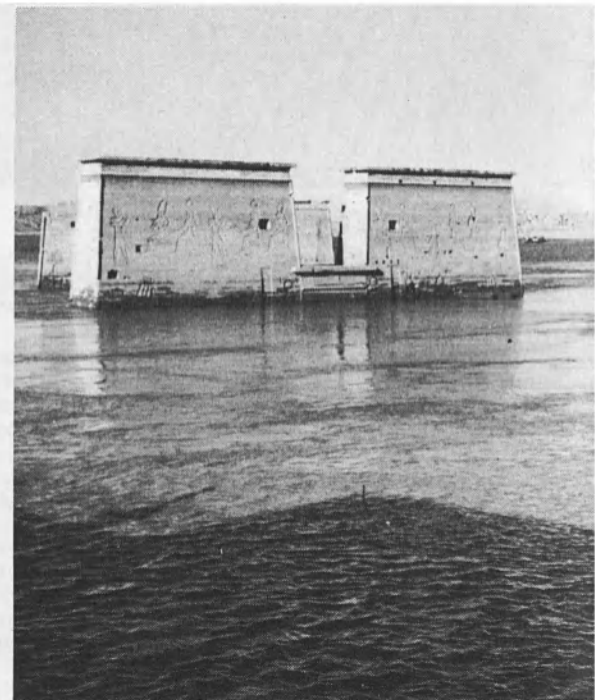
all the ancient necropolises in this region, all the remains of settlements and chapels, all the rock inscriptions telling of local gods, of the passage of Egyptian armies since the Old Kingdom four thousand years ago, of the Greek mercenaries who crossed Nubia since the 7th century B.C. Here, at Kuban, is a stela indicating the waterpoints and wells dug for Pharaoh's soldiers; there the ruins of a large brick fortress of the Middle Kingdom (2000 B.C.); further on the remains of a temple; and then the entrance to the Allaki valley leading to ancient gold mines, their rocky walls covered with inscriptions.

In a fertile plain bounded by a semi-circle of mountains, we spy Korosko, starting-point of the great caravan route to Abu Hamed in the Sudan. Here the Nile describes a great curve to the northwest and we come upon the little temple of Amada, dating back over 3,000 years to the beginning of the New Empire under Tuthmosis III and Amenophis II. Amada has exquisite reliefs and two monumental stelae of major historical significance. They relate the feats of the Athlete King Amenophis (the Egyptian version of Hercules) in Syria and Nubia. Amada is sure to be given high priority by the architects charged with "removing" the sanctuaries of Nubia.



The great temple of Derr stands a short distance away, almost entirely cut out of the rock on the east bank of the river. Built by Rameses II and dedicated to the sun-god Re, the third god of the Empire, it is one of the temples which the United Arab Republic has agreed to offer, wall by wall, to foreign museums as a grant for helping to save the monuments of Nubia.

Beyond Derr the Nile valley again trends to the southwest and we emerge onto a broad expanse of plain at Aniba (ancient Miam), the present and former capital of Lower Nubia. But nothing now recalls the splendours of the palaces of the Nubian viceroys which must once have been built here. Perhaps they are buried in the sand waiting to be discovered.



Unesco-Racah

**A NEW THREAT TO PHILAE.** The danger to which the island of Philae is exposed is quite unlike that of any of the other temples of Nubia which threaten to be engulfed by the Aswan High Dam. At present the island is tragically under water all year long except for a brief three-month period.

When the new dam is built, Philae will find itself in a "sandwich" position between the two dams and a major portion of its monuments will be permanently out of water all year long. But the danger to Philae will be even greater than before since the base of the temples up to a height of 15 feet will be attacked

We know though that these viceroys were important noblemen who were virtually independent, and that their principal tombs are found at Thebes, the great capital of the Egyptian Empire. One of these, the Tomb of Huy, Viceroy of Nubia in the reign of Tutankhamon, contains a series of remarkable paintings in multiple register. They show this high official receiving his appointment as "overseer of the southern lands," accepting the royal signet-ring of gold investing him with full powers, and a procession of Nubian princesses arrayed in the habit of court ladies. One of them is represented riding in a chariot drawn by oxen and with a parasol of ostrich feathers growing out of her diadem.

Finally the viceroy Huy is seen receiving the homage of the princes of Aniba, foremost among whom is a certain Heka Nefer, "the prince of Miam," richly clad in the dress of a Nubian chief: a leopard skin on his back and girded around his waist like an apron, ostrich feathers in his hair, and large rings in his ears. He is shown prostrating himself before the viceroy.

From inscriptions in Nubia and Egypt and other sources, we have now been able to piece together part of Heka Nefer's life story and thus get a better idea of his station and origins. The son of a rebel chief of Nubia, he had been brought north to the royal palace at the time of a revolt suppressed by Pharaoh's officers. His standing as a Nubian prince and as the son of a local chief was recognized, and he was sent to the college of royal princes at Thebes where he became an intimate friend of the king's children, sharing their up-bringing, their games and sports and their military training.

Thereafter, thoroughly steeped in the sophisticated culture of the capital and an enthusiast of Pharaonic civilization, he returned to his warmer native land to fulfil his role of prince. Nevertheless, he donned native dress again and garbed thus he greeted the viceroy.

Perhaps one day before Nubia disappears, excavations in the region may uncover the remains of his palace as well as his tomb hidden in some valley of the Libyan range. Who knows, it may be in an even more isolated and distant spot than the tomb of Pennut, another high official who served under Rameses VI thirty-two centuries ago, and whose burial chapel, located on the slope of a solitary hill two miles from Aniba, is covered with well-preserved paintings (it is hoped to remove it to a neighbouring oasis).

Looming up almost across the river from Aniba, stands the rock of Ibrim dominating the whole vast plain that stretches south from the capital of Nubia. Since remote times it has been the site of the largest fortress in the

region. At the foot, facing the Nile are rock chapels whose paintings should be removed to a safe place.

Let us leave the chapels that dot the banks, the prehistoric cave paintings rivalling in beauty those in the "rock shelter" at Wadi es Sebua, with their galloping herds of oryxes, ibexes, giraffes, elephants and ostriches, and let us push deeper south to where the Nile grows wider as it winds towards its source.

About 200 miles upstream from the First Cataract, a long way from Thebes, the official city of the god Amon and even more distant from Tanis, the capital chosen by Rameses on the Eastern Delta, stands the grandiose site of Abu Simbel. It is virtually on the same latitude as the diorite quarries in the western desert to which Egyptian working parties of the Old Kingdom swarmed in search of the ornately-grained green stone favoured by King Khephren's sculptors for his statues in the Valley Temple of the Second Pyramid.



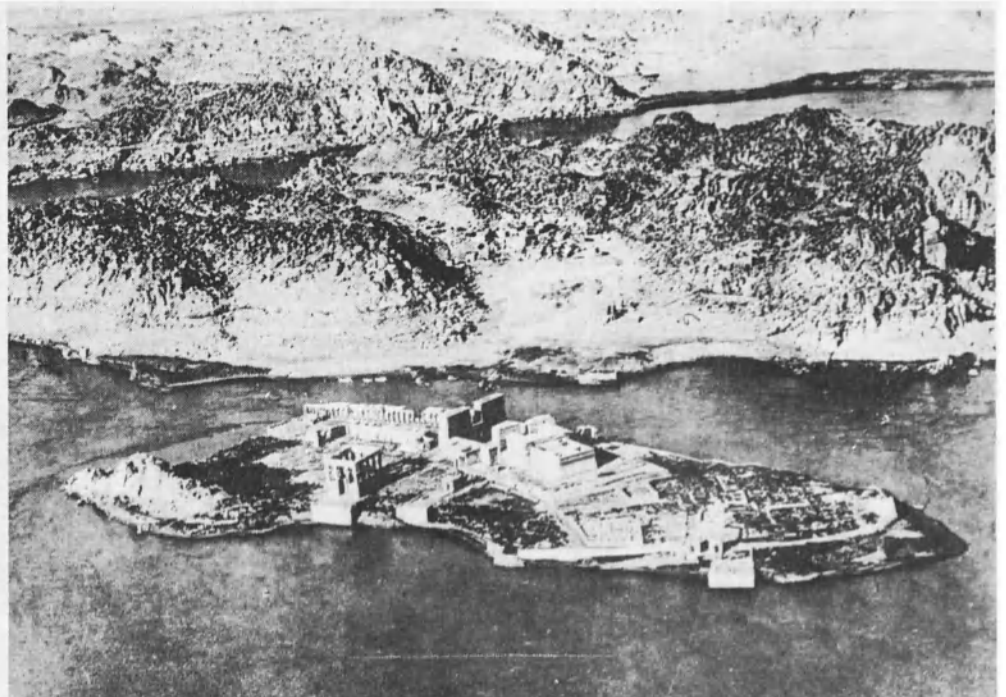
Here, at the scene of one of man's supreme achievements, we have reached the climax of our journey in Lower Nubia. The monumental majesty of Abu Simbel completely dwarfs other sanctuaries nearby, although these are by no means lacking in treasures. Two of them—the rock chapels of Abu Oda and Jebel Shams—were hewn out of the living rock at the command of the last kings of the 18th dynasty (about 1340 B.C.) one of which, later transformed into a church, still enshrines the oldest Nubian inscriptions of Christian Egypt.

The two rock temples of Abu Simbel (the Great Temple of Rameses and the Small Temple of Nefertari), rise on either side of a river of golden sand running down from a natural amphitheatre of pink sandstone. The most important sanctuaries built by Rameses in Lower Nubia, they are also the most remote, the most harmonious and the most colossal. Rameses built temples all over Nubia, each dedicated to one of the gods of the Empire. At Abu Simbel he brought the three great gods together and added his own image, raised to divine rank.

Here, therefore, he reigns, a god among gods, surrounded by his entire family. Rameses imposed the cult of the Sun-King, born of the sun, the spouse of a goddess transformed into a woman, the ravishing Nefertari. The queen is depicted in the flower of her beauty in the temple dedicated to her by Rameses to the north of his own sanctuary, identifying her with Hathor, the presiding goddess.



Unesco-Laurenza



Documentation Centre on Ancient Egypt, Cairo

by the waters several times a day. Under this treatment the monuments will eventually disintegrate and crumble to the ground. To save the sacred island it is envisaged to raise a protective wall around Philae, thus creating an artificial lake amidst which the island with its monuments will be perma-

nently above water and hence out of danger. Left, photo taken in January when only the tip of the Temple of Isis is above; centre, as waters subside, the temple and the "kiosk" of Trajan (on right) appear once more; right, the island as it appears when completely freed from the invading Nile.

## Born aloft like a Venus emerging from the waves

The four colossi, adorning the façade of the Great Temple and standing over 65 feet high are an unforgettable sight. The extraordinary harmony and delicacy of the heads completely counterbalances the deliberate heaviness of the bodies and the huge mass of this fantastic pylon cut from the very face of the rock.

From the wall of her small temple, Nefertari seems to become alive and to step forward, radiant in her feminine beauty, towards her eternal destiny. It is impossible, in a few words, to attempt to describe the magnificence of this temple of temples, the purity of the carvings in the queen's sanctuary, the images of Nefertari as a young girl, surrounded by wondrously slender, graceful goddesses, who seem to bear her aloft like a nascent Venus emerging from the waves.

On the walls of the Great Temple, historic scenes of the utmost importance, royal inscriptions, and murals heralding a new trend in art, precede eloquent religious scenes which lead to the sanctuary where four statues again show the king in the company of his fellow gods. Politics and diplomacy often take precedence over prayer in this temple of Rameses with its dual message.

The scenes, the inscriptions, the Osirian pillars in the first hall all recall the innovations of the great king. They mark a major turning point in the history of Egypt and find a small echo to this day in other parts of the globe. Thus the chronicle which Rameses caused to be carved on the south side of the terrace—the Marriage stela with its surface now scarred and pitted with the wind-blown sand of centuries—commemorates the conclusion of an age-long struggle between two peoples.

The Stela recounts the marriage of a Hittite princess whose epic story (see article page 31) unforgotten up to recent times, inspired one of Leconte de Lisle's *Poèmes Barbares*. The frail princess Nefru Re is depicted on the arched top of the Stela which then tells how Rameses ventured forth in mid-winter, crossing his northern frontiers to meet her in his fortified castle. With the appearance of the Sun-King a miracle occurred; the mists enveloping the earth were dispelled and the sun shone forth from a clear sky, spreading warmth over all things. A St. Martin's summer had been brought about by the son of Re, and the princess immediately received the name occasioned by this phenomenon. Henceforth she was *Maat Hor Nefru Re* "She who sees Horus, the life force of the Sun God."

Protected where they stand in their hallowed bay, preserved in the rock so frail that no water can touch them without disintegrating their stones, the two temples of Abu Simbel cannot be allowed to perish. They must remain facing the rising sun whose brilliant rays each day awaken the colossal statues of the Great Rameses.



**GODDESS WITH VULTURE HEAD- DRESS.** One of the six huge figures carved in pure Graeco-Roman style on the outer wall at the rear of the temple of Kalabsha. Goddess (above) wears a vulture headdress, symbol of the goddess-mothers. These were often worn by Egypt's queens including the famous Cleopatra. The headdress is surmounted by the sun nestled between the horns of the cow of heaven—the hieroglyphic for Isis. Temple of Kalabsha (left) built in the reign of the Roman emperor Augustus on the site of a sanctuary dating from the 15th century B.C., is the most important monument in Nubia after Abu Simbel and Philae. Like the other flooded Nubian temples, Kalabsha remains under the waters nine months of the year. To save it, it must be taken down and rebuilt on another site in Nubia.



# The thirsty lands

These two photos symbolize the dilemma of Nubia: how to bring water to its thirsty lands and people and yet safeguard the treasures placed in jeopardy. Right, site of the future High Dam at Aswan in the dry season. The blazing sun has cracked the river-bed of the Nile creating a pattern resembling a vast crazy paving; below, colonnade of the "birth house" in the forecourt of the Temple of Isis on Philae, the sacred isle, which is one of a group close to the site of the new Aswan Dam.



Photos © Albert Raccah.

**T**HE essential part of Egypt is a green gash of teeming life cutting across brown desert wastes. The line of demarcation between life and nonlife is startlingly clear: one may stand at the edge of the cultivation with one foot on the irrigated black soil and one foot on the desert sands. The country is essentially rainless; only the waters of the Nile make life possible where otherwise there would be endless wastes of sand and rock.

But what a life the Nile makes possible! The little agricultural villages contract themselves within the smallest compass, so as not to encroach upon the fertile fields of rice, cotton, wheat, or sugar cane. When properly cared for, the land can yield two crops a year...

The richness is confined to the green Nile Valley. Only 3.5 per cent of the modern state of Egypt is cultivable and habitable. The remaining 96.5 per cent is barren and uninhabitable desert. Today perhaps 99.5 per cent of the population lives on the 3.5 per cent of the land which will support population. That means an even greater contrast between the desert and the sown, and it means that on the cultivable land there is a concentration of people close to the saturation point.

— John A. Wilson  
*quoted from "The Intellectual Adventure of Ancient Man."*  
*Published by University of Chicago Press © 1946.*

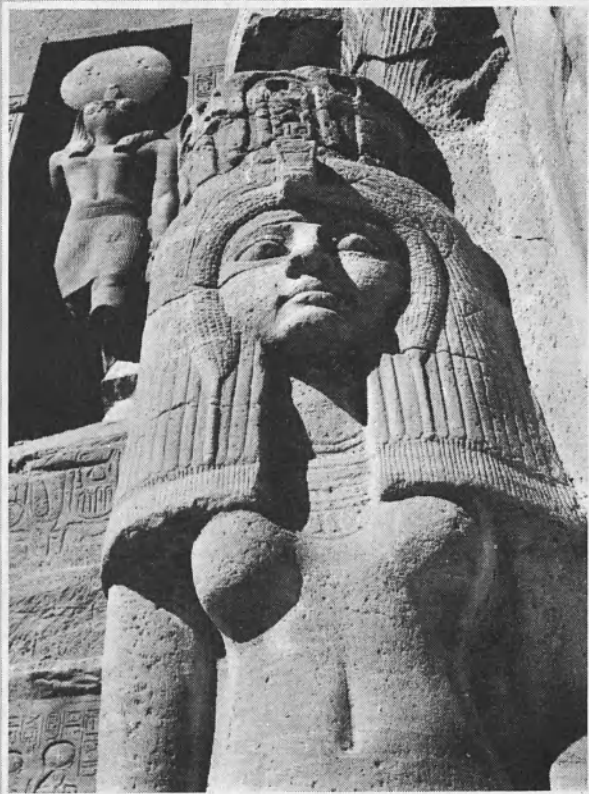
# ABU

## Marriage of the Colossal and the Beautiful



**ROYAL PAIR.** — The two temples of Abu Simbel are covered with numerous portraits of Rameses II and his lovely Queen Nefertari, to whom he dedicated the Small Temple. Above, a representation of the Pharaoh on an inner wall of the Nefertari Temple. Below, a statue of Nefertari placed at the foot of one of the colossal figures of Rameses carved on the facade of the Great Temple.

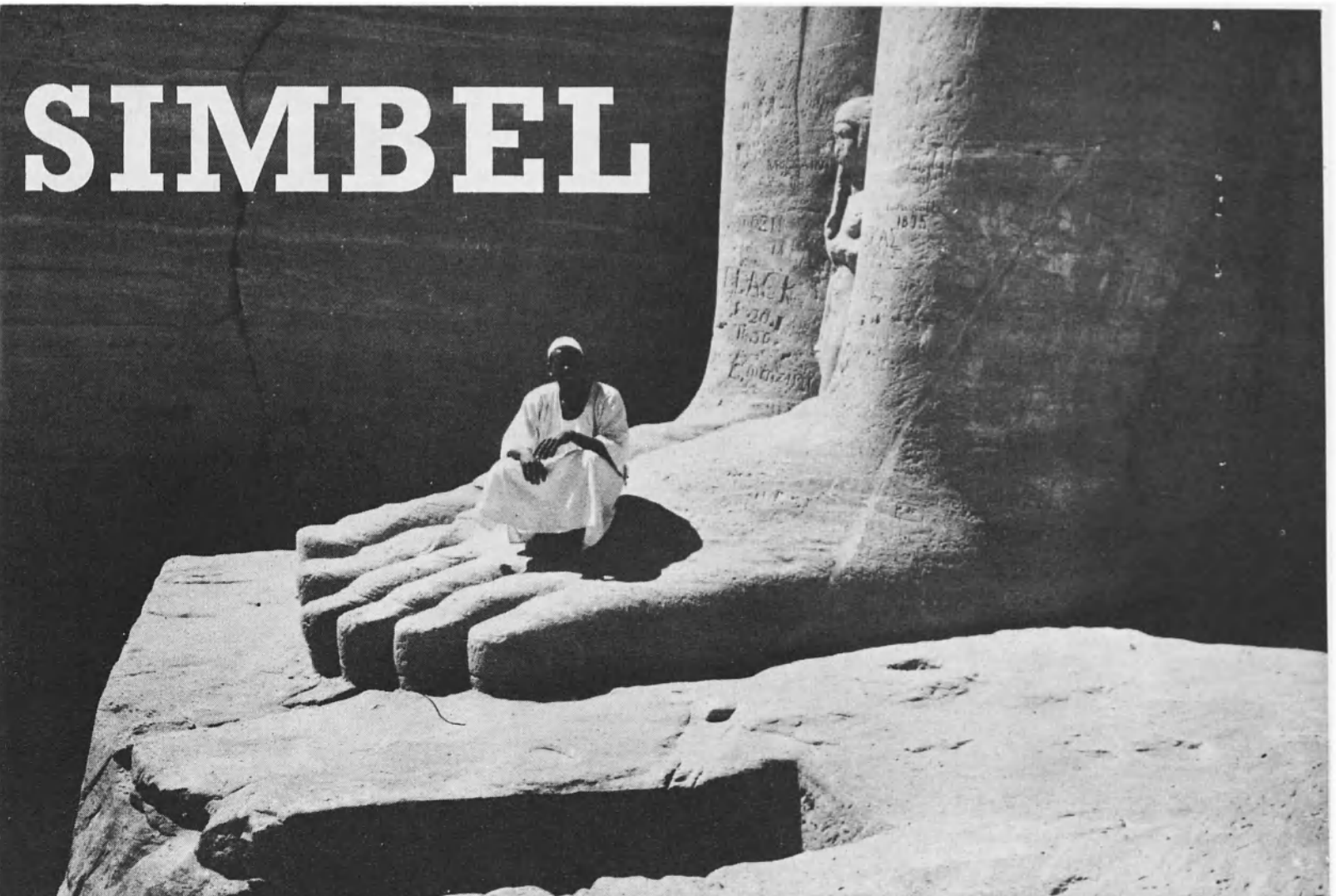
Photos Documentation Centre on Ancient Egypt, Cairo



Rameses II was one of the greatest builders among all the rulers of Egypt. The great rock-hewn ensemble of Abu Simbel is his most monumental and glorious architectural achievement. The Great Temple (right) measures 108 feet in height, 124 feet in width. On the façade, the four colossi, 67 feet high, representing the Pharaoh, look down from the cliff on to a majestic sweep of the Nile. Above right, a detail of one of the giant statues' feet. The scale of its proportions can be judged from that of the human figure. One of Rameses' children is visible between the colossal legs.

