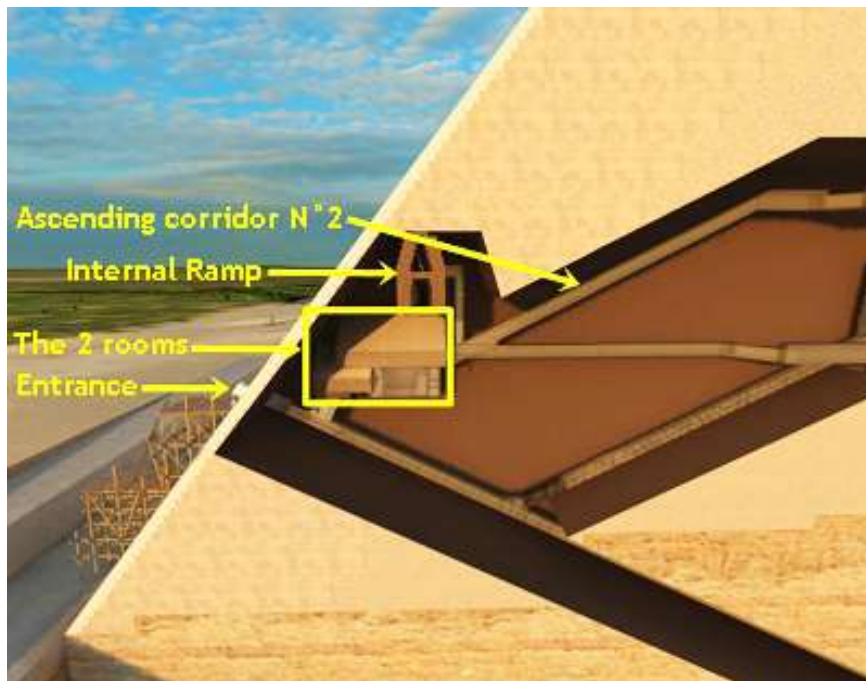




Friday February 25, 2011

The Great Pyramid "multiple purpose" entrance, according to Jean-Pierre Houdin¹

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March 30, 2007: *Khufu Revealed*.

January 27, 2011: *Khufu Reborn*.

Two dates that punctuate, for the architect Jean-Pierre Houdin, some twelve years of research on the "why" and especially the "how" of the pyramids of Egypt. Two important moments, punctuating the evolution of a "theory" whose premises go back to 1999, when the engineer Henri Houdin, father of Jean-Pierre, had the intuition that something was wrong with the "normalized" presentation of the construction site of the Great Pyramid. Hence the idea of the internal ramp, which will see thereafter the developments that we know.

In an exclusive interview granted to *Pyramidales*, Jean-Pierre Houdin presented the main lines of *Khufu Reborn*, namely his new reading of the internal structures and the environment of Khufu's Pyramid.

Different notes of this blog have already been devoted to this inventory: the antechambers, the King's Chamber, the "Noble Circuit", the layout of the Giza Plateau...

The entrance to the pyramid has also been re-read and Jean Pierre Houdin has provided the following information for the readers of *Pyramidales*.

¹ <https://pyramidales.blogspot.com/2011/02/lentree-usage-multiple-de-la-grande.html>



The entrance of the pyramid and its scaffolding

We are (approximately) in the year - 2550. King Khufu, pharaoh and sovereign ruler of Egypt, is dead. Long live the King!

His body is transported to Giza in his Solar Boat to the lower temple, where the priests must proceed to the mummification, a ritual that will last seventy days. The pharaoh is then ready for his great journey to the Imperishable Stars, transiting through the Royal Causeway of his pyramid, built for this sole circumstance of the solemn funeral.

The funeral procession begins by going up the monumental causeway that connects the temple of the valley to the upper temple, at the foot of the eastern face of the pyramid. *There,* comments Jean-Pierre Houdin, *"the priests proceed to the ceremony of the opening of the mouth in order to give the King back the use of his senses. He then recovers his speech and can appear before Osiris for the weighing of souls. No reproach having appeared during his confession, he is ready for eternity in the afterlife."*



