

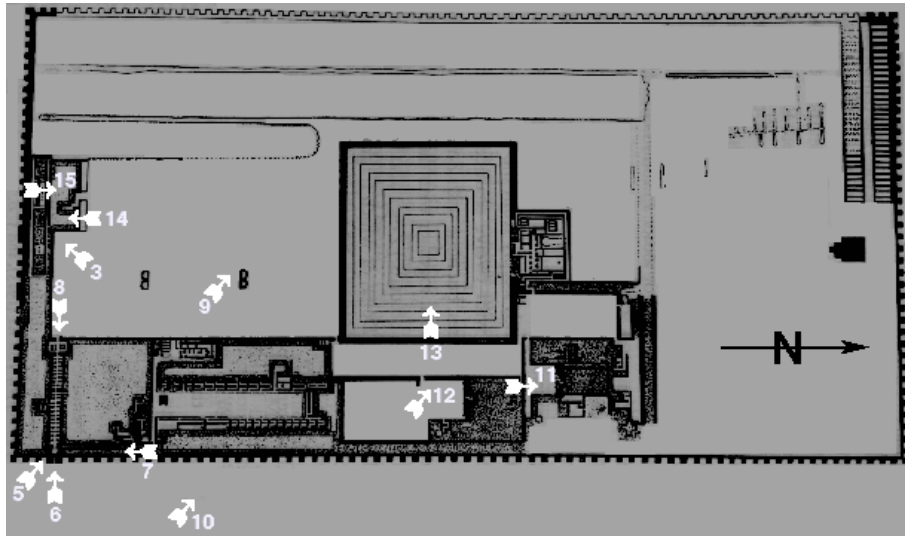
## **1 : Funerary Complex of Djoser at Sakkara.**

**Sakkara is one section of the great necropolis of Memphis, the Old Kingdom capital and the kings of the 1st Dynasty as well as that of the 2nd Dynasty are mostly buried in this section of the Memphis necropolis. It has been of constant interest to Egyptologists.**

**Three major discoveries have recently been made at Sakkara, including a prime minister's tomb, a queen's pyramid, and the tomb of the son of a dynasty-founding king. Each discovery has a fascinating story, with many adventures for the archaeologists as they revealed the secrets of the past.**

**Sakkara is best known for the Step Pyramid, the oldest known of Egypt's 97 pyramids. It was built for King Djoser of the 3rd Dynasty by the architect and genius Imhotep, who designed it and its surrounding complex to be as grand as it was unique and revolutionary. Imhotep was the first to build stone tombs in honor of the king's majesty. His many titles included 'Treasurer of the King of Lower Egypt', 'Administrator of the Great Palace', and  
"Imhotep the Builder, the Sculptor, the Maker of Stone Vessels.**

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The funerary complex of Djoser (Zoser) is believed to have been built around the beginning of the 3rd Dynasty. It is a walled compound that is constructed from stone rather than the mud brick that was used before this time. The stones that are used are different from the huge stones used in the pyramids at Giza, in that they are small in size. Imhotep was the architect of this revolutionary wonder. He was later worshipped as a god for the remarkable craftsmanship in the complex. Imhotep translated into stone the early Egyptian architecture of mud-brick, wood and reeds. This is seen in many of the monuments that are in the complex.

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The entire complex was once surrounded by an enclosure wall, that when complete, was about 600 yards (549m) long and 300 yards (274m) wide and rose to over 30 feet (9.1m). The wall is made of brick-size stones and is very impressive in its own right. the size alone would have made the wall an incredible Just project, but that is not the only thing impressive about this enclosure wall. The wall has projections and recesses that would have more than doubled the amount of stone and work required. The craftsmanship is very meticulous. The purpose of the wall is thought to have been one of symbolic nature, not of military protection, for the funerary complex inside.

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The entrance to the complex is a very narrow passage. The gateway on the eastern wall is the only ancient entrance to the complex. However, the wall contained several false doorways. The entrance ceiling is a simulation of a roof made from split logs This is the first of many organic original imitations.