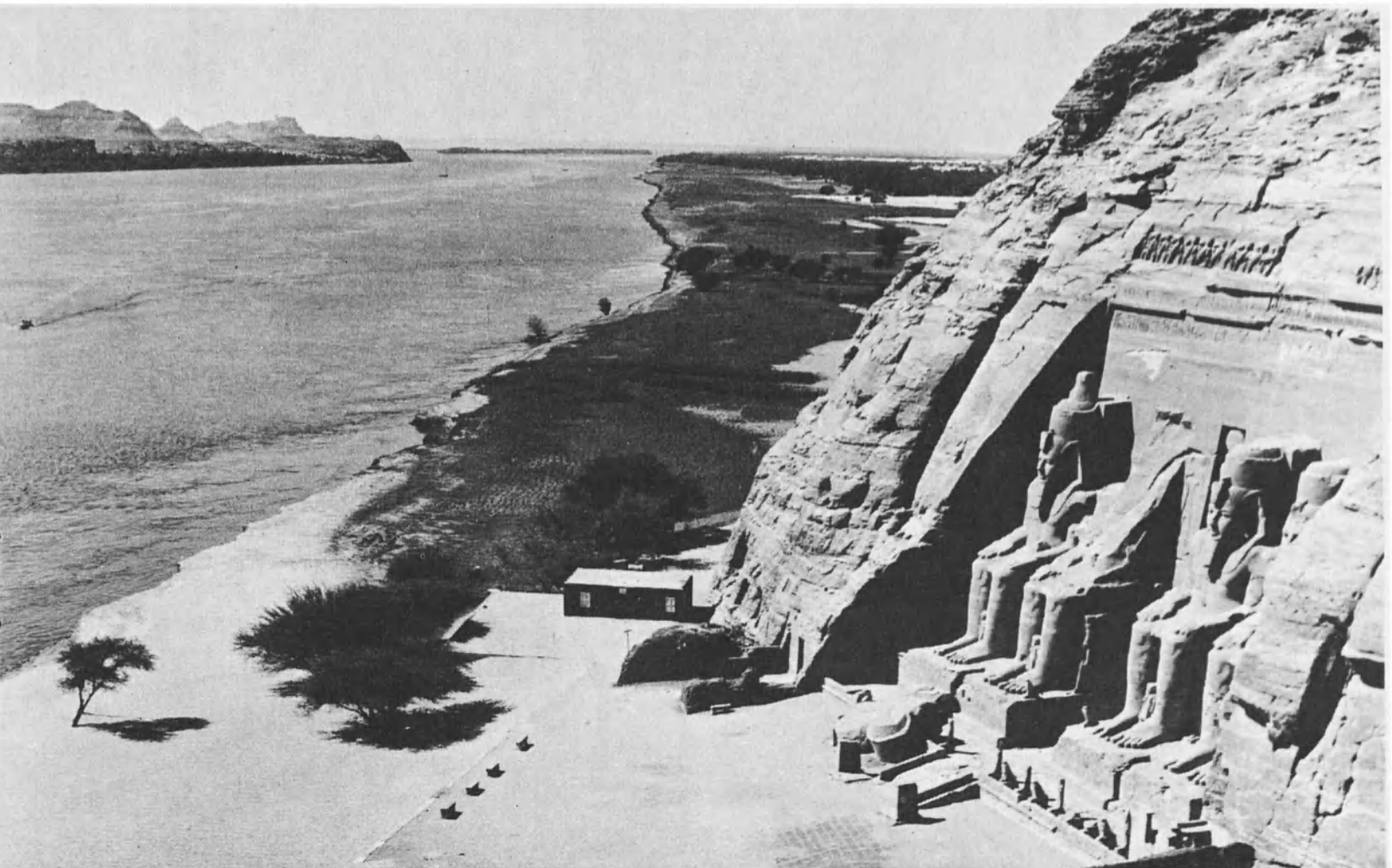
CONTINUED ON PAGES 18 TO 22





Unesco-Mariani

Unesco-Mariani



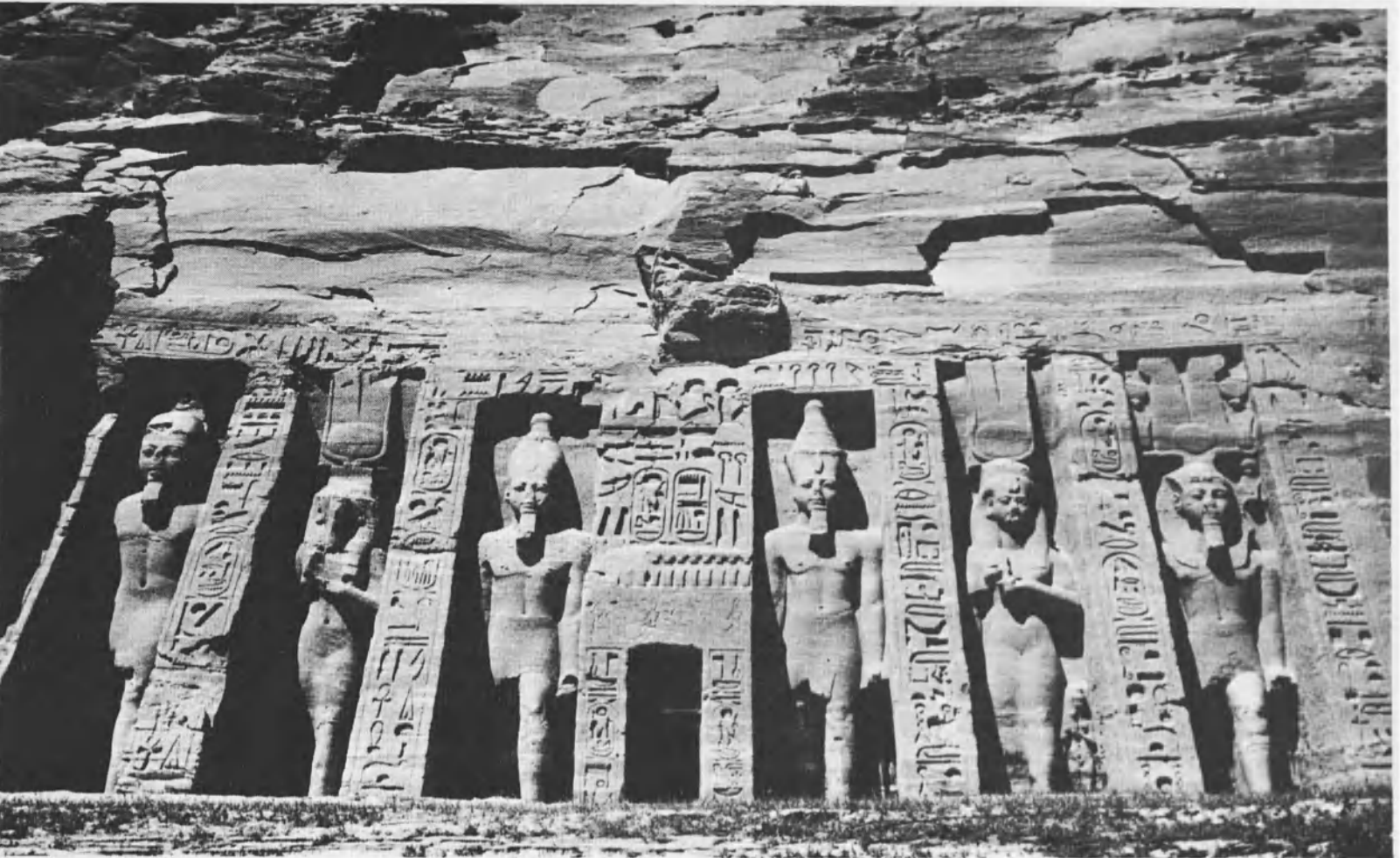


Unesco-Laurenza



## THEY SAID IT WITH FLOWERS ...THREE THOUSAND YEARS AGO

For over 3,000 years, six mighty figures (opposite page) have flanked the portal to the Nefertari Temple at Abu Simbel. Two figures of Nefertari stand between those of Rameses II. On the interior walls of the Temple are carved figures of the queen (right) and Rameses II (far right) making offerings of papyrus flowers. Head carved on the sistrum, the ritual instrument held in the queen's right hand is that of Hathor, also seen on detail of pillar (above). In place of the second ritual sistrum, the queen holds a sheaf of papyrus whose leaves, when shaken, give off a sound similar to that of the sistrum. The huge heads (top of page) from the nearby Great Temple façade are 13 feet from ear to ear. Mouths are 42 inches wide.

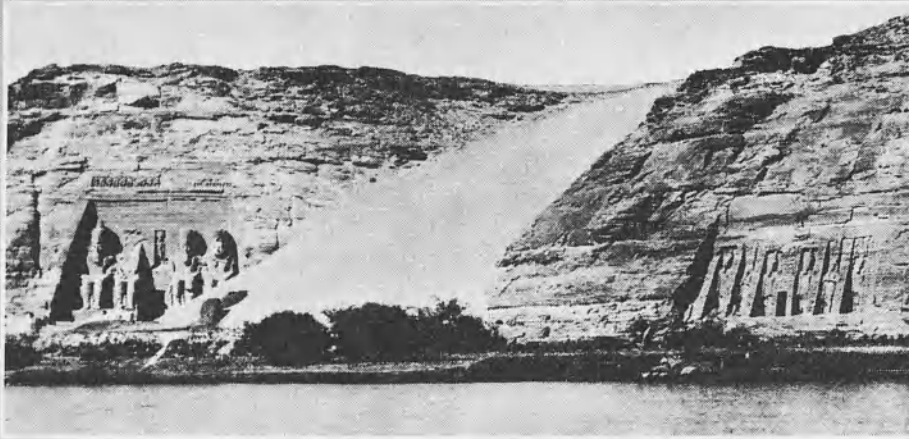


Photos Documentation Centre on Ancient Egypt, Cairo

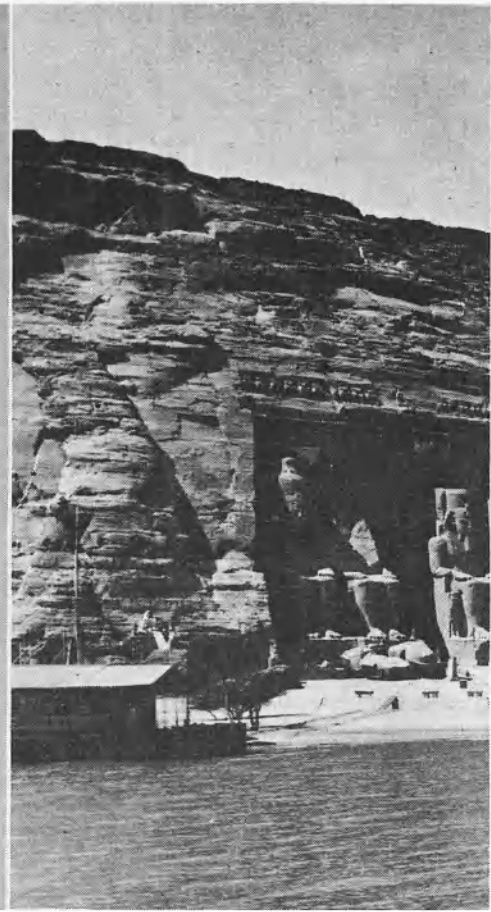


# THE SAGA OF A TEMPLE FREED FROM A GRAVE OF SAND

by *Louis A. Christophe*  
Member of the Egyptian Institute, Cairo



Photos Documentation Centre on Ancient Egypt, Cairo

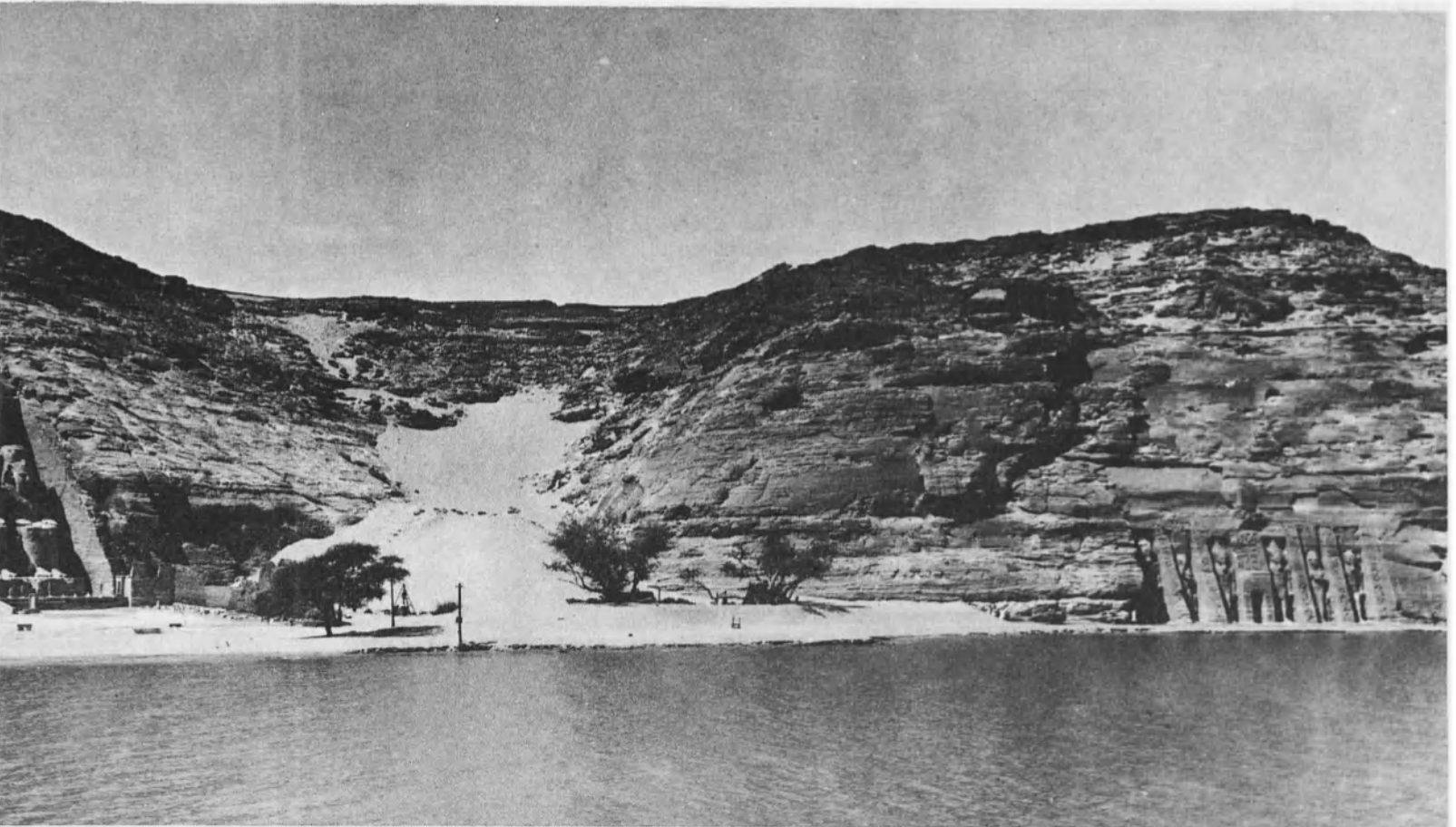


"Try to imagine the Cathedral of Notre Dame carved out of a single block of stone... nothing in our part of the world can

convey an idea of the labour that must have gone into this gigantic achievement." Thus wrote the French author, Maxime



**FIRST PHOTOGRAPH: 1850.** This is the first photograph ever made of the Great Temple of Abu Simbel. A daguerrotype, it was taken by Maxime du Camp in 1850. The façade lies half hidden under the sand which obstructed the Temple so completely in 1817 that it lay hidden even though the Nefertari Temple was known. When discovered, the 67-foot statues were so deeply buried that no one could tell if they were sitting or standing.



du Camp, after visiting Abu Simbel 100 years ago. Above left, first panoramic photograph of Abu Simbel taken in 1905,

showing the river of sand flowing down between the temples. Above, Great Temple (on left) and Temple of Nefertari today.

**I**n September 1812, a 28-year-old Swiss traveller named Johann Ludwig Burckhardt arrived in Cairo. His object was to join a caravan going to Fezzan and from there to explore the sources of the Niger. While waiting for this opportunity to occur he decided to travel up the Nile to see the monuments of ancient Egypt which were then for the first time being revealed to Westerners.

At this early period of the 19th century it was impossible for Europeans to journey up the Nile by boat beyond the town of Derr, some 150 miles south of Aswan. And no one, until then, had yet undertaken the arduous journey by land except one Englishman named Legh who in February 1813 had obtained permission to travel by camel to the fortress of Ibrim, 15 miles or so south of Derr.

But Burckhardt was no ordinary European. He had studied Arabic in London and Cambridge. He had spent several years in Syria as well as the Lebanon and Palestine in the guise of a Mohammedan trader from India, and had gained such an intimate knowledge of Arabic, of Islamic religion and of the manners and customs of the people that he had come to be considered as learned as the Ulema themselves, if not more so. He was later to become the first European to perform the rites of pilgrimage at Mecca and adopted the name Ibrahim ibn Abdallah (he is the famous "Sheikh Ibrahim").

