## TEMPLE by MANLY W. MUMFORD

The two temples at Abu Simbel, with their columns and statuary were cut in the sandstone cliffs on the west bank of the Nile during the reign of Ramses II in the nineteenth dynasty. The larger was dedicated to that pharoah and the smaller to his queen, Nefertari. Both are still in good, though not perfect, condition.

The present government of Egypt is constructing a high dam at Aswan, about 100 miles downstream from Abu Simbel, and the resultant lake is expected to flood an area where these and many other temples and monuments now stand. In addition to obscuring them, the water will soon make the soft sandstone of the temples at Abu Simbel crumble unless adequately protected. The cost of such protection is high, and estimates have run about \$60,000,000. Egypt can pay only a part of this cost and Unesco has established an international committee to raise the remainder in the belief that these temples and certain other endangered monuments are of great international significance.

In the geography and history of Egypt, the personality of a vain pharoah and the irresistable forces of our own age lies the setting for the drama of these temples.

Except for the area near the coast, Egypt depends on the Nile alone for water. Cairo, about 100 miles from the Mediterranean, has an average annual rainfall of 1.27 inches, and this quantity diminished to the vanishing point in Southern or Upper Egypt. Arable land rexists only where flooded or irrigated by the Nile, and farms and human habitations above the Delta lie only in a long, narrow strip along the Nile. Until the railroads were built, nearly all transportation was by Nile boat. This physical reliance on the river seems to have bred further

dependence: the regions of Egypt are and, since history has been recorded, have been known as lower and upper Egypt, rather than northern and southern. To those who live along the Mississippi, or here in Chicago, the "River" or the "Lake" is the common appellation, without mention of the proper name; but in Egypt, one speaks of "The Nile". The flood-stage is known as "High Nile" and when the flow diminishes, it is "Low Nile". A device invented by the ancient Egyptians to measure the height of the water is called a "nilometer."

Measured on a straight line, Luxor, at the site of the ancient capital city of Thebes, is about 325 miles south-southeast of Cairo; Aswan is another 100 miles beyond Luxor, and Abu Simbel is about 150 miles southwest of Aswan, roughly 525 miles almost due south of Cairo; it is approximately 60 miles south of the Tropic of Cancer, 20 miles north of the Sudanese border, and 1,500 miles north of the Equator, near the same latitude as Honolulu and Calcutta.

The landscape surrounding the temples is sandstone and the sand into which it has eroded through the action of the wind and sand. Save an occasional tree or a clump of greenery at the water's edge, there is no vegetation visible at High Nile. Perhaps things grew there hundreds of years ago, but there is no vestige of them now. Sometimes a few clouds appear in the sky, but they are high and thin and give little shade and no rain. Even when the wind is light, a haze of dust clouds the horizon but does not mitigate the rays of the sun when high in the sky. The occasional cliffs and sandstone outcroppings are separated by great stretches of the reddish-yellow sand of the region, and this sand reflects the sun, receives the heat, augments the dryness and nurtures the thirst abiding in the area. Nubian villages stand on either side of the Nile in Upper Egypt. They are constructed of mud and wattles or, as in the case of mosques and other large buildings, of mud brick, dried in the sun. Some buildings are

whitewashed or plastered and some houses have pictures painted or of broken pottery mosaics in bright colors on the walls to illustrate important experiences of the people who live in them. But you see nothing green in the villages, and in the heat of the day little life is visible. In the mornings and in the evenings the women, wrapped in their black robes, walk down to the Nile to fill jars or cans with water and carry them home on their heads. A donkey or two, or possibly a dog, may be seen in whatever shade can be found. The Nile falls each summer now when the gates in the present dam at Aswan are opened, and the level of the water remains low for a few months necessary for the inhabitants of the villages to plant vegetables or melons on the land which had been covered, to raise the crop and harvest it before the rains come to the watersheds of the Blue Nile and the White Nile and, flowing out of the mountain lakes and the swamps hundreds of miles to the south, flood their farmland for another eight months.

Villages like these, primitive and precarious, have survived in this area since man gave up hunting as a principal livelihood and turned to farming. They subsisted before and during the ancient Egyptian civilization which lasted two thousand years. They still endure, but will not survive another decade, as the ground on which they stand will be flooded and their 60,000 inhabitants relocated on large farms to the north.