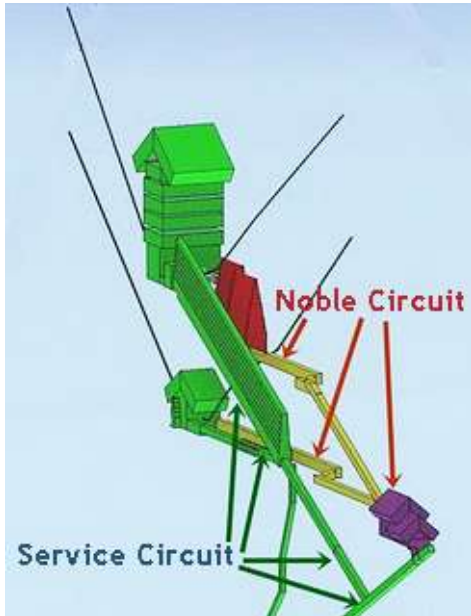
Ceremony at the Upper Temple

At sunset, the procession reaches the entrance of the last residence of the pharaoh - "his" pyramid -, more than seventeen meters above the ground on the northern face.

To do so, it takes a wooden scaffolding, built many years ago, which gives access to the interior of the monument. It is then about to enter the bowels of the monument to reach the King's Chamber, where the voluminous granite sarcophagus was put in place, because of its size, in the year of its construction.

"Service circuit" and "Noble Circuit"

According to Jean-Pierre Houdin, the funerary procession will indeed enter through the outlet of the descending corridor on the North face but, contrary to what is commonly believed, will abandon the latter a few meters further on, ignoring the entire route that follows it: ascending corridor (to which we will now add the precision "N° 1"), Grand Gallery, Portcullis Chamber, access corridor (to which we will also add the precision "N° 1") to the King's Chamber, a route that visitors from all over the world join, since tourism and curiosity exist, by taking the break-in tunnel dug in the North/South axis by the Caliph al-Ma'mun in 820 CE.



This route will not be followed, and for good reason: it has been blocked in several places. It was used, as a "service Circuit", during the whole period of the construction of the King's Chamber and the strange structure that covers it.

At the end of this construction, which had become useless, it was abandoned to the silence of the stones, until it was frequented by "visitors", more or less well-intentioned, who were far from imagining that such was not the true circuit for the royal funeral.

The procession will follow, according to the indications of Jean-Pierre Houdin, what we could call a "second itinerary", but which in reality, to use the terms of the architect, is the "Noble Circuit", the one that was conceived and built for the only day of the solemn ceremony of the royal funeral.

Consequence of this configuration, unknown to this day: the original entrance to the Great Pyramid, in order to give access not only to the "service Circuit", but also and above all to the "Noble Circuit", must include in its very structure this functional duality, which is supposed to remain secret so as not to give any indication to the eventual desecrators of the royal burial. Proof of this is that the Caliph al-Ma'mun and his soldier-sappers did not succeed in detecting the true entrance to the monument, but undertook to dig at a lower level to lead to... the "service Circuit"!

Presence of clues



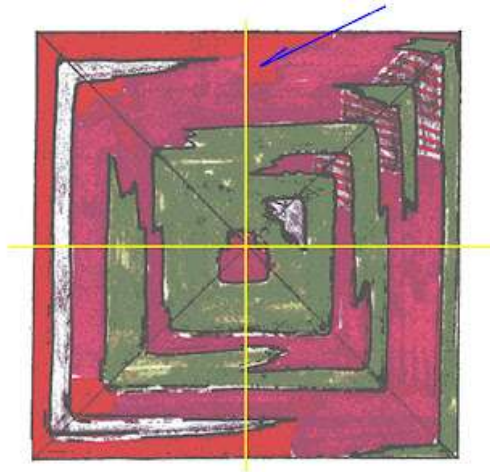
Excluding the hole of al-Ma'mun, which is like a wart, even very useful today for the access of the tourists, in the northern face of the pyramid, and taking into account the fact that this pyramid is, since several centuries, deprived of its facing blocks in Turah limestone, which clues can be revealing of the true entry of the "Noble Circuit"?

Jean-Pierre Houdin enumerates them thus:



Chevrons and "Strabo's stone"

- the Turah limestone chevrons above the original entrance are oversized for the covering of the descending corridor (two cubits wide, i.e. 1m 05) and, moreover, much too high in relation to it;
- We can see on the spot, by measuring the existing oblique stops, that six pairs of rafters are missing in the lower part and three pairs in the upper part: the lower series covered a void, while the upper series constituted an overlap of the roof, extending a second void *"that the Egyptian builders,"* says Jean-Pierre Houdin, *"who were sparing with time and materials, must have had a very good reason to build. The current large hole did not exist at the time. Everything that is visible today was embedded in the mass of masonry and set back behind the original North face, some ten meters away. Closest to the face, a first room (where the current hole is), was located just above the descending corridor and a vertical access well, centered in the room, directly connected these two structures. The rest of the descending corridor is supposed to have been used by the funeral procession, but in reality it was only used by the workers of the pyramid construction site;*