And so early in 1813 Burckhardt decided to explore the Nile valley south of Derr by land, and struck across the desert with his camels, venturing into the Sudan as far as Dongola well beyond the Third Cataract of Dal. On his way southward he followed the right (East) bank of the Nile, halting at Ibrim and then at the tiny hamlet of Ferrayg where he inquired about the Pharaonic ruins which might be visited in the region. He was told that at a place called Ebsambal (Abu Simbel) just north of Ferrayg, but on the other side of the river, there existed a small temple. The inhabitants, it should be noted, spoke of only one temple, and even a year later the people of

Derr and Ibrim told a traveller that only one existed.

On his return trip northward from the Sudan, Burckhardt now followed the left (West) bank of the Nile in order to explore the sites on that side of the river and particularly Abu Simbel which no one had yet described.

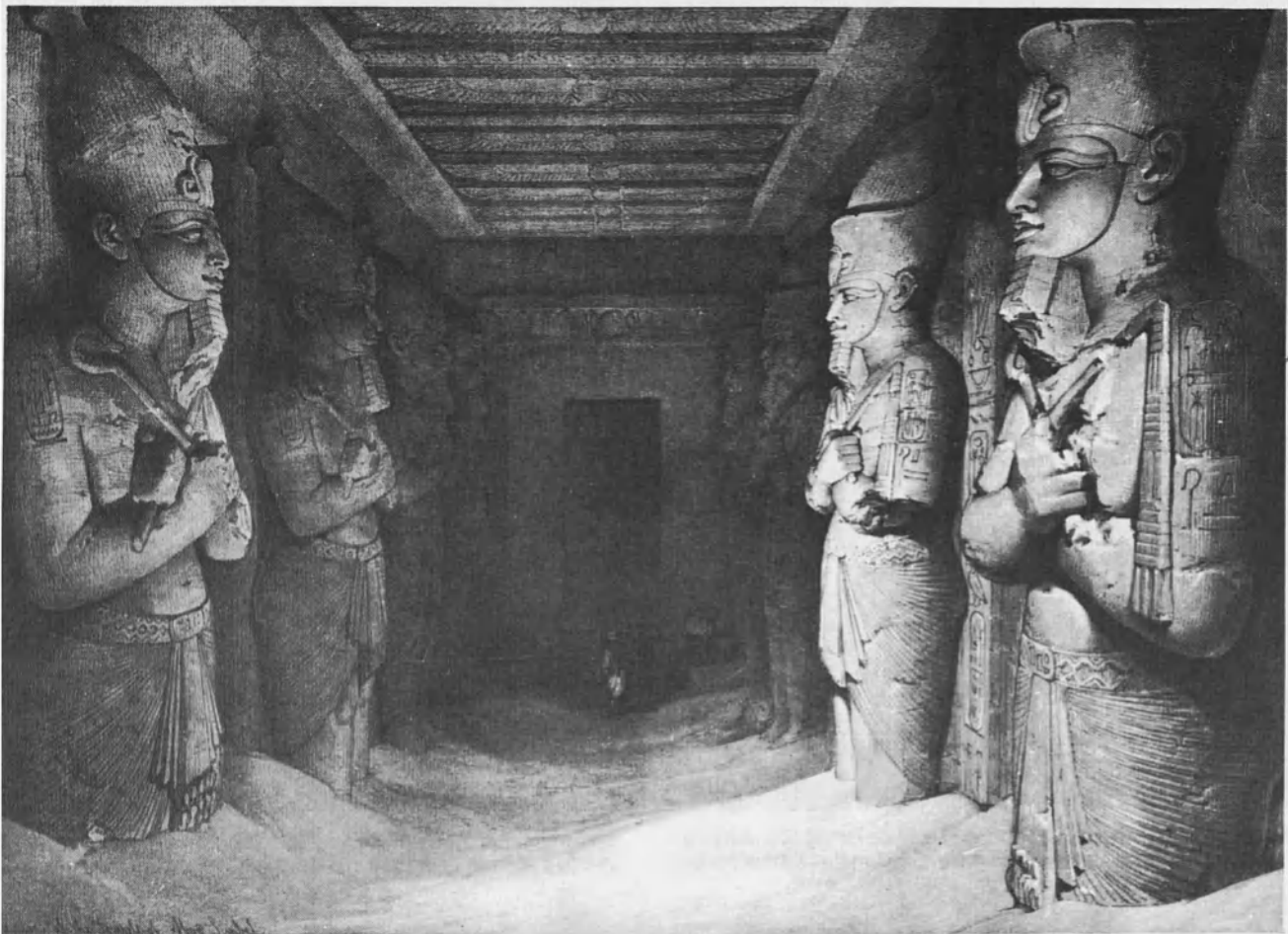
On March 22, 1813 he made a halt on the plateau, left his camels with his Nubian guide and went down into the sand-choked ravine. He inspected the small temple (of Nefertari) at his leisure and then, as time was passing, prepared to rejoin his companion.

"Having, as I supposed, seen all the antiquities of Ebsambal", he wrote in his travel diary, "I was about to ascend the sandy side of the mountain by the same way I had descended; when having luckily turned more to the southward, I fell in with what is yet visible of four immense colossal statues cut out of the rock, at a distance of about two hundred yards from the temple..."

Almost totally buried in the sand for more than a thousand years, the façade of the Great Temple of Abu Simbel and—as Burckhardt quite logically surmised—an edifice hollowed out of the rocky cliff were thus restored to their rightful place as one of the most stupendous monuments of ancient Egyptian architecture.

We do not know if he made a written report of his discovery before returning to Cairo in June 1815. We do know though that the British consul-general in Alexandria at the time, Colonel Ernest Missett, whom Burckhardt met, did speak of the find to others and spurred interest in it. No longer was Nubia an unknown, inaccessible region, and the path now was open for the intrepid traveller to reveal its archaeological treasures.

Explorers were soon at the site but they were either disheartened by the huge mountain of sand blocking the façade or failed to get the local help to clear it. The colossal façade was to wait until 1817 before its entrance was first freed from the sand by Giovanni Battista Belzoni—himself a colossus of a man, six feet seven inches tall and of amazing strength. Belzoni arrived at Abu Simbel



Drawing by David Roberts. Photo Documentation Centre on Ancient Egypt, Cairo

**CARVED INTO THE MOUNTAIN:** A drawing made in 1855 of the inner entrance hall of the Great Temple with its eight colossal statues of Rameses II, each 30 feet high. Statues stand knee deep in the sand. Each is holding the crook and the scourge—the two symbols of kingly power. To penetrate the temple the artist had to let himself slide down the steep mounds of sand which blocked the doorway. Everything about the Great Temple is colossal. Carved out of solid rock it is 108 feet high, 124 feet wide and goes over 200 feet into the mountain.

in September 1816 at the head of an expedition supported and financed by the new British consul-general, Henry Salt.

Like his predecessors he was dogged with difficulties and the refusal of the local people to help. Finally on August 1, 1817 the Great Temple of Abu Simbel was officially opened in the presence of Belzoni, Salt's secretary H.W. Beechey and two Royal Navy captains.

Twenty-two days were needed to remove enough sand to reach the entrance. For the first five days 100 local workers did the clearing, and when they refused to go on, Belzoni, Beechey, the two Navy captains, a Turkish soldier and a Greek servant took over alone, working 10 hours a day with the heat averaging 112° F. in the shade (44° C.). They worked from dawn to eight in the morning and from two p.m. (the mountain then shaded them) until dusk. The sand removed rose up 50 feet.

As they were consolidating the menacing mass of sand a toad emerged from the opening they had made in the upper left-hand corner of the temple door. When the creature had disappeared the whole team slid through the small aperture, crawled over the sand barrier filling the entrance corridor and followed the gentle slope down to the interior hall with its Osirian pillars. By the light of their torches and despite the smoke and stifling heat, they gazed in awe at the colossal figures before them and at all the reliefs they saw in the succeeding chambers.

One question was still unanswered: were the colossal statues of the façade standing or sitting? This was answered in the winter of 1818-1819 when a large expedition entirely cleared the southern (extreme left) colossus.

As a safety measure the legs of the statue next to it were also cleared thus revealing the now famous Greek inscriptions dating back to the Nubian campaign of Psammetichus II. (see page 39).

From then on, the great names in Egyptology visited Abu Simbel and drew on its riches: Bonomi, Lane, Burton, Wilkinson, Champollion, Rosellini, Hay, Lepsius, Mariette, and many others.

Despite repeated clearing operations, the sands kept blowing back into the Abu Simbel ravine from the Western desert. In 1892 sand-diversion walls were erected on the summit of the desert plateau. In 1902, when the level of the Aswan dam was first raised, Gaston Maspero, then director of the Egyptian Antiquities Service instructed the architect Barsanti to reinforce these diversion walls. Thus, it was only in 1909-1910, when all danger from the blowing desert had passed, that all the sand was at last cleared by Barsanti from the four colossi, from the terrace, the forecourt and the temple approaches.

It is thus barely fifty years since the monumental ensemble of Abu Simbel has really been revealed to us, thanks to the successive efforts of these men. Had it not been unknown and buried in the sand for so many centuries it might well have ranked among the Seven Wonders of the world. From Burckhardt to Barsanti, travellers, explorers and scientists of all nationalities followed each other during the 19th century in order to free one of the finest masterpieces of Pharaonic art from its tomb of sand. Their example justifies the hope that a second wave of international solidarity will save the great temple of Abu Simbel from the watery grave that now awaits it.

# MEDITERRANEAN

## THE NILE waterway of art & history

On the banks of the Nile innumerable artistic treasures and historical remains testify to the events of a glorious past. The construction of the new High Dam at Aswan and the artificial lake which this will create (shaded on the map) will flood forever hundreds of sites in ancient Nubia in both Egyptian and Sudanese territory. The Nubian monuments are shown in red.



EGYPT  
SUDAN

RIFAAT NASR



Photos Christiane Desroches-Noblecourt

**WADI ES SEBUA.** This name ("The Valley of the Lions" in Arabic) comes from the sacred avenue lined by sphinxes which leads from the Nile (in background) to the great rock-hewn temple dedicated by Rameses II to the god Amon.

**DAKKA.** Graeco-Roman sanctuary dedicated to Thot, god of wisdom and writing. It was built in the third century B.C. by King Ergamenes of Ethiopia. This is the only temple of Nubia facing north instead of south.





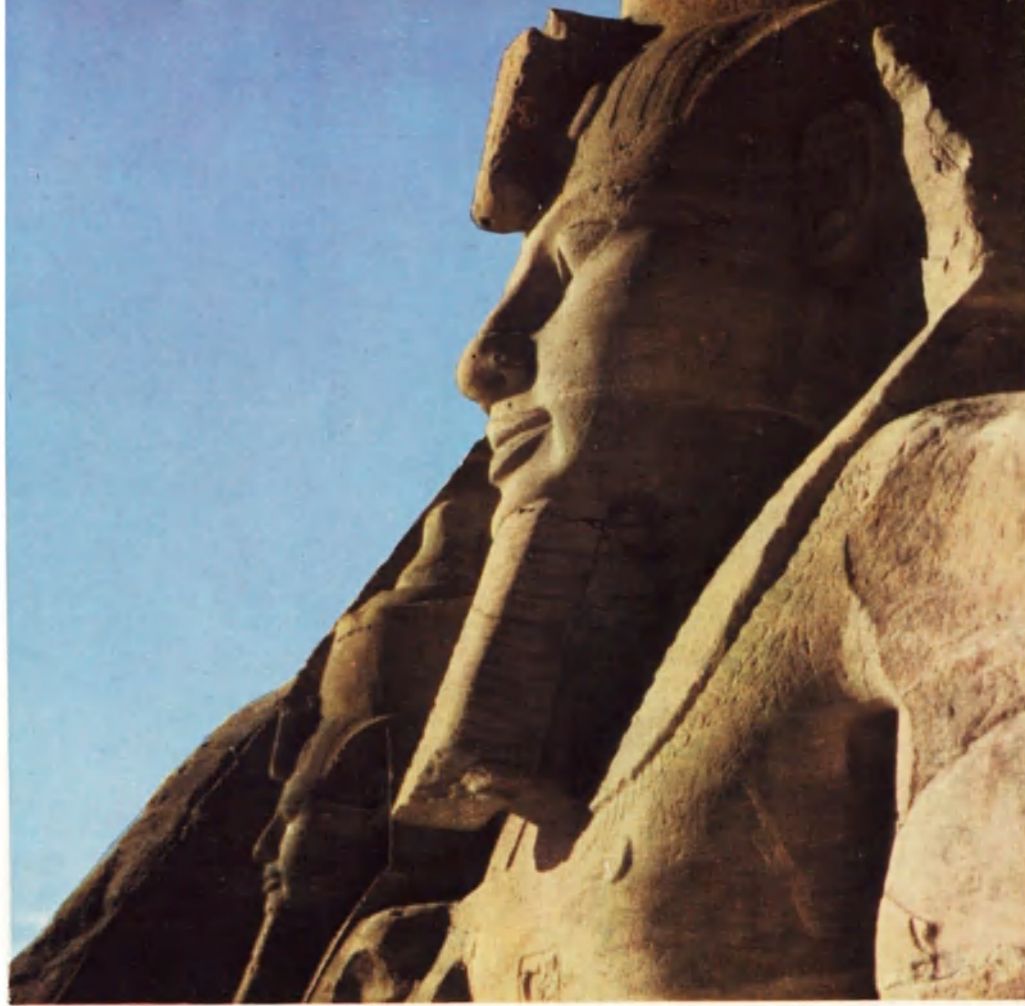
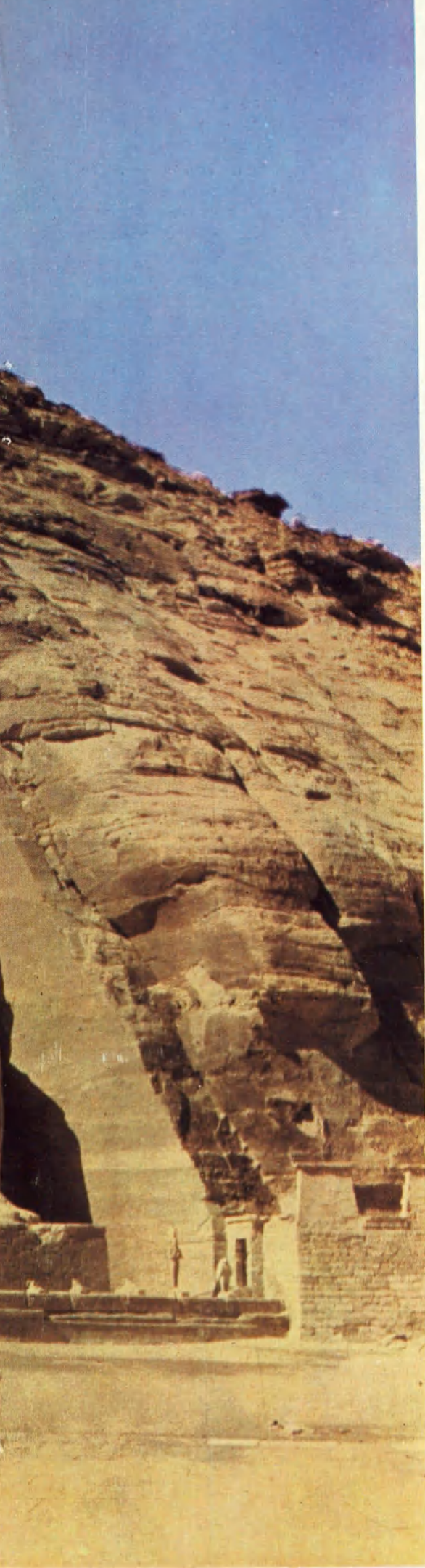


Christiane Desroches-Noblecourt

**ABU SIMBEL.** Two of the eight pillars representing the god Osiris with the features of Rameses II. The statue-pillars are located in the inner underground court of the Great Temple.

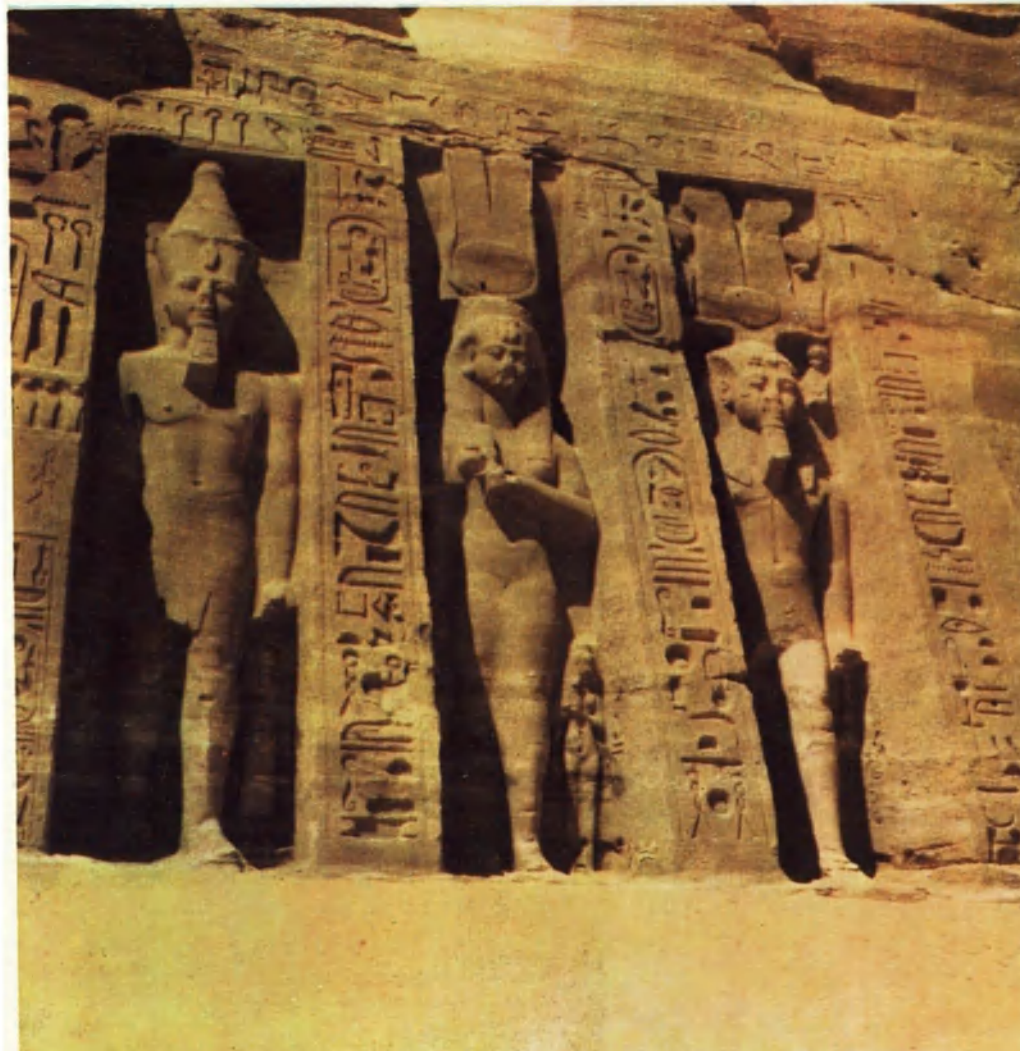


**ABU SIMBEL.** Four colossal statues of the Pharaoh Rameses II flank the entrance portal to the Great Temple, built by Rameses II to honour the gods Horus, Amon and Ptah, as well as his own deified image. Topping the façade is a row of baboons to greet the rising sun.



