

**AN INTRODUCTION TO
SEVEN LAYER MONUMENTS OF THE EARLY OLD
KINGDOM:
Minor Step Pyramids or Archaic Benbens**

Hitherto little interest was paid to this new branch of pyramid science in Egypt. In the literature however, not more than a few lines and sometimes paragraphs were written. Sketches of reconstructions were drawn disregarding essential details. By early 1970^{ies}, 4 layer monuments had been classified as 'Minor Step Pyramids' located at Seila in the Fayum, Hebenu at Zawyet el Maiyiteen south of el Minya, Nubt at Naqada, and el Kula at Nag el Miamariya north of Hieraconpolis. The successive discovery of the layer monuments: Sinki, Elephantine, and el Ghenimiya brought the total to seven and realised the birth of a new branch of pyramid science in Egypt. Gunter Dreyer investigated the layer monument at Elephantine, I investigated the layer monument at Seila, and together we investigated Sinki. These three investigations gave more information than we had had on Hebenu, Nubt, and el Kula while el Ghenimiya remains untouched!

This is an attempt however, to present an introduction to 7 layer monuments of the early Old Kingdom; minor step pyramids or archaic benbens. It addresses both the student of pyramid science and pyramid amateurs. It is richly illustrated with maps, plans, sections, elevations and many photographs.

This article however is incomplete, the minor step pyramids are largely a mystery, there are many questions still to be answered, dates and functions to be investigated except for the date of Seila.

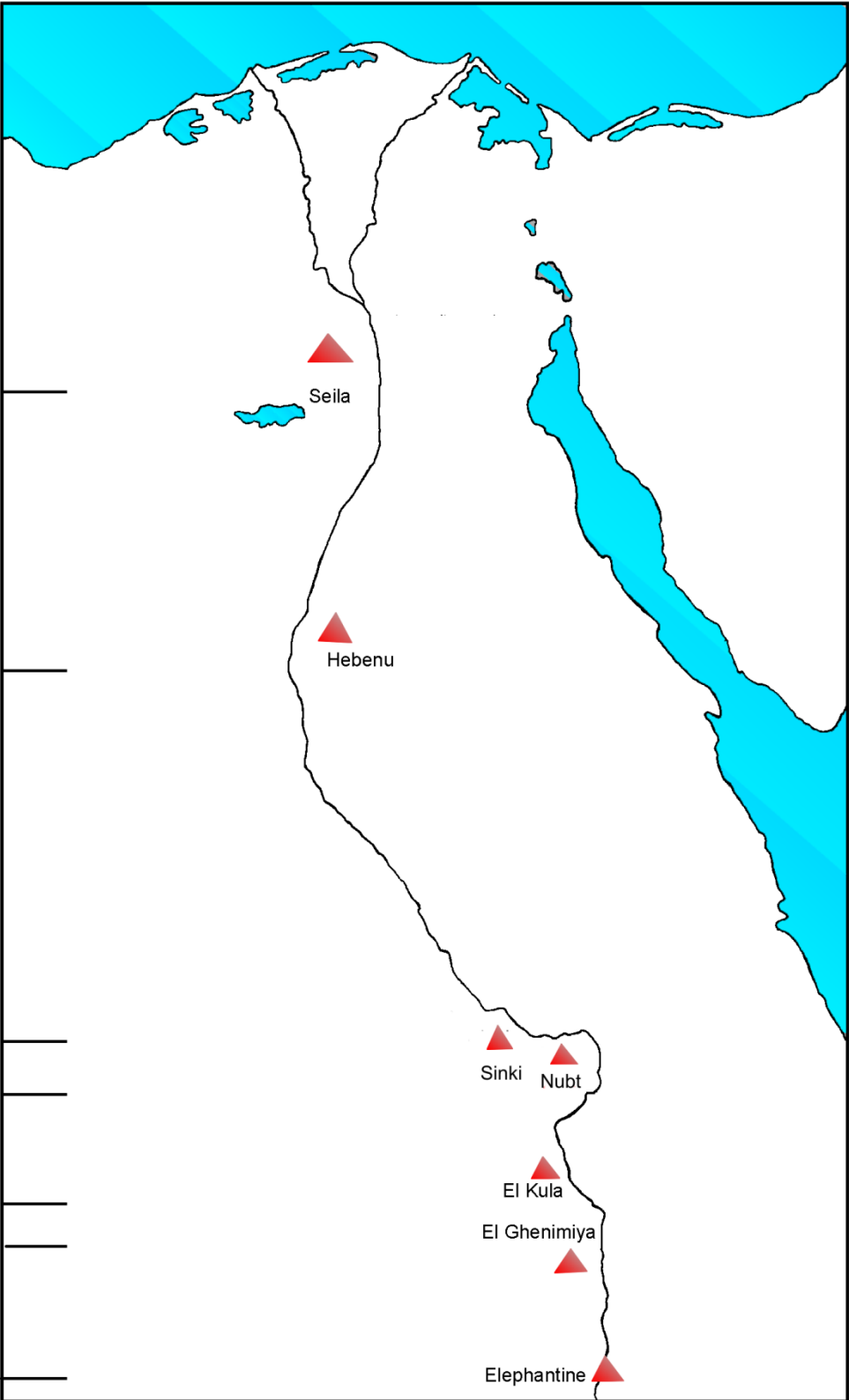
Visiting the layer monuments in the 70^{ties} seemed to be as if they were in the wilderness; today 2008 land reclamation of the Nile Fayum Divide by Seila, expansion of cultivation around Sinki and irrigation dikes by Nubt have changed the picture.

At the western corner of Sinki where the height of the ruin is greatest, there are 16 preserved courses of masonry, in layer 2. At the time of my discovery 3 years earlier there were 17 courses at that corner.

Some of the layer monuments do not appear on maps of the Survey of Egypt; for that reason, extracts have been drawn showing the region of the layer monument. From "Google Earth" the precise coordinates were added.

Hebenu is on the edge of the east desert and Elephantine is on an island, the others are found on the edge of the west desert.

Contrary to what was generally believed, the layer monuments were not oriented to the course of the river, data on the orientation, distance, river course, and deviation has been presented by icons.



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Name	Mon. base length	Nucleus base length	# Layers of the nucleus	Core base length	Outer facing layer	Thickness of accretion layers	Present height	Original height
Seila	31.1	26	2	15	1	2.6	8	17.8
Hebenu	22.5	18.3	2	10	1	2.1	5	12.9
Sinki	25.09	18.6	2	10.4	foundation	2.6	4.5	13.1
Nubt	23?	18	3	5.8	?	2.1	5	12.9
el Kula	23.6?	18.6	2	12?	Lost	2.1	8.5	13.2
el Ghenimiya	22?	18?	2	10?	?	2.1?	5.5	?
Elephantine	22	18.46	2	10	foundation	2.1	4	12.8