Arrow: overdensity zone

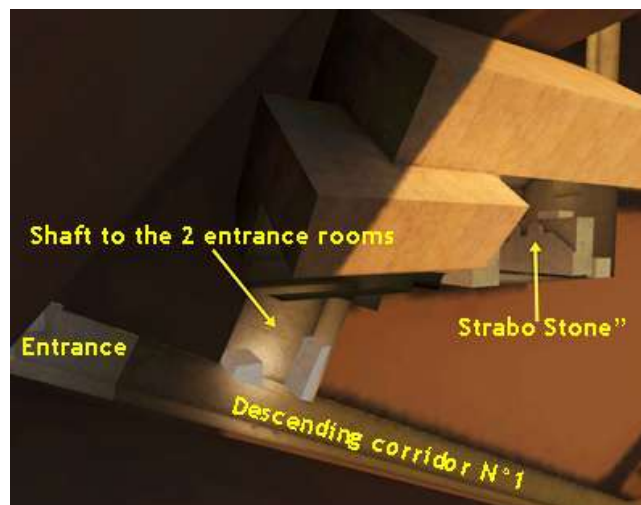
- Measurements carried out 25 years ago by microgravimetry," continues Jean-Pierre Houdin, "detected an anomaly, namely the presence of a zone of strong overdensity under the North face of the pyramid, in the exact extension of the chevrons of the entrance. This zone is located east of the North/South axis, thus in the alignment of the known corridors of the pyramid. Moreover, this overdensity stops at the 2nd section of the supposed internal ramp. (1)

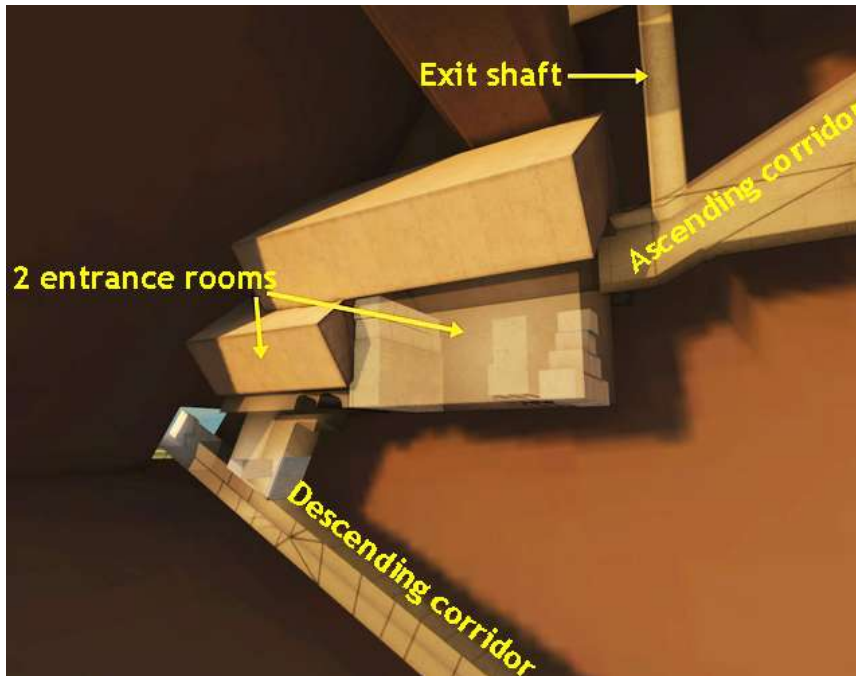
- the fluted block inserted under the first pair of chevrons, and previously stored at the bottom of the second room, was visibly pushed from the inside, traces of mortar overflowing under the right chevron. In front of this block, one can see that the limestone floor has been grouted with plaster and has received a surfaced and perfectly flat finish;

- the fluted block does not go all the way to the tip of the opening; a triangle about 40 cm high has been filled in with masonry centered on the chevrons ridge.

About this stone, the Greek geographer Strabo (1st century B.C.) wrote: "At a certain height on one of its sides is a stone that can be removed, and, once removed, reveals the entrance to a tortuous gallery or syringe, leading to the tomb." (2) Hence its current name of "Strabo's stone".