**ABU SIMBEL.** Profiles of the giant statues of Rameses II on the facade of the Great Temple. They are carved out of sandstone rock on the western cliff of the Nile in Lower Nubia.

**ABU SIMBEL.** Temple of Queen Nefertari. Part of façade of the Small Temple dedicated by Rameses II to his queen and to the goddess Hathor. Nefertari stands between figures of Pharaoh.





**PHILAE.** The Graeco-Roman "Kiosk" with its fourteen imposing columns, erected by the Roman Emperor Trajan, seen here isolated by the flood waters of the Nile.

Christiane Desroches-Noblecourt



**PHILAE.** Façade of the first great pylon of the Temple of Isis. Motif to the left of the gateway represents the Pharaoh making offerings to Isis.

© Albert Raccah



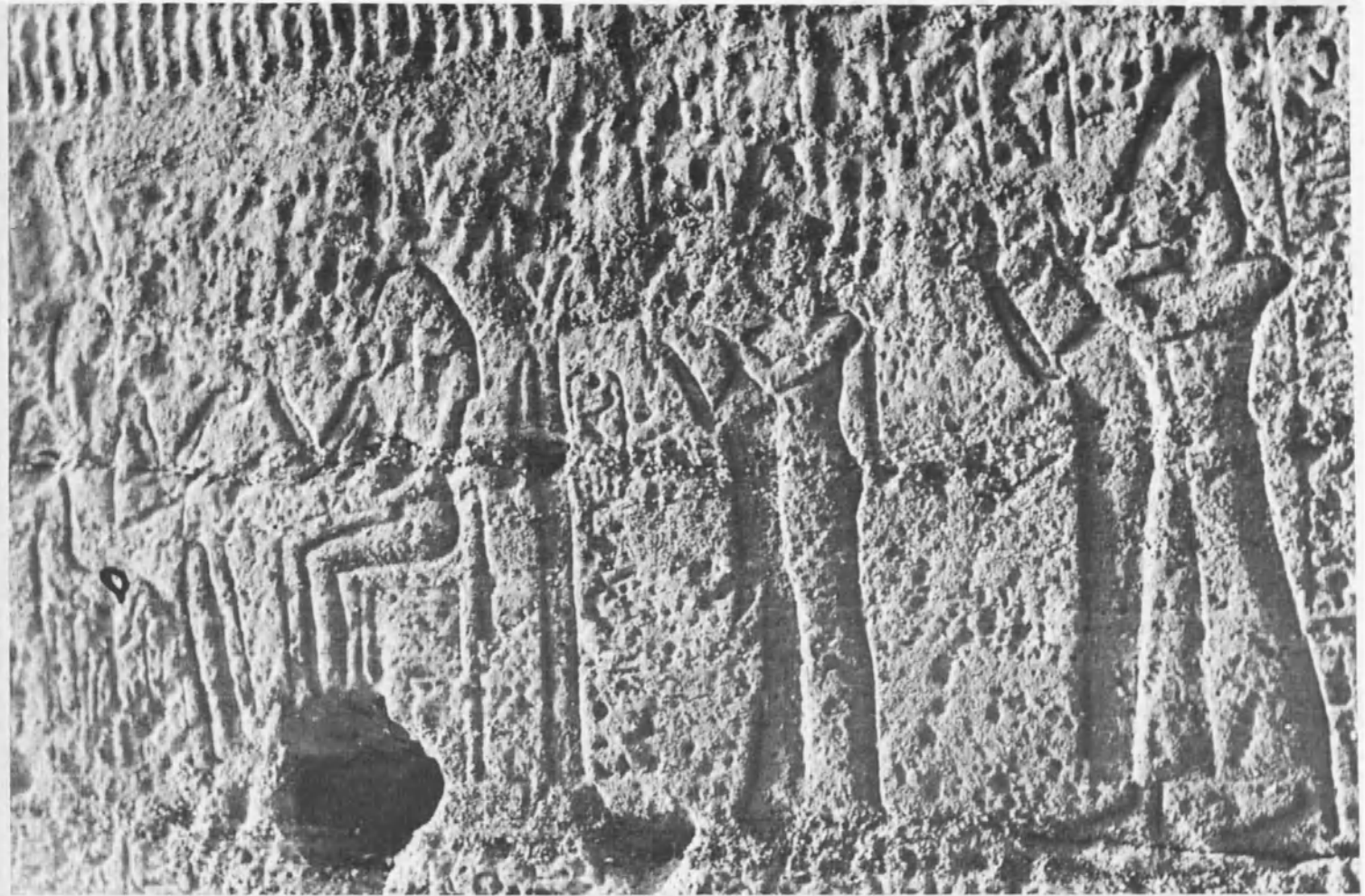
Christiane Desroches-Noblecourt

**PHILAE 'PEARL OF EGYPT'.** The celebrated colonnade on the island of Philae leading to the Great Temple of Isis. The colonnade was built during the reigns of Augustus and Tiberius. Philae's temples form a grandiose ensemble, with the Nile and the island of Bigeh as a backdrop, when the last rays of the setting sun strike its rose-hued sanctuaries.



Christiane Desroches-Noblecourt

**GERG HUSEIN.** Columns outside the temple dedicated by Rameses II to the god Ptah and hewn out of the rock overlooking the Nile. In the past a stairway lined by crouching stone rams led to the temple with its giant statues, but all traces of it have vanished.



Documentation Centre on Ancient Egypt, Cairo

Eaten away by the elements, lashed by sandstorms, the "Marriage stela" cut into the sandstone rock on the terrace of the Great Temple at Abu Simbel recalls some aged and yellowing document whose words can hardly be made out, yet whose story, once deciphered, is all the more moving. The Stela tells of the marriage of Rameses II with the daughter of the King of the Hittites in the 13th century B.C. On the fragment shown here, the princess is seen arriving followed by her father (right) wearing the ancestor of the Phrygian cap. Rameses is on extreme left under the marriage dais. The marriage took place on a dull winter's day, but when the pharaoh appeared the sun pierced the clouds. So the princess was named "She who sees Horus, the life force of the Sun God."

# THE SUN WAS A WITNESS AT PHARAOH'S MARRIAGE

by Jaroslav Černý

Professor of Egyptology, Oxford University

**A**n immortal text graven in stone is one of the precious records of the past threatened in Nubia. It is the so-called "Marriage stela" of King Rameses II of the XIXth Dynasty, who reigned from 1290 to 1223 B.C. It is cut in the vertical sandstone rock on the southern side of the terrace of the larger rock temple at Abu Simbel and is one of the copies of a document composed at Rameses II's court and sent to various Egyptian temples to be immortalized on their walls.

The copy at Abu Simbel is the only one to have come down to us in its entirety; three others are known from the temples of Aswan and Karnak in Egypt and from the temple at Amara in the Sudan. None of these versions, however, can vie with the one at Abu Simbel from the point of view of preservation, though even at Abu Simbel the inscription has not escaped some damage. To start with, the sculptor who had been instructed to carve the document in the rock did not find the available surface sufficient. He succeeded in cutting only forty-one lines of the inscription, and though he made his signs smaller

and smaller as he proceeded, he was forced to stop when he had reached the bottom of the rock wall and so left out the end of the story. Moreover, the inscription was subsequently exposed to the weather for a long time—for centuries probably—until it was finally completely sanded up. By then sand driven against the inscription had considerably obliterated the surface of the stone.

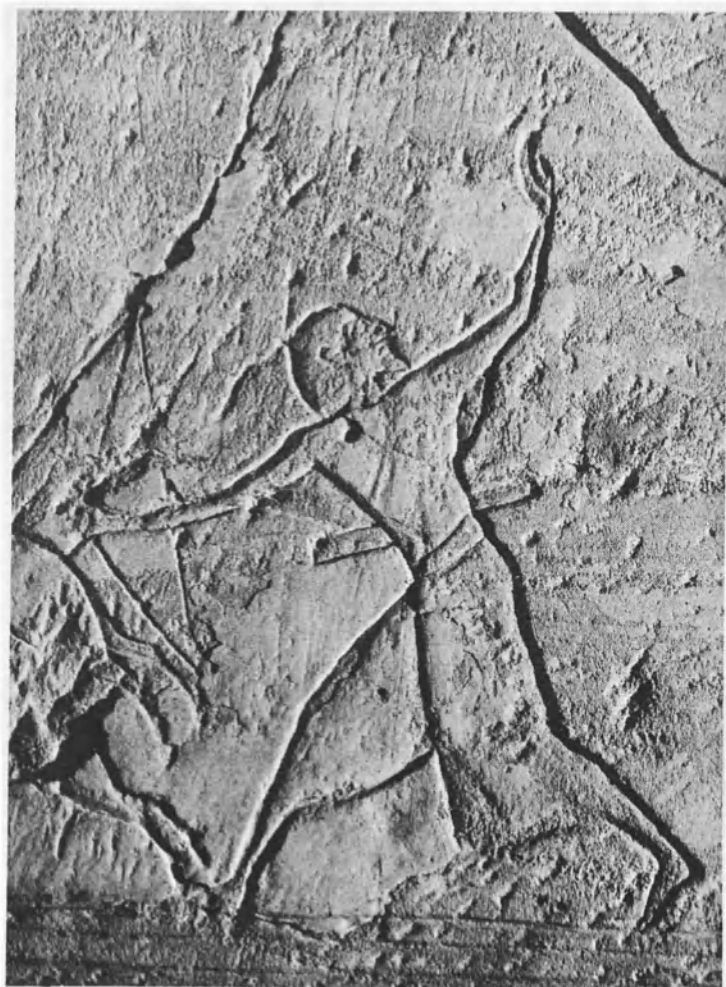
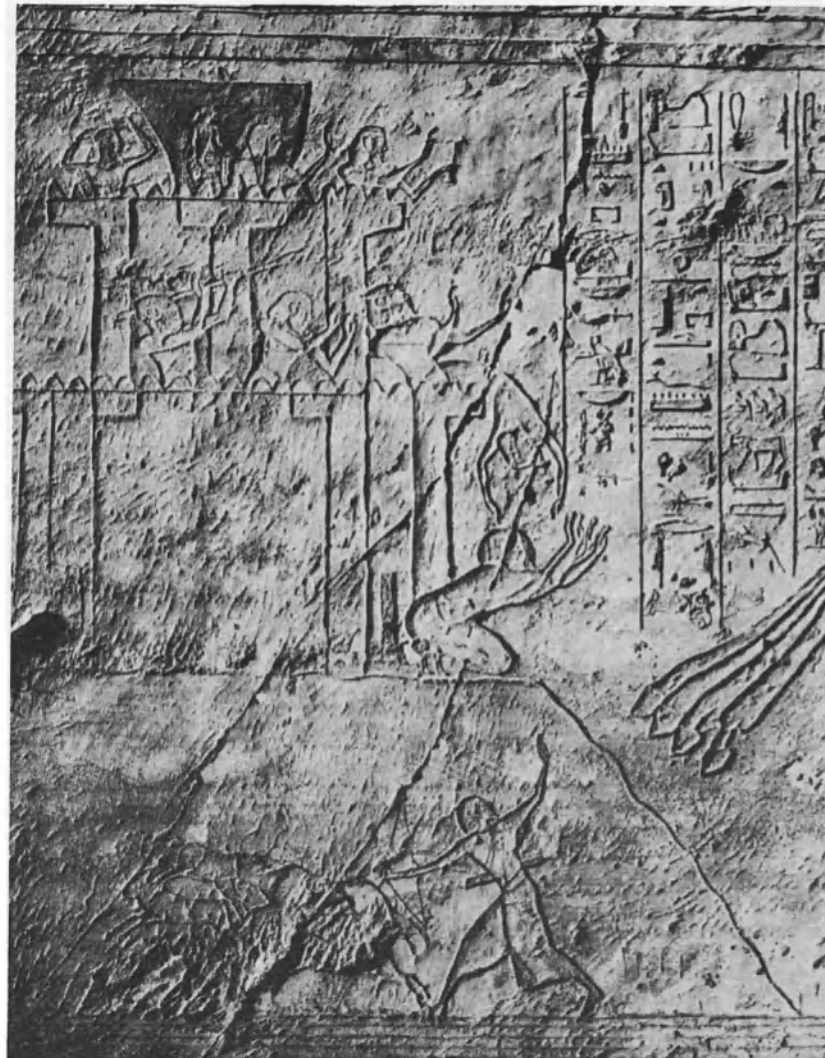
No wonder, therefore, that the German scholar Carl Richard Lepsius, who was the first to study the stela in December 1843, and again in August of the following year, copied only eighteen lines, and these with many gaps, the bottom of the stela being probably still beneath the sand. It was only towards the end of the last century that the French Egyptologist, E. Bouriant, recorded, however imperfectly, the whole inscription. Much of the original is badly mutilated by corrosion and often whole words, even whole lines, are so indistinct, especially in daylight, that a scholar can only hope to obtain a satisfactory result by having enough time and strong electric lighting by night at his disposal.

Such conditions were afforded to the scholars sent by

CONT'D ON NEXT PAGE

# THE WALLS SING THE GLORY OF RAMESES II

Cut into the rock walls of the first hall of the Great Temple at Abu Simbel are the stories of the exploits of a king who was also a god for his subjects. The principal story is told in the poem of Kadesh, scene of the battle where Rameses II by his personal courage saved his army from utter defeat by the Hittites. These works are considered to be among the most outstanding examples of narrative poetry of the period and the figurative representations are of a beauty worthy to accompany the poems. Right, from the southern wall, in another of his campaigns, Rameses in his war chariot pursues the enemy. To leave his hands free he has tied the reins round his waist, guiding his team of horses by movements of his body. Beneath the enemy citadel (bottom left of the bas-relief) a shepherd flees before the Pharaoh (detail below). Opposite page, below, a warrior dies, pierced by the Pharaoh's spear, in a scene from another battle on the same wall.



UNESCO during the past four years to co-operate with the Documentation Centre on Ancient Egypt, in Cairo. Moored for weeks in front of the temple, they had both time and strong electric reflectors, but even so, many hours of night work were required before the inscription yielded all its contents. The story which the inscription has to tell is remarkable enough to deserve the attention of anyone interested in ancient history.

The "Marriage stela" records the marriage of Rameses II with a princess sent to Egypt by her father, the king of the Hittites, to strengthen the peace between their two countries, whose relations had been far from peaceful in the past. Ever since the reign of Rameses II's father, king Seti I, the Hittites, whose kingdom was situated in Asia Minor, had been pushing south into Syria, a country which the Egyptians always considered as lying within the sphere of their interest.

A military expedition led by Rameses II in the 5th year of his reign (1285 B.C.), had resulted in the battle of Kadesh, a town of great strategical importance on the river Orontes in Syria. The Egyptian army still on the march and not in closed ranks had been taken by surprise by the Hittites and their allies, and only Rameses II's personal bravery had saved the Egyptians from a disastrous defeat. Despite the Egyptian claim, the battle must have been undecided, and fighting probably went on for some time until a peace treaty was concluded between Rameses II and the Hittite king, Muwattali, in the 21st year of Rameses' reign, that is in 1269 B.C. The text of the treaty was drawn up in two versions, one in Egyptian and in hieroglyphs, the other in the Babylonian language and in cuneiform writing. Both versions are still preserved.

One would expect that the conclusion of the treaty was the right moment for the diplomatic marriage. The "Marriage stela" is not, however, dated in Year 21, the year of the peace treaty, but in Year 34 when Rameses II was already a man of about sixty.

It is best to leave it to the stela itself to recount the event as well as all that had led up to it. After a long





Photos Documentation Centre on Ancient Egypt, Cairo

introduction filling the first twenty-five lines and containing the customary adulation and praise of the Egyptian king, the text continues:

"Then he (that is, Rameses II) equipped his infantry and chariotry so that they might strike against the land of the Hittites. He seized it alone by himself before the eyes of his whole army. He made a name for himself in it for ever. They will remember the victory of his arm. Who escaped his hand, those he abuses; his might is among them like a burning torch. And after they had spent many years, while their country was perishing and devastated by disasters from year to year through the might of the great living god Rameses, the great king of the Hittites wrote appealing his majesty, magnifying his might, extolling his victory and saying: 'Desist from thy discontent, remove thy punishment, let us breathe the breath of life. Thou art the son of (the god) Sutekh in truth! He ordained to thee the land of the Hittites and we bring tributes consisting of whatever thou desirest. We carry them to thy noble palace. Behold, we are under thy feet, O victorious king, it is done to us according to all that thou hast ordained.'

"And the great king of the Hittites wrote appealing His Majesty year after year, but he never listened to them. And when they saw their country in this bad condition under the great wrath of the king of Egypt, the great king of the Hittites spoke to his soldiers and his notables saying: 'It is a long time that our land has been in decay and our lord, (the god) Sutekh angry with us. Heaven

does not send rain upon us, all countries are enemies fighting us all. Let us despoil ourselves of all our property, my eldest daughter at the head of them, and let us carry gifts of propitiation to the goodly god (Rameses), so that he may give us peace and we may live.' Then he caused his eldest daughter to be carried and splendid tribute before her, consisting of gold, silver, common metal, slaves and horses without number, oxen goats and sheep in tens of thousands...

"One went to give the message to His Majesty saying: 'Behold, the great king of the Hittites has caused his eldest daughter to be brought with many tributes consisting of all (kinds of) things. They cover her who is at the head of them, the princess of the Hittites, and the great notables of the land of the Hittites who carry them. They have behind them many mountains and difficult passes and have reached the frontiers of His Majesty. Let the army and notables go to receive them.' And His Majesty was delighted and the palace was in joy when he heard this marvellous event which had never before been experienced in Egypt...

"When the daughter of the great king of the Hittites proceeded towards Egypt, the infantry, chariotry and notables of His Majesty were in her following, mixed with the infantry and chariotry of the Hittites, foreign warriors and Egyptian troops alike... And the great kings of all countries which they passed were puzzled, and turned back discomfited when they saw people of the land of the Hittites joined with soldiers of the king of Egypt."

Here the text of Abu Simbel abruptly comes to an end, but some idea of the sequel is conveyed by the fragmentary versions of Karnak and Amara. From these it can be gathered that when the princess and her convoy reached the residence, Rameses found the Hittite princess very beautiful; he installed her in his palace and was seen every day in her company... From then on, the great enemy of old, the people of the Hittites, were like subjects of Egypt, whose people could live in peace and without fear because of the victories of Rameses II.



# PHILAE

## The sacred isle

*by Etienne Drioton*

Professor at the Collège de France

The riches of the island of Philae with its exquisite temples and colonnades and the graceful "kiosk" of Trajan have consecrated its renown. The temples are not the work of a single pharaoh. Each new king embellished and extended what his predecessor had done. But practically all the buildings which still stand are due to pharaohs of the Hellenistic period or to the Roman Emperors who governed after them. Right, bas-relief on the first pylon of the Temple of Isis shows Horus between his mother Isis and the goddess Hathor.

