## SEILA

A layer monument locally called ' $\mathrm{el} \mathrm{Oal}{ }^{c} h$ ' meaning the fortress is found at el Fayum.

## A BRIEF HISTORY OF THE MONUMENT SEILA ${ }^{1}$

## Construction

The results of my investigation show that the layer monument of Seila was completely built in the reign of king Snfrw the first king of the $4^{\text {th }}$ dynasty. Subsequently he built 3 pyramids with 2 subsidiaries. These buildings demonstrate a marked development in the history of pyramid construction. It is obvious that this layer monument, because of its striking similarity to step pyramids of his predecessors of the $3^{\text {rd }}$ dynasty, became the last to built in their tradition and his last monument, the Red pyramid at Dahshur became the example followed by his successors of the Old and Middle Kingdoms.
The discovery of a pavement, cult chapels and outer facing blocks indicate that the layer monument was completed, preserved and maintained during the $4^{\text {th }}$ dynasty and with the coming of the $5^{\text {th }}$ dynasty violation and destruction began. ${ }^{2}$

## Ancient times

During the late Old Kingdom and the First Intermediate Period, the upper part of the nucleus was exposed by the removal of the upper courses of the facing. The lower courses over a pavement were left undamaged.
Subsequently the monument was left undisturbed for a considerable period, which goes much later than the Middle Kingdom. Meanwhile the exposed nucleus was subjected to weather erosion. ${ }^{3}$ Falling limestone spalls accumulated creating a thick homogeneous layer on the pavement. These spalls covered the remaining undamaged blocks of the outer facing, figure 18/4. ${ }^{4}$

[^0]

Spalls
Later during the New Kingdom or the Second Intermediate Period all the undamaged facing blocks were dug out to the foundation level. As seen in that figure 18/4 and $6 / 3$ below, a gap was created between the accumulated spalls on the pavement outside and the backing blocks on the inside.
It has been suggested by Lesko that blocks from the layer monument were reused at the early Christian cemetery of Fag El Gamous. ${ }^{5}$ During the Late Period, further destruction of the nucleus took place. The gap mentioned was filled up with rubble. This rubble over flew completely covering the spalls. The present appearance of the monument began to take shape from there on. See figures: $(76,77,86,88) / 5$ below.

[^1]

The east side: the pavement was covered with spalls leaning on the outer facing; and by the removal of that outer facing the backing blocks were exposed; and a gap was created between them. This gap was filled up with rubble.

## The 19th centaury

The layer monument was locally known as 'el Oalah' meaning the fortress, Petrie thought it was a mastaba but it acquired the name "Pyramid of Seila" after L. Borchardt made a visit to the site in 1898 and published his short article in $1900 .{ }^{6}$ The first published material however came 10 years earlier where Petrie is quoted: ${ }^{7}$ "The Mastaba is a landmark of all this part of the country; and can be seen from Hawara, as a heap on the hill top. It is formed of rough stone blocks laid with desert clay. It was built cumulatively, with successive finished faces (layers), but not finely coated with casing on each. It is about 90 feet square and 25 feet high. A great gash has been cut into it in a murderous fashion on the North side; in the same way that the pyramids of Dahshur, Kula, and others have been barbarously mangled of late years. Nothing appears to have been found here, the middle being cleared down to three feet below the pavement level. This is probably a building of the XII ${ }^{\text {th }}$ Dynasty; but who lay beneath it we shall hardly find until it is properly explored. The wild hill on which this stands has been trenched in all directions by rain fall, and rises into sharp crests too narrow to stand on, along the top sloping down to Medum on one hand and falling in cliffs down into the Fayum on the other. At the west foot of it is a village perhaps of Cufic date."
Petrie's remarks accurately describe the site, the monument and the robber's trench. Undoubtedly he did not notice that layer 3 on the west side had been removed. ${ }^{8}$ Physically by that removal the monument acquired a more rectangular plan ; consequently he describes and marks it as a mastaba; see his sketch map; reproduced here in figure 4/2A.
I wondered if he made further investigations without publishing them. Consequently in London on June 18, 1988, I contacted Ms. Margaret Drawer who is most familiar