A single entrance leading to two rooms

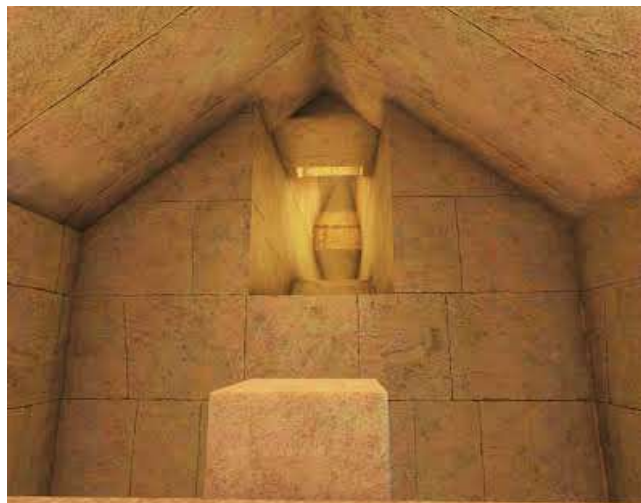




"Faced with these observations, I had proof," Jean-Pierre Houdin continues, "that other chevrons had been placed up to a very small distance from the face, in front of the chevrons currently visible. It was therefore obvious that in the area of the current gaping hole, there were two rooms, one in front of the Strabo stone, and the other behind this stone, slightly offset in height.

"I then understood that the Egyptians, great architects that they were, had imagined a single entrance to serve several corridors at once. This entrance could lead to any room in the monument, and thus serve for the funeral of Khufu and, at any other time, for access to the site during the construction of the pyramid.

"The two rooms under the chevrons made it possible to get a direct connection with the descending corridor and to link it with a second series of corridors that led to the Queen's Chamber and the King's Chamber without passing through the Grand Gallery."





By the complexity of its configuration, the original entrance of the pyramid is thus characterized by a clever diversity of use: it gives access, by the descending corridor, to the "service Circuit" (of no use at the end of the construction site), and it opens on the "Noble Circuit", which immediately comprises two distinct axes: one, horizontal, in the direction of the Queen's Chamber (let's not forget that this room was intended, in case of premature death of the King, to accommodate his burial); the other, ascending, as the first part of the route leading to the King's Chamber.

The two successive rooms have the function of starting the "Noble Circuit" (the "Royal Way") deep inside the mass of the pyramid (the rear of the second room is about 16 meters from the façade). Contrary to all the previous pyramids, the King's Chamber is very high up in the mass of the pyramid; therefore, it is no longer a question of connecting it by a "descending corridor", which opens practically perpendicularly to the face, but first by an "ascending corridor" (more or less parallel to this face, opening tangentially and no longer perpendicularly: a "whistle" configuration that is very complex to deal with), and then by a horizontal corridor (No. 2) opening on the two antechambers. Moreover, the passage of the internal ramp in the area would have had the effect of cutting off the ascending corridor N° 2, through which the funerary "Noble Circuit" to the King's Chamber begins; the simplest and most economical solution was to push the departure of this corridor farther into the mass, with the two horizontal entrance chambers serving as connecting and transfer modules.



Worker's exit route

At the same starting point, a well is connected to the internal ramp next door, for the evacuation of the last workers: *"At the end of Khufu's funeral"*, Jean-Pierre Houdin explains, *"and after having sealed the pyramid at several 'sensitive' points (chamber, antechambers, access corridor, entrance room), the workers are supposed to have left the funeral circuit via the internal ramp by joining it through a connecting well dug just behind the second entrance room, at the starting point of the second ascending corridor. The designers had previously simulated this device in the construction site model dug into the bedrock some fifty meters east of the pyramid."*

Previously, the priests and other officials of the funeral ceremony left the pyramid as they had entered it, taking exactly the same route, as a result of the nobility of their function.



(1) The internal ramp was one of the major elements of *Khufu Revealed*. It is obviously still present in *Khufu Reborn*, but with variations that will be the subject of a future note in *Pyramidales*.

(2) The exact translation of the Greek text, as confirmed for example by Ian Lawton, author of *Giza, the Truth*, in a letter addressed to Jean-Pierre Houdin, is indeed *"leading to the tomb"* (and not "to the foundations"). It is the one proposed by Amédée Tardieu: *"At a certain height on one of its sides is a stone that can be removed, and, once removed, reveals the entrance to a tortuous gallery or syringe, leading to the tomb"*.

Illustrations: copyright Jean-Pierre Houdin/Dassault Systèmes

