

The Libyan Desert Glass Puzzle

In 1996 in the Egyptian Museum in Cairo, mineralogists spotted an unusual yellow-green gem in the middle of one of Tutankhamun's bejewelled breastplates.

The jewel was tested and its origins were traced to unexplained chunks of glass found scattered in the sand in a remote region of the Sahara Desert.

But the glass is itself a scientific enigma.

How did it come to be there and who or what made it?

An Austrian astrochemist Christian Koeberl had established that the glass had been formed at a temperature so hot that there could be only one known cause, a meteorite impacting with Earth.

And yet there were no signs of a suitable impact crater, even in satellite images.

American geophysicist John Wasson is another scientist interested in the origins of the glass. He suggested a solution that came directly from the forests of Siberia.

"When the thought came to me that it required a hot sky, I thought immediately of the Tunguska event," he said.

In 1908, a massive explosion flattened 80 million trees in Tunguska, Siberia.

Although there was no sign of a meteorite impact, scientists now think an extraterrestrial object of some kind must have exploded above Tunguska. *Covered in a previous issue of Mediterranean Living.*

Wasson wondered if a similar aerial burst could have produced enough heat to turn the ground to glass in the Egyptian desert.

It was in 1932 that British explorers, driving Model-A Fords, first visited this area of western Egypt.

They discovered a mysterious yellow-green glass scattered across the surface. Then in 1971, three scientists stopped for only two hours and collected 24 samples of the glass.

During this brief visit, the expedition accidentally found the site of a forced landing of an Egyptian aircraft with the remains of nine men who had died of thirst.

The failure of Egyptian authorities to find the downed airplane for over three years is testimony to the remoteness of this arid region.

The glass has generated intense interest among scientists because its origin remains an enigma. Was it produced by the encounter of an



Libyan Desert Glass



Breastplate of Tutankhamen

extraterrestrial body with earth?

Science isn't sure and, in fact, has come up with at least ten theories to explain its origin.

Many researchers consider Libyan Desert glass to be a form of tektite, a natural black, dark green, or dark brown glassy stone, resembling the volcanic glass obsidian, that may possibly be of extraterrestrial or meteoritic origin.

Tektites occur in four large areas of distinctly different ages throughout the world, and they provided a model for the design of the heat shields which protect spacecraft returning to earth through the atmosphere.

Tektites, first scientifically reported in 1788, have been the subject of investigation since that time.

In 1844 Charles Darwin described a specimen he was given in Australia while on his voyage of discovery.

Twenty nine million years old, Tektite isn't volcanic, and the easy explanation is that the glass was formed by direct shock-melting by an asteroid impact.

But an asteroid that large would have left a crater, and there is none, nor in the other places in the world that this glass is found.

Fused quartz particles also found in Libyan Desert Glass also point to an extremely high, up to 1700 C, formation temperature. The impact of an asteroid at high speed is certainly capable of creating such high temperatures.

But, no partially melted material, which would be seen in asteroid formed glass, has ever been found in Libyan Desert Glass.

So what actually transformed an asteroid instantaneously into a unified and relatively bubble free liquid, which rapidly cooled to form glass?

At the moment, nobody is sure!

Did Atomic War In 6500 B.C. Form Libyan Desert Glass?

Gurkha,
flying a swift and powerful vimana
hurled a single projectile
Charged with all the power of the Uni-
verse.

An incandescent column of smoke and
flame

As bright as the thousand suns

Rose in all its splendour...

a perpendicular explosion

with its billowing smoke clouds...

...the cloud of smoke

rising after its first explosion

formed into expanding round circles

like the opening of giant parasols...

..it was an unknown weapon,

An iron thunderbolt,

A gigantic messenger of death,

Which reduced to ashes

The entire race of the Vrishnis and the
Andhakas.

...The corpses were so burned

As to be unrecognizable.

The hair and nails fell out;

Pottery broke without apparent cause,

And the birds turned white.

After a few hours

All foodstuffs were infected...

...to escape from this fire

The soldiers threw themselves in
streams

To wash themselves and their equip-
ment.

Ancient verses from Mahabharata the
great Indian Epic - 6500 B.C.?

Do America & India Supply The Answers?

Or are they part of the mystery?

When the first atomic bomb exploded in New Mexico, the desert sand turned to fused green glass.

Archaeologists have been digging in the ancient Euphrates Valley and have uncovered a layer of farming culture 8,000 years old, and a layer of herdsman culture much older, and a still older caveman culture.

Recently, they reached a layer of fused green glass. Coincidence or atomic blast too?

It is well known that atomic detonations on or above a sandy desert will melt the silicon in the sand and turn the surface of the Earth into a sheet of glass.

But if sheets of ancient desert glass can be found in various parts of the world, does it mean that atomic wars were fought in the ancient past?