As you pass through the entrance, on the left and right, there are reproductions in stone of a double door. The doors appear to be able to open and close. These are permanently open Past the double doors is the colonnade. The colonnade has almost entirely been reconstructed by fitting bits and pieces of the stones found in the sand. There are forty columns in this area and are thought to represent the provinces or nomes that were in existence during that time. Originally the colonnade had a roof and would have formed a long T-shaped gallery.

The columns of the colonnade resemble bound reed bunches. Most of the columns have seventeen stalks. The ones toward the end have nineteen, as do the double freestanding columns on the western end. The columns are spaced closer together toward the west from the eastern entrance. This makes the distance seem greater.

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The colonnade opens up into the Great Court. There are two altars near the center of the court. These altars are thought to have been part of the Sed (Heb-sed) festival. Very little is known about this festival. It is thought to have been a great public event in which the king was to run an actual race to prove his physical fitness to rule.

The Heb-sed Court is also thought to have played a part in the Sed festival. To the north of the colonnade is a double row of shrines that is called the Heb-sed Court. Most of these shrines have been reconstructed. At the far end of the court is the base of a statue that has been destroyed except for four pairs of unidentified feet.

The House of the South (Southern Buildings) is just beyond the Heb-sed court. The buildings were discovered during a 1924-26 excavation. The entrance to the southern buildings is located between the second and third columns, which makes the entrance off-center.

The House of the North (Northern Buildings) is just further along from the House of the South. Each column is carved to resemble an opened papyrus stalk.

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**On the other side of the great courtyard is the Step Pyramid. Also located in the complex is the mortuary temple as well as the southern tomb.**

**Across the Great Court of the Pyramid Complex of Djoser (Zoser) (2667 - 2648 BC), the second king of the 3rd Dynasty, stands the Step Pyramid. It is believed to have been created by one man, Imhotep. He has been called Doctor, Sage, Architect, Astronomer and High Priest. During an excavation in 1924-26, a pedestal of a statue of Djoser (Zoser) was found. This complex represents the first major work in stone. That is, unless there are other works that have yet to be found.**

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**On the Pyramid, most of the outer casing is gone. In some places the core masonry has disappeared as well. It is obvious there were different stages of construction. The eastern side gives the best side as picture, but it can be seen from the northern and southern wall.**

**The original structure was an underground burial chamber. This chamber was rare in that it was square; most mastabas were rectangular. The royal tomb is 28m underground with a vertical shaft leading to it. The entrance was sealed with a 3 ton piece of granite. The face of the mastaba was a fine Tura limestone. Apparently it was intended for this to be the finishing touches to**

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the building. It was then enlarged all around with ten feet of additional limestone and then again with an extension on the eastern side. The extension was twenty-five feet of limestone to make the mastaba rectangular. Again, it was enlarged and a two-tiered structure was made. A series of corridors and a tomb chamber was dug. Some of the chambers are lined with blue tiles. Some scholars think this tomb was intended for a member of Djoser's (Zoser's) family, but not for him. The only other site that has similar tiling is in the South Tomb which is located in the Djoser (Zoser) complex as well.

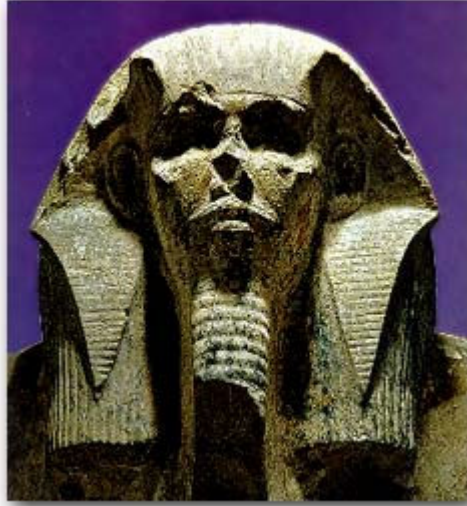
After the third stage was finished, the process to make it a true step pyramid was begun. Over 200,000 tons of stone was used to make the additional two tiers that went above the existing two-tiered structure. An additional two tiers were added above the existing four to make it into the six-tiered pyramid which is there today. A Tura limestone face was added on.