Like the Roman Empire more than a dozen centuries later, the Egyptian Empire displayed the ultimate extension and the atrophy of a culture of the first magnitude. The Egyptians of the Empire, or New Kingdom, were of a different character from that of the Early Kingdom, whose people built the Great Pyramid in the twenty-seventh century before Christ, with such accuracy that the margin of error in the squareness of the north and south sides was 0.09% and of the east and west sides was 0.03%.

The following selection from the book, <u>The Culture of Ancient</u>

<u>Egypt</u> by John Wilson of the Oriental Institute of the University of Chicago, will illustrate; Professor Wilson compares the Egyptian and ancient Hebrew cultures, saying:

"Each of these cultures felt itself to be the Chosen People.

The Hebrews were a little people, buffeted by their neighbors and ultimately dispersed to distant lands. For them God's choosing came to mean a demand for rigorous responsibility on the part of the group and of the indivisual. The Egyptians were a rich people, set apart from outside peril. For them the election by the gods meant the privileges of civilized life, including a tolerance of minor divergences within the system. Further, their special election was in their mythology a part of the original creation, so that effort or incentive toward change, what we call 'progress' was out of the question. The only thing necessary was to get back again to original principles whenever the system went out of adjustment, that is, to restore the ma'at (a word meaning, roughly, abstract truth and justice) of the beginning.

"This will explain why the only really creative period was at the beginning of Egyptian history, at the end of the predynastic period and in the early dynastic. Then the culture was formative, the Egyptians were trying to discover what it might be that the gods had given to them. One might say that they were then trying to write their mythology. So the earliest dynasties showed the most exacting technology, the closest approach to a scientific attitude, and the closest approach to a philosophy of being. By the time that the culture was formed —— by the Fourth Dynasty —— the governing mythology was known, and further experimentation

or change was proscribed. The system had been set for eternity. But it already had that lightness of attitude, that gentle humor, which gave it flexibility for long life."

In the Early Kingdom the entire country had been recently united; the Egyptians knew of no other civilization of comparable size or achievement; they worshiped gods whose places had been fixed, including a pharoah whose claim to divinity was unquestioned; and their artistic expressions were straightforward, simple, clean and economical. Within little more than a century after learning to hew stone, the people of the Early Kingdom built the greatest of the pyramids. Their king and god needed a place to live forever, so they went about building for him a home that would last that long. The purpose of Egypt then was to serve pharoah, and the political structure, as well as the stone, was so designed.

The Early Kingdom lasted 500 years and was terminated by the First Intermediate Period which lasted roughly between 2,200 and 2,050 B.C. During this period the government crumbled and the resultant anarchy was cruel evidence that the people could not safely rely on the gods to keep Egyptian affairs in order. The Pyramids were robbed. Some people, with apparent impunity, ceased to pay taxes and the burden fell the heavier on those who continued to pay. Then the treasury was looted. Wilson has translated some of the writing of that era: "Why really, the land spins around as does a potter's wheel. The robber is (now) the possessor of riches.... Why really, all maid-servants make free with their tongues. When their mistresses speak, it is burdensome to the servents....Why really, the ways (are not) guarded roads. Men sit in the bushes until the benighted (traveller) comes, to take away his burden and steal what is upon him. He is presented with blows of a stick and

slain wrongfully...Ah, would that it were the end of men, no conception, no birth! Then the earth would cease from noise, without wrangling!...

Why really, the children of nobles are dashed against the walls. The (once) prayed—for children are (now) laid out on the high ground...Behold, noble ladies are (now) gleaners, and nobles are in the workhouse. (But) he who never slept on a plank is (now) the owner of a bed....Behold, the owners of robes are (now) in rags. (But) he who never wove for himself is (now) the owner of fine linen...If three men go along a road, they are found to be two men: it is the greater number that kills the lesser...All these years are civil strife: a man may be slain on his (own) roof, while he is on the watch in his boundary house."