[^2]with his work and, who, in 1985, had published. Flinders Petrie, a life in Archaeology. I learnt that he did not.
The pit was dug in the core and a trench was forced to the north destroying layers 1, 2 , and 3 . It will be referred to as 'the robber's trench and pit'. This destructive investigation is similar to Raymond Weill's at Hebenu later in 1912. ${ }^{9}$ The rubble dump resulting on the north side created a large mound similar to the one of K 1 at Bet Khallaf. One wonders if these excavations were made by Mariette or a team of scholars led by Maspero. ${ }^{10}$

## Before 1981

A. Pochan, published another short article with 5 photographs in $1938 .{ }^{11}$ In 1951 Ahmed Fakhry considered investigating this layer monument, but declined for a greater project at the Bent pyramid. ${ }^{12}$
In 1962 J-Ph. Lauer gave an account of the layer monument ${ }^{13}$ his measurments have proved to be fairly accurate. The base length of 60 cubits, an orientation west of north, a layer width of 5 cubits, a possibility of an outer facing, a side angle of 14응 and a possibility of a date contemporary to the pyramid of Meidum. He states that the monument was more important than the other three known at the time of the publication, Hebenu, Nubt and el Kula. ${ }^{14} \mathrm{He}$ considered Seila to have 4 steps, with a height of 40 cubits and made a drawing reproduced in figure 6/6A. Lauer suggests the monument to belong to king Huni or to queen Hetep Heres the wife of Snfrw. In April 1979 W. Kaiser and G. Dreyer ${ }^{15}$ made their famous visit to all the layer monuments and recorded some observations. Concerning Seila the base length on the west side 22.5 meters, an orientation $12{ }^{\circ}$ west of north, width of the outer layer on the south side 5 cubits, side angles $120-130$ on the north side, $14^{\circ}$ on the west side, 150 on the east side, and $13.5^{\circ}, 140-150$ at the inner south layers.. The courses of masonry were laid in headers and stretchers having a height of 0.3-0.4 meters and inclined backwards. The mortar was a mixture of sand and clay.

## 1981

Leonard Lesko conducted a short season at the layer monument of Seila in 1981 and published his results in JARCE 1988 after I had completed my two seasons. He kindly sent me an off print later on in that year. In addition to the points on the history of the layer monument mentioned, Lesko accounts for a former USA ambassador would have liked to see the pyramid of Seila excavated. ${ }^{16}$ The results of Lesko were a great help which are summarized as follows: ${ }^{17}$

[^3]The hill top on which the layer monument was built was not completely levelled but steps were cut into the Pliocene conglomerate to receive the stone for the lower courses at lower and lower levels (about 35 cm . for each) until a level and firm footing was provided for the outermost layer which seems to have extended 30 meters on each side.
The Pliocene conglomerate at the centre was at a higher level in comparison to the corners.
Remains of the foundations of an outermost layer were cleared on the south and west sides.
Large stretchers were missing on the south and east sides while the headers still protrude and provide basis for measurement. ${ }^{18}$
That the south layer was removed in antiquity is argued by finding a coin beneath the debris. This raises the possibility of reusing these missing blocks in the Fag El Gamous' early Christian cemetery.
Mortar was missing from the west side and the pit of the robber's trench ${ }^{19}$.

## 1987 and 1988

My participation began at Toronto during the Third Congress of Egyptologists; September 1982, Leonard Lesko asked if I would join an excavation at the layer monument of Seila. Later when Lesko took a new position at Brown University and the concession was no longer with University of California, Berkeley, Wilfred Griggs of BYU who was working at the nearby Christian cemetery of Fag el Gamous made it clear to me that Lesko was not coming back to Seila and invited me to excavate the layer monument. I worked at the layer monument of Seila for the seasons 1987 and 1988. The duration of the first season was 24 working days from Feb. 3 to March 8, 1987. The duration of the second season was 27 working days from Feb. 7 to March 3,1988 . During these seasons it appeared that king Snfrw built the monument. ${ }^{20}$ Following the last season I have hitherto not visited the site nor have I re-examined the finds; everything is far from being complete. Now many years have passed, two earthquakes have shaken the country and much work still lies ahead.
Some independent research, since 1988 however, with the aid of photographs and consultations with colleagues here in Cairo and during my visits to London, Oxford, Berlin, Bonn, Vienna, Boston and San Francisco have help me include some of my results. ${ }^{21}$ The excavation and results of the seasons 1987 and 1988 are discussed in chapter 5 'Description'.

