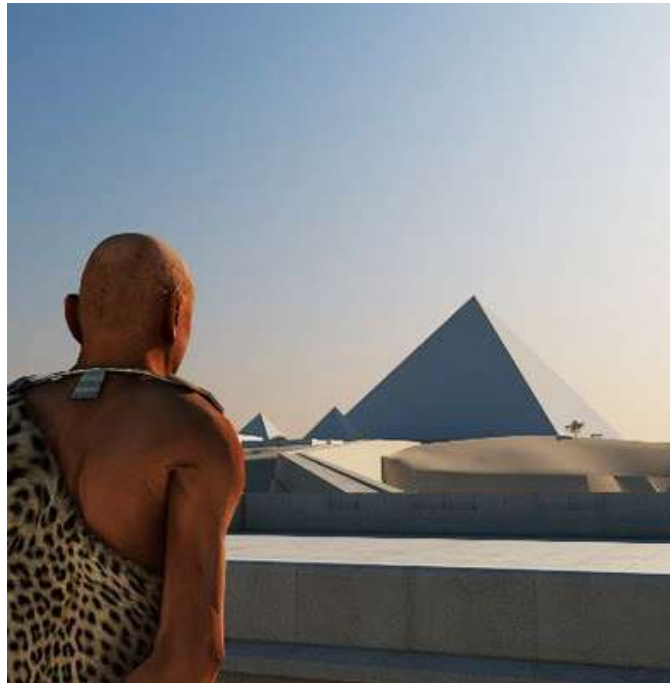




Wednesday December 7, 2011

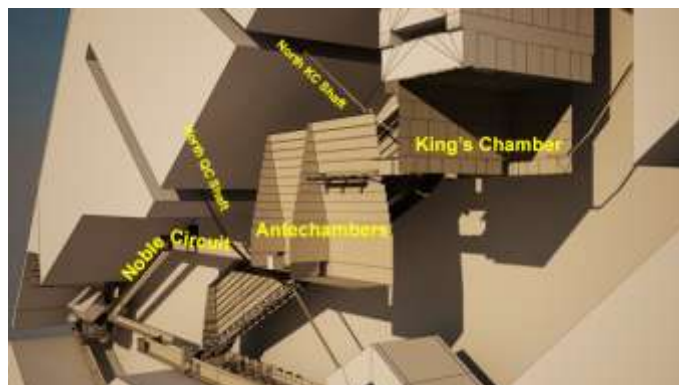
"Khufu Reborn", a year after



In January 2011, *Pyramidales* echoed the international press conference in which Jean-Pierre Houdin and the "Khufu Team" at Dassault Systèmes presented Phase II of the theory of the author of "Khufu Revealed", formulated under the label "Khufu Reborn". Subsequently, *Pyramidales* fully described and illustrated these new developments regarding the construction and the technical configuration of the Great Pyramid of Giza Plateau.

Almost a year later, it seemed interesting to know how this new component of the theory "houdinienne" has been received and interpreted, both by the general public and by experts and enthusiasts of Egyptology.

Jean-Pierre Houdin has kindly agreed to answer questions from *Pyramidales*. Let him be here very warmly thanked.



Pyramidales:

Jean-Pierre Houdin, here about one year you have presented publicly, at an international press conference, the extensions of your research and work on the construction of the Great Pyramid of Giza, "Khufu Reborn" following "Khufu Revealed".

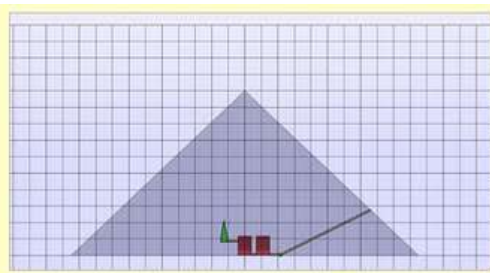
Looking back, how do you assess the reactions generated, both among the general public as from specialists or experts in Egyptology, by these additions to your "theory"?

