CyberScribe 181

## CyberScribe 181 - September 2010

Let's start this month's offerings by giving some information on an upcoming North Texas-ARCE speaker, Andrew Bednarski. He'll be speaking on the ARCE funded publication of the once-lost manuscript of an early Egyptian explorer, Frederic Caillaud. Some of his work was published at the time, but the rest disappeared Another ARCE speaker in the past, Ben Harer, discovered the original on an auction site...purchased it...and gave it to ARCE. This very generous action made it possible to make it available for modern publication.

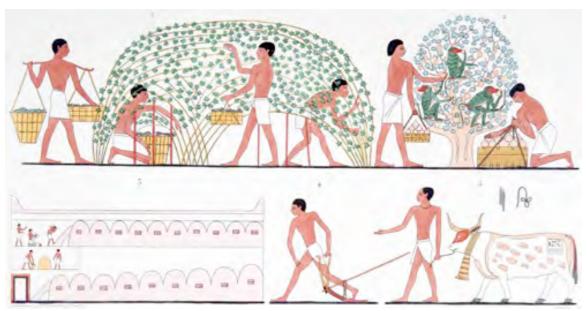
Why do we care? Well, the article below from 'Heritage-Key' (http://snipurl.com/11fyc4) gives a little information about the project and shows us a couple of Caillaud's wonderful illustrations (abbreviated here). Read on:



This drawing is also from the tomb of Neferhotep - it depicts a fishing and fowling scene. Archaeologists today do not know where this tomb is. Photo Courtesy Dr. W. Benson Harer Jr. and Andrew Bednarski



A hunting scene from the tomb of Neferhotep - drawn by Frederic Caillaud. The French explorer discovered this tomb in the early 19th century but archaeologists today do not know where it is. The newly discovered manuscript provides clues. Photo Courtesy Dr. W. Benson Harer Jr. and Andrew Bednarski



An image included in the book. It shows Egyptians using poles to carry goods. Caillaud compares this to how milkmaids in 19th century Holland use balancing poles while skating. Photo Courtesy Dr. W. Benson Harer Jr. and Andrew Bednarski

"An unpublished manuscript, written by 19th century Egypt explorer Frédéric Caillaud, has been discovered – and it points the way to a 3,500 year old tomb of an Egyptian official. The American Research Centre in Egypt (ARCE) is in the process of translating and publishing it. The newly discovered manuscript includes four drafts of the book, plus notes – about 1,000 pages in total. The focus of the work isn't so much on the adventures Caillaud had – rather it's on his efforts to make sense of the things that he saw.

"Work on the book did not go smoothly. "To say that there were problems with publication is a bit of an understatement," said Dr. Bednarski. Half of the image plates were lost when the house they were in was destroyed. "It actually collapsed." Some of these drawings later appeared in other works. Despite the setback Caillaud kept working on the text, reaching the fourth draft before he passed away in 1869.

"At that point his son got the documents and they vanished from the historical record. It's not until 2002 that they re-surfaced at an auction house in the southern United States, where it was purchased by Christine Thomson and Rupert Halliwell. In 2005 it came up for auction again, this time at Christies in London, and long-time ARCE member Dr. W. Benson Harer Jr. made the purchase. In 2008 ARCE initiated the publishing and translation project.

""Neferhotep was an Egyptian official who was buried in Thebes. "He was an overseer of the granary," said Dr. Bednarski, probably during the reigns of Amenhotep II and/or Thutmose III. This makes the tomb about 3,500 years old.

""We just have no idea where that tomb is all together," said Bednarski.

"That's where the book comes in. "In the manuscript there's a plan (of the tomb), of which I've just found," said Bednarski. "My focus is to go back this summer to the Theban west bank." Once there "I'm going to try to find it based on the references that he makes in his manuscript, but based primarily off of a plan that he's drawn of the tomb itself."

"In general the book is written "in the style of a 19th century encyclopedia," said Dr. Bednarski, with individual sections for each topic. However Caillaud didn't understand Egyptian hieroglyphs so he had to make his interpretations without them. If all goes well we should know soon whether the manuscript leads the way to the tomb of Neferhotep. While the tomb won't be as large as one built for a pharaoh or prince – the potential of re-discovering the artwork inside is a tantalizing one."

Also in the theme of restoration and rediscovery, there is a fine article on the current work that is aimed at restoring and reworking the tomb of Tutankhamun. In the paper (http://snipurl.com/11fz8w), a firm known as 'Factum Arte' is making a near perfect record and a copy of Tut's tomb. The good news is that this will lead to a great archive of the tomb...while the bad news is that it is part of Hawass's plan to close popular tombs forever...making their copies the only way one can ever even attempt to experience them.