[^4]
## Other information from the area

Because no major activities took place at the immediate site of the layer monument, it has been poorly published. The same information appears in pyramid books. D. Kessler ${ }^{22}$ however, had referred to a third to sixth dynasty necropolis at the wadi Fag El Gamous and Djebel El Rus location and a statue in Berlin, \# 1858, comes from Seila.
In November 1888, however, two more statues, one of a man, the other of a man and woman were reported to have been found in an illegal excavation at Seila (no one knows if it were at the monument's site). They were confiscated and acquired by the Cairo Museum; Jd'E 28681 and 28682.23

[^5]

In the foreground are the fields of el Fayum. Behind the fields and by the hill are the sediments of a prehistoric lake. Above are the beds of the Eocene limestone. The layer monument Seila is founded on a Pliocene conglomerate formation.


North side and the robbers trench, note the conglomerate in the foreground


The south side of Seila, note the conglomerate to the left


The north side of Seila, note the conglomerate to the left


The north west corner of Seila, note the conglomerate in the foreground


An aerial view of Seila


The profile \# 2 on which my reconstructions are worked


A reconstruction (step pyramid option) of Seila


A reconstruction (benben option) of Seila


Elevation of the north side


Elevation of the west side


Seila on Google earth


The section resulting from some destruction at the east chapel at Seila, indicated that a layer of bricks was built over a fill to act as a foundation for the chapel pavement. The bricks in this section may have joined up with a poorly preserved brick construction on the same level further east. All that remains of it are 4 stretchers parallel to the layer monument and 3 perpendiculars; and a single one 5.50 meters to the south. Brick measurement was $22 \times 11 \times 7.5 \mathrm{~cm}$.

Three loose bricks were found 5 meters down the slope of the embankment measuring 22X11X8 cm .
One damaged brick found 10 meters down the slope of the embankment measured >14X12.5X6.5 cm.
One complete brick in the northern trench measured: 22X11X7.5 cm and two halves of bricks in the southern trench measured:?X11X7.5 cm.

The eastern chapel


The northern Stela at the eastern chapel


A drawing of the Red pyramid at Dahshur?


A remarkable stone object in many respects; it could be the monolithic roof of a small shrine, may be for a model boat?


Oar of a model boat


The Northern Chapel


Fragments of the statue of Snfrw


Detail


A triple basin with a cover


A stone stand

## BASIC DATA ON SEILA

It located south of Philadelphia in the nome of Crocodilopolis.
The monument was built on the rise of Djebel el Rus.
It is at distance of 2 kilometres and a rise of 100 meters to a level of 92 meters $(=120$ meters above sea level) east of the bridge called Hagz Nadjib that crosses the Wahby canal.

The layer monument is 10 km north east of the Village of Seila and 9 km south west of the ruins of Philadelphia.

The layer monument was built on the second highest point of Djebel el Rus overlooking the Nile-Fayum Divide to the east and the Fayum depression to the west. On the east side, at the foot of Djebel el Rus is a Mousterian beach banked on an Eocene limestone formation.

At the lower part of this formation are the quarries, which supplied the layer monument's nucleus masonry.

The upper part of the Djebel is a Pliocene conglomerate simulating a terrace. ${ }^{24}$
Access to the site is by a Wadi passing close to the north side of the layer monument, ascending from the Fayum cultivation over the sediments of the prehistoric lake to the limestone formations above which are layers of hard gravel. ${ }^{25}$

The layer monument is built on the second highest point of these layers where five Wadies begin their course in all directions downwards.