Jean-Pierre Houdin:



The presentation of "Khufu Reborn", on January 27, 2011 at the Géode, was already for me the expression of a major vote of confidence from my friends of the "Khufu Team" at Dassault Systèmes. For some reasons that have nothing to do with science, no scientific mission was carried out on the site since the revelation, on March 30, 2007, of the theory of the internal ramp; the result is the inability to get a scientific proof of the existence of an internal ramp.

Otherwise, the discovery by Dr. Bob Brier, while filming a documentary in 2008, of a large unknown room behind the notch on the north-eastern edge was a clue of great importance. Given this context, the decision made four years later by the "Khufu Team" to help me, by means of an extraordinary 3D animation, to go even further in my revelations with the announcement of the possible existence of two antechambers next to the King's Chamber, was for me a major event for the theory. After nearly eight years of silence on this part of my work, I can now show the consistency of such research. No researcher has ever been so far in the study of Khufu's pyramid, as much on the architectural project drawn up by the designers of the time as on the implementation of the project.



Funerary apartments in the Red pyramid



Funerary apartments in the Khufu pyramid

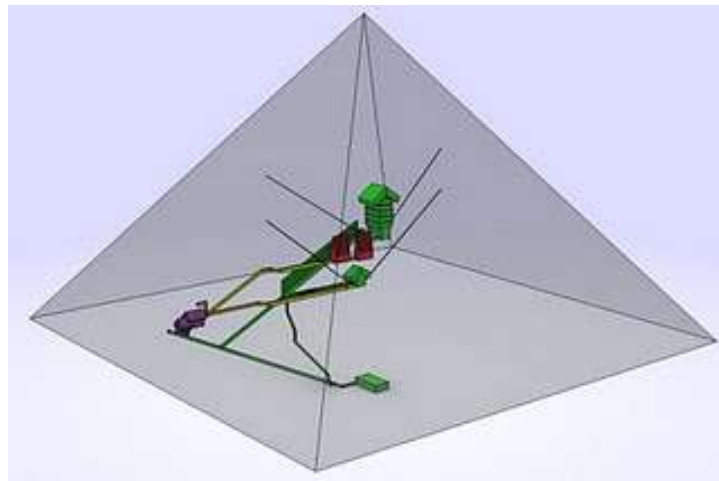


Khufu architectural inheritance
from his father Snefru

In addition to the satisfaction they bring, public reactions are quite telling: one can see, in my proposals, a more and more perfect consistency, based on simplicity and logic, which fully answers to the questions that are related to this construction and its purpose. The public finally discovers the intelligence of the ancient Egyptians through a project that seemed "inexplicable". There is an explanation for any human intervention, especially when it comes to construction. There is neither magic nor miracles in this area. Now, about construction specialists, there again responses are very positive, moreover as the 3D language speaks very convincingly.

“...a more and more perfect consistency, based on simplicity and logic, which fully answers to the questions that are related to this construction and purpose.”

Finally, let's talk about experts in Egyptology ... the French ones! They have not deigned to usefully express themselves from the beginning of the theory. So why should it be different now since I'm confronting them with a reflection they have never undertaken. In contrast, many foreign Egyptologists have shown me a growing interest in my work. Unfortunately, as always, explanations of Egyptology about the pyramid of Khufu are based on a trompe-l'oeil: a North-South cross-section of it showing three rooms, some corridors and the Grand Gallery. From there, this discipline proposes us only theories which can't resist to any careful analysis, whether it is about the purpose of the different internal parts, about the funeral of the King and even less in constructive terms. Yet the construction of the pyramids during the 4th dynasty, with Snefru, Khufu and Khafre, is the result of a real know-how, of course constantly improved, but at the service of architectural continuity. The so-called "rupture" of Khufu, based on the famous North-South cross-section view, is not a rupture at all. It is the result of an Egyptological vision of the monument, not from an architectural vision. Architecture must take again its place as this one is at the base of the construction, and is the only one which can bring together all the elements for understanding the will of the designers. The stones speak to those who can understand their language ... an architect, for example.