On the northern side of the pyramid, a few blocks of the casing remain. The casing blocks from the Great Pyramid rested on the individual blocks of the core masonry. The casing blocks on the



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step pyramid were set at an angle to take up the thrust of the successive layers.



The statue of Djoser (Zoser) that was found by excavators, was found in the Tomb Chamber. This statue was damaged but still intact. It is located in the Cairo Museum. The Tomb Chamber has a replica of the statue in this blue-tiled room. It can still be seen through the viewing slit that is at the entrance. The chamber is closed to the public. Scholars believed that the roof of the chamber could give way. The chamber walls have inscriptions that show beyond any doubt that this is indeed a burial chamber. also contains offering rooms and most of the other features that It were often found in both earlier and later tombs.

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**The Mortuary Temple is just north of the pyramid and is in total ruin. On the southern wall back across the Great Court from the pyramid are carved cobra heads or uraei. The cobra head is an often seen symbol in Egypt. It was once a symbol of the north.**

**The Southern Tomb is located just outside of the southern wall. Steps lead up the wall to the other tombs and monuments outside the walls. On the left side of the stairs, there is a large hole. At the bottom of the hole, is an entrance that leads to an amazing set of chambers. This Southern Tomb is closed to the public. These chambers are also lined with the blue tiles that are found in the**

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burial chambers in the Step Pyramid. The inscriptions found in these chambers are remarkable. They are perfectly executed and pure in line.



## **2 : Pyramid of Huni at Meidum.**

This king is another "strange presence" in the Third Dynasty; owing to his doubtful ownership of the Pyramid of Meidum it has been thought that this king with a possible reign of 24 years (Turin Canon), could have been the author of a renaissance which fortells the splendour of the reign of his follower (and son?) Nebmaat Snofru. Many of the latter's dignitaries might have lived or being born during Huni's reign. But, as we' ll see, there are only few concrete proofs of this king's reign and monuments.

The Papyrus Prisse (II, 7) names Huni as Snofru's predecessor [so the founder of Dyn. IV would be, as generally reported, the son Huni had by Meresankh I, the one who married Hetepheres I, another daughter of Huni and future mother of Khufu. The writing of the name Huni is found in the Turin Papyrus and] Saqqara king list, while it is wanting in the Abydos king list.

In the Old Kingdom cemetery at Elephantine, near the northern side of the (now disappeared) pyramid of the III<sup>rd</sup> dyn., a conic granite block was found (by H. Gautier in 1909) on which an inscription



named a king HU or NSWTH or Nsw Hun(i) (Seidlmayer in Spencer 1996) differently interpreted (Smith in C.A.H. vol. I cap.XIV, 1971) probably related to the name of a palace: 'Diadem (of the King Huni' (Barta , M.D.A.I.K. 29(1) p1.4.

The same Huni's name variant Swtenh, Nisuteh or Nswt H (w), is attested on the Palermo Stone (verso V,1) under the V<sup>th</sup> dynasty when Neferirkara commemorated this Nswteh dedicating a monument to him (Urk.I 248,12); for a mention in Metjen's tomb see below.



Therefore in the late Third Dynasty we have no trace of the name of this king in the full form "Huni" (but see Heni in the Wadi Maghara reliefs of Netjerykhet - Djoser [Inscript. Sinai I pl. I,2]: Heni's title is read as that of a woman in Kahl et al. Corpus, but it might be also a Iry A'at A'mw (Responsible of the Asiatic boundary) and thus this person would represent the future king (Huni as John Degreef kindly suggests me.

Now we must return to the discussion of the ancient attestation of the name Niswth or Swteneh or Nswt-Hw (see bibliogr).

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writing variant is Niswth, while we can overlook the MK and later sources, the writing of which must be a corrupted one, deriving from later Egyptians own misinterpretation of the original variant of the name, the same as earlier egyptologist have done ((Goedicke).

