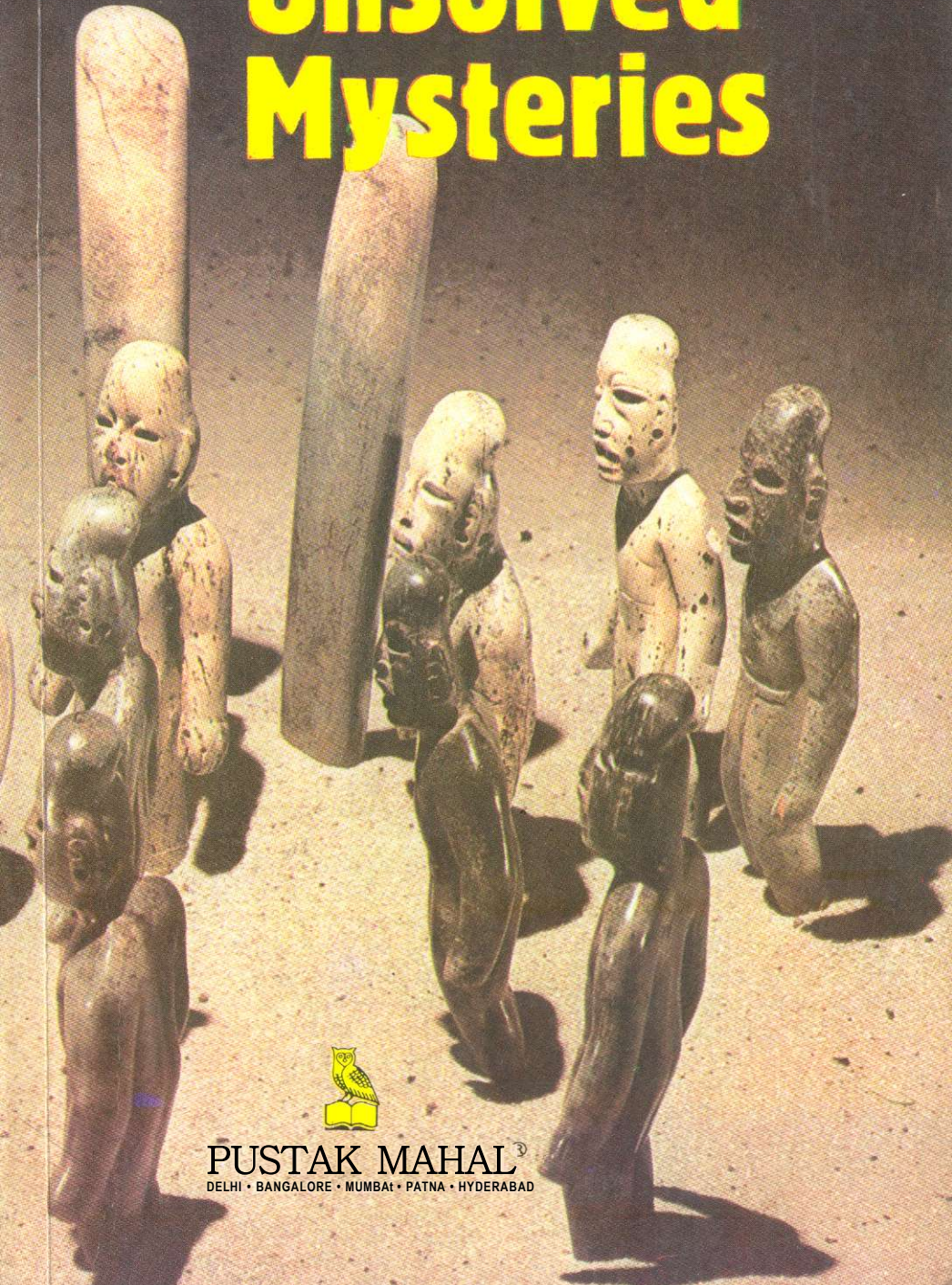
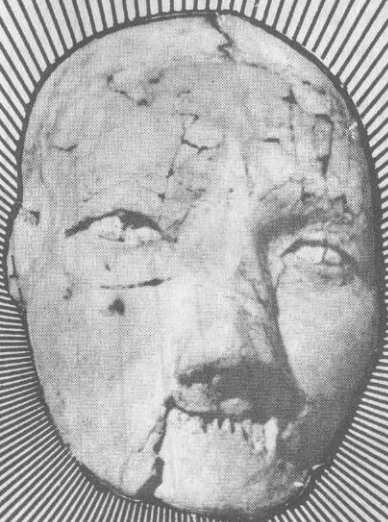
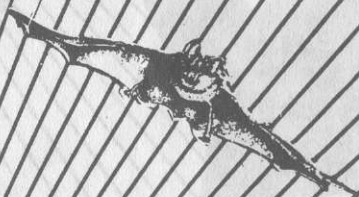