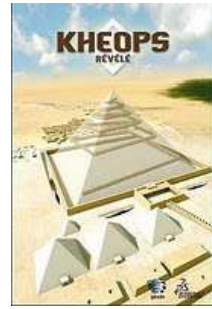
Pyramidales:

I note, by consulting as closely as possible, the recent literature - in the paper press articles or on the web - about you, that your name remains mainly attached to the original theory of the internal ramp, as if version 2 of your description of the Great Pyramid, including in particular the two antechambers next to the King's Chamber, was encountering some difficulty ... in making a breakthrough. In other words, "Khufu Revealed" is still popular, while "Khufu Reborn" still seems confined to more confidential spheres.

Do you share that impression?

Jean-Pierre Houdin:

This apparent state of affairs is absolutely not related to the "quality" of the information revealed on January 27 (the probable presence of two antechambers close to the King's Chamber), but to the "quantity" of information that have spread on the web after the press conference. In March 30, 2007 there was an extraordinary "cocktail" between quality and quantity, the theory being propelled, thanks to a very innovative presentation in 3D animation and in real time, on top of the news for more than 24 hours. The news went around the world with the time zones. This type of "state of grace" is exceptional and it clearly set the bar very high for any new statement on the subject.



The purpose of the press conference on January 27, 2011 was quite different: push the theory a little deeper in the minds of people, by revealing the elements (the 2 antechambers) that could have blurred the message if they had been included in the 2007 presentation. The conference itself was a great success, major French television channels (TF1, FR2, and FR3 in particular) talking extensively about the event in their mid-day and evening news. As for news agencies and newspapers, they have widely spread the information on their side, except for a large agency that has managed a very nice "missed" on the subject which resulted in fewer articles than in 2007. But I believe that above all, there is a major event not included in the program which partly stole the show to "Khufu Reborn": on January 25, 2011, the first news about a revolutionary embryonic movement were arriving from Cairo... on January 27, the day of the conference, the revolution in Tahrir Square was already on the front page in all media. You know what happened next.



Finally, when you search the theory on Google, there are more responses related to 2007 than to 2011. This is only linked to the quantity of information available, not to the quality. But I can tell you, and the "Khufu Team" certainly agrees with me, that the message is very well perceived. Every day I receive, from everywhere around the world, many e-mail from passionate people who know a lot about pyramids and who are totally convinced by the overall consistency of the theory.



A visit to the website "Khufu Reborn" made by Dassault Systèmes enables them to have their "feet on the site" as no one had ever proposed. They emerge from this journey through time by sending e-mails whose terms do not allow for more room for doubt.

Finally, I conclude on this issue by taking your sentence: "In other words, "Khufu Revealed" is still popular, while "Khufu Reborn" still seems confined to more confidential spheres".

For me, on the front line, I perceive absolutely no confinement. "Khufu Reborn" perfectly complements "Khufu Revealed" and anyone who is interested in my work ends up having knowledge of the theory as a whole.

The goal is reached.

Finally, about the "confidential spheres", I would say that these terms are more applicable to a very small number of people in the world of Egyptology who have chosen to ignore me. Too bad for them, the dialogue would have been interesting.

Pyramidales:

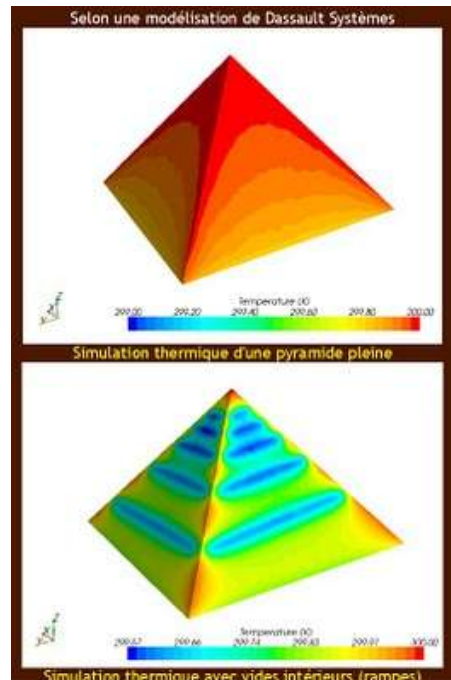
During your public presentation of "Khufu Reborn", in January 2011, contacts were established with two experts from Laval University in Quebec, for a possible in-situ observation of the Great Pyramid, using the technique of Multipolar Infrared Vision. Where are you now about this project?