Is this needed? Hawass has some good points, as the use of the tombs by tourists damages them. Is this a good way for the future? Hard to say. The costs of such duplicate full scale tombs will be enormous.

Check out what they are doing in the (abbreviated) article below:

"The High resolution recording and production of an exact facsimile of the Tomb of Tutankhamun is part of a major initiative by the Supreme Council of Antiquities to preserve the tombs in the Valley of the Kings while making important tombs that are either closed or in need of closure accessible to the public and to scholars. The Supreme Council of Antiquities has granted

permission for the recording and facsimile production of the tombs of Seti I, Nefertari, and Tutankhamun.

"Dr Zahi Hawass has identified a site near Carter House at the entrance to the Valley of the Kings to install the facsimiles and a full feasibility study has been commissioned. It is estimated that over 500,000 visitors a year will visit the site.



The Seti laser scanner, specially designed for the Supreme Council of Antiquities, recording the figure of Tutankhamun on the east wall of his burial chamber, March 2009.

"This will result in he highest resolution large-scale facsimile project ever undertaken. The 3D recording is being done at a resolution of 100 microns with 100,000,000 independently measured points per sq meter. A color photographic system has been developed with low level cold lights to record the painted surfaces at 1:1 at 600 - 800 DPI. The entire tombs of Seti I and Nefertari will be recorded along with the burial chamber and sarcophagus from the tomb of Tutankhamun.

CyberScribe 181

"Throughout the recording work the tomb remained open to the public. On busy days approximately 1000 people visit the tomb. The visitor numbers have a dramatic effect on the temperature and humidity in the space. Most visitors showed a great interest in the work that was being carried out and many expressed concern that their presence had a destructive impact on the preservation of the tombs.



One of Harry Burton's photographs taken soon after the discovery of the tomb of Tutankhamun. The section on the left is no longer in the tomb. Once its exact location has been identified it will be recorded and reintegrated into the facsimile. Photograph from the Griffith Institute, Oxford



Unloading the boxes into storage in KV3. Due to the space limitations in Tutankhamun most of the equipment, that was specially designed for use in the tomb of Seti I, had to be stored in KV3 and moved into the tomb as it was required.



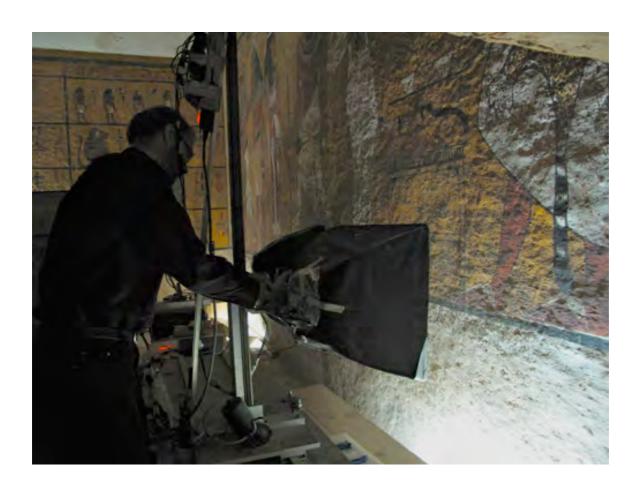
The Seti scanning frame being lifted into the tomb of Tutankhamun after the sarcophagus lid had been covered with a wooden structure to protect it during the work.



The Seti Laser scanner mounted onto the linear guide frame that was specially designed for use in the tomb of Seti I. This is a scanning system designed to record painted surface with shallow relief. A new generation scanning head is currently in production.



Nub 3D structured light scanner recording the west side of the sarcophagus.



Due to space restrictions in the tomb a new linear guide structure was made, tested and used in the tomb for the majority of the photographic recording.

"Over 150 different color samples were created on paper sticks and compared to colors on the walls. Matching colors would then be noted and located precisely. Over 500 different sticks were recorded. Naoko Fukumaru also took macro photographs of these specific locations and recorded other important characteristics of the surface.



The system used to ensure accurate color matching during the production of the facsimile uses specially prepared color sticks that are matched to the exact tone and brilliance of the color on the wall.

CyberScribe 181



Naoko Fukumaru, Factum Arte's conservator carrying out color matching on the North wall.