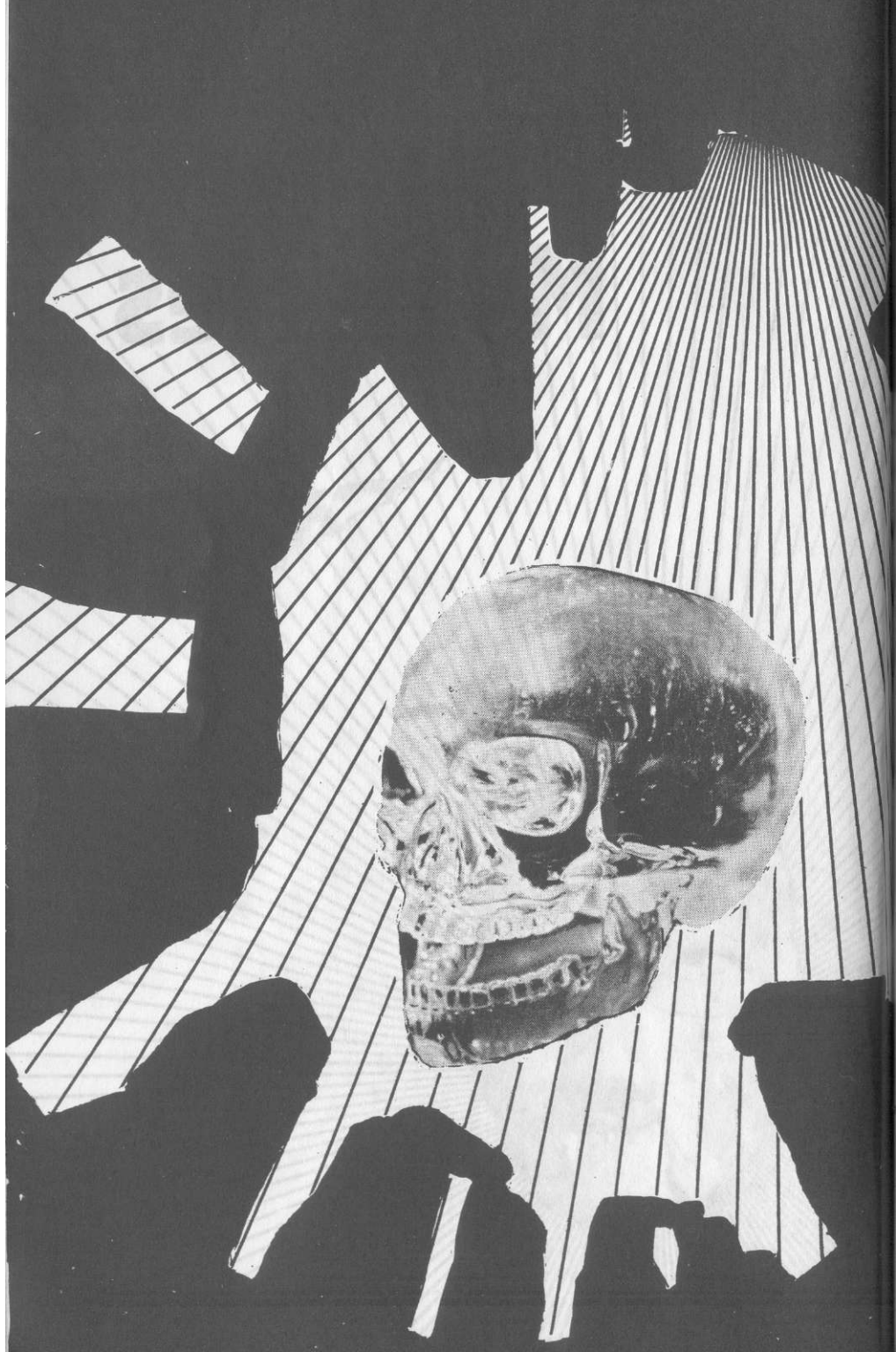
World-Famous **Unsolved Mysteries**



PUSTAK MAHAL[®]
DELHI • BANGALORE • MUMBAI • PATNA • HYDERABAD

World-Famous
**Unsolved
Mysteries**





World-Famous
Unsolved
Mysteries

Abhay Kumar Dubcy



PUSTAK MAHAL®

DELHI • BANGALORE • MUMBAI • PATNA • HYDERABAD

Publishers

Pustak Mahal, Deihi-110006

Sales Centres

- 6686, Khari Baoli, Delhi-110006, *Ph:* 23944314,23911979
- 10-B, Netaji Subhash Marg, Daryaganj, New Delhi-110002
Ph: 23268292,23268293,23279900' *Fax:* 011-23280567
E-mail: rapidexdelhi@indiatimes.com

Administrative Office

J-3/16 (Opp. Happy School), Daryaganj, New Delhi-110002

Ph: 23276539,23272783,23272784 *Fax:* 011-23260518

E-mail: info@pustakmahal.com • *Website:* www.pustakmahal.com

Branch Offices

BANGALORE: 22/2, Mission Road (Shama Rao's Compound),

Bangalore-560027, *Ph:* 22234025 • *Fax:* 080-22240209

E-mail: pmbblr@sancharnet.in • pustak@sancharnet.in

MUMBAI: 23-25, Zaoba Wadi (Opp. VIP Showroom), Thakurdwar,

Mumbai-400002, *Ph:* 22010941 *-Fax:* 022-22053387

E-mail: rapidex@bom5.vsnl.net.in

PATNA: Khemka House, 1st Floor (Opp. Women's Hospital), Ashok

Rajpath, Patna-800004, *Ph:* 3094193 • *Telefax:* 0612-2302719

E-mail, rapidexptn@rediffmail.com

HYDERABAD: 5-1-707/1, Brij Bhawan, Bank Street, Koti,

Hyderabad-500095, *Ph:* 24737530 • *Fax:* 040-24737290

E-mail. pustakmahalhyd@yahoo.co.in

© Pustak Mahal, 6686, Khari Baoli, Delhi-110006

ISBN 81-223-0560-1

22nd Edition : August 2004

Printed at: Param Offsetters, Okhla, New Delhi-110020

Publishers' Note

Our publications are enjoying unquestioned popularity and have been appreciated in reviews of prestigious newspapers and magazines. Authenticity of text matter, nice production, beautiful presentation and the affordable price of books are four basic reasons for this popularity.

The objective of 'World-Famous Series' is to expand the mental horizon of an average reader by channelising his knowledge and thoughts to international happenings.

This book under the series is a collection of mysteries – consisting of 26 such baffling mysteries which are still unsolved despite the pace of modern discoveries. The book explores man's cherished myths such as the fabled land of Atlantis, an unending search for an Eldorado whose gold was beyond imagination and other fascinating wondrous megaliths like Stonehenge, Pyramids, etc. It also peeps into the most mysterious world of ghosts, vampires, zombies and monsters, including Bermuda Triangle, U.E.O., etc.

The language has been kept simple and lucid while the authentic photographs make the book a reader's delight.