Necessary complement to this question: such a project supposed and still supposes an implied agreement of the highest levels of Egyptian Antiquities. Now Egypt has experienced the upheavals that are known. Will the appointment of a new Secretary General of the Supreme Council of Antiquities, and a minister of Egyptian Antiquities, let glimpse a "window" to the completion of your project?

Jean-Pierre Houdin:

The collaboration with a team from Laval University, Professor Xavier Maldague, Matthew Klein and Clemente Ibarra Castanedo, is developing very well. Working meetings were held in June at the university and we have established a specific protocol, with a strategy for the establishment of a mission. In addition, a Multipolar Infrared Vision campaign was set up in Quebec: the experience is being applied to the "Redoute", a fortified building in the walls of Old Quebec, local authorities having warmly accepted to make the building available. We will therefore be able to refine the protocol based on the results acquired during this campaign.

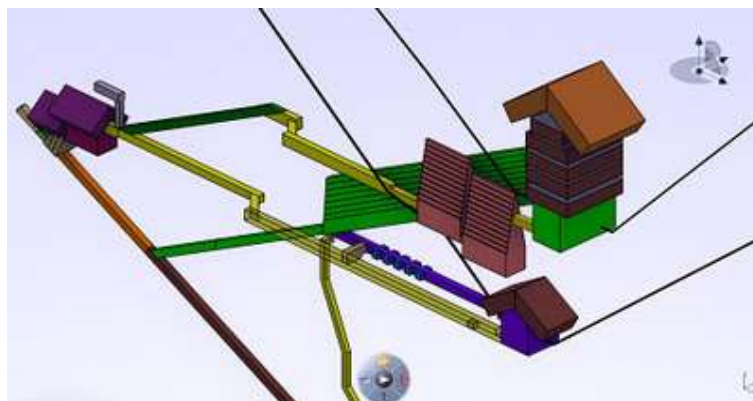
This leads me to answer the second part of your question: as always, it is essential that any survey to be carried on site with the Egyptians and in accordance with the legal authorities of the Supreme Council of Antiquities (SCA). The current situation in Egypt does not leave a clear vision of what is going at the SCA, the post of Secretary General being successively held by several people in a very short time. The current elections are an additional element of uncertainty about the future of this service. It follows that it is unfortunately impossible to see at the moment a "window" to complete the project.



Pyramidales:

Your theory as formulated in "Khufu Reborn" represents the culmination of your "reconstitution of the building site" of the Great Pyramid? Or is it likely to have new developments or improvements? If so, what are the new areas of your research?

Jean-Pierre Houdin:



The theory is now globally formulated, funerary architecture is determined, construction processes are detailed and the entire Giza Plateau is integrated into the explanation of the project and its progression. But as in any hypothesis, the details can still be improved. However, they will render the theory even more relevant. I am very pleased because the theory became more refined and simplified as while its developments and its logic were enhanced. Every step, every detail, every process, every architectural choice are supported by solid arguments or evidence visible in situ.

Many 3D simulations carried to extremes with the software Dassault Systèmes CATIA has enabled us to achieve a perfect virtual model of what I imagine. Now, only confrontation to the reality will allow us to correct any differences in detail. Doubt is part of the research, of course, but it is more and more difficult for me to imagine any other way apart from the technique "built from the inside" for the construction of the Great Pyramids. When I try to put myself "at the outside" in order to address the issue, and because of all the knowledge I gained during twelve years of research, I always understand quickly that I stumble against an impossibility. I had the time to turn the problem in every way, believe me!

“Doubt is part of the research, of course, but it is more and more difficult for me to imagine any other way apart from the technique ‘built from the inside’ for the construction of the Great Pyramid”

As I often say, Khufu's pyramid has not landed on the Giza Plateau by chance: it is the result of an evolution in the art of building from the early mastabas. Having studied all the pyramids built from Djoser up to Menkaure, it is now appropriate that I specify for each one their mode of construction, especially the two pyramids of Snefru at Dahshur (Bent and Red) and Khafre's pyramid in Giza. If construction "from the inside" is the rule, there are still variations adapted to each of the monuments in the building processes. The modeling of these pyramids shows the changes and can only complement and strengthen the principles of the theory.