"The accurate milling of the surface in three dimensions ensures objective accuracy and results in an exact facsimile. This is the most expensive and time consuming part of the production process. When cutting at the highest resolution each section of  $52 \times 52$  cm takes approximately 78 hours to machine.

"Once the surface has been milled it is then molded, cast printed and finished by hand. It is this level of obsession with the detail of the surface that results in a convincing facsimile."

Yet a third announcement of the results of a long conservation project is the site of Al-Alamein west of Alexandria...yes, the same Al-Alamein that figured so importantly in the North African battles with the Germans in World War II. This report deals with Greco-roman sites and records an important part of Egyptian history. The item is from the Egyptian news source "Al-Ahram' (http://tiny.cc/u0ivo) (abbreviated somewhat):

"Following years of restoration and development, the Marina archaeological site, situated not far from the World War II memorials at Al-Alamein, will open in the evenings from the middle of next month. The site is I96km west of Alexandra and 6km east of Al-Alamein. The site of the town stretches for 1km and is 0.5km wide, making it the largest archaeological site on Egypt's north coast.

"Over the last 10 years, the Polish Archaeological Institute in Cairo and the American Research Center in Egypt have unearthed remains of more than 50 different structures in the town and necropolis. The ancient town of Leucaspis was a good natural harbor. Adjacent to the harbor was a commercial quarter, and further south was the town centre which included baths, markets and a civic basilica. The earliest archaeological remains, which date from the mid- second century BC, were found in the town's necropolis. It is thought the town was occupied until the seventh century AD.

"Abdel-Maqsoud (director of the Central Administration of Lower Egypt Antiquities) said, the chronology indicated that most of the excavated structures could be dated to the first and third centuries AD. The ancient town must have been a very prosperous community in those days. A wide range of imported pottery, particularly amphorae, suggests flourishing trade relations with the entire Mediterranean region.

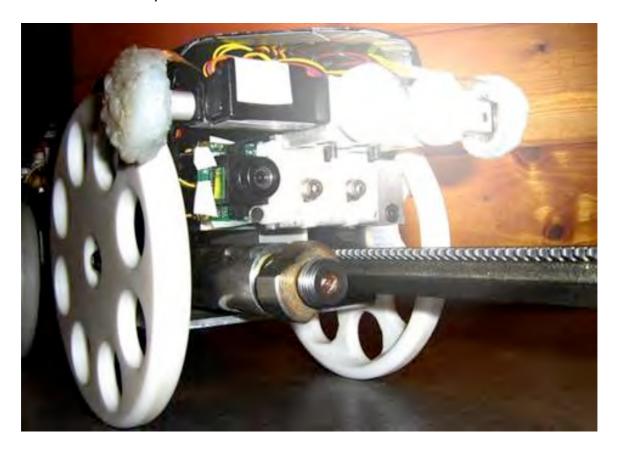
"The settlement of Leucaspis was probably destroyed by an earthquake in the late third century AD, but was partially inhabited again in the fifth and sixth centuries AD. A small basilica church uncovered in the eastern sector is considered the best evidence of this later occupation."

Remember a few years back when they sent robots up the so-called 'ventilation shafts' in the Great Pyramid? Well, Hawass is convinced that there are still more things to be learned up those shafts and he is obsessed with the probability that there is yet a second door beyond the one they drilled last time. Unlikely to be true, the project is of interest, and they are about to do it again. There will be different robots this time and they will have more capabilities.

Note that there are major errors in the story. There is no 'Queen's Tomb' in the great pyramid, and there is no 'giant stone door blocked the tunnel'. The CyberScribe 181

room is one that has been claimed as a so-called Queen's chamber, with no basis for fact, and the door is only a few inches across.

The news item was aired by MSNBC (http://tiny.cc/fcygd) in a brief statement and a photo. Read on:



"The robot, part of a years long exploration called the Djedi Project, will explore a shaft inaccessible to a previous robot, unlocking a room that has remain sealed for 4,500 years. The robot explorer, built by researchers at the Leeds University, England, in collaboration with French aviation company Dessault and British robotics company Scoutek, will incorporate a small fiber optic camera for looking around corners, an ultrasonic probe for testing the quality of the rock and a releasable mini-robot that can fit through spaces as small as 0.7 inches in diameter. Additionally, the robot uses special nylon and carbon fiber wheels that won't deface the pyramid's sensitive rock.

