Terraces of Shrunken Lake Tell Story of Egypt a Thousand Centuries Ago

Archaeology

By Frank Thone

EGYPT has always been a name of glamour—the glamour of the mystery that surrounds the immemorially old. When the sons of Jacob fled thither from the famine, Egypt was old; nobody then knew how old. In our own childhood the fame of the first antiquarian researches was just becoming popularly disseminated, and the "more than five thousand years!" assigned to the first Pharaohs had an awesome sound. But soon came a widespread knowledge of the men of the Old Stone Age in Europe, with their estimated antiquity of a hundred thousand years or more, and the glamour of Egypt paled somewhat by comparison.

Now, however, the land of the Nile reclaims her own. New evidence suggests that the oldest of the Old Stone Age peoples were at home in Egypt when northern Europe and eastern North America groaned beneath a mile-thick burden of glacial ice. Beside the high antiquity of these shaggy-haired earliest Egyptians, Cheops and Tut-ankh-Amon are people of only yesteryear, mere schoolboys by comparison. Against this perspective of a thousand centuries or more, their once distant figures move suddenly up into the foreground, not very far back of Christopher Columbus and King Alfred. The valley of the Nile once more holds a history of humankind to as remote a date as we have any certain knowledge that men have been men. And by way of stressing the vanity of expecting more, the geologic record goes back to these earliest known humans with full and closely-written pages—and then sharply breaks off, leaving several fly-leaves at the beginning of the volume most eloquently and emphatically empty.

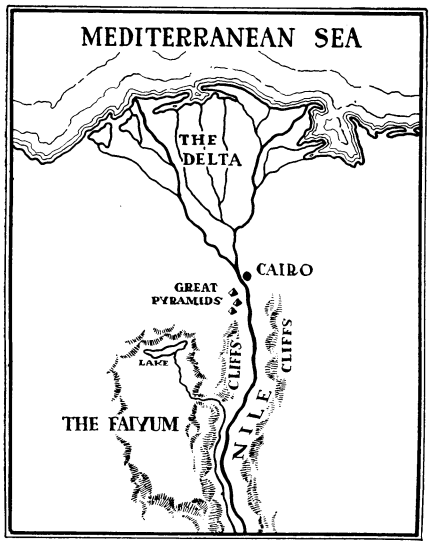
Some hints of this great antiquity of man in Egypt had been obtained years ago. Here and there the rough stone tools that are the usual records of the oldest human beings had been found, but scatteringly and disconnectedly, like bits of torn papyri; readable separately, but lacking the connecting links that would bind them into a continuous chain through the centuries. Now these links have been found and the chain is forged complete.

The tracing of the record of prehistoric man in Egypt is largely the work of two scientists, K. S. Sandford and W. J. Arkell, of the staff of the Oriental Institute, University of Chicago. It is in a way an anticipation of their work, for they went to Egypt with the idea of conducting a comprehensive geological survey of that country, which is needed for a proper understanding of the archaeological work now in progress, and which — astonishingly enough — has never yet been carried out. The search for and dating of traces of ancient man were scheduled to follow.

They were hard at work at "straight geology" well down toward the lower end of the Nile valley when an emergency call took them into the Faiyum. The Faiyum is a curious side valley, a pocket at the bottom of a bowl of desert hills, a fertile oasis connected with the Nile through a narrow gap in the sterile cliffs that wall the ancient river in. Having finished their job there, they decided to stay and do the geology.

It was here, in this isolated side valley, once the gathering-place for the waters of rivers that flowed into the Nile when the desert was a green prairie, that the two geologists began to pick up the connected chapters of the surprising record, one chapter on each of a series of ancient terraces cut by the lake that once filled the valley, now rising like steps up the sides of the dry hills. Then they went out through the water-gap that connects the Faiyum with the Nile valley itself, and found corresponding terraces both in the gap and on the sides of the Nile gorge.

It seems paradoxical at first glimpse to learn that they found the relics of the oldest races on the highest terrace, while the tools and weapons that had belonged to the most recent of the prehistoric civilizations were buried in the silts and sands on the valley floor, which had once been the old lake bottom. We have become so used to the idea of the oldest things being at the bottom and the newest on top that this seems like



Sketch map showing relation of the Faiyum to Lower Egypt.

a completely upside-down arrangement.