Pyramidales:

Khufu's pyramid is considered the ultimate pyramid architecture on the Giza plateau, the culmination of the skills of the Egyptian builders. Does this mean that this pyramid is unique? Or do you think that the techniques used in its construction - in particular, from your point of view, the internal ramp - have also been used to build other pyramids, Khafre, for example, or Menkaure as well?



Henri Houdin, the father of Jean-Pierre, attentive to the research of his son

Jean-Pierre Houdin:

As I indicated in my previous answer, Khufu's pyramid is, at the beginning of its construction, the culmination of the expertise of Egyptian builders and is absolutely not a unique monument, although this pyramid is unique in its category (funerary architecture in the heart of the monument). The construction technique "from the inside" was applied to all large smooth pyramids built after the Step Pyramid of Saqqara. This does not mean that all smooth pyramids were built in part by an internal ramp. This technical process was only necessary for the large smooth pyramids of the 4th Dynasty (Bent, Red, Khufu and Khafre ... and certainly Meidum). For all other pyramids from Menkaure and after, Egyptians will continue to build "from the inside", but without recourse to an internal ramp; a construction gap penetrating in one side of the building will be reserved during construction before being filled at the end of construction. There are traces of a gap in the ruins of the pyramids of Neferirkare and Sahure at Abusir.

Pyramidales:

A fundamental question to me: regarding the multiple contemporary theories which succeed each other in an attempt to decipher - at last! - The "secret of the pyramids", what are, in your opinion, the strengths, or even more, the skills, that any researcher must or should show in this field?



Jean-Pierre Houdin:

I believe it is important to think first to the monument itself, to understand the design philosophy, to follow the logic of the scalable architecture of the time, to analyze in detail the components, and especially not to come proposing a gadget that could respond to a specific point of construction. The Egyptians have only pushed to the extreme, for Khufu, processes simple, logical, but controlled.

The schedule of conditions was clear: build a pyramid, just a pyramid, and not, for example, build a big ramp "at lost" or build locks to build a pyramid. One had to build without wasting any material, because each one had a cost. Extracting a stone to build an external ramp was not an end but a step in the life of this stone. Processes tailored to each major stage of construction lowered the cost of construction, because the same stone used in a process (external ramp) was recycled, in the following, as a component of the building itself. This is the great art of the Egyptians of the time.

What are the necessary skills? Certainly a good knowledge about construction, that makes sense to me ... especially when I see some theories that ignore gravity!

I do not think that the only study of texts can help to understand, especially when these texts are so few and sketchy. Herodotus is absolutely not sufficient, far from it!

To the contrary, to rely on the maximum knowledge of this period provides us a very important reference library. One can find common parameters, an architectural language and religious principles that it is mandatory to know to move.

Pyramidales:

You accompany with your encouragement the "Earth Pyramid" project, developed by Steve Ward. What do make you think this initiative is promising? What does this one reveals?



Jean-Pierre Houdin:

I have been contacted by Steve Ward a little more than a year now. Steve found my theory simple, logical, ecological and perfectly suited to his project to build a pyramid today. So there was already a likeable side in this encounter via the Internet. But what attracted me the most was the idea of the "Earth Pyramid" project (<http://www.earthpyramid.org/>) : to build a monument intended to cross the centuries for future generations, involving the younger generations of today in a large rallying movement.

Why is this initiative promising?

We never get something for nothing. The men and women who will support this initiative are those who will make the initiative promising. But this one has everything to become so: the project is positive, constructive, generous, peaceful, somewhat utopian (you need some to dream), dedicated to children around the world who have a "sacred" need to have another vision of Earth than the one they see all day long in the TV : wars, crises, disasters, famines ... nothing very pleasing in all this. So when someone is deeply motivated, fights for a noble and smart idea (transmitting messages from children intended to be read in a thousand years), I support, simply. It's a bit of fresh air in a quite turbulent world. And the symbol of the pyramid containing a "time-capsule" is a great idea. It is clear that this type of monument can defy time without too much trouble ... These are just the actions of men that can disrupt their life: who would dare attack a symbol dedicated to children from around the world?