The first intermediate period was brought to an end, after a century and a half, when around 2,050 B.C. the various city-states united in the Middle Kingdom behind the leadership of Thebes, perhaps willingly or perhaps not. Each city-state had its own favorite god, and the patron of Thebes was Amon, a more abstract deity than most of the personalized gods of primitive theologies, having some of the ubiquitous and pervasive qualities of Brahma. As Amon developed in concept, he became, like Brahma, superimposed on the religious beliefs of those who lived in areas where more concrete gods were revered and was accorded a higher station. Eventually Amon achieved not only the widest acceptance, but also the greatest wealth. Vast holdings of land and slaves were devoted to the temples of Amon, and that god's priests in time weilced power second only to that of Pharoah.

The first few pharoahs of the Middle Kingdom did not have an easy time dealing with the political jealousies of the city-states, and assassination was a serious danger. To overcome these jealousies, Pharoahs

increased the centralization of power, and, as a result the significance of the independent individual diminished and that of Pharoah increased. As the kingdom consolidated, it pushed south beyond the first cataract (where Aswan now is) and into Nubia. Trade with the peoples at the eastern end of the Mediterranean prospered and also brought in outside influences in art and artifacts. Egyptian art, then, grew more refined, more stylized and less original. The pharoahs of the latter part of the Twelfth Dynasty were not so adept as their predecessors, and around 1,800 B.C. Middle Kingdom fell and much of Egypt was ruled by foreign invaders, the Hyksos, who came from the north with horse and chariot.

The Hyksos ruled largely in lower Egypt, but their influence was strong in upper Egypt. Various dynasties, contemporaneous and competing, existed at the time of this Second Intermediate Period, but in the writings of the Egyptians of that time the foreign humiliators were mentioned as little as possible. The Hyksos themselves left no written records, so little of their culture is now known.

In time the Egyptians mastered the horse and chariot and the pharoah who was surviving at Thebes at the sufferance of the Hyksos managed to drive the foreigners out around 1,570 B.C. The Eighteenth Dynasty took over the country through the remainder of the Middle Kingdom and into the Empire.

The Hyksos invasion may have changed the attitude of the Egyptians about foreign people's willingness to live in peace with them, or perhaps the Egyptian attitude would, under the new pressures and tensions, have changed anyway. In any event, Egypt no longer contented itself with the produce of the Nile valley and such foreign goods as it could get from peaceable trading. Trade increased, to be sure, but so did conquest, both south into the Sudan and Ethiopia and northeast along the eastern edge of the Mediterranean.

The reign of Queen Hatshepsut was the end of the Middle Kingdom. Through her efforts, the internal strength of Egypt was built up and few if any battles for conquest were fought. Hatshepshut's successor, Thutmose III (who was also her nephew and stepson) found during the first twenty-two years when he felt he should have been on the throne, his aunt wielded the power as pharoah. When he finally did come to the throne, Thutmose tried to obliterate every image of Hatshepsut in all the temples and monuments made during her reign. He also entered the empire building business, devoting a great proportion of his efforts to foreign conquests. Many later kings of the Eighteenth Dynasty also succeeded in this business.

An exception was Amenhotep IV who became pharoah around 1369 B.C., two hundred years after the Hyksos were driven out. Foreign influences on the native Egyptian culture had grown more significant as the empire grew and contact with foreigners flourished. The priesthood of which waxed rich from its share of the profits of empire, did not relish the accompanying changes in beliefs and customs. The same may be said of the ancient noble families, who dominated in the civil, secular scene. Amen-Hotep IV, however, welcomed and embraced the changes, and even went so far as to reject much of the ancient religion. He did not believe in the pantheon of ancestral gods nor in the way things had always been done in Egypt. He discarded the name which meant "Amon is satisfied" and assumed the name Akh en Aton, meaning "He who is serviceable to the Aton" or "It goes well with the Aton". The god Aton was the sun and the only god recognized by this pharoah, who changed the capital city from Thebes to Tell el Amarna. For this reason, this period is sometimes called the Amarna Revolution. Artists were encouraged to break away from the idealized forms which had been growing more stylized for centuries and to portray their subjects with more freedom. Statues of the pharoah himself are unflattering to the point of repulsiveness.

showed the world that he was human.

Pharoah and the army were able to maintain power in Egypt, but, partly because of his lack of interest in empire and partly because of outside forces, the empire began to dwindle. The new religion, though intellectually significant, was not taken up by the populace at large. A few years after the death of Akh-en-Aton the teen-aged pharoah Tut-ankh-Aton was persuaded to change his name to Tut-ankh-Amon, to remove the capital back to Thebes and to stop all monotheistic nonsense of his predecessor. But the political damage, which was sooner or later inevitable, had been done. Although the Egyptians continued to accept the doctrine that pharoah was divine, the importance of this dogma diminished. The internal operation of the country had been seriously affected and more than a full generation elapsed before Egypt again turned her attention to affairs beyond her borders.