""All the robots were designed from scratch to do as little damage to the shafts as possible," Shaun Whitehead, Systems engineer and mission manager, told TechNewsDaily. "The previous robots both used tracks that scrubbed away at the floor and ceiling as they moved. We use soft brace pads to grip the walls, like an inchworm or the technique that rock climbers

use for ascending 'chimneys.' The wheels don't need to grip, they need to slip as much as possible.'"

"The robot will travel down a shaft located in the tomb of the Queen. Unlike the King's tomb, where shafts lead to the outside of the Great Pyramid so his soul could escape into the afterlife, the shafts leading from the Queen's tomb borrow deeper into the pyramid.

"This is the third time a robot has tried to find the end of the Queen's tomb shaft. The first expedition found that a giant stone door blocked the tunnel, and the second robot discovered another door behind that one. With it's microbot and drill, the Leeds University researchers designed this new robot specifically to breach those obstacles."

New discoveries are always popping up in Egypt, and one emerged from the sands along the desert road that leads to Kharga Oasis in the Egyptian western desert. The report was presented in the Yale Alumni Magazine (http://tiny.cc/oigjl) and records the deep desert work of John and Deborah Darnell. They made news some years back when they were the first to realize how important the desert roads were to the ancient Egyptians. Abbreviated for space reasons, their tale is rather interesting. Read on:

"Umm Mawagir, as the city is now known, flourished in the Western Desert from 1650 to 1550 BCE, nearly a millennium after the construction of the Great Pyramid at Giza.



"Darnell first became interested in looking at desert roads in 1988, while studying ancient Egyptian texts in Luxor. His office window at the time looked out across the Nile, and he was struck by the sight of desert tracks crossing both the east and west banks. "We knew that the ancient Egyptians went into the desert," he recalls. "But we didn't know precisely how they got there. And I began wondering if there was any way to date those tracks."

"Curious, he and Deborah decided to hike a route running above the Valley of the Kings, on the west bank of the Nile—one of the most intensively studied regions in all Egypt. "We didn't think we'd find anything new," says Darnell. "We assumed we'd just find some pottery remains. But within the first three minutes, we came across a fragmentary stela [a carved stone slab] and mountains of ceramic materials."

"The growing mountain of data revealed just how much traffic once flowed along the Girga Road, which stretched 110 miles westward from Thebes in the Nile Valley to remote Kharga Oasis in the Western Desert. "This was a major route in antiquity," says John Darnell. And it possessed an impressive

infrastructure to keep traffic moving. Along the road, the Darnell's discovered a series of official outposts that had served as food and water depots for travelers. These depots dated to Egypt's Middle Kingdom, a period extending between 2125 and 1650 BCE. Yet the earliest Kharga Oasis settlements then known to scholars had been built more than 1,000 years after the end of the Middle Kingdom.

"In 2005, the team found a dense litter of ceramic molds for baking bread—vestiges of a large industrial bakery—about half a mile north of the temple. And this summer, John Darnell and his colleagues located the expansive ruins of a major undisturbed city, including the foundation of a significant mudbrick administrative building. Darnell, who leads the excavations there, named the desert metropolis Umm Mawagir—an Arabic phrase meaning, memorably, "Mother of Bread Molds."

"The sheer scale of the operation, says Darnell, suggests that Umm Mawagir was producing a huge surplus of bread, enough to feed an army of soldiers. The team found other signs that the ancient desert city once served as a major military garrison. Scattered across the site were the broken cooking pots of Nubian desert soldiers known as the Medjoy, troops highly valued by the Egyptian pharaohs. Some of these pots were made of Nubian clays, indicating that they had been made far to the south and carried all the way to Umm Mawagir. Others, however, were fashioned from local clays from Kharga Oasis itself, suggesting that the Nubian troops brought their pottery-making wives with them.

"For Darnell, however, the real wonder is the administrative genius that went into creating a city in the desert more than 3,600 years ago. "People always marvel at the great monuments of the Nile Valley and the incredible architectural feats they see there. But I think they should realize how much more work went into developing Kharga Oasis in one of the harshest, driest deserts on Earth.""

'USDaily Trends (http://tiny.cc/rsgwo) reported on something that the CyberScribe has always believed...drinking beer is good for you. It also claims, which the CyberScribe rather doubts, that ancient Nubian brewers deliberately made a beer laced with antibiotics. Just because we can do something, doesn't mean that ancients were able to do the same thing.