— Publishers

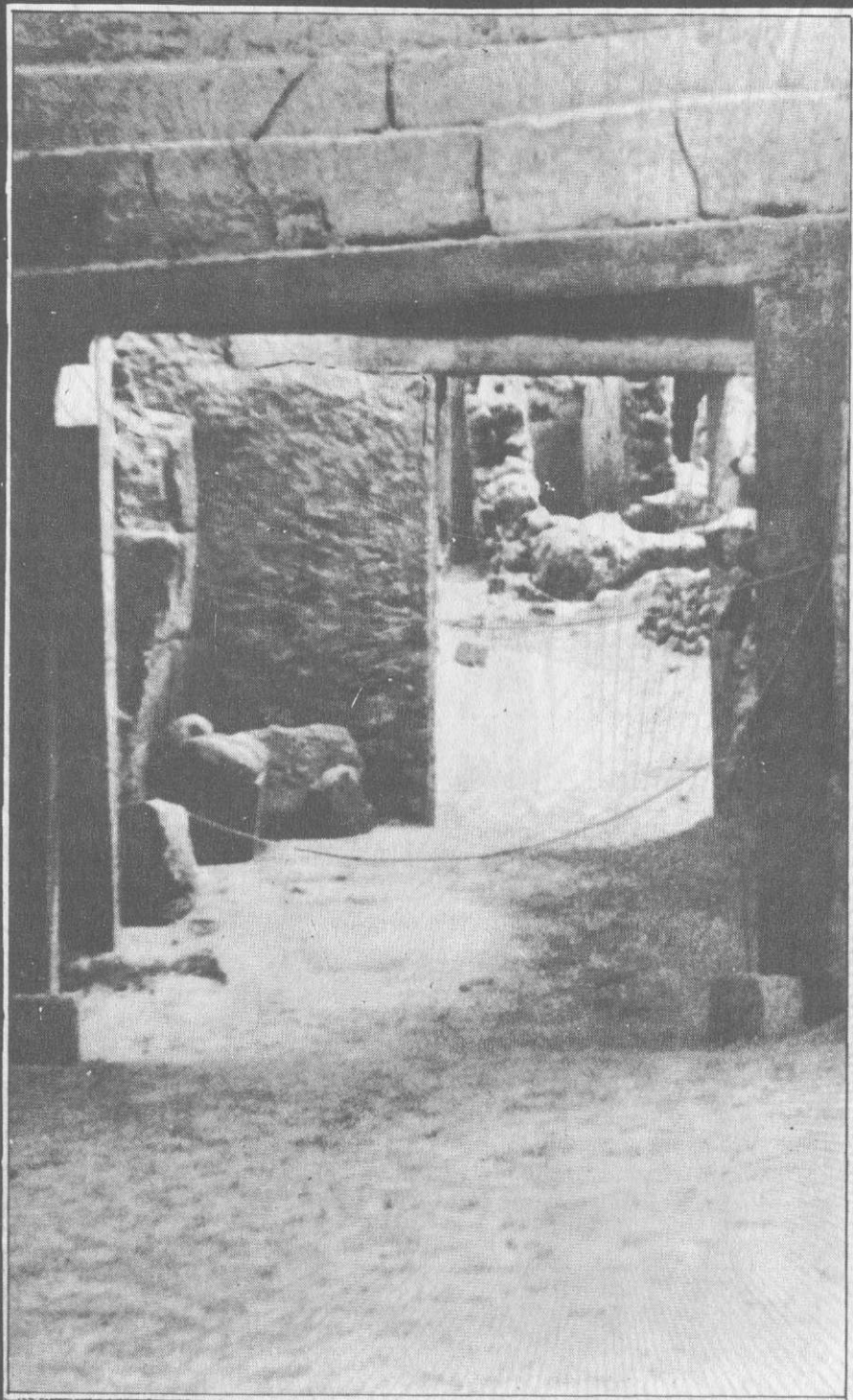
Contents

1. Atlantis: Paradise Lost?	9
2. Haunted people	16
3. Eldorado—A golden myth	23
4. Olmecs: The founders of the American civilization?	28
5. Who was queen of Sheba?	32
6. Project U.F.O.	37
7. The mysterious iron pillar	43
8. The secret of Tutankhamen's mummy	45
9. The jungles of Angkor	49
10. PSI—The science of knowing the unseen	53
11. The secret of Mayas	58
12. The mysterious Inca treasure	63





13.	Is the earth shrinking?	69
14.	The unknown message of Nazca drawings	72
15.	Is there a second life?	76
16.	Bermuda Triangle—Is it a reality?	83
17.	The stones which speak of past artistry	87
18.	The navel of the world	92
19.	The splendour Of pyramids	97
20.	Black hole of Siberia	102
21.	Scythians—The great warriors	107
22.	Was Sahara desert ever green	112
23.	The forgotten voyagers of the new world	116
24.	Which was the first city of the world?	121
25.	Teotihuacan, the place where gods lived	126
26.	Magic healing	131



Atlantis: Paradise Lost?

It is said that much before Sumnerian civilization, a great civilization existed in the Atlantic Ocean. It was a paradise, where civilization was at its Zenith. But then a volcano erupted and the entire grand civilization was washed away.

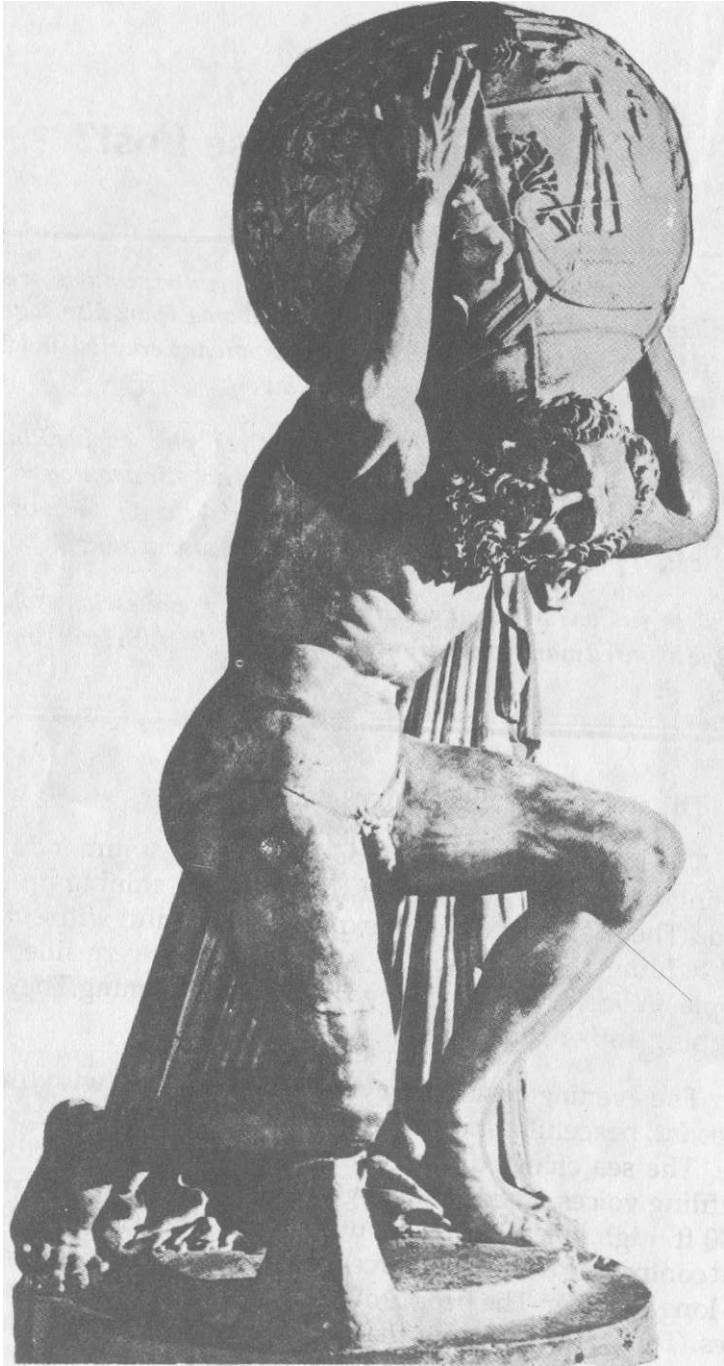
The story of Atlantis was first told by the Greek philosopher Plato. But how far can one believe Plato? This is a question which many ask. After all where did Atlantis disappear? Why do we have no historical proof? Or was the story of Plato a mere fable?