This is a controversial theory, but one that is not lacking in evidence, as such ancient sheets of desert glass are a geological fact.

An article by Giles Wright in the British magazine *New Scientist* (July 10, 1999), entitled "The Riddle of the Sands", says that the Libyan Desert Glass is the purest natural silica glass ever found.

Over a thousand tonnes of it are strewn across hundreds of kilometres of bleak desert. Some of the chunks weigh 26 kilograms, but most LDG exists in smaller, angular pieces, looking like shards left when a giant green bottle was smashed by colossal forces.

Scientists have not been able to trace the Libyan glass to any source. No fragments of meteorites or indications of meteorite craters could be found in the area of its distribution.

Some of the flakes were submitted to Egyptologists in Cairo, who regarded them as "late Neolithic or pre-dynastic".

Are they evidence of an ancient war that may have turned North Africa and Arabia into the desert that it is today?

Vitrified Ruins in California's Death Valley: Evidence of Atomic War?

The most numerous vitrified remains in the New World are located in the western United States. (*Vitrification is a process of converting a material into a glass-like solid either by the quick removal or addition of heat, or by mixing with an additive.*)

In 1850, the American explorer Captain Ives



William Walker was the first to view some of these ruins, situated in Death Valley.

He discovered a city about a mile long, with the lines of the streets and the positions of the buildings still visible.

At the centre he found a huge rock, between 20 to 30 feet high, with the remains of an enormous structure atop it.

The southern side of both the rock and the building was melted and vitrified.

Walker assumed that a volcano had been responsible for this phenomenon, but there is no volcano in the area.

In addition a volcanic heat could not have caused such a liquefaction of the rock surface.

An associate of Captain Walker who followed up his initial exploration commented: "The whole region between the rivers Gila and San Juan is covered with remains.

The ruins of cities are to be found there which must be most extensive, and they are burnt out and vitrified in part, full of fused stones and craters caused by fires which were hot enough to liquefy rock or metal.

There are paving stones and houses torn with monstrous cracks. [as though they had] been attacked by a giant's fire-plough."

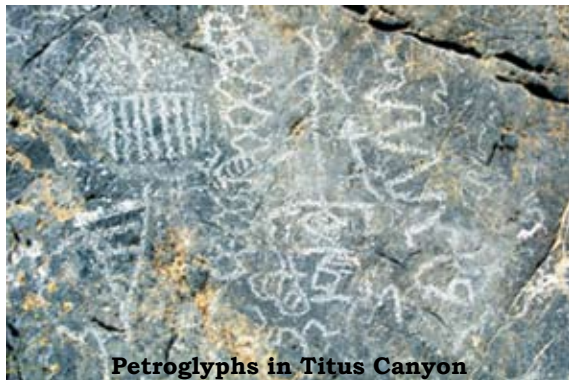
These vitrified ruins in Death Valley sound fascinating, but do they really exist?

There certainly is evidence of ancient civilisations in the area.

In Titus Canyon, petroglyphs and inscriptions have been scratched into the walls by unknown prehistoric hands.

Some experts think the graffiti might have been made by people who lived here long before the Indians we know of, because extant Indians know nothing of the glyphs and, indeed, regard them with superstitious awe.

Piute legends tell of a city beneath Death



Petroglyphs in Titus Canyon

Valley that they call Shin-au-av.

Tom Wilson, an Indian guide in the 1920s, claimed that his grandfather had rediscovered the place by wandering into a miles-long labyrinth of caves beneath

Wilson told this story after a prospector named White claimed he had fallen through the floor of an abandoned mine at Wingate Pass and into an unknown tunnel.

White followed this into a series of rooms, where he found hundreds of leather-clad humanoid mummies. Gold bars were stacked like bricks and piled in bins.

When White tried to locate these remains for scientists he was unable to locate their remains.

It seems one local character knew how to find the place.

"Death Valley Scotty", an eccentric who spent millions building a castle-estate in the area, was known to go "prospecting" when funds ran low.

Death Valley Scotty would check out for a few days of wandering in the nearby Grapevine Mountains, bringing back suspiciously refined-looking gold that he claimed he had prospected.

Many believe that he got his gold from the

stacked gold bars in the tunnel system beneath Death Valley.

Were these the remains of another ancient civilisation?

Atomic War in Ancient India

These verses are from the Mahabharata, written in ancient Dravidian, then later in Sanskrit, which describe horrific wars fought long before the recorder's lifetime.

* Various omens appeared among the gods: winds blew, meteors fell in thousands, thunder rolled through a cloudless sky.

* There he saw a wheel with a rim as sharp as a razor whirling around the soma... Then taking the soma, he broke the whirling machine...

* Drona called Arjuna and said: "Accept from me this irresistible weapon called Brahmāsira.

But you must promise never to use it against a human foe, for if you did it might destroy the world. If any foe who is not a human attacks you, you may use it against him in battle.