The key to the paradox lies in the fact that the waters of the Faiyum have gone down by steps. Ages ago, before the coming of the glaciers to the northern world, there was no Faiyum basin and no Nile valley. A great river, the ancestor of the present Nile, wandered northward toward the sea across a high plateau, and rivers from the then well-watered but now desert Libya flowed into it. One important set of watercourses joined the Nile through what is now the Faiyum.

As rivers are wont to do, these ancient streams cut their channels deeper and deeper. They would flow at a given level long enough to carve a well-marked terrace, and then the process of down-cutting would begin again. Five such river terraces have been traced on the hillsides. The lowermost, and the youngest, is broader in its present extent than the rest and gives evidence of having endured much longer than they.

It is on the lowermost of these ancient river terraces that Dr. Sandford and Dr. Arkell found the first signs of human occupancy of the valley. The upper terraces were barren; no chipped flint was there, nor any other sign that man had ever made his home on them. Through all the ages of their building, the Nile flowed northward to the sea, unobserved by any human eye. But while the last terrace was in the making, there were human eyes a-plenty, and human hands hard at work, as the flint implements bear testimony.

These are described by the two scientists as being of the types known in Europe as "Chellean" and "Acheulean," from the French names of the places where implements of this particular workmanship were first found. Chellean stone tools are the crudest and roughest of any flints which can be called man-worked, at least with any real confidence. If there were any human beings older than the Chellean workmen, they did not know much about the technique of flaking flint.

The next chapter of man's history in Egypt, as told by the flints, is labelled "Mousterian" in the catalogs of archaeologists. The name is again derived from a place in France, where stone tools of this type were first discovered. There are plenty of Mousterian implements on the sixth terrace system in the Faiyum, and a goodly number have been found also at a corresponding level around the corner in the Nile valley.

Mousterian flints, though still rather rough-looking, show a considerable advance in technique over the two earlier types. The men who made them had become really skillful in knocking off sharp-edged flakes of flint at a single blow, and using them as knives, chisels and scrapers. A generation or so ago, a noted German scientist liked to call a hypothetical race of men of this period by the derogatory title *"Homo stupidus,"* but as knowledge has accumulated about Mousterian man the name has become more and more ill-fitting. He was anything but stupid, considering what he had to go on.

About Mousterian man we have not merely the record of his workmanship in stone; we can get a pretty good idea of what he looked like himself. For the man who made the Mousterian implements was the well-known Neanderthaler, often shown somewhat unflatteringly in the "restorations" which artists and sculptors have built over his bones. He is shown low-browed and brutal-faced, shambling on bowed legs, his back always in a stoop. Well, he wasn't as pretty as modern man, probably, but his skill in cracking the toughest of common stones into the kinds of tools he wanted mark him as well above the level of the semi-ape to which some popularizers have endeavored to assign him. He had no chin to speak of, and a very much beetle-browed skull; but inside his cranium he carried a brain about equal in cubic content your own.

Mousterian man's implements have been found in plenty in Egypt, but of their makers as yet not one bone. It may be that the makers and users of these tools were not Neanderthalers at all. They have been everywhere else, but that is no guarantee that such was the case here. A given type of tool does not argue a given race in the user: witness modern Mongolians, Hottentots and Fiji Islanders driving Ford automobiles. But there is a hint that the men of the Mousterian culture in Egypt were also Neanderthalers in the recent discovery of an unmistakable Neanderthal young man's skeleton at Capernaum in Palestine.

During the many thousands of years of Mousterian man's first development in the Faiyum an important change took place in the valley. Either the land rose or the sea level sank—it is not certain which—but at any rate the Nile began to flow faster. The valley was rapidly scooped out to a considerable depth, and cut down part way to its present level. Then, due to some geological change of fortune in the valley of the Nile, the river suddenly backed into this side valley, turning it into a vast lake. The Mousterian terrace is no longer a river terrace; it bears every evidence of having been built by a lake, over whose surface violent storms rushed, raising (*Turn to page* 396)

A stone ax used by one of the oldest inhabitants in the land of Egypt. The weapon was grasped by the neck-like end.

Egypt a Thousand Centuries Ago—*Continued*

huge battering waves that piled gravel and debris in typical beach ridges.