True or fiction? Myth or reality? These are the questions which have inspired many to carry out research. Yet the truth is unknown, untold.

The story reads like a fairy-tale.

The time is 3,500 years ago. A long hazy summer day was coming to an end. The rays of the sun were shining on a tiny island. The island appeared inexplicably beautiful with sun rays highlighting the volcano. The narrow streets were filled with people. Women were enjoying the pleasant evening. They were laughing and chattering.

The evening passed away. Night came. And with time the pleasant, peaceful atmosphere changed into a turbulent, violent one. The sea changed its colour. From within the earth came muffling voices. The islanders grew worried. They thought that 5000 ft. high volcano was about to erupt. They thought that the God controlling the violent forces of the earth had awakened from his long slumber. The people of Atlantis merely thought on these lines. They did not know that those were just signs of a great



Atlas: The first king of Atlantis

Plato: Whose description of Atlantis are as vivid as ever.



cataclysm. And that happened. Their whole civilization was destroyed.

First a dark smoke engulfed the entire island. Then a blitzkrieg of pumice stones occurred. This was followed by ash which poured down heavily. A big bang occurred. The great volcano erupted forming a crater of 37 miles. Into this gap rushed the sea water and the great civilization finished, leaving behind no trace.

The scientists and seismologists see the destruction of the island in this way. According to them the destructive forces must have been equivalent to 500 - 1000 atomic bombs. According to them the dark ash which fell down on the Aegean must have plunged the entire area into darkness. The deposits of it were found on the remains of the island and the ancient Greeks called it 'Kalliste'!

Scientists believe that Kalliste is the only particle which can solve the riddle that has made the historians and geographers mum on the topic, which the great Greek philosopher, Plato had extensively described in his discoveries.

According to Plato, Atlantis was a paradise. It was a vast island with green plains and impressive mountain ranges. The island had variety of animals, even elephants and fruit gardens. The island was rich with precious metals alloy of copper and orichalc. The city was arranged in five zones and was built in perfect concentric circles. The ports were served with canals.

Plato also says that the city had a great palace and a temple, which were covered with silver and gold. The interior of the temple was of ivory and walls, pillars and floors were coated with orchil. A statue of the God was built with gold. This God, standing on a chariot with six winged horses has been described as the God of the Sea and Shaker of the Earth. The inhabitants worshipped this God.

Plato has not only described the good points of the society, but, being a great judge of human nature describes, "When the divine portion began to fade away, and became diluted with mortal admixture... (society) became full of avarice and unrighteous power." Atlantis embarked on the career of war and conquests. They defeated most of the surrounding areas. The only power that stood against them brilliantly, was of Athens. But the defeat was not enough to teach Atlantis a lesson. After the moral decay, even Gods grew against Atlantis and punished them with severe earthquakes and volcanic eruptions. And Plato describes, "Afterwards there occurred violent earthquakes and floods; and in a single day and night of misfortune... the island of Atlantis disappeared into the depths of the sea."

According to Plato this happened 12,000 years ago in the Straits of Gibraltar. And from this point starts the great controversy of Atlantis. Historians ask whether Plato's story can be trusted? And then what were the circumstances in which he wrote it.

Plato's story passed from generation to generation. The main source of Plato's story was his nephew Critias. And Critias claimed that he heard the story from his grandfather - Dropides and the latter heard it from Solan, who was famous for his truthfulness and was considered to be one of the wisest law givers and the seven sages of Greece. Solan lived from 640 B.C. to 558 B.C. Plato wrote the story two centuries later.

Solan himself claimed that the story was not original. He heard it from a priest in Egypt. Solan was so impressed with the story that he translated it into a poem in Greek.

From this account, it appears that the Egyptians knew about the Atlantis or perhaps trade existed between them.

However, as far as Plato's version matters, it was more philosophical than historical. Plato's student, Aristotle believed that it was not more than a poetic fiction. Many scholars think on the lines of Aristotle.

But there are some scholars who believe in the truthfulness of the story. Crantor (300 B.C.) who was the first commentator on Plato's work, believed that the account was true. Even Stoic philosopher and scholar Posidonius (135 - 50 B.C.) refused to believe it as mind's imagination.

Even after 23 centuries, the controversy haunts - truth or fiction? So much so that many have taken advantage of the situation and have started weaving uncommon stories about black magic, clairvoyancy etc.

Plato believed that Atlantis was in the Atlantic itself. This led to serious research and historians found out that once there existed a continent in the middle of the ocean. According to these historians, the Azores, the Cape Verde Islands, the Canaries and Madeira were the mountain peaks of Atlantis.

The 15th century cartographers included Atlantis into the world map, purely out of imagination. When America was discovered, it was thought that Atlantis had been unearthed. Gradually the interest in this mysterious island gave birth to a new science department Atlantology, in the 19th century. The prominent member of Atlantology was the American politician and member of the US Congress, Ignatius Donnelly. He published a book "Atlantis: The Antediluvian World". The book became a best seller.

Donnelly observed some comparisons between pre-Columbian civilizations and ancient Egyptian culture. He gave the examples of pyramids, mummy and the art of developing 365 day calendar. He emphasised that the two civilizations had a common seed - Atlantis. And after its destruction, both the civilizations grew up differently,

Donnelly took the help of archaeology, mythology, ethnology, geology and botany. He scientifically prepared the



Picture based on Bible story showing Moses on his journey.

documents and proved that Atlantis existed. Many believed in Donnelly's theory.

However, 20th century oceanographic studies have completely negated the work of Donnelly. According to the oceanographers, the 36 million sq. miles Atlantic shows no evidence that a cataclysm ever took place and that there existed a continent. Although 12,500 miles long mountain range runs from north to south in the Atlantic ocean, this in no way could be remains of the Atlantis, as it is rising up at the place where Atlantis should have subsided.

