

Ancient Stereograms Found in the Valley of the Kings

“What if I could make a discovery in the Valley of the Kings” flashes through the mind of every tourist who ever strolled through the dusty pathways, wiped sweat with a shirt sleeve, and entered the tombs of the pharaohs. Most people think of finding a gold figurine, however, or stumbling over some rock to find it’s the edge of a long-buried entrance to an untouched burial place. Apparently there are other discoveries to be made there as I found myself during a seven-day tour of Egypt just prior to the beginning of the second Iraqi war. Tourism had understandably ground almost to a standstill. Allison Sills and I seemed to be the only two Americans in the country. Our tour guide, Ahmed M. Shawky Sawany, Inspector of Antiquities of Luxor Temple (on leave of absence) was determined to give us a complete hieroglyphic by stone Horus account throughout the entire trip. We had the advantage of being able to stroll leisurely through the artifacts accompanied by the running dialogue of the Chief Inspector for the Luxor Temple. Inspector Ahmed seemed to know everything and everybody. He had no satisfactory explanation, however, for the yellow star ceilings of many of the tombs and temples we visited.

Why did the ancients paint countless rows of simple five-pointed stars upon the ceilings of otherwise magnificently designed and executed structures? Price seemed to be no object in construction. The background for the stars was always blue—as it should be, of course, since this was always an obvious effort to depict the evening sky. I found myself standing just staring up at ceilings. I would look at the intricate hieroglyphics, then look at the ceiling stars. Something was really amiss here. No pharaoh worth his salt would let his artists get away with such an unspectacular finishing touch to his resting place.

Then, on the day we visited the Valley of the Kings, an extraordinary thing happened. Allison and I were walking through the tomb of Ramses III. I was taking my time and she had gone on ahead. My mind had refused to absorb more verbal information so I was just meandering along, letting thoughts run through my head, not looking at anything in particular. We were on our way out. I was in a darker part of the passageway and several feet from a turn in the corridor when suddenly the ceiling went three-dimensional on me. I couldn’t believe it, but I understood immediately what was going on. The illusion created was lovely and spectacular and was a worthy counterpoint to the wall hieroglyphics. The five-pointed stars painted on the blue background turned to four-pointed stars with the fifth point dropping down like a ray of starlight. The blue background turned to a velvet black field filled with the rays of thousands of stars. In low light or torchlight, the image would have been much easier to pick up. I called Allison back to look at it and she saw it, too. Then I went around the corner where there were more large patches of “stars” and the same illusion occurred. It had to have been intentional. We got so excited we ran out and dragged the archaeologist working in the next tomb down to see it. Unfortunately, he couldn’t see it and his explanation that we were just seeing an optical illusion caused by the way the stars were painted was unsatisfactory. We were indeed seeing an optical illusion, but a complex and intentional one.

Our next tourist stop was the tombs of the artisans. Allison and I hypothesized that if the illusion was a stereogram, then we would be able to find examples of more of them in the tombs of the artists. We found several repetitive patterns, but they were behind glass and we weren't able to see a 3-D image. In one tomb, however, we found one that did. It was a simple design, like the stars, but this time it was a set of zigzag lines representing water in a moat around a palace. Again, the lines were too simple for the rest of the drawing. Let the image shift to 3-D, however, and actual waves appeared. Unfortunately, our time in the Valley was very limited and we were forced to leave before continuing our artistic explorations and getting exact tomb references.

Upon returning home, Allison began searching the internet and found another 3-D image at site <http://www.thebanmappingproject.com/sites/>. This image is found under the Tutmoses III, KV34, images section. We call this the floating flowerpots image. Go to the website and expand the image. With some practice, you can actually make it go 3-D on your computer screen.

Dr. Daniel Crocco and Alice Crocco took the same trip to Egypt several months later. At my request, they agreed to look for starred ceilings and attempt to see the 3-D image. Here is Dr. D. Crocco's account:

Dr. Briegel asked if we were interested in looking for an "effect" on the ceiling of the Ramses III Tomb in the Valley of the Kings. Toni suggested that it might be useful to practice beforehand by looking at "stereogram"-type pictures and gave us a web-site that had examples of stereograms. My wife Alice and I spent an evening, just before our trip to Egypt, going over pictures on the web-site: www.magicseye.com.

The entrance passageway in Ramses III tomb takes a right turn, turns left, and then continues on. On the ceiling just at the turn, the rows of 5-pointed "stars" became 3-D once I looked at them, or "stared" at them with a relaxed focus for about two minutes. The stars appeared to stand apart from the background, and the fifth point on each star pointed down and almost appeared to drip away from the ceiling, looking like a small icicle. The effect is startling, dramatic, and once seen, is difficult not to see.

Further to this illusion of depth, was another sense of depth coming from the rows themselves which appeared to be terraced from one another. These 3-D effects seen in the tomb on November 20th, 2003, reminded me of the perceptual depth illusions seen in psychology textbooks, and represent an impressive understanding of human perception. It would be wonderful to revisit the area and have an opportunity to examine these stars further, and look for other examples of this perceptual effect." (See photo and drawings at the end of this article.)