\*\*Turned Turned the Abaroah of The internal operation of the nineteenth dynasty began with the short reign of Ramses I.

Seti I followed in 1302 B.C. and was pharoah for twelve years. During this time he attempted to secure wider respect for the laws of the land by imposing greater penalties for their breach (particularly in matters involving corruption, which was widespread), and by decrees directing the gods to punish those violators of the law who were not caught.

Seti's son was Ramses II who came to the throne in 1290 B.C. and reigned for over 65 years. His claim to Egypt was secure and enforceable but the rest of the empire, the rest of the known world, in fact, refused to remain changeless and subservient. In the fifth year of his reign, Ramses II fought the important Battle of Kadesh against the Hittites and numerous allies. Egyptian writings of the battle describe the glorious victory which the pharoah won; largely by dint of his personal prowess

enemies, and slaying great numbers of these inferior people, he was able to save most of his army for the journey back to Egypt. The failure of Ramses to take Kadesh was of too little importance to diminish the glory, and any lack of judgment which may have caused pharoah to enter the ambush was swamped by his valor. In lieu of the plunder of a conquered enemy, the glory of the occasion was shipped back to Egypt where it was enlarged and carved into the walls of stone temples up and down the Nile. Eventually the Egyptians and the Hittites reached accord, and Ramses married a Hittite princess to secure the peaceful relationship. As there were over a hundred recorded sons of Ramses, and his chief wife was known to be Nefertari, the distinction thus granted the Hittite princess was less than would have resulted from a monogamous marriage; but the ceremony seems to have served the political purposes satisfactorily.

Subsequently Ramses' main preoccupation appeared to be the construction of monuments to himself. Temples displayed, on their walls, depictions of the valor of pharoah in battle, thousands of inferior peoples (bound by chains from neck to neck) kneeling in submission to him, the chastisement by pharoah of his enemies, and the close relationship between Ramses and the other gods of Egyptian religion. His fondness for this sort of reminder to his subjects closely resembled vanity; in time Ramses' desire for more monuments to himself exceeded the capacity of the craftsmen available, and they were reduced to removing the names of preceding pharoahs from statues and temples and carving the name of Ramses instead.

As might be expected, this pharoah's taste ran to the ostentatious and his temples did not shrink modestly from the eye.

They were large; the larger the better, and what they lacked in refinement they made up in grandeur.

-10-

One wall of the major temple at Abu Simbel shows and tells of the great victory at Kadesh. Other walls and carvings and statues likewise display mixtures of truth, fiction, myth and prayer to impress the mortals and mend fences with the gods.

A few generations after Ramses II the empire began to shrink and the temples and forts on the upper Nile were abandoned. Centuries of sand, driven by the wind from the western desert, fell over the cliffs into which the king's temple was carved, and it vanished almost completely from sight, although not before a Greek mercenary soldier about 590 B.C. had an opportunity to write a short message to posterity on the leg of one of the colossal statues in front of it.

The temple was found again in 1813 by John L. Burckhardt, a Swiss, and was excavated by the Italian Giovanni Belozoni in 1817. It has, for many years, now, been a major point, if not the climax, of foreign travel into upper Egypt.

Egypt today is under the first government in thousands of years which has the inclination and ability to train and muster its populace for the job of rising out of poverty. Ambitious, dictatorial and cruel, lacking in the political ability to forgive and compromise with opponents and so to use their abilities, nevertheless, the present government is making a real effort and beginning to succeed at this job. As modern science and medicine reduce the number of available causes of natural death, the population is growing and exerting a malthusian pressure against the available food supply. Food can be grown, or it can be received in exchange for manufactured goods. To grow food, more land and water are needed; to manufacture goods, more electricity is needed.

It is estimated that in 1947 there were 19,000,000 people in Egypt; in 1960, 25,000,000, and by 1970 that there will be 30,000,000.