Hans Goedicke read the name as a nisbe Nj-Swtch (He who belongs to the one who seizes) referring the king to a god; the causative of the verb wtH or jtH (to draw, open) would be swtH (to seize); he related this name to the political program of Huni which would have been the king who finally established the Egyptian dominion on the southern boundary at Elephantine.

The granite cone inscription was read by Goedicke as the foundation of the Elephantine fortress by this king (now we know that previous kings were active on the island, as the clay seals of (Peribsen, Sanakht, Djoser, Sekhemkhet and Khaba show.

Later articles have rejected the reading of the name proposing Njswt Hwj (Barta), Hw-n.i nsw (Helck); Helck also pointed out that in Metjen inscriptions (see also below) do appear various other domains which had been read hwt Hn-sn and which could

be read hwt Hwn (j-nsw). He proposed to read the name instead as 'The Defeater'. Goedicke's translation of the Sshd-Ah has been rejected in favour of 'The adorned palace' or 'Palast: Stirnbinde 'der In.i-nsw-Hw.

Thus if Huni, who has his name in a cartouche on contemporary inscriptions, has to be equated with the Nswt H(u) or Nysuteh just quoted, it is likely that the pyramid on the isle of Elephantine was of his reign (the cone might have been a pyramidon).

According to recent theories (M.D.A.I.K. 36 p. 43-59 ; M.D.A.I.K. 38 p. 83-93 and 94-95) it appears possible that all the little step pyramids 10-17 meters high, discovered at Zawyet el Mejtin, Abydos (Sinki), Naqada (Nubt), Khula (Hierakonpolis), Edfu and Elephantine must be attributed to a single sovereign, maybe just Huni; the Seila pyramid is more developed (the german archaeologists date it to Snofru), but the Americans (and myself as well) prefer an higher datation to the reign of Huni (J.A.R.C.E. p.215) (when he had already ended the 8 steps Meidum 25 Pyramid). Nabil Swelim (op.cit.p. 100- ff) added two more possible contemporary step pyramids: one at Athribis (reported by the Napoleonic savants; see also Rowe in A.S.A.E. 38) and

Currelly, Abydos III, 1904 pl. XV, called ) another one at Abydos ('Tomb Chapel of Ay' of Dyn.XII).

Huni continued the pyramid-building tradition started by Djoser. His was built at Meydum, a site at the edge of the Faiyum Oasis. Huni's pyramid was the first Egyptian pyramid designed to have a square base and be geometrically "true." It was built as a step pyramid 7 levels high, then loose stones were packed around it to create the four sloping sides. The stones were then covered with a limestone casing. Bad idea... the casing wasn't able to get a good grip on the loose stones and eventually slid right off. It now rests all around the base of the pyramid as huge pile of rubble surrounding the 3 remaining steps.

Egyptologists used to think Huni's pyramid belonged to his son-in-law and successor Snefru; now it is believed that it was built for Huni, who died before it was finished, and that it was completed under the command of Snefru. Either way, there is no evidence that a sarcophagus was ever even buried in it.

It was once thought that Huni had built the 'Romboidal' or 'Southern' pyramid at Dahshur. This is surely incorrect.



**What remains to be fully proved is the attribution of the Pyramid  
of Maydum.**

**The Meidum Pyramid was credited to Snofru by the New  
'Kingdom graffitos calling it 'beautiful temple of Snfrw.**

**Today the belonging of the Meidum pyramid is still disputed  
(between Huni and Snofru); it appears certain that the Dahshur  
pyramids were both made by the founder of the IV<sup>th</sup> dynasty,  
whereas the one at Meidum, albeit what was thought about it by  
Kingdom Egyptians, might have been the funerary the New  
monument of HUNI; it is furthermore very very probable that the  
same Snofru tried to make of that 8 steps pyramid a true 'smooth-  
edges' pyramid, perhaps causing the collapse of its revetment.**

**Once again note that THERE'S NO CONCRETE PROOF FOR )  
THE ATTRIBUTION TO HUNI OF THE MEYDUM  
(PYRAMID).**

**On the period of the downfall of the structure there's not  
concordance among the scholars; the pharaoh Snofrw apparently  
began his works on it during or after the erection of the  
Rhomboidal pyramid (Mendelsshon 'Riddle..') and maybe it was  
the Meidum Pyramid collapse that caused him to diminish the**

angle of the Dahshur monument.