In 1912, the controversy was again flared up. An article appeared in the newspaper — *New York American*. The title of the article was *Haw I found the lost Atlantis, the source of all civilizations* and the author was Dr. Paul Schliemann, grandson of the discoverer of Troy.

Dr. Paul claimed that he possessed some valuable documents and articles passed on by his grandfather. Dr. Paul showed the bronze vase which was unearthed at Troy and which bore the inscription : "This was the gift of Cronos, king of Atlantis." Dr. Paul tried earnestly to prove his evidence but nobody believed him.

So much has been written on Atlantis that recently, a German archaeological journalist, C. W. Ceram counted the number of the volumes written on Atlantis. The number was astonishing. About 20,000 volumes have been written on the subject.

The unique write up had been by the American prophet and clairvoyant, Edgar Cayce (1877-1945). Cayce claimed that number of his clients were reincarnated Atlanteans. His picture of Atlantis, which emerged during various trances was quite similar to Plato's vision, though he had never read Plato. According to Cayce, Atlanteans were advanced people who brought about their own destruction and that Atlantis was between the Gulf of Mexico and the Straits of Gibraltar. Perhaps, he was hinting towards America.

Again in 1968, Dr. Valentine discovered some walls which sparked the Atlantis controversy again. He saw a giant wall, submerged in the waters of North Bimini island. He linked this wall with the Atlantis.

Earlier in 1967, at Greek archaeologist, Sypridon Marinatos made an excavation and discovered Santorini. He compared the cataclysm of 1883 which occurred at Java and Sumatra with the information of a similar cataclysm which occurred 3,500 years ago at Santorini. The Santorini cataclysm was earlier researched in 1965 by two American scientists Dragoslav Ninkovich and B.C. Heezen. Marinatos concluded that the sequence of events of both the volcanic explosions was identical. Moreover, the excavation at Santorini resolved many archaeological doubts.

As the science of archaeology is day by day becoming scientific, historians and archaeologists think that eventually Atlantis mystery will also be solved. Till then, various stories and legends continue to hound around the mysterious, vanished civilization. Rivers of ink continue to flow in constructing a new story or a new discovery about Atlantis. •

Haunted People

'Ghosts' is the subject which baffles everyone, everywhere. Even after the advancement of science, the reality about ghosts remains a mystery till this day. But human beings have always been inquisitive. Harry Price spent 40 years in unravelling the mystery about ghosts in vain. Spirits' photographers tried their best to substantiate the facts. But again progressed with little success.

In fact, all efforts have been without success. Often people who claim to have seen a ghost are labelled as fraud or suffering psychologically. Science has totally disbelieved in the existence of ghosts. Yet, the phenomenon exists and is as true as our reflection in the mirror.

A young English lady had come to India with her husband. Early in the morning on March 19, 1917, she was dressing up her little baby. Suddenly she felt the urge to look behind her. She did so. She was amazed to see her pilot brother standing there. She thought that he had been posted to India. She was so excited that she took some steps to greet him. But then suddenly she realized that her infant would fall down from the bed. So she turned back towards her baby and when saw him sitting safely, she again turned towards her brother. But there was no one at this time. Her brother was gone. Thinking that her brother was playing hide and seek with her, she searched the whole house. But he was nowhere to be located. Exhausted, she sat down disheartened. A few hours later she learnt the shocking news. Her brother had been killed in an air battle.

In 1869, a woman in Italy saw the body of her mother. The woman was upset by the sight. She immediately penned down a letter to her mother. By return post she got the news that her dear



*Photographer took this photograph near his mother's grave.
In the rear seat ghost of mother is clearly visible.*

mother had passed away sometime back and was buried on the same day when she (the daughter) had the vision.

These are not mere stories. And these two are not the only cases. There are innumerable such cases. But what do such stories arrive at? How should a modern mind comprehend these cases? Did the two ladies in the above stories see ghosts? If yes, then what do we mean when we say the word 'ghost'? These and many other intriguing questions haunt a modern mind.

Surprisingly, of all the sciences, only psychiatry has seemingly given an understandable answer. According to psychiatry, ghosts are signs of unfulfilled wishes, guilts and of far-fetched imaginations. Accordingly, it is not improbable when a lonely widow sees an image of her dead husband or a loving daughter or a son sees an image of a dead parent.

But this explanation has shortcomings. For how can one rationalize the 'seeing' of an unknown person.

Margaret Sheridan was just a child when she had her first encounter with a ghost. She had gone to stay at Frampton estate with her mother and brother. They were to await the news of their father, who was a British Army Officer. He was serving at the

Harri Price shown with his ghost-catching modern scientific instruments.



German front in World War I. In the evening when Margaret was coming down to the drawing room, she met a little boy on the stairs. Recollecting the incident, Margaret later wrote, "He was wearing a white sailor suit, with a round straw hat on the back of his head. He looked at me, and I looked at him. We passed each other without a word. Nanny had always impressed upon me that I must never speak to strangers; I assumed, nevertheless, that he had come to play with me. As soon as I got into the drawing room, I announced with shrill anticipation/1 jaw a natty sailor bo/. An ashen silence followed. I came to know much later, that the Sailor Boy was a visitor of ill-omen in the Sheridan family. In life he was an ancestor who had been drowned at sea as a midshipman. He appeared at Frompton only before the death of the heir. The strange part was that the portrait of him was that of a young man of sixteen or seventeen, yet what I saw - and saw clearly - was a child of about my own age."

The possible reason for Sheridan's apparition is based on the theory about the recent controversial subject of telepathy. According to this theory the reason for the child Margaret's visualization was due to mother or grandmother or perhaps both. The whole Sheridan family feared the dreaded superstition but tried their best to hide it And in their effort to suppress the fear they succeeded in passing on the myth to an impressionable child. She (Margaret) then inadvertently transformed the sailor into a child, a child of her own age. So much is understandable from the



Sketch of Philip's ghost (above). People calling it on the table.

science of telepathy. But the climax of the whole episode still remains a mystery i.e. how did the heir die?

In similar fashion, telepathy has explained another amazing incident, which occurred in 1964. In an automobile plant in Detroit, a motor fitter was working on an assembly line. Suddenly a big piece of machinery which was accidentally set in motion started to fall on him. He was too shocked to say or do anything. Suddenly, as he recollected later on, a tall black man with a scarred face pushed him to safety. But when he turned around to express gratitude, the other man was nowhere to be seen. Moreover, he had never seen the mysterious man in the plant earlier. But some of the older workers had seen the rescuer. According to them he was the worker who had been decapitated 20 years ago while working on the same section of the plant.