So even to maintain the existing standard of living, production must be raised 20% over the 1960 level. To save 130 billion cubic meters of water per year which flow into the Mediterranean without being used, the government of Egypt has obtained a commitment from the Soviet Union to finance the construction of the High Dam at Aswan. This dam will cost about \$312,000,000 and the accompanying irrigation works, power plants and transmission lines will cost another \$418,600,000. With government compensation to flooded landowners and private investment in the land to be made arable, the total cost of the project will exceed \$1,000,000,000. It is estimated that the dam will bring an additional \$61,600,000 per year to the government in taxes and operating economies and that an annual  $V_{3}$  655,200,000 will be added to national income. The dam will be over two miles long, and will hold four times as much water as the Hoover Dam. It will add 2,500,000 acres or fifty per cent, to Egypt's arable land and will add 2,000,000 horsepower or five hundred per cent to the electric power output of the country. In addition the new dam will raise the level of the Nile by 240 feet above that set by the present dam at Aswan. The reservoir so created will extend south into the Sudan, to a distance of 300 miles from Aswan.

Very little archeology is going on now, in Egypt, except on sites which are to be flooded by the dam. Many archeological teams which were interested in other projects have gone to Nubia on the government's promise of later opportunities to dig in areas which will not be flooded. But the archeologists can only discover what is there, make pictures of plaster images, and remove objects of limited weight. Small temples actually are being taken apart to be put back together somewhere else, and a few are being offered as rewards for financial contributions to the salvage of what remains. But even the most doughty

of archeologists are not prepared to move temples which are carved into solid rock cliffs.

At one time engineers proposed a cofferdam around the temples at Abu Simbel, but it was determined that the water might seep through the porous sand and stone under the cofferdam and up into the sandstone forming the temples, causing it to crumble. The alternative is to cut out the sections of the cliff in which the temples are located and to raise them 200 feet until they are safely above the anticipated height of the Nile. The Temple to Ramses II is estimated to weigh 250,000 tons and would be raised one millimeter at a time, stopping every 30 centimeters to put in prefabricated beams. Because the temple is made of soft sandstone and contains cracks which adversely affect its structural strength, the raising must be carried on with extreme care. The Egyptian government has already contributed \$10,000,000 to the cost of the project and UNESCO has established a special international committee, of which Professor John Wilson of the Oriental Institute is the American member, to raise the remainder. In this country the effort is to raise \$25,000,000, through private subscriptions and through the appropriation by the Congress of counterpart funds - - that is, payments for foreign aid which the government of Egypt has made to us in Egyptian funds which must be spent in Egypt.

My wife and I decided to see for ourselves whether these temples are worth the effort. We left Chicago Thursday afternoon, near the end of April, and flew to Cairo and from there we took the southbound train Saturday night.

When we awakened Sunday morning, we were passing through farming country, the farms and the Nile to our right and the desert to our left. Farming seemed largely confined to sugar, wheat, vegetables, a little corn, sheep, goats and an occasional cow. Often we saw natives

plowing with a wooden plow to which were yoked one ox and one camel. The wheat is cut by hand and tied into small bundles, which are loaded on camels who carry it to a place where the earth is hard packed. The grain is dumped onto the earth there and oxen are driven around and around a stake in the middle, treading on the grain. Sometimes they draw a small machine that vaguely resembles a disc harrow. After this process is completed the grain is winnowed by hand, the farmer taking the chaff and grain in a shallow basket about a foot in diameter, sometimes at the end of a stick, and tossing the contents into the air so that the wind will carry the chaff away. References to this procedure are frequent in the Bible, and also in ancient Eguptian art, and I doubt that it has changed much in the last 5,000 years.

We reached Aswan Sunday afternoon and on Tuesday we boarded the M.S. Abu Simbel, one of the better ships which ply the upper Nile. We passed the site of the new High Dam shortly after getting underway, and saw the beginnings of a diversion channel and a large pipe, about a foot in diameter, extending on pontoons from the east bank of the Nile about three-quarters of the way across.