The arabic historian Al Maqrizi described the Meidum Pyramid (XV th century) as formed by five steps , while the graffitos by the workmen who built it represent it with 3,4 or 5 steps.

After the relations presented by F. Norden (1737) and R.Pococke (1738) and the brief explorationse of Vyse and Perring (1835) and Lepsius (1845), the monument was taken into higher consideration by Maspero (1882), Petrie (1892, 1910), Wainwright (thence by V. Maragioglio and C.Rinaldi (1964 ,1912) and Petrie.

The Pyramid was initially made in 7 steps for 60 m circa of height; it was built around a central core on the four sides of which were laid 6 layers of inclined blocks ( $74^{\circ} 5'46''$ ); these, decreasing in height from the nucleus to outwards, formed the steps.

Huni modified the monument by adding a new external layer next to the base, increasing the height of the inner layers, piling new blocks on their steps and perhaps adding a eight step on the central nucleus, the top of which was the vertex of the pyramid.

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After this last phase the height was 82 m circa (160 c.) and the base 122m (220 c.), with a 52° slope. (Note that we refer here not to the slope of the oblique layers -which remained unchanged- but indeed to the imaginary line passing by the edges.

Over the second and fifth step as well as on the ground around the pyramid there were found traces of ramps used to carry the blocks above. Each step had to be covered by thick limestone slabs

The descendery, for the first time dug in the pyramid' s mass, is a corridor (0,85 m wide, 1,55 m high, 58m long, with 28° of slope) that, starting from the northern face of the second step (circa 20 goes , (m of height, hence few meters above the first step floor down throughin the oblique layers and the core ending with 7 steps, and then, after further 9,45 m, with a little pit; hidden over this pit there's the entrance of a small passage ascending for 6,65 level ; the m to the funerary chamber floor, just at the ground chamber is 2,65m in width, 5,05 m in height and 5,90 m in length; its upper part is not dug in the rock but in the base of the pyramid nucleus and has a (N-S) triangular section (it's covered by a not on the true corbeled vault with 7 blocks); the chamber is north-south/east-west axis of the pyramid but it's very few est of the first (N-S) axis and some meters south of the second (E-W)

axis.

Some cords and 3 cedar wood poles near the chamber pit-entrance are the only objects found within the pyramid with fragments of a wooden coffin found in a recess of the horizontal corridor (Maspero).

Snofru's effort consisted in filling the steps and applying blocks to support the external smooth revetment.

The slope was decreased by few seconds of degree, the base grew to 144 m (280 c.), the height 91,7m (175 cubits). (J. Ortiz G.M. 154, 1996 p. 77-91; P. Testa D.E. 18, 1990 p. 54-69; F. Petrie 'Medum' 1892; D. Wildung R.d.E. 21).

The complex was surrounded by a straight wall, 1,4 m thick and 2m high, of which only a trench remained; the original size was m. 210x210 (400x400 c.) later augmented to 220,5 x 236,25 (420 x 450c.) (Testa in D.E. 18).

The chapel on the pyramid east side, square in plant and with two uncarved stela, should have been projected by Snofru (thus in

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the third and final constructive phase), because the size reciprocal relations in cubits refer to basic models used in the third phase (cfr. P. Testa in D.E. 18 page 63). Meidum (Huni-Snofru).

The 210m ceremonial causeway disappears beneath the fields of the valley; it had walls 3 cubits thick and 4c. high its floor was 6 cubits large and  $3^{\circ} 98' 22''$  inclined; the ramp is almost  $4^{\circ}$  south than the pyramid East-West axis.

The small south pyramid, 26,5 m of base (50 cubits), had four steps, a descendery, corridor and funerary crypt; both Petrie's (Meidum) as Maragioglio - Rinaldi's (op. cit. III p. 47) publications lack of informations to deduce its possible with the first two construction phases or the contemporaneity third one, thence to Huni or Snofru.