Christiane Desroches-Noblecourt



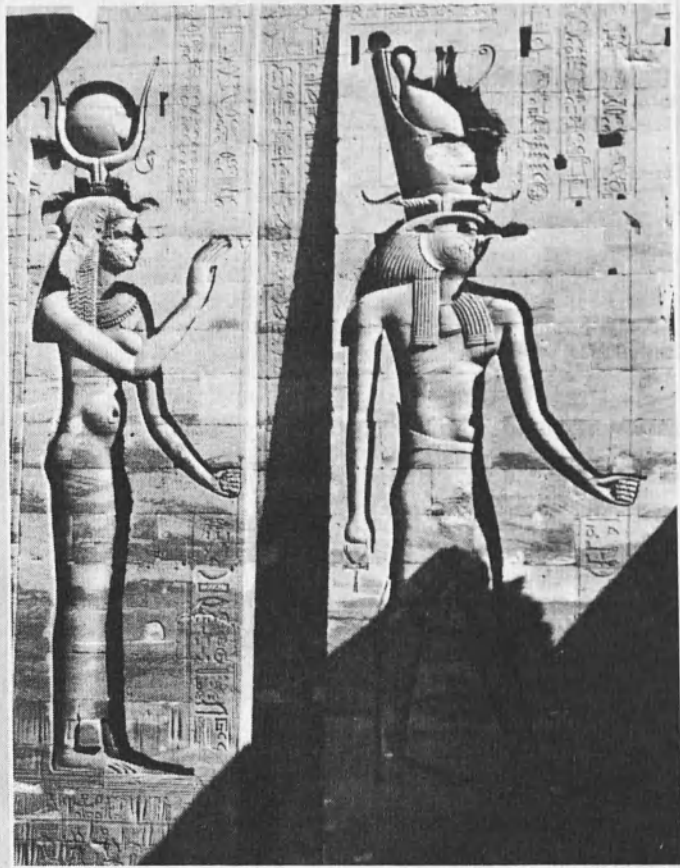
FOR the generation before mine, the temple of Philae was still the pearl of Egypt.

My teacher, Georges Bénédite, who copied its inscriptions in 1887 and 1888, ten years before the building of the first Aswan dam was begun, often spoke of Philae as one of the most remarkable experiences of his life. He would describe his feeling of enchantment each time he crossed the grim granite-rock desert of Aswan and came within sight of the sacred island of Isis. There stood the temple of the goddess reflecting her pylons, porticoes and kiosks in the blue waters of the Nile, surrounded by palm-trees and acacia mimosas. It was, Bénédite said, the vision of Paradise for one emerging from hell.

But it was not for its beauty alone—today somewhat diminished, since the flooding of the island throughout most of the year has destroyed the vegetation—that Philae was famous in ancient times. In the last period of its history, it had, with the adjacent islands, become one of the great religious centres of ancient Egypt, replacing Abydos in the cult of Osiris.

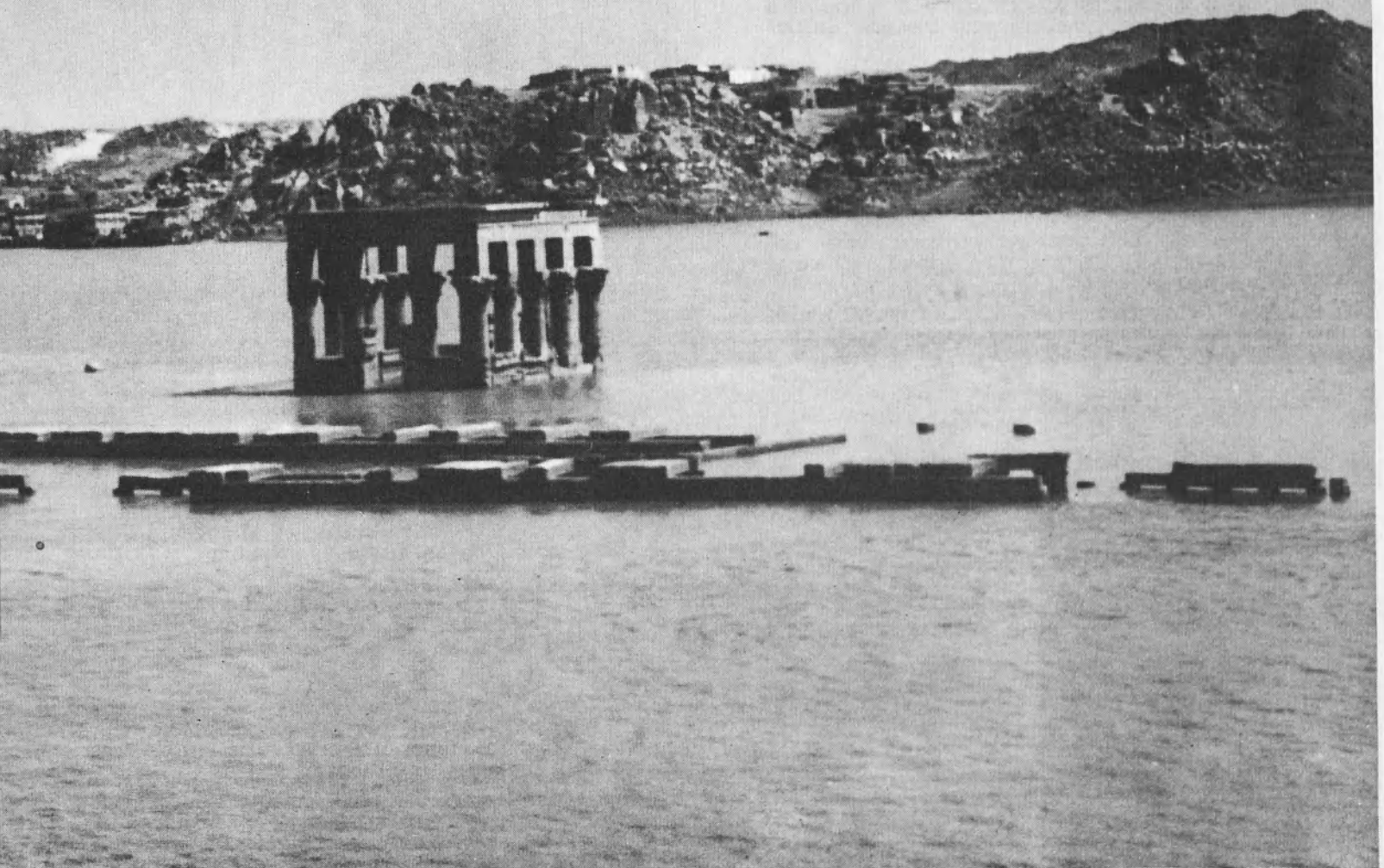
Philae is the smallest of three islands, which are the remains of a granitic shelf, running from south-west to north-east, from which the rapids of the First Cataract begin, and which the Nile has demolished in carving out its course. Philae is also the most easterly of these islands. To the west, separated from it by a narrow channel, is the island of Bigeh, twelve times its size; then comes El-Héseh, three times larger than Bigeh, beside the west bank of the river.

On his journey about 450 B.C., Herodotus did not get as far as this region. He stopped at Elephantine, four and a half miles below Philae, and merely questioned the inhabitants about points of interest that lay beyond. From what they said he gathered that the country above



Unesco-Laurenza

CONT'D ON NEXT PAGE



# PHILAE

## sacred isle

(Continued)



Flute player

Elephantine was mountainous and that one could see the chasms from which the Nile issued, between the crags named Krophî and Mophî. However, he noted nothing of interest before the island of Takhompso, twenty miles farther south. There was, then, presumably nothing remarkable about the region at that time.

This agrees with negative archaeological data. The oldest building remaining on the island of Philae is the small temple of Nectanebo II (359-341 B.C.). This monument is dedicated to Isis, identified with Hathor and associated with the gods of Bigeh.

The remains of the temple of Bigeh are the façade of a vestibule built under Ptolemy XIII (father of the celebrated Cleopatra) and the central part of a pylon decorated under the reign of the Emperor Augustus. The building replaced another one, dating perhaps as far back as Sesostris III (1887-1850 B.C.), and in any case as far as Thutmosis III (1504-1450 B.C.) and Amenophis II (1450-1425 B.C.). These last two kings had adorned it with statues. The gods worshipped there were those of Elephantine, the ram Khnum and his companion goddesses, assimilated to Hathor. Nothing in the composition of its pantheon revealed any particular pre-eminence given either to Osiris or to Isis.

However, their supremacy was established in the area by the first century A.D. The historian Diodorus Siculus wrote:

"Others maintain that the bodies of these two divinities (*Isis and Osiris*) are not at Memphis, but near the frontier between Ethiopia and Egypt, in an island of the Nile, near Philae, called for this reason 'the sacred plain'. The monuments of the island are shown in support of this opinion: the tomb of Osiris, venerated by the priests throughout Egypt, and the 360 vessels for libations surrounding it. The priests of the locality fill these vessels with milk every day, and with lamentations invoke the divinities by name. Apart from the priests, no one is allowed on the island."

Hieroglyphic inscriptions carved in the temple of Philae confirm and add to the information given by Diodorus



Harpist

Siculus concerning the group of sacred islands at Philae. In particular, a divine edict on the subject is inscribed in two versions on the portal of the Emperor Hadrian. The better-preserved of them may be translated as follows:

"*The Holy Mound is the sacred golden domain of Osiris and his sister Isis. It was predestined therefore from the beginning (of the world)... Milk shall not be lacking to this Mount of the Sacred Wood, nor to the temple where Osiris is buried. Let there be provided for him, round this place, 365 tables of offerings, upon which there shall be palm leaves, in order that libations may not cease, that water may never be lacking about him. Let there every day be divine service by the appointed high priest; let there be a libation to Isis, Lady of Philae, when the libation of each day is poured. Let there be no beating of drums or playing of harps or flutes. No man shall ever enter here; no one, great or small, shall tread upon this spot. Nor shall any bird be hunted, nor any fish taken, within 40 cubits to the south, to the north, to the west, to the east. No one here shall raise his voice during the sacred time of the days when Isis, Lady of Philae, who is enthroned, shall be here to pour the libation each tenth day. Isis, Lady of Philae, will embark for the Sacred Mound on the holy days, in the sacred bark of which the name is... (effaced).*"

"*Re has signed this writ; Shu son of Re has signed this writ; Kêb son of Shu has signed this writ, which Thot himself has composed.*"



Photos Unesco-Raccah

Tambourine player

Such was the religious character of Bigeh during the second century A.D. All or part of it was sacred to Osiris and had become, according to the Greek term, an *Abaton*, that is, an area within which it was forbidden to penetrate. The sleep of the dead god beneath his sacred wood must not be disturbed. The same rule of silence was imposed, during that period, in all the sanctuaries of Osiris, notably those of Memphis and Abydos, which also had their *Abaton*. But none of them achieved the fame of Bigeh.

Close by this island dedicated to the dead god, Isis in her temple of Philae belonged to the world of the living. For this very reason, so as to provide a link with the world of the departed, she devoted herself to maintaining the cult of her brother-husband. On all holy occasions, the idol of Isis was taken from its tabernacle, embarked on the river and disembarked at Bigeh, where it presided over the solemn libations at the tomb of Osiris.

The religious geography of the Philae site would be incomplete if mention were omitted of the function of the island of El-Hêséh. The excavations carried out by the American archaeologist G.A. Reisner have led to the discovery of some funeral stelae which prove that the westernmost and largest island in the group contained a necropolis in which the faithful could be buried as near to him as possible, though the *Abaton* discipline kept them away from the tomb of Osiris. The custom was inherited from the oldest traditions of Abydos.

As we see, the history of Philae mirrors the religious trends which inspired Egypt in the days of the Ptolemies and the Roman emperors. During the Assyrian, Babylonian and Persian invasions, the people gradually turned

away from the gods of the State religion, the sun gods who had been unable to protect Egypt.

The faith of the people was transferred to Osiris, whose legend explained all ills and authorized all hopes. The cult of Osiris spread rapidly in those calamitous times, and it is not surprising that it should then have reached the threshold of the Cataract, where only the gods of Elephantine had been honoured before.

The same trend was observable throughout Egypt. A legend was created to explain why there were so many temples of Osiris, for which the ritual required that each of them should have a tomb of the god. Seth had cut Osiris' body into sixteen parts and dispersed them throughout Egypt in order to prevent Isis from reassembling them. She, however, went in search of these fragments and, wherever she found one, she made a tomb for it and consecrated a temple. Bigeh, for instance, was supposed to possess Osiris' left leg.

But this arrangement did not lead to harmony amongst the temple clergy; each temple claimed to be the sole possessor of the authentic relics. So finally a legend prevailed according to which Isis, in order to baffle Seth, had deposited many coffins of Osiris in different parts of Egypt; but only one of them, which could not be distinguished from the others, contained the god's body. Thereafter, each temple had no trouble in claiming that its coffin was the right one—Bigeh just like the others.

Another feature of religion at this time, unknown in the Pharaonic period, was the tendency to give more importance to Isis than to Osiris. This tendency is apparent in the religious establishments of the Philae group. The mortuary character of Osiris being accentuated, Isis remained the living element, helpful to men, of the divine couple. The temple of Philae was dedicated to her. We should also bear in mind that, assimilated to the Great Goddesses from Asia, it was she who, in the Roman Empire, patronized the mysteries whose epithet was not "Osirian" but "Isiac".

While speaking of all the *mirabilia* which antiquity attributed to the Philae island group, we cannot fail to mention that the old legend of the Kropi and Mophi crags, sources of the Nile, as related by Herodotus, finally took up its abode there. A bas-relief in the temple of Philae shows, hidden under the earth in the midst of the rocks of Bigeh, crouched in a cavern from which he dispatches his flow of waters, the god Nile. The ancient Egyptians, whose armies had many a time taken the road to the Sudan, knew as well as we do that the Nile came from much further south. But they also believed that its peculiarities—its regular floods and the fertilizing power of its waters—were due to a good genius hidden somewhere in the bed of the river, perhaps in the Cataract, the swirling of which proclaimed his presence and his activity. This was not physical geography, but mythical geography.



Unesco-Racchah

A magnificent view of the Temple of Isis at Philae. Foreground, the second pylon; behind it the first pylon with white line near top showing high water mark in the Nile flood season. In background, colonnade is just barely visible. The name Philae is said to come from the word Pillaq meaning "the end", the island being at the southernmost limit of Egypt in the Nubia area. In the Arab period it was known as *Qasr* (castle) or *Qasr Anas el Wogûd*, a legendary personage from the Arabian Nights. The three musicians shown on opposite page are some of the charming representations found on the columns in the Temple of Hathor.



© Albert Raccah

**THE SACRED BOAT** of the goddess Isis, depicted here on a bas-relief in the Isis temple of Philae. On all holy occasions, the idol of the goddess Isis was taken from her tabernacle, embarked on the river and landed at the nearby island of Bigeh, where she presided over the solemn libation ceremonies at the tomb of the god Osiris, her husband and brother.

# IN THE STEPS OF GREECE & ROME

by **André Bernand** and

French National Council for Scientific Research

**Abdullatif Ahmed Aly**

Professor, Faculty of Letters, Cairo University

**A** tragic paradox today presides over the destiny of Egyptian Nubia. This region rich in relics of the Graeco-Roman period with over 1,200 Greek inscriptions, 16 free-standing temples, and seven hewn out of the living rock, and with that architectural gem of the New Empire, the temple of Rameses II at Abu Simbel, where one of the oldest Greek texts in the world is to be found, is doomed to disappear for ever beneath the waters of the High Dam.

The hand of man, which built these temples, carved these statues and reliefs, and engraved these inscriptions, will, within a few years, undo the work of ten centuries, to speak only of the Graeco-Roman period.

In point of fact, the geography and history of Nubia are stamped throughout by paradox. Paradox of the Nile which unlike any other river, widens as one approaches its source, and instead of flowing straight, as is erroneously imagined, winds interminably round the Jebels of Africa. Paradox of the valley, sometimes narrow, as at Bab-el-Kalabsha, where the cliffs form a kind of rocky gateway, under which the waters of the Nile rush tumbling with a loud roar; sometimes, as in the plain of Dakka, spread out to the width of a lake, where violent storms sometimes blow up. Paradox of the desert land so barren that it is difficult to imagine its supporting human life, yet bearing countless traces of Graeco-Roman military and religious establishments.

Even the history of the region is paradoxical. Here, on the confines of the Greek world, in these distant "marches" of the Roman world, the mercenaries of King Psammetichus, of the Ptolemies and of the Roman Emperors have left their imprint. What were they seeking in this far-off land reaching almost to the countries at the source of the Nile?

## Inscriptions in verse

**W**e can glean little about the history of Graeco-Roman Nubia from the writers of antiquity. Herodotus, Diodorus Siculus, Agatharchides, Pliny and Ptolemy seldom give us any historical facts, confining themselves mainly to ethnographic details, and much of what they tell us is vague or fanciful.

Fortunately, the Greeks left behind over 1,200 inscriptions in Nubia, but they have never been recorded in a *Corpus* and many of them are little known, as few photographs have been taken of the sides and texts. For the whole of Nubia, only about a dozen Latin inscriptions have been traced; much still remains to be done, since the Roman occupation of Nubia lasted from the time of Augustus to the end of the Roman Empire.

This epigraphic material, which is our chief source of information about the history of Graeco-Roman Nubia, cannot be fully utilized until all the texts have been deciphered from the stone itself, but they have already been severely damaged by their annual immersion, particularly those at Kalabsha, most of which were painted.

Thanks to Unesco's assistance and the work of the Documentation Centre on Ancient Egypt, copies, rubbings and photographs were taken of the inscriptions at Abu Simbel in April 1956 and of those at Jebel Abu Duruah in September 1959. But all the other inscriptions will have to be inspected again before the dam is completed.

It is particularly important to assemble these texts because Greek inscriptions in Nubia are not usually long. Seldom do we find inscriptions of more than a few words. Among these are the decree of Aurelius Besario, the civil governor of the *nome* (ancient Egyptian province) of Ombos and Elephantine, at Kalabsha, dating from the second third of the Third century A.D. and giving the people of Talmis (the present day Kalabsha), at the request of the high priest Myro, fifteen days to clear the village of the swine that were polluting the temple; and the famous inscription of King Silko, also at Kalabsha, dating from the Christian period and commemorating the victories of the "king of the Nobatae and of all the Ethiopians" at Talmis and Taphis over the Blemmyes who had invaded his territory. At Abu Simbel, the longest text runs to no more than five lines and records the expedition led by the mercenaries of Psammetichus II in Upper Nubia.

However, the most striking and interesting inscriptions are a series of epigrams or inscriptions in verse—ten at Philae, five at Talmis and

two at Pselhis. Elusive though their meaning often is, some of these epigrams have great charm and reflect the high cultural level of the pilgrims who used to visit the shrines of Isis.