Alice Crocco's impressions of the phenomenon were similar: At first glance...very simple... just stars decorating a ceiling. Following the directions of Dr. Briegel, my husband's colleague at Zayed University in Abu Dhabi, I stared at the ceiling. With time and relaxation (a challenge with a steady stream of visitors passing by and excited chatter all around), the 3-D effect took place.

It was no longer simple when I tried to put what I saw into notes and sketches. I saw what appeared to be just a few lines creating the pattern on the ceiling—however, so cleverly done. Each star had five points. Star beside star in neat symmetrical rows. In every other row, each star was not drawn directly under the star above. It sat over by half. Then in some areas there appeared to be faint boxes drawn around a star or through the centre of a star. I would say the boxes appeared to be square.

When the ceiling took on its three-dimensional appearance, it seemed to come alive. The fifth point of the star, pointing at six o'clock (if it were on a clock), seemed to be actually hanging from the sky, as if it could be touched or pulled. This point appeared to have more color or paint to it than the other points.

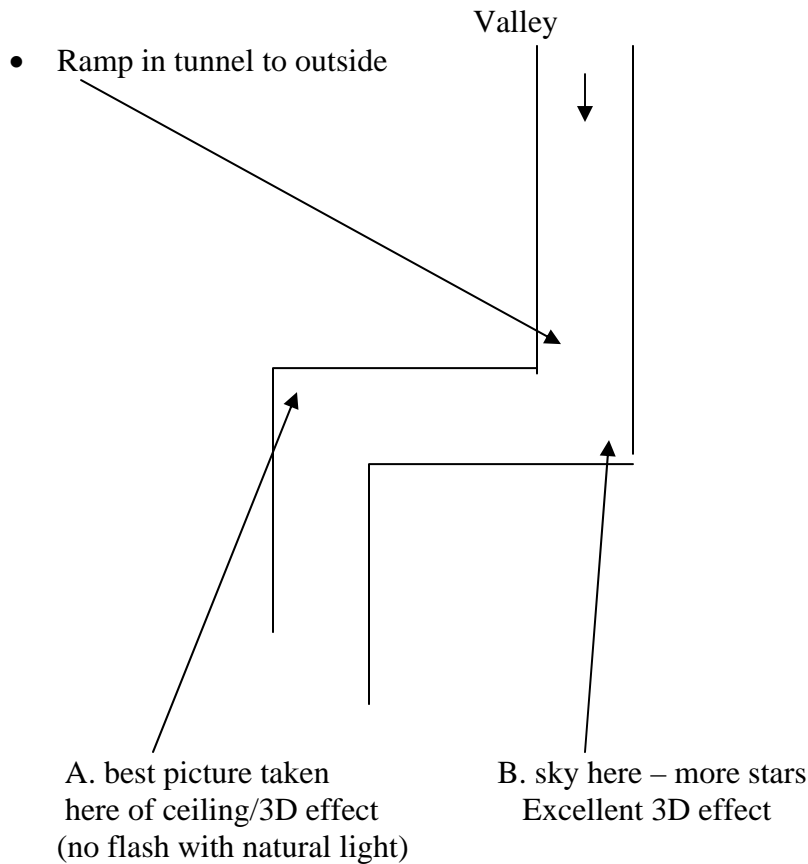
The second impression I received while staring at the stars was the depth of the sky. Somehow some stars seemed closer while others seemed farther away, like in a real sky.

Photo: Star Ceiling, Tomb of Ramses III, Valley of the Kings, Egypt. Photo (no flash with natural light) taken by Dr. Dan Crocco.



Diagram: Location of Star Ceiling

Entrance to tomb of Ramses III



It is recommended that an art historian return to the Valley of the Kings and, with the luxury of time, study this ancient 3-D creation, to measure the boxes, to figure out clearly the issue of boxes around stars and boxes through stars, to measure the stars, to check again the thickness of color, to ponder the sense of depth which several of us experienced. Apparently three-dimensional artwork is literally as old as the pyramids and was discovered and developed intentionally to enhance the ceilings of tombs built during a certain time period. Exact time periods of star ceilings need to be determined and other repetitive patterns that do not conform to the more common hieroglyphics need to be studied for potential three-dimensional effects.

The ability to see three dimensions in a two-dimensional drawing might well have been regarded as magic long ago. Did the artists know what they were doing? We think they did. The humble, childishly drawn star ceilings were not a time-saving device or a way to save money. The pharaohs probably cared little for either of those ideas. They would have been enchanted, however, by seeing the evening sky transported so far beneath the earth--to look up and see a velvet blue sky with gold stars shining down upon them.

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Photographs of star ceilings may be found in the following books:

Freeman, Charles (1997). *The Legacy of Ancient Egypt*. New York: Facts On File, Inc. pp. 98-107. "Images of Forever: Art & Architecture in Ancient Egypt"

Papanek, John L., Editor-In-Chief, et al (editors) (1993). *Lost Civilizations: Ramses II: Magnificence on the Nile*. Alexandria, VA: Time-Life Books.116-117 (photo of star ceiling in tomb of Nefertari.)

Strouhal, Eugen and photos by Werner Forman (1992). *Life of the Ancient Egyptians*. London: Opus Publishing LTD. P. 228-229.

Star ceiling photographs may also be seen at the following website:

<http://www.superstock.com/stock-photography/King+Amenhotep+II> (see image 1788-10343 and image 1890-6310)