The followers of the telepathic theory believe that the older worker who had witnessed the misfortune of the earlier worker must have conveyed the predicament of the earlier victim to the fitter who was removed out of danger. However, doubt remains about the fitter's conviction that he saw the man and was saved by somebody else. The fitter confidently recalled that his rescuer had "enormous strength and just pushed me out **of the way as if I were of featherweight.**"

There are innumerable such stories. And the reason for most such beliefs or sightings go untraced. In fact, to explain the reason for such encounters is itself an arduous task. One explanation could be that it is the soul's final visit to a far off loved one. It can also be a form of telepathy. Amidst such conjectures, the most scientific (if it could be called scientific!) explanation is that it is the unconscious mind's response to loneliness and worry, marked by bizarre coincidence. Yet even this explanation has its limitations. Nevertheless, the role of mind in such encounters cannot be underestimated.

Surprisingly, till now, one of the most astonishing manifestations of the strange exchange of mind and circumstances occurred in the early 19th century in the United States. For four years, a prosperous farmer and his family in Tennessee were tormented by a wicked force which came to be known as the Bell Witch.

The traumatic experience began with a series of seemingly unrelated sights. One day the head of the family John Bell, noticed a peculiar looking dog in his cornfield. He shot at it. But when he went to collect the animal, he could find no trace of it. A few days after this incident, John Bell was walking along with his two sons. They saw a unique bird. John Bell shot at it. But when the boys rushed to pick up the bird, they saw nothing. A few days afterwards, Bell's youngest daughter, Betsy Bell saw a young girl near the same tree. But when she approached near that tree to talk to her, Betsy found no one.

In addition to these events, the family often experienced the rattling of windows, a tapping at the door, continuous clawing on the floor and often the growling of two dogs.

These incidents were followed by the family members being attacked by some unforeseen hands while sleeping. Often covers were removed from their body and children's hair were pulled up in the dark. Betsy Bell was the most priced victim. At night she was often heard shrieking and screaming.

The attacks on Betsy became frequent. She often complained of being suffocated, suffered from fainting fits, spoke of feeling pins and needles all over her body and once vomitted a stream of sharp objects. The Bell's family members were terrified. Exorcists and spiritualists flocked to the town. Questions were put to the unseen 'person', commonly called witch. First the unseen force rapped out indistinct answers to questions, then it started whistling and whispering, it refused to answer the direct questions and later on became offensive. It became impossible to detect the purpose of the witch.

Witch was kind towards Betsy's mother but Betsy and her father/John Bell, were the favourite victims of the witch.

Gradually, the witch turned its full attention on Betsy's father. His tongue swelled up to such a sight that he could neither eat nor talk. His face changed. He was tormented so much that finally he had to stop working. He was put to bed and never got up again. He went into coma. The doctor was called in and to his surprise he noticed a vial of liquid among his other medicines. When asked, the witch replied, "I have produced the mixture and fed some to Bell during the night which fixed him." To test the substance it was given to a cat. The cat tossed and turned for sometime before finally collapsing. John Bell also died the next morning. The witch did not go away with this death. Betsy Bell, who was of 16 years' old was about to marry a young man when the witch imposed upon her not to marry that man. Finally she called off her wedding and married another man who died soon after. Betsy never married again. She remained a widow till her death in 1890, at the age of 86. After this incident the witch disappeared.

The sufferings of the Bell family became the focus of psychologists. Everybody believed in the existence of the phenomena, but nobody could analyse the reasons for it.

The post-Freudian world analysed the phenomena in detail. Nandor Fodor, a psychoanalyst studied the case in detail. He said the symptoms of Betsy - swooning, fainting, dizzy spells, were those experienced by someone who is leaving the conscious self behind; in other words someone entering a trance. While the symptoms of John Bell, i.e. inability to eat or speak and withdrawal from all normal activities were associated with the feeling of guilt. On the other hand he explained the behaviour of Bell Witch as malicious but at the same time, very kind towards Lucy Bell. As the behaviour of the witch was not uniform toward the family members, he analysed the psychological factors of Betsy Bell and John Bell extensively. Fodor came to the conclusion that Betsy Bell's behaviour was the result of her intense hatred for father - John Bell, who might have harmed the father - daughter relationship by his sexual advances or by some form of incestuous relationship. As a result, Betsy alone was incapable of dealing with the situation and subsequently her personality split into two - she and the "girl in the green dress swinging from the oak tree". And it is this latter part of her self which gathered courage to attack her father.

This was the psychological version of the Bell Witch. And it was impossible to agree or disagree with Fodor because of the remote possibility of ever proving it after a lapse of a century and a half of that incident. In any case the subject of ghosts is a difficult topic to dissect. Hence, the theory of Fodor remains ambiguous till this day. At the most, we can only suppose that ghosts are the familiar forms of our deepest wishes and fears, of our dreams and perhaps something beyond human comprehension.

In conclusion, one can say that ghosts should be accepted as one accepts fire, a somewhat mysterious phenomenon. For if one is to explain about fire, what can one say? Perhaps, that it is an event rather than a thing or a creature. Similarly, explains Robert Graves, (one who claimed that he saw the ghost of young Private Challoner) "Ghosts seem to be events rather than things or creatures."

-

Eldorado - A Golden Myth

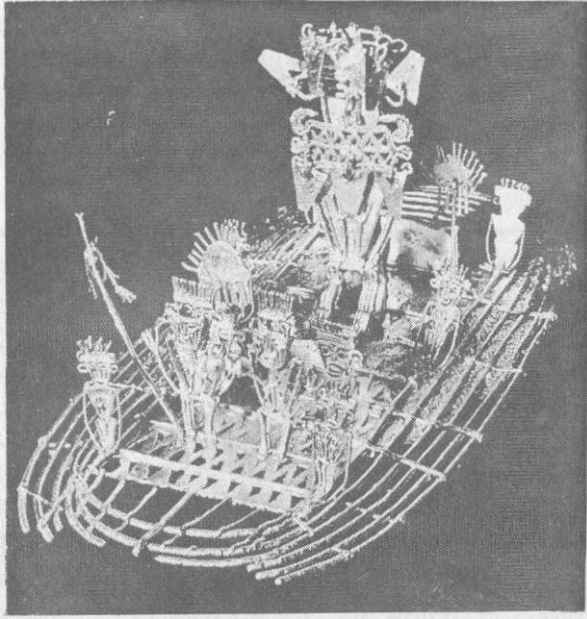
Human beings have always been fond of possessing gold. This lure has led to many weird and strange adventures. And the strangest of all the expeditions had been the search for Golden Land - Eldorado.