The relative position to the pyramid of Meidum, which is at a distance of 10.5 km , is a little south of the east west axis. At the layer monument site, on clear days, one sees an oblique view of the south side of the pyramid of Meidum and the Nile Valley beyond it.

This monument is recorded as the pyramid of Seila on the maps of Egypt

We have unquestionable evidence that Seila dates to Snfrw

- Reference maps

1: 25000 ) EL RODA sheet $74 / 615$ of 1971, the monument is ignored on this map
(1: 100000 ) BANI SWEIF sheet 29, 00 / 31, 00 of 1956, Extract reproduced here

[^6]

- The region of the monument

- A contour map
- Geographical coordinates by Google

| $29^{\circ}$ | $22^{\prime}$ | $57.17^{\prime \prime}$ | N |
| :--- | :--- | :--- | :--- |
| $31^{\circ}$ | $03^{\prime}$ | $13.27^{\prime \prime}$ | E |



- Icon of the monument and the river
- The axis is bearing $=356.5^{\circ}$
- The pavement surrounds the monument at the top level of the foundation of layer 3 with a width of $=4.4$ meters
- The final monument of the step pyramid option would have had 4 steps:

A base length of $=30.1$ metres
A side angle of $=$ Seked $7,\left(76^{\circ}\right)$
A height of $=21$ metres above the pavement level, in the reconstruction.
The side length of the core is 15 metres at the pavement level, in the reconstruction.

- The present monument has

A nucleus side length of $=26$ metres
A height of $=8$ meters above the surrounding area

- The layer thickness is not uniform approximately $=5$ cubits, 2.6 metres
- Built on a rock surface see elevations above


[^0]:    ${ }^{1}$ Dr. Edwards had visited the site during my second season, and attended my lectures concerning this excavation at Oxford on June 71988 and at the Fifth Congress of Egyptologists in Cairo. It surprises me to see that he has ignored my role at Seila in his Pyramids editions, which follow that date. See however. Edwards I.E.S, The pyramid of Seila and its place in the succession of Snofru's pyramids, Fs C. Aldred, 1996, 88; ..... Studies in honour of A.F.Shore, 1994.
    ${ }^{2}$ This occurred at earlier sacred precincts such as building the pyramid of Userkaf between the dry moat and the temenos of the Step Pyramid; tunnelling the rock tombs of Chantier H in the rock knoll of the Brick Pyramid at Abu Rawash; tunnelling the quarry cemetery west of the pyramid of Khafra; and other examples.
    ${ }^{3}$ Today spalls continue falling.
    ${ }^{4}$ This assumption is based on a cord basket and a wooden box with a sliding lid, figures */8 and */8 which were found in this layer of spalls. The latter can be dated to the Middle Kingdom.

[^1]:    ${ }^{5}$ The dates of this phase of destruction and the cemetery do not match moreover for its supplies; local quarries are closer to the cemetery.

[^2]:    ${ }^{6}$ Borchardt L.,, Die pyramide von Silah auszug aus einem berichte, ASAE I, 211-214., Cairo 1900. he mentions noticing a piece of basalt which may come from a chapel or ststue
    ${ }^{7}$ Petrie W M F, Illahun, Kahun and Gurob 1891 (Surrey 1974) 31 and plate XXX.
    ${ }^{8}$ I estimate that it was a major task, lasting one month with at least 50 workers.