The present dam at Aswan was built at the turn of the century and raised twice since then, most recently between 1929 and 1934, and stores about 8-1/2 billion cubic meters of water. This gives the Nile the appearance of being a much wider river. Occasional tree tops can be seen, emerging from the water near the shore, where the land had been dry when the trees first grew. Most of the way the desert came down to the river's edge with no greenery. Often we would see a few trees in a clump, or a few feet of vegetation, but seldom more. Yet there were dozens of villages, built of dried mud, back from the water's edge, as irrigable

land is too valuable to live on. These villages exist without roads, railroads or electricity, supporting themselves partly on the one crop per year they can harvest, and partly from the remittances of the young men who go to the city to earn their livings, and return to their native villages to retire. The Nubians who live along this stretch of the Nile are a clean, modest, industrious and honest lot, who are highly regarded for domestic and hotel work. It was rumored that the Russians claim one Nubian worker on the dam is worth ten Arabs.

One member of the crew came from one of the villages which we passed, and as we approached the ship blew her whistle so that his friends and relatives could come out and wave to him.

Tuesday morning dawned bright and clear, as I suppose it has for the last thousand years in that region. We passed and looked at monuments at Amada, Derr, and Ibrim, the last of which is on a cliff and holds the ruins of a fortress built during the time of Ramses II, a Coptic Christian church and a mosque. More villages appeared, but usually the desert sands, rocks and cliffs extended on both sides of the Nile, as far as we could see, yellow and orange in the sun, and greybrown in what little shade there was.

A few minutes before 5:00 o'clock in the afternoon we noticed some grey objects ahead along the western edge of the Nile, just below one of several cliffs in the vicinity. Looking at these objects with binoculars I determined that they were houseboats, and on the vertical face of the cliff next to them were the huge statues at the entrance to the Pharoah's Temple at Abu Simbel. Approaching, we gazed at the scene with surprise and gratification. All the pictures we had seen showed only the temple, not its surroundings or position. The approach is from an

angle of about forty-five degrees to the plane formed by the cliff from which the statues are carved. The sun was in back of the cliff, which faces in an easterly direction, light reflected from the sand across the river and from the Nile itself gave ample illumination. Our attention was so drawn to the temple of Ramses II that, until we were directly in front of it, we did not notice the smaller, but still large, temple of his wife, Nefertari, which is carved from the face of the next cliff to the north, the plane of which is nearly parallel to the course of the ship. Both temples were carved from the reddish-yellow sandstone cliffs, and the entrance to each was between the middle pair of a set of huge statue four 67-foot seated statues are in front of the pharoah's temple, representing Amun, the Theban God, Ptah (whose statue has broken and fallen) the Memphis god, Ra, god of Heliopolis, and Ramses II. The six statues in front of the queen's temple are standing and only 30 feet high.

We went ashore as soon as the ship tied up to an iron stake driven into the sand on the river bank. In the area in front of the temples and between them, were several tents to house natives who were working there. Some were taking sand to the river's edge from between the cliffs in little cars on narrow tracks, and others were helping an Egyptian documentation team or the team of Swedish engineers who were taking test borings of the rock around the temples. Electric and water lines running in and out of the temples, and compressed air hoses running around the bases of the cliffs, with a rather aimless looking, partly built, mud brick wall extending toward the water, added confusion to the scene.

At the front of the King's Temple a ramp leads from the sand between the center pair of colossal statues to the door of the temple.

This ramp first crosses a narrow platform on which are a row of smaller statues, and the remains of statues, about the size of a man, representing

various gods. Some of these smaller statues reach the level of the pedestals behind them on which the great statues are placed. There is one pedestal on either side of the entry ramp, and the sides of these pedestals bear carved scenes attesting to the valor, omnipotence and divinity of Ramses. Atop each pedestal are located two of the lofty seated statues which look impassively at the Nile, while from next to the calves of the legs peer stone images of the servants and close family members of Pharoah. Although larger than life size, these images fail to reach the knees which top those calves. Back of the great statues the cliff is flat, with carvings and a twenty-foot high bas relief of the god Aroeris over the door.

True to the pattern of Egyptian temple architecture, the various rooms of this edifice are joined by narrow doorways to give a visitor the experience of entering a large space through a narrow opening several times in the course of a tour through the temple. Entering the temple through a narrow vestibule we went into the largest of its rooms, in which stand a row of huge columns on either side, each column being square in shape and supporting a statue from the rear. The ceiling at this point is about 30 feet above the floor, and the statues, standing on pedestals and facing the center, nearly reach the ceiling. In this same room, on the walls, is the picture writing which constitutes some of our best information of the history of Egypt of that era, including a heroic scene of the battle of Kadesh.