For centuries the legend of Eldorado, the fabulous land of gold led many to undertake the courageous feat. Some lost their fortune, some their reputation and some their life. Still the men remained undaunted. Year after year, decades after decades, men went out in search of the Golden Land.

After all, what were they seeking? Gold? A Golden City? A Golden Man? or was everything just a myth, a story which destroyed many adventurers?

The year was 1969. Some farm workers were working in a cave near Bogota in South America. Suddenly their hands struck against a model of a raft. As soon as they saw it clearly, they shrieked with surprise - "Eldorado! Eldorado!" It meant the Golden Man. The model showed a king on a raft standing with his bodyguards. This solid gold model raft is similar to the one taken from Lake Siecha in the 19th century by the adventurers of Spain and Britain who were on their mission to discover the golden land. They couldn't find the golden land. And soon people forgot all about it. But in 1969 the discovery of golden man once again forced the people to search for the land - the Golden Land whose very existence till now is in doubt.

The mania for gold started in 1530 with the Spanish adventurer Francisco Pizarro who set sail from Panama to plunder the treasures of the Inca empire in Peru. In 1535, Sebastian



The gold model raft.

de Belalcazar, veteran of the Inca conquest and founder of Quito, the capital of Ecuador, met an Indian, who told him of a far off tribe King who sprinkled his body with gold dust before swimming in a sacred mountain lake. After hearing this story Belalcazar coined a new name for this mysterious king Eldorado, meaning the Golden Man. It was this name which became so famous among the adventurers. The word Eldorado signified different things to different adventurers. To some it meant the Golden Man but to some it signified the Golden Land. Anyhow, Eldorado became a hypnotic legend and allured many adventurers to lose their fortune, reputation, life itself in its vain pursuit.

The first man to think of Eldorado was Gonzalo Jimenez de Quesada. He started on his journey in 1536 with 900 men from Santa Marta, situated on Colombia's northern coast.

Quesada's journey was full of peril. He and his men had to face various animals and had to fight diseases and were often decimated by fever, malaria and the attacks of hostile natives before they reached Chibehas. At Chibehas, Spaniards were told

of some more tales about the Golden Man. Going by the tales, Quesada proceeded to Guatavita lake with an Indian guide. They reached the lake which was a deep, dark expanse of water set in the crater of an extinct volcano almost 9,000 ft. above sea-level. Few huts were there but nowhere could Quesada and his left over 200 men see the Golden Man or the Golden Land.

Quesada returned, but only to sit quiet for sometime. In 1568, the old Quesada, haunted by the lake and the possible treasures hidden beneath it restarted his journey. He left Bogota, the new city he discovered, with a force of 2,800 men. They hunted in vain for three years before Quesada gave up the search.

So even after four decades of expeditions the men had failed to find any gold, leave aside discovering a Golden Man or a Golden Land. In return, expeditions had cost huge amounts. Nevertheless, the lure of discovering huge mass of gold made the men to pursue their search. But by the end of the 16th century the interest shifted from Colombia to Guyana.

In 1584, Antonio de Berrio, Governor of a vast tract of land between the Amazon and Orinoco rivers, set off from Tunja in



King Eldorado being anointed before taking bath in the lake.

central Colombia to explore the hinterland of Guyana, He was convinced that the Golden Man was to be found at a lake surrounded by mountains. His expedition was unsuccessful. So was his second expedition which lasted from 1585 to 1588.

In 1591, Berrio launched a third expedition and travelled down the Orinoco. He sailed to the island of Trinidad and established his base for future expeditions to Eldorado. In Trinidad, he met Sir Walter Raleigh, who was searching for a new source of wealth for the queen, Elizabeth I. Berrio passed on the information to Raleigh who published his journal – *The Discovery of the Empire of Guyana*. In his journal, he described extensively about the golden city, although with very little truth in it.

Queen Elizabeth died in 1603. Raleigh was also convicted of trumped-up charges of treason and sentenced to death. The sentence was however suspended for sometime. Raleigh led a second expedition. But was unsuccessful and when he returned he was beheaded in 1618.

His death did not deter other men from searching for the Golden Man. Right up to the end of the 18th century, search for the Parima Lake continued. This was the lake which Raleigh described in his journal "Discovery of the Empire of Guyana". He had shown that on its shores stood the imperial city of Manoa - the City of Gold. The explorers searched for the lake Parima. And like earlier quests, the explorers failed in their effort.

The last Spanish expedition in search of Eldorado was led by Diez de la Fuente. He set off into the Caroni river region of south-east Venezuela. At this point, he divided his expedition into three columns. The expedition put under the command of Gonzalo Suarez Rondon, it was assumed, nearly reached Lake Parima. But a sudden attack by Indians forced the Spaniards to turn back. The Spaniards finally had to give up the search and leave Guyana. The English, Dutch and French divided the colony among themselves.

People began to wonder whether Eldorado really existed. But myths die hard. And by the beginning of the 19th century the quest for Eldorado passed to a new breed of adventurers. The two

new adventurers were Humboldt (with scientific interest) and Bonpland (a botanist). They travelled extensively and finally concluded that the search for Eldorado was futile and that there was no such lake as Parima. However, Humboldt noted the spot where Sepulveda's expedition had made a breach in the Crater wall in the 1580's. So once again interest was drawn on Lake Guatavita. Humboldt had no interest in the treasure of the lakes but others had. So, in 1912, a British Company - 'Contractors Ltd.' arrived in Colombia with 150,000 dollars worth of equipment to pump out the Lake Guatavita's water. The company did partially succeed in pumping out the water. But lo! what they found was not worth the effort. The ground was covered with thick black mud and little bit of gold, which was not even enough to repay a fraction of the cost spent. More valuable than this find was the raft gold model found at Lake Siecha earlier in the 19th century.

Thus, ended the search for Eldorado - the Golden Man - the Golden Land. The expeditions failed to discover the Golden Man or the Golden Land but in their pursuit they discovered unknown tribes, platinum, silver, bauxite and manganese. And above all, they discovered oil in the Lake Maracaibo basin of Venezuela. The Golden Man on the raft still stares into the eyes of the adventurers, as if asking - "Are you ready to unfold my mystery - the mystery of Eldorado?" •

Olmecs : The Founders of the American Civilization.

One of the most astonishing unsolved mysteries of the world is the knowledge about Olmecs. The world doesn't know who Olmecs were? And where did they suddenly disappear?

Archaeologists believe that Olmecs were the precursors of the Mayas. They were the great sculptors, who created remarkable sculptures. Even the intensive research of the archaeologists has revealed little about them.

Just a century before nobody knew about Olmecs. The name Olmec was completely unheard of. But today they are regarded as the precursors of the American civilization that came into full bloom with the Mayas.