We are here in presence of the prototype of the royal funerary monument of the subsequent dynasties, with the pyramid, the satellite pyramid(s), funerary temple, ceremonial way, and valley temple (this latter hasn't been found yet at Meidum); they are pointers of a new architectural typology that will continue to develop at Dahshur, Giza, Saqqara.

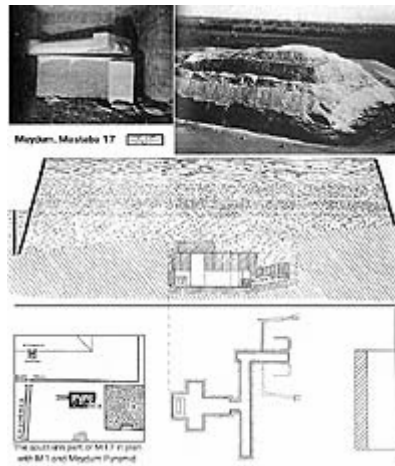
It's not sure, as just told, whether these innovations must be credited to Huni; it's much more probable that at least the east temple and the causeway must be attributed to Snofru, whereas nothing can be said about the satellite pyramid and the valley temple; the archaic enclosure wall is surely Huni ' s work.

However it seems that the most recent essays on this period prefer to credit Snofru with the whole building of the Meidum pyramid since the beginning of its stepped phase. There is the recent new of the finding of another chamber in this pyramid.

The Meidum necropolis is noteworthy for some officials' mastabas too: Nefermaat (another son of Huni and first vizir of Snofru as well as father of Hemiunu, the architect and vizir of Khufu) was buried with his wife Itet in the tomb (M 16) from which the famous 'Geese of Maidum' were taken; not less famous is the statuary group of Rahotep and Nofret, whose tomb (M 6), once again double, produced a beautiful serie of reliefs now scattered in various museums and private collections (cfr. J.E.A. 72); the largest mastaba (M 17) is near the east side of the pyramid, but its owner (maybe a royal prince) is unknown.

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Swelim (op. cit. p.97) thought that the bones fragments found in its burial chamber could be those of Nebkara; but the author supposed,as well, that the substructure could have been built by Neferka and the superstructure by Huni (and Snofru).



### **3 : Pyramids of Snofru at Dhashur.**

**Currently Dhashur is one of the best places to see large pyramids, because it has few visitors, yet is not a far drive from Cairo.**



**The Red Pyramid**

**Located in South Saqqara stand the pyramids of Dhashur (Dahshur). The Red Pyramid and the Bent Pyramid are about 2 km south of the Mastaba Faraoun. The constructor of these pyramids is thought to have been Snofru (2575 - 2551 BC), who was the first ruler of the 4th Dynasty. Snofru built these two pyramids and is thought to have built the pyramid at Meidum.**



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His son was Cheops who continued his constructive tendencies.

The Red Pyramid is thought to be older and is the only one that can be entered at this time.. The Bent Pyramid was built out of limestone which was quarried locally. The casing was of polished Turah limestone. This pyramid is also known as the Southern Shining Pyramid. The casing blocks are very stable and very difficult to remove because they slope inwards. The base of the pyramid is 188.6m and is 105m high. Because of the bend in construction, the original angle would have made it 128.5m high.



**The Bent Pyramid**

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The Bent Pyramid is unique for two reasons. The first is the angle change. There are two theories for this change. The first is that the builders may have gotten tired and wanted to reduce the volume and to finish faster. Another is that when the pyramid at Maidoun collapsed, the architect lost his nerve and changed the angle. The angle at Maidoun was 52 degrees as is the base of the Bent Pyramid. At the bend, the angle is changed to 43.5 degrees up to the peak.

The second reason is that it has two entrances. The first is in the middle of the northern side and is about 12m above the ground. It leads to the upper chamber. The second entrance is on the western chamber. side and is just above the ground. It leads to the lower chamber. The floors of both chambers were built 4m deep with small stone blocks.

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