Nonetheless, the discovery in quite interesting. Read on. (Article abbreviated somewhat):

"A chemical analysis of the bones of ancient Nubians shows that they were regularly consuming tetracycline, most likely in their beer. The finding is the strongest evidence yet that the art of making antibiotics, which officially dates to the discovery of penicillin in 1928, was common practice nearly 2,000 years ago. The research, led by Emory anthropologist George Armelagos and medicinal chemist Mark Nelson of Paratek Pharmaceuticals, Inc., is published in the American Journal of Physical Anthropology.

"Armelagos is a bioarcheologist and an expert on prehistoric diets. In 1980, he discovered what appeared to be traces of tetracycline in human bones from Nubia dated between A.D. 350 and 550. The ancient Nubian kingdom was located in present-day Sudan, south of ancient Egypt.

"Nelson, a leading expert in tetracycline and other antibiotics, became interested in the project after hearing Armelagos speak at a conference. 'I told him to send me some mummy bones, because I had the tools and the expertise to extract the tetracycline,' Nelson says. 'It's a nasty and dangerous process. I had to dissolve the bones in hydrogen fluoride, the most dangerous acid on the planet.'

"The results stunned Nelson. 'The bones of these ancient people were saturated with tetracycline, showing that they had been taking it for a long time,' he says. 'I'm convinced that they had the science of fermentation under control and were purposely producing the drug.'

"Even the tibia and skull belonging to a 4-year-old were full of tetracycline, suggesting that they were giving high doses to the child to try and cure him of illness, Nelson says.

"The first of the modern day tetracyclines was discovered in 1948. it was given the name auereomycin, after the Latin word 'aerous,' which means containing gold. 'Streptomyces produce a golden colony of bacteria, and if it was floating on a batch of beer, it must have look pretty impressive to ancient people who revered gold,' Nelson theorizes."

An unfortunate accident occurred in Japan recently, and it may have implications for future international loans of ancient Egyptian artifacts. The item appeared in several Japanese news sources, but unfortunately only in

Japanese. Using a computer translation program, the CyberScribe prepared a translation, but the readers must understand that it might be somewhat inaccurate.

Never mind, what it does tell is most unfortunate. While it was being installed, the museum workers DROPPED a huge royal stone head! And they BROKE it!

The most complete notice seems to have appeared in 'Yahoo – Japan' (http://tiny.cc/i36d0). Here is the report, as translated on the Internet. Read on:

"(An exhibit) was held in Shizuoka city Shizuoka Prefectural Museum of Art Exhibition "Egypt Torino" (Asahi Shimbun, and sponsored by Fuji TV). (One of the ) exhibits, a stone, was damaged during the unloading. 2Asahi Shimbun and the organizers, the conference announced. (The exhibits, were loaned from the Italian "Torino Egyptian Museum".



"According to organizers, the damaged statue was produced around 1500 BC, (and was the) "colossal head of the king shaped as Osiris" (cm 149 height, 48 cm wide and 60 cm depth). (The) facial part was completely broken from the crown portion. It is charged that "Nippon Kanto branch of art" workers, moving the statue, lost balance and fell, carrying the stone with the lifting equipment that was damaged.

"Exhibition in Tokyo last August, spent over a year throughout the country and Sendai Shizuoka was the last place. Shizuoka Prefectural Museum of Art will be held from June 22 through June 12, organizers said, was well received in total about 14 million visitors."

And lastly, we have another piece showing that King Tut died because of an incest laced family history. Unfortunately, few people seem to understand that incest is not bad...its incest when a bad gene is present that caused the problems. We all eat line-bred (meaning incestual) strains of livestock. These lines are very stable and produce quality offspring. Of course when a bad gene is present, as in Queen Victoria's hemophilia gene crops up, it can trash families and alter history.

Here (abbreviated) is the story from 'My Fox-New York' (http://tiny.cc/o646s). If you have been reading the CyberScribe over the past few months, you will know that many of the 'facts' in this article are highly speculative and some are just plain wrong, but read on:

"Using 21st century technology, including DNA and CT scanning, a team of scientists attempted to put to rest the mystery of King Tut's death -- concluding he was a victim of his incestuous lineage, according to an article in the September issue of National Geographic.

"A team of researchers using a combination of CT scans, DNA testing and archaeological information now believe his fate was sealed by the fact that his parents were brother and sister. DNA finally put to rest questions about Tut's lineage, proving that his father was Akhenaten and that his mother was not one of Akhenaten's known wives. His mother was one of Akhenaten's five sisters, although it is not known which one.

"New CT images discovered congenital flaws, which are more common among the children of incest. Siblings are more likely to pass on twin copies of harmful genes, which is why children of incest more commonly manifest genetic defects.