One of them reads: "Our journey has brought us to the beautiful and sacred island belonging to Isis, in furthestmost Egypt, on the borders of Ethiopia (i. e. Nubia); on the Nile we can see swift vessels bringing (stones for) temples from Ethiopia to our country, a fertile granary, well repaying a visit and revered by all mortals." The epigrams of Nubia packed with delicate imagery in this vein, are difficult to decipher, and it is to be hoped that a specialist on such inscriptions will be able to come and read them on the spot before they disappear for ever.

## Prayers in stone

**T**he other Nubian inscriptions are either dedications of temples or shrines, the names of priests or military leaders, or else *proscynemata*, that is prayers by pilgrims to a god to recommend a beloved one to his care. Many of these texts are dated, and most of the others can be dated by analysis of the writing or archaeological study of the building. Brief though they are, these relics provide some basis for a history of Graeco-Roman Nubia, which has never yet been written, for want of a *Corpus* of inscriptions. (1)

Yet what a stirring history it would be! At Abu Simbel, as we stand dwarfed by the towering figure of Rameses II, our thoughts are carried to Psammetichus' expedition to Nubia, the story of which is related on the leg of one of the colossal statues, a precious record giving us insight into the complex organization of the Egyptian army:

"The King Psammetichus came to Elephantine and those who accompanied Psammetichus, son of Theokles, and made their way upstream from Kerkis as far as the river was navigable had this inscription engraved. The foreign legion was under the command of Potasimto, while the Egyptians were led by Amasis. This inscription was engraved by Arkhôn, son of Amoibickhos, and Pelekos, son of Eudamos."

At Philae, with its countless inscriptions covering not only the faces of the pylon but many other parts of the temple, we can picture the throng of pilgrims at the splendid festivals in honour of Isis, who continued to be worshipped long after the issue of Theodosius' decree (end of fourth century A.D.). From the top of the citadel of Ibrim (the ancient Primis), the Eastern gate of which is Roman, and where, to the north of the plateau, rises a building dating from the time of Emperor Septimius Severus (193-211 A.D.), our eyes can follow, from the dizzy slope of the hill, the course of Queen Candace's desperate flight from the armies of the Roman prefect, Gaius Petronius, in 22 B.C.

## Desert garrison towns

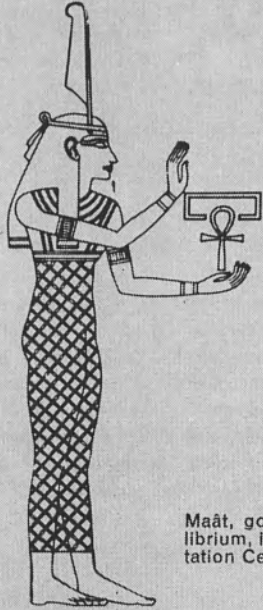
**F**rom 29 A.D. onwards, the Romans established their protectorate of Lower Nubia, but here again, they seem merely to have followed the example set by the Ptolemies. It was under the rulers of the Egyptian dynasty preceding the Ptolemies that Greeks came to settle in the region extending from Philae southwards to Tachompsa.

This part of the country never seems to have formed a separate *nome* but was a territory attached to Philae. Judging by the inscriptions and remnants of military structures, it was only in exceptional circumstances, as during the war against Candace, that the Romans seem to have driven further into Nubia.

The texts from Kalabsha (known as Talmis in Graeco-Roman times) bear witness to the soldiers' cult of the Nubians' god Mandulis, who also had his shrine at Philae, in the second century A.D. From those at Pselkis (modern Dakka) we learn that the worship of Thot (Hermes) was much practised. Both towns were obviously garrison centres guarding the road to Africa and protecting Egypt against the southern "barbarians."

Kertassi was both a military station and a quarrying centre supplying

(1) The only general reference work on Graeco-Roman Nubia is *La Nubia Romana* by Ugo Monneret de Villard (1941), running to a mere 50 or so pages.



Maât, goddess of precision and equilibrium, is the emblem of the Documentation Centre on Ancient Egypt, Cairo.

# UNDER THE SIGN OF MAAT GODDESS OF PRECISION

**O**n the desert shores of the Nile in Lower Nubia, a small army is waging a battle unique in history. Its task is twofold: to safeguard a heritage thousands of years old, and to record the lesson its treasures have to teach before they are obliterated within a few years.

This army with its headquarters in Cairo, its flotilla on the Nile, its liaison officers, its reconnaissance patrols and its working parties operating in the field, represents a new force in the service of humanistic studies and the protection of beauty. For almost the past five years, under the sign of Maât, Egyptian goddess of precision and equilibrium, it has been running an inexorable race against time. It calls itself in all simplicity Documentation Centre on Ancient Egypt, a modest title indeed for a unique archaeological operation about to assume truly Pharaonic proportions.

Under the torrid Nubian skies, the Egyptologists of the Centre and their teams of technical experts have been on the job year after year, advancing as fast as the exacting nature of their operations allows. The time these missions can spend in the field is limited by the intolerable summer heat, the floods of the Nile and the inundations caused by the sudden, unpredictable torrential rains which sweep the upper reaches of the river. Every single day is precious to them and following the Egyptian decision to go ahead with the gigantic project of the Aswan High Dam (the Sadd el-Aali) the time factor has assumed even more dramatic proportions.

The Aswan project meant that the whole of Nubia with its irreplaceable monuments would be submerged by an artificial lake some 300 miles long. In the face of this major undertaking, sparked by the imperative economic needs of today, it would have been a waste of time to deplore its effects on the civilizations of yesterday. There was work to be done, and done quickly.

At the beginning of September 1955, the first teams of Egyptologists arrived on the Abu Simbel site, the most important in the whole of Nubia. Here, twenty-five miles north of the Sudanese border, and downstream from the second cataract, the awe-inspiring tawny facades of the two sanctuaries of Rameses II still stand today in the dazzling desert light.

At the feet of Rameses and his queen, Nefertari, scaffolding went up. Archaeologists, philologists, photographers, draughtsmen, architects and moulders arrived on the site. Work began at dawn and often went on far into the night since the heat and blinding light prevented photographers from working in the afternoon. Invaded by cameras, searchlights and generating plants, the age-old sanctuary began to look like a film studio.

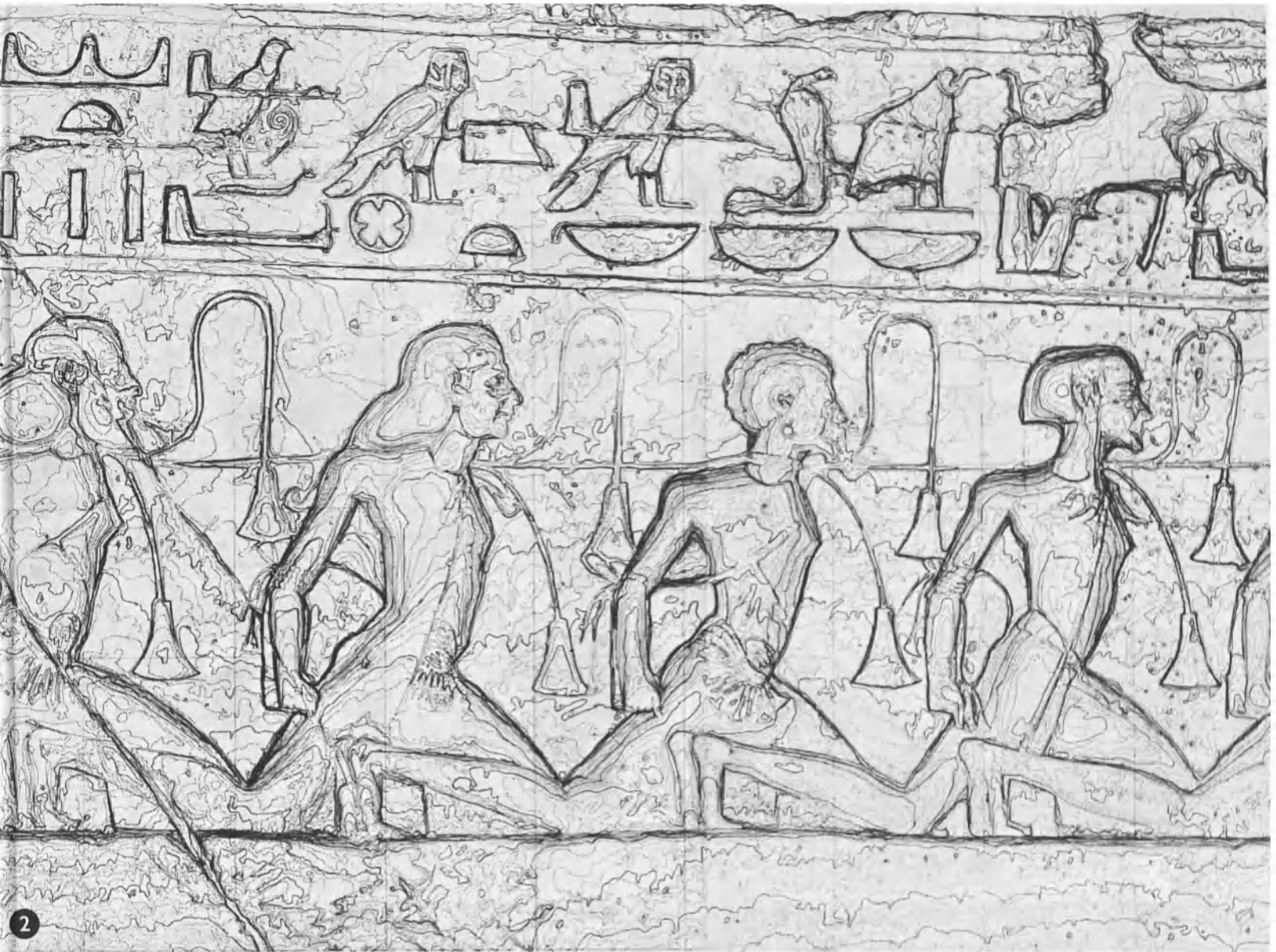
Every square inch of the great Abu Simbel group was minutely examined. Since then, black and white and colour photographs, photogrammetric negatives, architects' notes, casts and copies of hieroglyphic texts, rock graffiti and Greek, Coptic and Semitic inscriptions, have gradually been amassed in the Cairo Documentation Centre. Already this material constitutes the fullest and most accurate inventory of facts about these monuments that has ever been collected. Systematic surveys of the temples of Debod, Kalabsha and Wadi-es-Sebua and the chapels of Abu Oda and Jebel Chains are now also nearing completion.

## 'Noah's Ark' on the Nile

**W**HILE doing this urgent field work, the Documentation Centre has also had to set up and equip its own headquarters. From the very start of the Nubian expeditions it had to keep teams supplied and to protect photographic material. It would be difficult to exaggerate the difficulties this involved in the grilling heat of Nubia. The work, however, has become much easier since the Centre acquired a five cabin boat, the "Horus", which is used to carry out rapid missions and tours of inspection and to relieve working teams. Now the Centre is to receive another boat, a kind of "Noah's Ark", built specially to its specifications by the Egyptian Government. This floating laboratory can be towed along the Nile and moored close to the sites where work is in progress. It will carry workshops, offices, stores and a library and will provide the teams with living quarters.

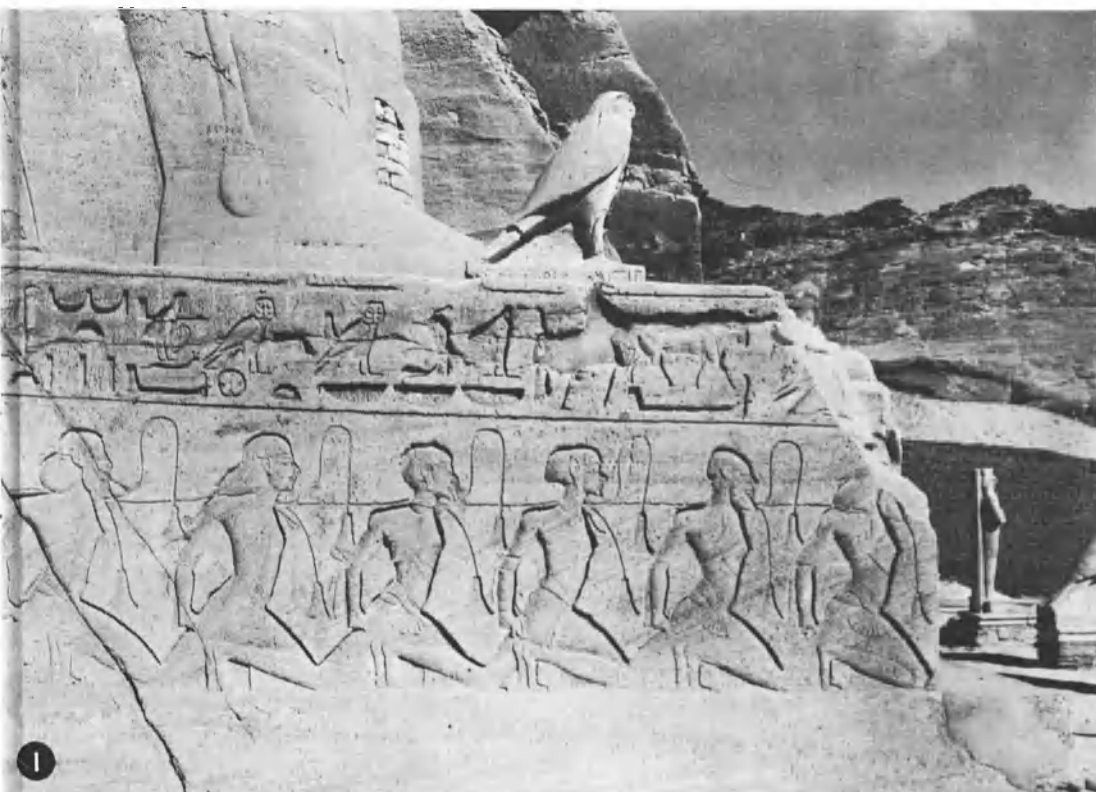
Finally, a year ago, the Centre itself took on concrete form as an attractive modern building in Cairo, close to the *Corniche du Nil*. It has been planned and equipped





© Institut Geographique National, Saint-Mandé

Documentation Centre on Ancient Egypt, Cairo



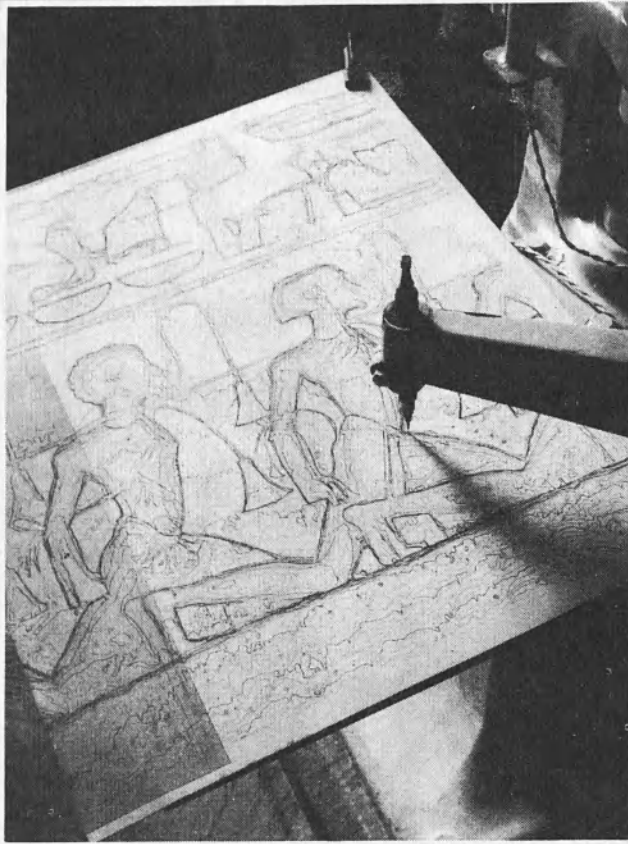
## CAPTURED BY PHOTOGRAMMETRY

The photographs on this and the following pages show the remarkable results achieved by a new science — photogrammetry — which makes it possible to determine the shape and dimensions of an object from two stereoscopic photographs and then to reconstitute it in the laboratory in the form of an exact model. The work shown here was carried out at the request of the Documentation Centre on Ancient Egypt, Cairo, by the French National Geographic Institute. Photos show:

1. An ordinary photograph of a bas-relief showing a group of prisoners at the foot of the colossal statue of Rameses II to the right of the entrance to the Great Temple of Abu Simbel.
2. The frieze as it appears with all the contour lines plotted as a result of stereoscopic photography.

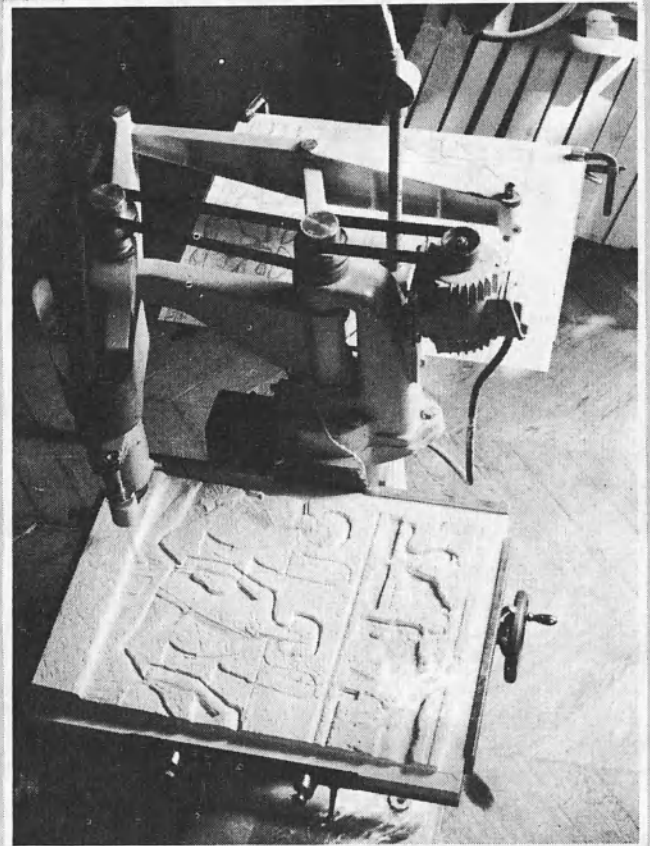
**PHOTOGRAMMETRY** (Continued)

3. Contour plotting is then placed in a pantograver. This special apparatus follows every detail of the stereoscopic plotting, reconstituting the frieze, on scale required.
4. Contour lines are reconstituted on a block of plaster which is placed at the other end of the pantograver.