No one told us where we could or could not go within the temple, but some of the equipment of the documentation team (whose members otherwise were very helpful to us) barred our entrance to rooms we would have liked to explore.

Back of the large room is a smaller room, about ten feet high, with four columns, two on either side. Through this room and another we

passed to reach the western most chamber in which, over 150 feet back of the entrance, stand four statues on a pedestal, the over-all height being about ten feet. On certain mornings in the late winter and early fall the rising sun sends its beams all the way to the center pair of these statues. The two outer statues represent gods of the darkness, and the sun does not reach them.

The walls of the temple are decorated throughout with depictions of the glory and divinity of Ramses, mostly carved in relief and painted, but some in painted plaster. At a few points the colors are still moderately bright but in most of the temple the colors have faded or been worn off. Other rooms branch off from the largest and some of these have branch rooms of their own, resulting in a total of fourteen.

The Queen's temple is much like that of Ramses, but smaller and with fewer rooms. Many of the colors are better preserved, particularly the yellows, which predominate here, as do red and black in the larger temple. At the time these temples were made, pictures of men were usually painted red and women yellow. In the middle of the floor of the major room of Nefertari's temple the engineers were digging a great hole which, presumably, would yield geological information necessary to raise the temple before the flood.

A couple of the other passengers invited the chief of the Egyptian documenting team to have supper on our ship. Our guest was Dr. Yussef, a nice looking man about 40. His documentation team consisted of two assistants, two photographers, a sculptor and several artists, all of whom were also Egyptians. The documentation was being accomplished not only by photography and photo-metry, but also by hand copying of all of the markings on the walls, as many were not sufficiently clear to show

up on a photograph.

In the course of conversation Dr. Tusseff explained the The Egyptian writing of the time of Ramses II consisted of three

separate types used concurrently. The primitive picture writing was used when the word to be written corresponded to a picture. For a polysyllabic word or a holonym, the picture which corresponded to each syllable, or the holonym, was used, sometimes with a special mark to show that the word originally intended by the picture did not apply. Finally, there were characters which represented certain sounds, and these were used when all else failed. The ancient Egyptians had characters only for consonant sounds, so it is impossible to tell surely which vowel sounds were used in which words.

Dr. Yussef went back to his houseboat about 10:00 and we sat on deck chairs listening to a group of natives who had formed a circle on the sand about 60 feet from the ship. One would start clapping his hands in a two-beat measure and others would join him; after a few minutes they would chant, very musically, with rich, clear voices and in powerful rhythm stirring the dark, dry desert air.

The following morning my wife and I arose just before sunrise, as this is the hour at which the temples are said to be at their best. When the sun rose, however, there was a low dusty haze that prevented its rays from falling on the temples until about 8:00. By that time the direct sunlight came several feet into both temples, and reflected brightly against the nearby walls. The entrance to the room which, the day before, had been blocked by documentor's equipment was now free, and this room, with one beyond, proved to contain very well preserved wall carvings and paintings. Most of each temple was illuminated by bare electric light bulbs which had been installed with minimal damage to the art work but there was no light in these particular rooms and we had to use a flashlight to see at all. The flashlight beam was neither strong

nor wide, and I was able to see well what carvings were on the walls of these rooms only later upon looking at the pictures which I'd taken with flash bulbs.

On our way back to the ship we saw that the sunlight, reflected from the sand in front of the King's temple, penetrated the entire length of the temple; of the statues at the extreme rear of the temple, the center pair were illuminated by it and the two at the ends were still in darkness, as they had been for over 3,000 years. We left the temple, boarded the ship and spent the hot day, mild night and warm following forenoon on the return to Aswan.

I had expected the pharoah's temple at Abu Simbel to illustrate Shelley's poem of the broken statue in the desert:

"My name is Ozymandias, king of kings:

Look on my works, ye mighty and despair!

Nothing beside remains. Round the decay

Of that colossal wreck, boundless and bare,

The lone and level sands stretch far away."

I was not disappointed in that expectation, and marvelled at the ability of artisans with rock to maintain for a few milleniums Pharoah's claim to immortality. The temple, however, is not merely a monument to the search for immortal glory and eternal recognition by one vain man; it is a monument to that same search by all men and, perhaps, to the futility of that search.