The men who sat on the edge of the ancient lake and hacked their flints were easy-going hunters, for whom life was not over-hard. The laborious agriculture of the modern Nile was far, far off: why eat bread in the sweat of your face when meat can be had by throwing a stone? It is no wonder that so many thousands of years passed without much progress, as we reckon it.

But arduous times were ahead, times which would compel the improvident hunters to begin taking thought for the morrow, what they should eat. For as the ice age in the north began to draw to its close, the rains in the south became less abundant, and the grass on the North African plateau slowly grew shorter and scantier, supporting fewer animals, making hunting more difficult and compelling the population to be more and more dependent on what the immediate neighborhood of their rivers and lakes could yield them.

So we see in the flints of the people who succeeded or developed out of the Mousterians of the lake terrace and river valley evidence that they were less and less hunters after big game in the open and more and more fishers on the shore and trappers in the marshes. Their implements were not so large as those of the Mousterian population had been, nor adapted to such lusty blows. Their flakes, becoming ever smaller, displayed great cunning nevertheless; though they are not to be compared with the probably contemporaneous tools and weapons used by Crô-Magnon men in Europe, where game was still abundant.

Down to the end of the Mousterian, there is a close similarity in shape and type of workmanship between the flints of Europe and those of Egypt. But after the close of that period the Egyptian craftsmanship developed on wholly independent and divergent lines from that of the North. For this reason, Dr. Sandford and Dr. Arkell do not use the culture-names made familiar from European studies: Aurignacian, Solutrean, Magdalenian, and so on. For the culture of the two lakes terraces next below the Mousterian they adopt an entirely new name, (first used by Vignard) native to Egypt as the tools it characterizes were. They call it the Sebilian.

At the end of the ice age, radical changes took place in river and lake, and were reflected in the character of the prehistoric population. In the first place, the Nile began to flow toward the sea much more rapidly, though much diminished in volume. This cut down its valley once more, making the river lower than the lake. The lake accordingly reversed its age-long direction of flow; it drained into the river again, and its bottom was eroded down to its present level. Real desert conditions were settling down in good earnest over the stony uplands, and the people were hemmed in with increasing strictness. Harder and harder became the hunting, more and more was it necessary to depend on what the river brought. The Nile only awaited the invention of agriculture to assume its historic role as the Father of Egypt.

With the onset of "modern" time—in the geologic sense—the drama was completed rapidly and inevitably. Another change in either the crust of the earth or the level of the sea slowed down the dwindling river from a rushing, gravel-bearing, channel-eroding stream to its present character of sluggish, often-overflowing, silt-depositing river, building up a floodplain and delta of soil so incredibly rich that it can be farmed with a crooked stick and still yield a living crop. So farming began there perhaps ten thousand years ago, and so it continues to this day. Where tractors and gang-plows have invaded Egypt it is the result of Occidental impatience and hustle, not of the Oriental calm and philosophic serenity native to the land.

But to return to our Nile. The same geologic changes that slowed its flow, probably, dropped the level of the Faiyum basin until its bottom was below sea level. The river naturally did what it had done at a higher stage at the beginning of Mousterian time, and filled up the lake again.

But it did not fill it up so high this time. The lake grew large, but it was only a lake at the heart of a big valley that had once contained a veritable inland sea. This lake survived into historic times, though one of the first of the great public works of the Pharaohs was to build a dam across its connection with the Nile, and so control its level.

There are four terraces marking where four stages of this ancient lake level stood. These again bear reminders of the works of man, but they are of a different order. The Paleolithic, the Old Stone Age, was at an end; the stones of the newer terraces are more delicately chipped, often polished, and they have pieces of a new stuff mixed with them—pottery, the unmistakable mark of the New Stone Age, the Neolithic. It is not long now until occasional bits of copper are due, then bronze, then the strange marks that represent ideas and usher in the dawn of history.

The gap caused by the rapid erosion and subsequent silting up of the valley is the moment of darkness that marks the fall of the curtain. The Old Stone Age had played out its epic drama on the successive terrace-stages that mark the circling hills like steps: a Descent of Man in the truest, most literal sense. The first polished stone blade, the first potsherd, that whispers "Neolithic" to the searching archaeologist is the cue for the prelude to a new play, the drama of History.

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