3

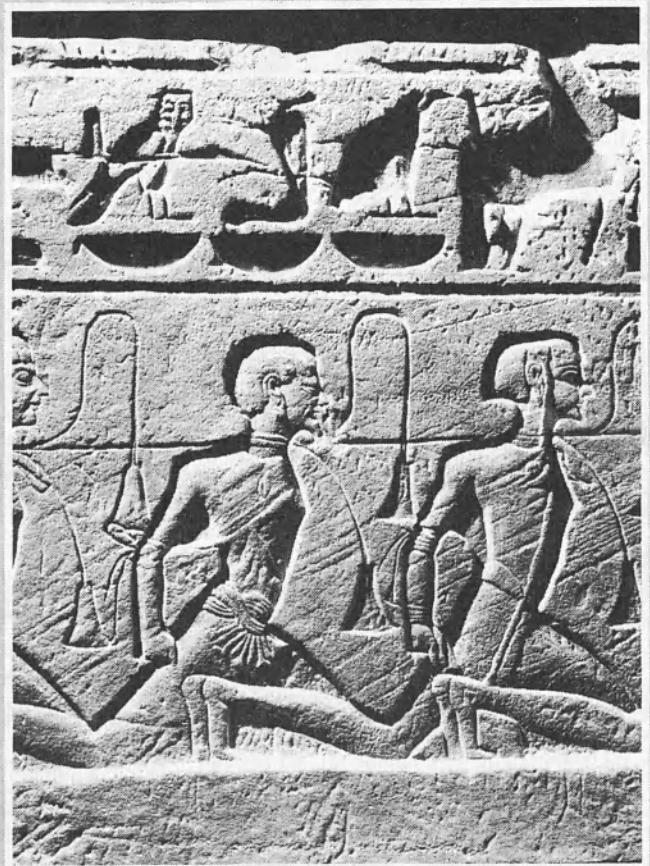
5. Detail of one of the figures before levelling process.
6. The frieze is reconstituted in a plaster model following automatic levelling of the contour lines. The reproduction is accurate to one-half of a millimetre (a fiftieth of an inch) and shows amazing results of photogrammetry.



4



5



6

Photos © Institut Géographique National, St Mandé

**UNDER THE SIGN  
OF MAAT**  
(Continued)

# Documentation Centre on Ancient Egypt

down to the smallest detail for the recording and use of Egyptological material. Its lecture halls, library, card indexes and its air-conditioned photographic laboratories and archives have already made it an ideal centre for these studies.

The Documentation Centre was set up in May 1955 by the Antiquities Service of Egypt with the direct co-operation of UNESCO. It is an Egyptian body, financed by the Government of the United Arab Republic. UNESCO has a representative on the Board of Directors of the Centre and provides technical aid in the form of international specialists.

## Race against time in Lower Nubia

**F**ROM the days of Champollion—the founder of scientific Egyptology—the work of preserving monuments, organizing excavation work, research and documentation studies has been carried out by a great many foundations, museums and universities in Egypt, Europe and America. It has often been done most successfully, but almost inevitably in a piecemeal fashion. Never until now has so systematically organized a body as the Cairo Centre been at work in this field. Its operations have called for powerful resources and the services of large teams of full-time specialists working in a synchronized operation.

Originally, the Centre had chosen as its first task to make systematic surveys of the Necropolis of Thebes where the tombs, once well-preserved, had shown signs of deterioration. The announcement of the High Dam project changed the order of priorities and began the race against time in Lower Nubia. In the next five years something like one hundred missions are planned with a clear-cut programme of work relating to the monuments threatened by the Aswan High Dam.

The archaeologists and philologists attached to the Centre co-ordinate all operations taking into account existing documentation and data. They direct work in the field and then record the results of every mission on card indexes.

## Painting and sculpture recreated by the camera

**F**ACTS needed to complement copies and descriptions are assembled by the technical section. Architects prepare plans, sections and elevation, complete to the most minute detail—every brick, every flagstone and even the smallest hole in a wall is marked in. Experts in architectural drawing trained at the Centre use photographs to prepare exact plans of groups of monuments. The old method of making tracings from actual monuments is no longer used except for small details, or in cases where monuments are too closely hemmed in or in too bad a state of preservation for satisfactory photographs to be taken. Copies of those reliefs which are renowned for their beauty or historical interest and of any hieroglyphic inscriptions

likely to provoke controversy, are made by moulders, who also prepare architectural models.

Photographers find themselves working closely with most of the other specialists. Following details of the master plan, they develop their test film each day on the spot before sending the negatives to the developing laboratory in Cairo. At the same time they take identical photographs on colour film. Yet even all this work is not enough.

The photographic reproduction of works of art, and of sculpture in particular, is—as André Malraux has termed it—a phenomenon of recreation. Freed from the recesses where they were hidden away, sculptures seem to spring into life again when viewed in this new light, becoming familiar and acquiring fresh significance.

Photography, like drawing and even architectural plans, contains a certain element of subjectivity which can produce various degrees of distortion. To obtain the absolute accuracy demanded by scientific recording, use has been made of photogrammetry, a process that has been employed for the past forty years in the preparation of geographical maps.

This method was first used to survey a monument in 1850 and today provides invaluable documentary material for archaeologists. The stereoscopic photographs, taken with the aid of a phototheodolite, give precise information down to the smallest detail of a relief and thus make possible the creation of an absolutely faithful copy in reproductions, models and casts.

## New horizons opened by photogrammetry

**P**HOTOGRAMMETRY opens up new horizons in the knowledge of forms and techniques. It may even make possible the discovery of architectural laws as yet undisclosed by Egyptologists, and may add to our knowledge of sculptural techniques. For instance, the contour lines taken on the face of the North-West Osirian colossus (23 feet) in the inner court of the Great Temple of Abu Simbel, and those taken on the face of the South colossus (65 feet) on the façade, show some striking resemblances between the two even down to the modelling of the cartilage of the nose.

When all the survey programmes are completed, the Documentation Centre in Cairo will be a rich, permanent source of information both for Egyptological studies and for works destined for the man in the street. As a safety measure, all the archives are to be microfilmed and one copy of every document will be given special security treatment to guard against any possible destruction or deterioration.

Thanks to the international action undertaken by UNESCO there is now reason to hope that these majestic monuments will be saved from the encroaching waters and that present and future generations will still be able to visit the giant statues of Rameses II and the island temples of Philae. Furthermore, the extensive work undertaken by the Documentation Centre on Ancient Egypt will give the world's Egyptologists the possibility of adding to our knowledge of one of the areas of the Ancient World which has by no means finished yielding up its secrets.

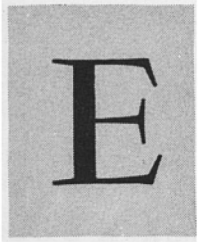
# THE MODERN PYRAMID OF ASWAN: SADD EL AALI

*by Albert Raccah*



© Albert Raccah

**'WHITE COAL.'** Electric power production in Egypt will be given a tremendous boost when the Aswan High Dam (The Sadd El Aali) is completed. Water from the dam will be used to operate 16 turbine units buried more than 300 feet underground which together with the existing power station at Aswan will give Egypt a total annual electricity production of 15,000 million kilowatt-hours, reducing its cost to consumers by two-thirds. Photo was taken during the construction of the present Aswan power station. Map on opposite page shows the relative positions of the sites of the two dams. Between them lies group of islands including Philae.



EGYPT is a gift of the Nile." Thus wrote Herodotus, the Greek historian and traveller of the fifth century B.C. Indeed, all of this land of nearly 400,000 square miles would be nothing but a vast desert from the Libyan frontier to the Red Sea and from the Mediterranean to the Sudanese frontier if the Nile did not cross it from south to north before fanning out in a vast delta 100 miles from the coast.

This is a rain-starved country. On an average there are six rainy days in Cairo per year and only one at Aswan. It is easy to understand why the ancient Egyptians considered the Nile of divine essence: it was the very source of all life in Egypt.

One also understands why all agricultural development is at the mercy of the amount of water taken from the Nile. During the flood season, an immense volume of water is lost to the sea. The present Aswan dam was built to harness a part of it for irrigation in spring and summer.

Called in Arabic "El Khazzan" (the reservoir), it was built at Aswan between 1899 and 1902 on the granite rock of the river bed in the middle of the First Cataract. The dam, 100 feet high, was to make it possible to store 980 million cubic metres of water in an artificial lake extending upstream for 140 miles, thus inundating the island of Philae and its sanctuaries, as well as part of the cultivated land.

Between 1907 and 1912, the height of the dam was raised another 16 feet, giving a total capacity of 2,400 million cubic metres to the artificial reservoir which then backed the waters of the Nile upstream to a total of 185 miles.

Finally, between 1929 and 1934, the dam was further raised by 30 feet bringing the reservoir's total capacity to five thousand million cubic metres. The artificial lake reached back as far as Wadi-Halfa, 225 miles up the Nile from Aswan.

The present dam contains one and half million cubic metres of masonry (the Great Pyramid of Cheops had two and half million originally). The dam wall is over a mile long and has 180 sluice gates operating on two levels. The iron control gates are all opened in July, during the high water season, so that the Nile's muddy waters may flood and fertilize the country. Early in October the sluices are closed and the river is kept back. In early spring when Egypt begins to lack water, the Aswan dam acts as the reservoir which irrigates the country.

### A vast inland sea covering 1,150 sq. miles

**B**UT the Aswan reservoir is inadequate for Egypt's present-day needs. For the past half-century, agriculture and industry have been unable to keep pace with the problem of food for its rapidly rising population. Egypt urgently needs more land for cultivation, better and higher crop yields, hydro-electric energy for its expanding industry.

This "living space" can be won thanks to the Nile, the real wealth of Egypt, and by the construction of a new dam, the Sadd El Aali. The purpose of the High Dam, the preliminary engineering work on which has already been done, is the total utilization of the Nile's waters. Not a drop of the river will be lost in the sea.

The dam wall, to be erected on a site four miles upstream from the present Aswan dam, will rise 225 feet and have a crest three miles in length. It will create an artificial lake 300 miles long with a capacity of nearly 130,000 million cubic metres and a surface area of 1,150 square miles. Several localities, including the city of Wadi Halfa will be submerged. Since the rapids of the Second Cataract will disappear under 30 feet of water, regular navigation between Egypt and the Sudan will become possible for the first time.

### Two and a half million acres of desert land will bloom

**I**N a climate as hot as that of Nubia, it is to be expected that such a vast expanse of water will give rise to evaporation. It is estimated that the atmosphere will annually absorb 10,000 million cubic metres of the 130,000 million stored. The resulting rise in the humidity ratio of the Egyptian and Sudanese regions neighbouring on the artificial lake is certain to have an important effect on vegetation growth.

Some of the water reserve is also sure to be lost through fissures under the lake-bed. The Nile already pays a heavy tribute to the desert as it crosses Nubia and Upper Egypt. In these regions, it flows over a veritable sieve. During the flood season in August and September, 5,000 million cubic metres are estimated to be lost between Aswan and Asiat, and 100 cubic metres a second between Asiat and Cairo. The volume seems insignificant compared with the Nile's flow at that season: nearly 9,000 cubic metres a second.

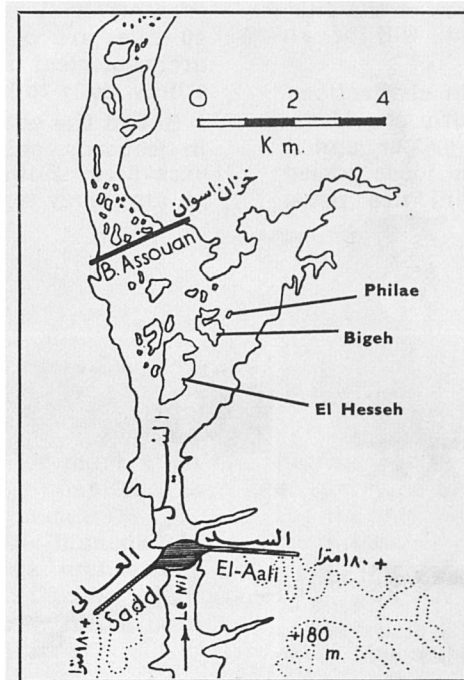
However, the *average* flow of the river is only 2,510 cubic metres a second, much less than that of the Rio de la Plata (25,000 cubic metres a second) or the Mississippi (18,000 a second).

With the great reservoir which the Sadd El Aali will create, Egypt will be able to increase its arable land surface by nearly half. In reality it is expected that as much as two and

a half million acres of desert land will be brought under cultivation and that 750,000 acres now flooded will be reclaimed.

Although the greatest advantage of the Sadd El Aali lies in the possibility of opening up new areas for farming and ensuring their regular water supply, the energy output foreseen for the dam would in itself be enough to justify its construction. Four tunnels for water evacuation during flood periods and four chute tunnels will service 16 turbine units buried more than 300 feet under the granite rock. They will operate all year round with a "head" (height from which the water drops) averaging 200 feet. The turbines will have an estimated total capacity of 2 million H.P. and an annual production of 10-12,000 million kilowatt-hours a year, nearly ten times present total consumption in Egypt. The Boulder Dam in the United States produces only half as much power. The combination of the hydro-electric potentials of both the Sadd El Aali and Aswan dam will raise Egypt's capacity to more than 15,000 million kilowatt-hours a year.

When the High Dam of Aswan is completed, four years will be needed to fill its basin capacity. In that period, the population of Egypt will probably continue to increase at the same rate as in previous years and this increase (8,000,000 persons within the next ten years) makes the building of the Sadd El Aali a vital necessity.



Map: Documentation Centre on Ancient Egypt, Cairo

# SUDANESE NUBIA

## 'TERRA INCOGNITA' OF ARCHAEOLOGISTS

by J. Vercoutter

Director of the Antiquities Service, Republic of the Sudan

**A**RCHAEOLOGICALLY speaking the Sudanese part of threatened Nubia is practically a "terra incognita". It has never been systematically surveyed. But it is known to contain a vast number of unexplored sites which lie buried under the sands. These sites could provide valuable data about the early history of mankind, and their disappearance forever under the waters of the Nile, if not thoroughly investigated beforehand, will be an irreparable loss.

Sudanese Nubia was a meeting ground of civilizations. It was the borderland between Egypt, with its Mediterranean and Asian affinities, and Africa proper, and it was the gateway through which objects and ideas passed between the ancient world and Africa, and vice versa.

As the link between two continents, the importance of Sudanese Nubia cannot be overstated.

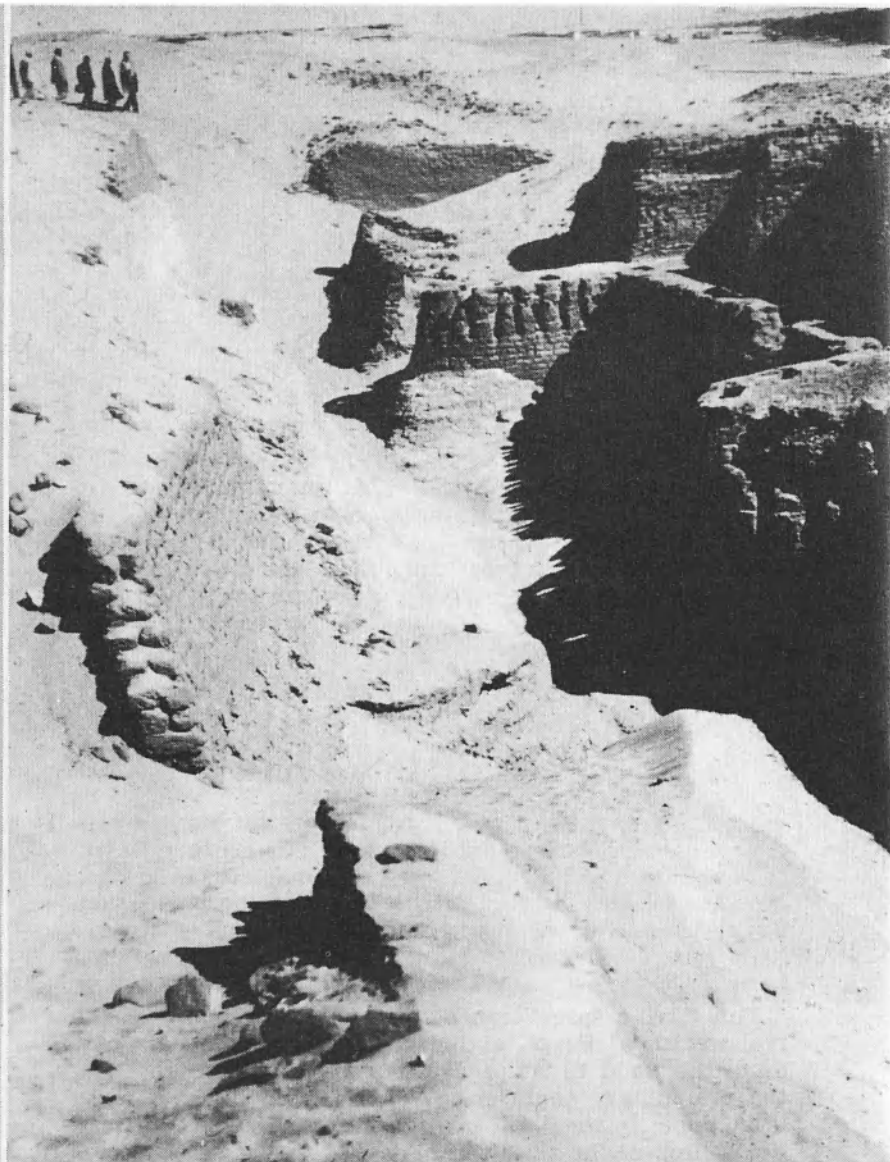
The reservoir of the high dam of Aswan will ultimately flood about 115 miles of the present banks of the Nile in the Sudan. By 1964, when the first stage of construction is scheduled to be completed, over 40 miles of Sudanese territory will be permanently under water. And these 40 miles are the area with the country's richest store of archaeological remains, containing 47 known sites and others likely to be unearthed in the course of prospection.