[^3]:    ${ }^{9}$ Weill R., CRAIBL, (1912) p, 484-490 (Zewiyet El Meyiteen)
    ${ }^{10}$ Capart J. (Editor), Travels in Egypt, December 1880 to May 1891 Letters of Charles Edwin Wilbur, Brooklyn Museum (1936) 242-243. A black folder of cigarette paper with a red ribbon was found in the pit, figure */8.
    ${ }^{11}$ Pochan A, Pyramide de Seila (au Fayoum) BIFAO XXXVII 1938, 161.
    ${ }^{12}$ Fakhry A., The Monuments of Sneferu at Dahshur I The Bent Pyramid, Cairo 1959 *
    ${ }^{13}$ Lauer J-Ph., Histoire monumentale des pyramides D'Égypte, Cairo 1962, 222-225, Fig 61and plate LXIX lower photograph; Les petites pyramids a degres de la III ${ }^{\mathrm{e}}$ Dynastie Revue Archaeologique 1961 II 5-15.
    ${ }^{14}$ The layer monument of Elephantine, El Ghenimia and Sinki were not known at that time.
    ${ }^{15}$ Dreyer G., W. Kaiser, Zu den kleinen Stufenpyramiden Ober-und Mittelagyptens, MDAIK 36 (1980) 42. Dreyer G, LÄ V 828. See also Gommaà F, LÄ II 440.
    ${ }^{16}$ Caffery J., National Geographic, 108 Nov. 1955 641, 645.
    ${ }^{17}$ Lesko L, AJA 861982 275; Seila 1981, JARCE XXV 1988, 223-235. For consistency in my report I am using the word Pliocene conglomerate where Lesko had used the word 'bed rock' the word layer where he used 'step' and robber's trench where he used 'interior'.

[^4]:    ${ }^{18}$ I discovered that the protruding headers were backing outer facing stretchers, and the alternating receding courses were backing the outer facing headers, together creating layer 3, consequently the missing masonry has to be included in the measurements.
    ${ }^{19}$ I believe that the west side like all the other sides of the monument were built with mortar; the absence of mortar on it was due to the westerly wind. The inner parts of the core where the robbers dug the pit reviled a common practice in all pyramids where much less or no mortar was used.
    ${ }^{20}$ Swelim N, Some problems on the history of the Third Dynasty 1983, 101 no 2; Newsletter, The pyramid of Seila locally called `El Qalah, season 1987. Leclant J. and Clerc G., Orientalia 57, Fasc. 3 (1988), 336, pl. XXXII, XXXIII, Figs. 40, 41.
    ${ }^{21}$ I thank Prof. Wilfred Griggs of the Brigham Young University for inviting me to excavate the layer monument of Seila during the seasons of 1987 and 1988. I also thank Mr. George Homsey FAIA, of Esherick Homsey Dodge and Davis in San Francisco for the skill by which he carried out the work assigned to him. Mr. Homsey worked during two seasons and was assisted during the second season by Ms. Melissa Harris, Mr. James Mclane III, and Mr. Charles Davis FAIA. They made drawings of elevations, and sections. A few years later, George kindly hosted me in San Francisco, April 26 to 28, 1993, where we discussed some active steps towards publishing this long delayed report. I thank Mr. and Mrs. Jaroslaw Dobrowolski, of the Polish Archaeological Centre at Heliopolis for drafting

[^5]:    some my figures. Dr. Phillips R., of the BYU, worked on mapping the site. I thank Dr. Vassil Dobrev of the IFAO for his contribution on the writing and marks on stones discovered. I thank Dr. Hourig Souruzian for her contributions on the fragments of a seated statue of king Snfrw. I thank Dr. DINA FALTINGS of the DAIK for a contribution on 12 pieces of pottery photographed on coloured slides. During the 2 seasons the director of the Antiquities of Middle Egypt and the chief Inspector of Fayum were Mustafa El Zierl, and Aly El Bazidi. Representing the EAO during the first season were inspectors Ahmed Abd El Al and Sayyed Aly Kouleeb, and during the second season inspectors Abd El Mohsin El Qadi and Atef Helmei Salama.
    ${ }^{22}$ LÄ, IV 401 \#110, the references \#109, 413 are: Archaeological report 1900-1901, EEF; J. Yoyotte RdE 15 (1963) 98, Fig 5. My thanks to AndRze ĆWIEK of the Polish Institute in Heliopolis for bringing this information to my attention.
    ${ }^{23}$ Borchardt L., Statuen und Statuetten von Konigen und Privatleuten im Museum von Cairo I, (1911) 6-7 plate 2 no 5,6. Catalogue General; PM IV 103

[^6]:    ${ }^{24}$ Sanford and Arkell, Paleolithic Man and the Nile-Faiyum Divide 1929, pl. V, VI, and the folding map.
    ${ }^{25}$ Another access to the site is by more important wadi Fag El Gamous north of the one just mentioned.