"It is just as likely, however, that Tutankhamun's health was compromised at conception, said researchers. "Perhaps he struggled against others [congenital flaws] until a severe bout of malaria or a leg broken in an accident added one strain too many to a body that could no longer carry the load," wrote Zahi Hawass, an archaeologist involved in the research."

Let's finish this month's column with a couple of silly bits.

First this one on Uri Geller's private island and his pharaonic treasure. This appeared last time, but the account below is much more fun (even though it

is abbreviated). The article appeared in, of all places, the 'Wall Street Journal'! Therefore, it must be true. Read on:

"When Uri Geller saw a rocky lump off Scotland's eastern coast was for sale a couple of years ago, the famed spoon-bender says he knew he had to have it. "I didn't know why. I was somehow drawn to it," Mr. Geller recalls. He put in a successful £30,000, or about \$46,000, offer. Today, the 63-year-old paranormalist says he now understands why he bought the uninhabited, 100 yard-by-50 yard Lamb Island. Buried inside, he says, is an Egyptian treasure including relics supposedly brought there by a pharaoh's daughter some 3,500 years ago.

"Tales of Scotland's ties to ancient Egypt date back to the 15th century, but many regard them as a bit of nonsense. According to the legend, King Tutankhamen's half-sister, Princess Scota, fell out with her family and fled to Ireland and then Scotland, thereby giving the country its name. Some say the alignment of the Lamb and two nearby islands closely mirrors the layout of the pyramids at Giza, near Cairo, not to mention the three main stars in the Orion's Belt constellation.



Mr. Geller on his way to camp on Lamb Island, seen in distance.

"Before Uri came along I don't think anybody had ever heard of all this Egyptian stuff," says 55-year-old Drew McAdam.

"Mr. Geller got interested in the Lamb in 2008, when he saw on the Internet that it was for sale, and the idea of owning an island appealed to him. Not even the island's status as a protected seabird colony ruffles his feathers: Mr. Geller is a vegetarian.

"Mr. Geller chugged the ten minutes to the island on a fishing boat to spend a night on the Lamb, among tens of thousands of seabirds and an English adventurer. "It was excruciatingly cold, with not a single flat spot to lay a sleeping bag," Mr. Geller says.

"For his next trick, Mr. Geller hopes to really astonish the locals by locating the ancient trinkets he thinks are buried within the volcanic rock of the Lamb. Using dowsing—a technique Mr. Geller says he previously used to detect oil deposits in the Gulf of Mexico—he reckons he has pin-pointed a place on his island where treasure might be buried.

"He hopes to excavate if he can secure permission from the Scottish authorities—and only if it doesn't offend the Lamb's legions of gulls, cormorants and shags. Rob Sinclair at the local council's planning department says Mr. Geller doesn't need legal approval to dig on his land. "But he might like to talk to our Council archaeologist about whether it would be worth his time and energy," Mr. Sinclair says.

""I'm certain there are ancient Egyptian artifacts there," Mr. Geller says. "It's only a matter of time until we find them."

"And if there wasn't any treasure on the Lamb before, there is now. Mr. Geller says he has strengthened the island's mystical powers by burying a crystal orb that once belonged to Albert Einstein."

And finally...here is a practical use of pyramid power! This one comes from the Australia 'Herald Sun' (http://tiny.cc/9p2rx), and records a method of preventing highway accidents. Read on...and marvel:

"Traffic officers in Nagpur, 870km west of Mumbai, have agreed to allow small pyramids to be placed at 10 accident-prone sites in the city to see if their claimed positive energy can reduce crashes. Deputy Commissioner of Police (Traffic) Sahebrao Patil said the road safety initiative came about after a meeting with an expert in Vastu, an ancient Hindu system of construction which is similar to Chinese Feng Shui.

""He told me that he had placed a number of pyramids on roads outside the city and the results were excellent. The number of accidents reduced. He wanted to do it in the city, so I said, 'OK, no problem'," Mr. Patil said.

"Vastu expert Sushil Fatehpuria, who offered his services free of charge, said that each 30 centimeter tall pyramid will have a copper bottom and five smaller pyramids inside.

""I think the accidents are caused by negative energies. So we need to minimize or convert the negative energy into positive ones," he said. "I will energies the pyramids. I will transfer my positive thoughts into the pyramids."

"Mr. Patil said his officers' own, more human, efforts to cut the number of road accidents would continue during the experiment. "We will see in six months. If it gets positive results then that's excellent," he added."

Don't run over any pyramids, and The CyberScribe will see you again next time!