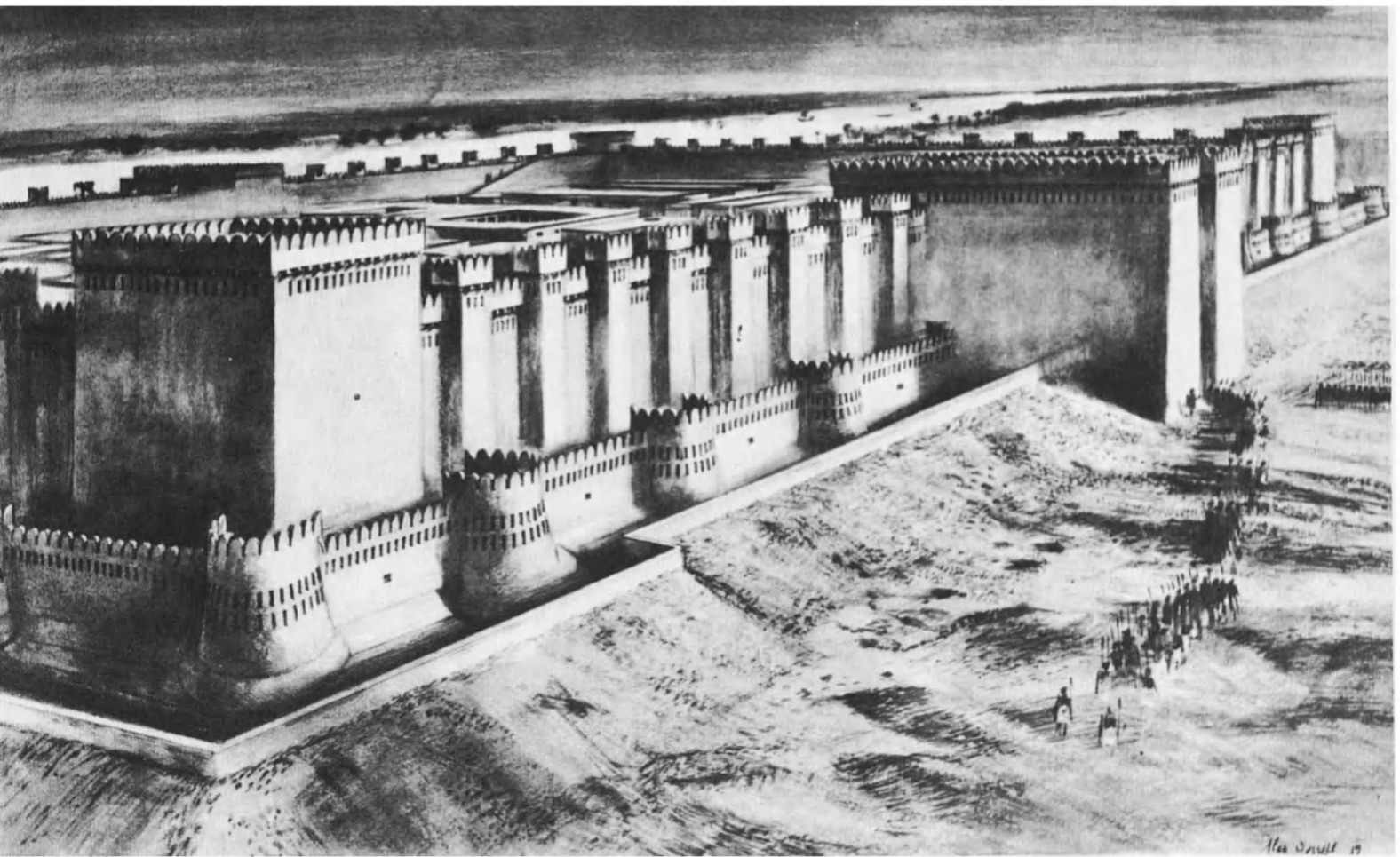
But in the entire 115 miles region of the Sudanese Nile in jeopardy, only ten sites have thus far been *partially* excavated. However, a rapid ground survey together with an air survey recently carried out by the Sudanese Survey

Jean Vercoutter.

### MASTER-WORK OF ARCHITECTURE

Much of Sudanese Nubia which is to be flooded is unknown territory, archaeologically. In the past few years alone over 100 sites have been recorded in this area. Photos right and opposite page show one of them: a master-work of Egyptian military architecture, the great castle of Buhen near Wadi Halfa. The fortress has just been discovered by Professor Walter B. Emery of the University of London who led two expeditions to Buhen last year and in 1958 for the Egypt Exploration Society. The discovery has already revolutionized previous conceptions of pharaonic military architecture. The fortress was built in the early Middle Kingdom as one of a series of trading posts and strongholds erected 3,900 years ago to defend the strategic area of the Second Cataract dividing Upper and Lower Nubia. Sacked about 1675 B.C. its vast fortifications were rebuilt and enlarged in the New Kingdom (1570 B.C.). Excavations are still under way and have already unearthed the skeleton of the earliest horse known in Egypt and a quantity of torn-up papyrus which may be the remains of military dispatches. On opposite page is a reconstruction of the Middle Kingdom castle, made by British artist Alan Sorrell, with the help of Prof. Emery and based on his plans.





© Illustrated London News

Department has revealed the existence of more than 100 sites! The discovery of a remarkable Egyptian fortress of the Middle and New Kingdom recently made by Professor Walter B. Emery at Buhen (in the immediately menaced area) shows how much Sudanese archaeology has to give (see photos left and above). Can we allow all these sites to be destroyed without their having been at least partly explored, excavated and recorded?

The situation is no less urgent as regards the *known* monuments of the Sudan. Among the ruins still standing or clearly apparent and which will be engulfed by the waters, are seven ancient towns, four Pharaonic temples, at least 20 Christian churches (including some with frescoes), rock graves of the 18th Egyptian dynasty, rock chapels of early Christian date, numerous cemeteries, and sites with rock drawings or rock inscriptions. Special mention must be made of prehistoric sites, both Neolithic and Palaeolithic, one of which has recently been dated 6300 B.C. by the radio carbon process.

Among the sites which will disappear forever are the two temples of the XVIIIth Dynasty inside the twin fortresses of Semna and Kumma; the small temple of Rameses II at Aksha, still buried in the desert sand; the lovely temple of Buhen with its magnificent carvings and paintings; the sites, mostly Egyptian citadels of the Middle Kingdom (2065-1500 B.C.) of Mirgissa, Dabenarti, Shelfak and Uronarti—to mention but the most important monuments known today.

Each year, survey and inspection tours carried out by the Antiquities Service of the Republic of the Sudan reveal new sites; trial excavations lay bare unexpected finds such as the paintings of the Djehuty-hetep tomb at Debeira or the Faras alabaster vase which was found in a site thought to have been excavated.

In the Sudan, therefore, everything, or nearly everything, still remains to be done. But in the short time available and with its very limited staff, the Sudan Antiquities

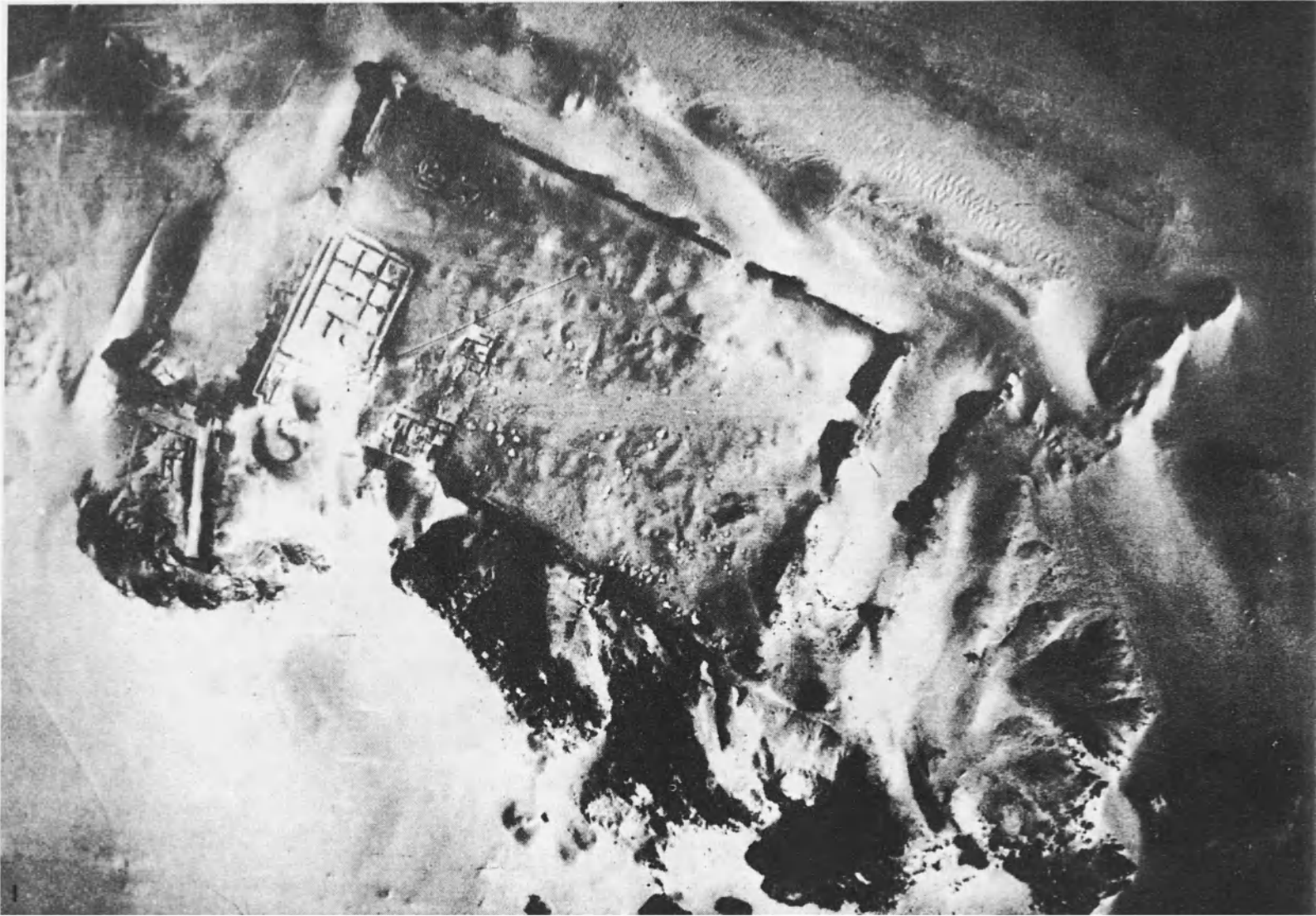
Service is unable, on its own, to carry out the urgent work of surveying and excavating, of removing and safeguarding the monuments, and recording for posterity all these operations.

The important, the urgent thing is to start, as quickly as possible, a complete archaeological survey, mile by mile, of the whole area to be flooded. A survey of this kind has never been carried out before.

In 1955, when the Sudan first learned of the proposed building of the new dam at Aswan, its Antiquities Service prepared an emergency plan of action. In order to get a clear picture of what would have to be done it started a ground survey. But as this proved too slow a job with the limited staff available, an air survey was made. The entire threatened zone was photographed from the air in 1956-57 by the government's Survey Department, and this air survey has now become the basis for the Sudan's rescue plan. Thanks to UNESCO, a specialist is now working on the archaeological interpretation of these photographs and the first precise archaeological map of the region will soon be available.

What is urgently needed now is a photogrammetric contour map of the area for which aerial stereoscopic photographs have just been taken. Once the photogrammetric contour map is available it will be possible for the ground survey to get under way. It is envisaged that these surveys will be carried out on each bank of the Nile with prospecting teams for a general survey preceding excavation teams.

Most of the monuments in the threatened area are built of mud brick and cannot be dismantled; but some have frescoes painted on brick and these will need to be removed. Four stone temples (Aksha, Buhen, Semna West and Kumma) could and should be dismantled and taken to a safe place. The temples at Semna and Kumma stand on a rocky barrier, possibly the site of an ancient Egyptian dam, and offer an imposing landscape. The ideal thing would be to preserve them where they are.



J. Vercoutter

**1. MIRGISSA FORTRESS.** Aerial view of one of many Sudanese sites still only partially excavated. Situated on a steep rock close to the Nile, south of Buhen, it has recently yielded important finds including the archives of a post office chief of 4,000 years ago. Girdle walls are made of sun-dried bricks. Site also contains the ruins of a small temple built by Sesostris III.

**2. AKSHA TEMPLE.** Remains of wall from temple built by Rameses II at Aksha, in the Sudan, about 25 miles south of Abu Simbel. The temple was dedicated to the great sun god Amon to whom Rameses (far left and centre, kneeling) is offering devotion. Much of this stone-built temple is still buried beneath the desert sand.

**3-4. SEMNA EAST & WEST.** About 40 miles south of Wadi Halfa the Nile narrows and flows between granite cliffs forming impressive rapids. To guard this passage (the southern limit of Egypt under the Middle Kingdom) the Pharaohs built two massive forts on either side of the river. On the left bank lies West Semna; on the right East Semna, or Kumma. Both have important temples dating from 1500-1400 B.C. of which the photos on the opposite page show details.

**5. TEMPLE OF BUHEN.** Just north of the 2nd Cataract and opposite Wadi Halfa lie the ruins of the lovely temple of Buhen built by Thutmose II and Hatshepsut over 3,000 years ago against a high cliff overlooking the Nile. Photo shows only a corner of the large Hall, but the temple has remarkable carvings and paintings many of which still retain much of their original colouring.



Courtesy Oriental Institute, Univ. of Chicago





Photos Courtesy Oriental Institute, Chicago

## Mile by mile excavation survey imperative



# QUESTION MARKS IN THE DESERT

by Dr. Anwar Shoukry

and

Professor François Daumas

Director of Pharaonic Antiquities, Antiquities Service of Egypt

Director, French Institute of Oriental Archaeology, Cairo

**N**o one who visits present-day Nubia at different times of the year can fail to be struck by the two sharply contrasting landscapes. In winter, during January for instance, the country has become a sort of narrow lake which extends to the cliffs on the Libyan and Arabian sides of the Nile valley, on which stand villages with large houses, painted and adorned with earthenware tiles. But in summer—particularly in August and September—when the sluice gates of the Aswan dam have been opened to let through the flood waters—the Nile retreats almost to its old bed. Wide stretches of black earth appear, providing a few green crops which often do not even ripen. And in places, great temples, most of them almost invisible under the winter waters, now tower up in the shape of imposing ruins: Kalabsha, Dendur, Dakka.

When the building of the first dam was decided on, the Antiquities Service of Egypt, then under the direction of Gaston Maspero, not only consolidated the temples, but also carried out excavations in the area before the dam was raised and then each time it was heightened until the flood-water level reached the 121 metre mark. It might at first be thought, therefore, that only the land above spot level 121 would remain to be excavated before the erection of the High Dam.

In archaeology, however, things are never as simple as they may first appear. How can one be sure that a valley has been properly excavated when, despite the fact that it is not very wide, it is hundreds of miles long? Is there any chance of finding something in the areas flooded in winter? What may be found above spot level 121? Have excavations in Nubia left no mysteries still to be penetrated?

First of all there are certain sites where the excavations carried out have been inadequate. They should be continued as long as we are lucky to have the low waters during the summer, particularly in the case of the great Nubian temples. The scientists who were sent to monuments like Kalabsha or Wadi es-Sebua cleared the inside of the temples but did not explore the surroundings.

In 1956, a study was made of the structure of the various walls that surround the temple of Kalabsha. It did not take long to realize that one of these walls could be explained only by the presence of a sacred lake. Only one such lake—that of Dendara—has come down to us intact.

Excavations at Kalabsha are thus clearly imperative. Clearing work carried out to the west of the supposed lake by the Antiquities Service in September 1959, has already brought to light the roofs of two chapels which are apparently intact. Unfortunately, the Nile rose abnormally high during this period so that excavation work had to be interrupted. This is not the place to enter into a discussion on the theological reasons justifying these excavations but it will be readily understood that a detailed knowledge of the way a temple is arranged is important if one is to get really to the heart of Egyptian religion.

In the present case, what is at stake is not merely an architectural survey but the interpretation of an essential element in ancient temples. And this may be all the more important because in Nubia, where the population has never been very dense, the monuments have suffered less than elsewhere.

The situation is much the same as regards the temple of Wadi es-Sebua. Excavations in the past cleared only the avenue lined with sphinxes (the dromes). We know nothing of the entire front part of the sanctuary buried under the high waters of the Nile and which could provide information of the greatest importance. Some sections of the exterior wall are still visible, but no one has ever thought of surveying or exploring them. Thus without citing any other example, excavations will certainly yield major results as far as the study of religion is concerned.

But even during the high-water season, archaeological work could very well yield excellent results. The research carried out on the two occasions when the height of the old dam was raised, laid bare a strangely refined yet primitive civilization, that of the Blemmyes, dating from the sixth century A.D.: well-provided royal tombs, furnished with coffers richly inlaid with

ivory, pottery of all kinds, games, even completely accoutred horses.

The Meroitic culture—the name comes from Meroe, the capital city of its kings, near Shendi—has brought to light many facts of which we had no inkling, in particular the penetration of Greek influences in these somewhat remote regions of Africa. Recently, in a Meroitic cemetery bordering the high waters, an Italian mission unearthed a copper bowl engraved with the image of a cow, of very fine workmanship. The same mission, last year, resumed excavations at Ikhmindi and had the luck to discover an inscription describing how the city was founded, in the Byzantine era. The German excavations at Amada have likewise been very encouraging.

But there are still points in doubt. It is to these that attention should be drawn. Research that starts from reflexion may well lead to more interesting discoveries.

Upper Nubia has many traces of the Middle Empire and the XVIIIth Dynasty whereas in Lower Nubia the remains date mostly from the XIXth Dynasty and the Graeco-Roman era. But we are convinced that, if the temples of Lower Nubia had been more carefully excavated, they would have yielded a larger number of ancient documents.

There is an even more tantalizing question. The viceroys of Kush, who governed the country from the XVIIIth to the XXth Dynasty, seem to have resided at Aniba. But only one tomb of any importance has been found—that of Pennut. No necropolis of viceroys. No residence. Yet these mighty chiefs of Egypt's African empire, would not have been satisfied with a mere house, however large. They must have had a palace. Funeral statuettes, called Oushebtis, of other viceroys, show that they had tombs, at least secondary ones, even if their bodies were brought back to Egypt. Where may we find these vestiges of the Egyptian occupation of the country in remote antiquity?

These are the kind of questions excavation expeditions will have to find answers to. We hope they succeed before the great sheet of water submerges Nubia forever.

## IN THE STEPS OF GREECE & ROME

(Continued from page 39)

stone for the Philae temples. The guild of agents, known as the "gomos," which was responsible for the transport of the stones, had its priests and dignitaries who made a point of engraving their names on the tablets cut into the façade of the speos. At Abu Duruah, about three miles to the east of Dakka, we find *proscynemata* dating from the time of Antoninus Pius (middle of second century A.D.), proving that this rock shrine with its Pharaonic decoration, far from having fallen into disuse, was a centre of worship for the god Min and Hermes Peithnuphis. All these texts shed a great deal of light on the life of the Roman garrisons, their composition and dates and the cults they practised.

The material already available proves that Nubia, for all its aridity, played a not inconsiderable role in antiquity. To begin with, from the military point of view, the region was both a bastion of defence and an operational base. Then, from the economic standpoint, hunting must

have flourished, as indicated by the many names of elephant and bird hunters to be seen at Abu Simbel, and by the engravings at Jebel Abu Duruah, representing giraffes, oryxes, ostriches and buffalo.

Down the Nile sailed convoys loaded with the treasures or the gold mines at Wadi Allaki, facing Dakka, or white stones quarried at Kertassi. Viticulture and the use of *sakieh* or water wheel, of which there is evidence in Nubia, bear witness to the flourishing state of agriculture. Lastly, from the religious point of view, the Nubian gods went to swell the Graeco-Roman pantheon. It was in the first and second centuries A.D. that Philae reached the pinnacle of its glory with the construction of the gateways of Augustus and Tiberius and the Trajan kiosk.

And so Nubia, from the days of antiquity, has stood as an example and a token of what man can achieve when his toil and ingenuity are pitted against the elements and an unfriendly climate. The Greeks and Romans sought, in ancient Nubia, to convert a barren, thankless region, doomed, it might have seemed, to everlasting poverty, into a source of spiritual and material wealth, strength and pride—a goal that is still being pursued by the architects of modern Nubia.



Documentation Centre on Ancient Egypt, Cairo

**PRINCESS WITH THE SISTRUM.** The princess Bent-Anta, one of the daughters of Rameses II, shown playing the sistrum in a carving at the entrance to the temple of Abu Simbel. The sistrum, an ancient Egyptian musical instrument, is a form of metal rattle. It has an oval frame crossed by loose rods and when shaken produces a high-pitched tone.

# THE DROWNING SPHINX

SEE PAGE 4