None but you deserves the celestial weapon that I gave you." *What other kind of foe different from a human might there have been?*

* I shall fight you with a celestial weapon given to me by Drona. He then hurled the blazing weapon...

* At last they came to blows, and seizing their maces, struck each other they fell like falling suns.

* These huge animals, like mountains struck by Bhima's mace, fell with their heads broken, fell upon the ground like cliffs loosened by thunder.

* Bhima took him by the arm and dragged him away to an open place where they began to fight like two elephants mad with rage.

The dust they raised resembled the smoke of a forest fire; it covered their bodies so that they looked like swaying cliffs wreathed in mist.

* Arjuna and Krishna rode to and fro in their chariots on either side of the forest and drove back the creatures which tried to escape.

Thousands of animals were burnt, pools and lakes began to boil...

The flames even reached Heaven... Indra without loss of time set out for Khandava and covered the sky with masses of clouds; the rain poured down but it was dried in mid-air by the heat.



The Ancient City of Lothal

Several historical records claim that Indian culture has been around for literally tens of thousands of years.

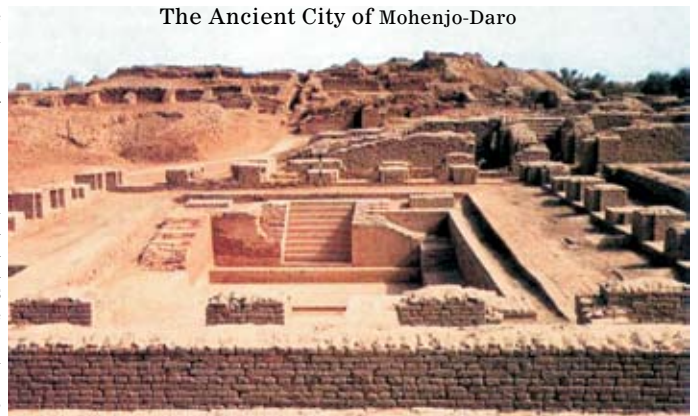
Yet, until 1920, all the "experts" agreed that the origins of the Indian civilisation should be placed around 327 BC.

However, that was before several great cities like Harappa and Mohenjo-Daro (Mound of the Dead), Kot Diji, Kalibanga and Lothal were discovered and excavated. Lothal, a former port city now miles from the ocean, was discovered in Gujarat, western India, just in the late 20th century.

These discoveries have forced archaeologists to push back the dates for the origin of Indian civilisation by thousands of years, in line with what the Indians themselves have insisted all along.

The way that each city was laid out in regular blocks, with streets crossing each other at right

The Ancient City of Mohenjo-Daro



angles and the entire city laid out in sections, gives archaeologists cause to believe that the cities were conceived as a whole before they were built, a remarkable early example of city planning.

Even more remarkable is that the plumbing/sewage systems throughout the large cities were so sophisticated, superior to those found in Pakistan, India and many Asian countries today. Sewers were covered, and most homes had private toilets and running water. Furthermore, the water and sewage systems were kept well separated.

This advanced culture had its own writing, which has never been deciphered. The people used personalised clay seals, much as the Chinese still do today, to officialise documents and letters. Some of the seals found contain

The Ancient City of Lothal



figures of animals that are unknown to us today, including an extinct form of the Brahman bull.

Archaeologists really have no idea who the builders were, but date it at 2500 BC and older, but radiation from the wars apparently fought in the area may have thrown off the date.

The Rama Empire, described in the Mahabharata and Ramayana epics, was supposedly at the same time as the great cultures of Atlantis and Osiris in the West.

Atlantis, well known from Plato's writings and ancient Egyptian records, apparently existed in the mid-Atlantic and was a highly technological and patriarchal civilisation.

The Osirian civilisation existed in the Mediterranean basin and northern Africa, according to local legend and archaeological evidence, and is generally known as pre-dynastic Egypt. It was flooded when Atlantis sank and the Mediterranean began to fill up with water.

The Rama Empire flourished during the same period, according to similar legends, fading out in the millennium after the destruction of the Atlantean continent.

Déjà Vu?

In 1909 when academics were first beginning to grasp the awesome power of the atom, physicist Frederick Soddy wrote in his Interpretation of Radium: "I believe that there have been civilisations in the past that were familiar with atomic energy, and that by misusing it they were totally destroyed."

Remarkably Robert Oppenheimer the chief of the Manhattan Project that developed the first atomic device - that we know of - watched the test explosion rise up in a vast mushroom cloud and felt moved to quote from ancient Sanskrit: "I am become death, the destroyer of worlds!"

Perhaps Oppenheimer, more than anyone, realised that right then and there, at that very moment, man had become reacquainted with a piece of his history that had once cost him so dearly!

The weapon of a "million suns" was again within his possession!