Thanks to the intensive research by the archaeologists, the world knows quite a lot about the Mayas. But we hardly know anything about the Olmecs who influenced most of Middle America from the 13th century till their disappearance 12 centuries later. If reasons for their downfall are unearthed, then perhaps, our knowledge about the American Civilization will be more accurate and precise.

The civilization of Olmecs started at a very odd, unpromising territory - Gulf of Mexico. This low lying, swampy ground was covered with jungles and was often flooded. Despite such geographical shortcomings the Olmecs created the first accountable ceremonial centres of Middle America at this place. They not only created but lived harmoniously for 12 centuries.

Surprisingly, till now only four centres have been explored. These four sites are Laguna de los Cerros, San Lorenzo, Tres



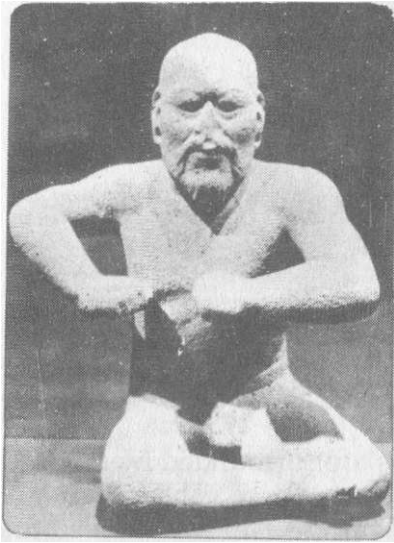
fit mysterious sculpture of Olmec art.

Zapates and La Venta. These areas are surrounded by forested plains which have many rubber trees. These rubber trees are called Ollin by the natives. Perhaps from Ollin was derived the name Olmec.

Archaeologists assume that La Venta must have been the largest religious centre at the height of the Olmec civilization between 800-500B.C. The architecture of this area foreshadows the town planning of pre-Columbian Mexico. Olmecs built a small stepped pyramid with a quadrangle in front of it. The four corners were edged with basalt pillars. Nearby this pyramid are the two parallel mounds which form the boundary of the oldest sacred ball game court in the Americas. This complex appears like a model of a large man-made volcano. The scholars believe that it must have been constructed to be used as burial ground.

Inside these complexes are the carved stone slabs with richly decorated altars and huge basalt heads. This, indeed is the most striking art work of the Olmecs. The facial features of the heads are unique. The heads are flattened with thick heavy lips, drawn corners, short and broad nose and slit eyes. Such odd admixture of facial characteristics has even astonished anthropologists. They cannot establish their origin.

However, after seeing the remains one cannot question the Olmecs' credentials as great sculptors. A green stone statue has been excavated in a Mexican village. This statue depicts a Virgin and a Child. In fact this statue is an eighth century B.C. Olmec



Sculpture of an Olmec wrestler.

carving and it shows a male figure carrying one of the Olmec Gods. Scholars assume that it must be the rain God.

A similar sculpture has been found at the basalt pillar. In this sculpture a monkey like face is looking up at the sky. It is still an enigma that who is this man and where is he looking? Is he a star worshipper? Or an astronomer? Is it a man or an animal? Some specialists have suggested that often Olmec Gods took the form of a half human, half jaguar figure. The markings on the face and limbs, together with the thick drooping lips and slit eyes seem to be the special features of the Olmec sculpture.

A group of statues have been discovered at La Venta. These statues made of jade and serpentine are about 8 inches tall. They are facing a statue made of red stone. We still do not know about the central statue - whether he is a priest or a prisoner on the point of being executed. The exact meaning of these statues is still a mystery.

These are not the extremes of their remarkable art. A figure seated in an alcove in the front of a basalt altar is made from a single block of stone. Another man with a crown is holding a rope which is around the wrist of a figure shown on the altar. This figure is probably the prisoner who is being taken to be sacrificed to the Olmec Gods. The alcove, scholars assume, may be depicting the open jaws of the Jaguar God.

The skill which Olmec artists brought to carving colossal works can also be seen in tiny figures like the well known statue of the 'weeping child'. It is just 5 inches high, and is made of jade, a favourite material of the Olmecs. The head is disproportionately large in respect to the body. Olmecs often depicted a baby in their art, although sometimes with the features of a jaguar.

The stone slab, called King's Stele, comes from the Olmec religious centre of La Venta. It is about a foot high and shows several figures in bas-relief. Perhaps, the figures surrounding this warrior king are vassals who have come to pay homage in token of submission.

Seemingly, Olmec artists were also being very fond of carving huge heads from a single block of basalt. This basalt weighed about 18 tons. Archaeologists have found 14 such heads. The largest one weighs 30 tons and is more than 10 ft. high. The blocks for this must have been carried on rafts by rivers from the quarries which were 60 miles away. This implies that there must have existed an efficient social organisation. Archaeologists believe that these heads must have been of leaders.

Much different from all these sculptures is the sculpture of a 'wrestler'. It is made of porous stone and is considered to be one of the masterpieces of pre-Columbian sculpture. This sculpture is different as the figure is not shown with a flat nose, slit eyes and thick lips. This man has fine features, a beard and a moustache. Thus, Olmec sculptors were capable of making various figures. They were original and creative in their works.

Nonetheless, Olmecs were not only great sculptors. They were also great carvers of jade. And towards the eclipse of their history they developed interest in mathematics and in the calendar. A few scholars also believe that they originally developed the system of writing numbers which Mayas inherited.

Despite having such a remarkable civilization, the Olmecs collapsed. And they disappeared so completely that we are not left with any account of their downfall. Perhaps, had we known the reason of their downfall, our knowledge about American pre-history would have been more refined. •

Who was the Queen of Sheba?

For 30 centuries the Queen of Sheba has baffled people. According to the Bible, Queen of Sheba visited King Solomon with rare gifts. But the question is how far can one believe the Bible? Did she really exist? And if she really existed then where was the land Sheba? Was she a queen, a noblewoman, a witch or simply a seductress? Did she marry Solomon? Was Haile Selassie, the last emperor of Ethiopia, the direct descendant of a union between the Queen and the King Solomon?

Innumerable questions surround the personality of the Queen of Sheba. And the field is open to controversy and research till now.

The name Queen of Sheba first appeared in the Bible, in the 10th chapter of the First Book of Kings. Her story is told in the following way, "And when the Queen of Sheba heard of the fame of Solomon concerning the name of the Lord, she came to probe him with hard questions. And she came to Jerusalem with a very great train, with camels that bare spices, and very much gold, and precious stones."

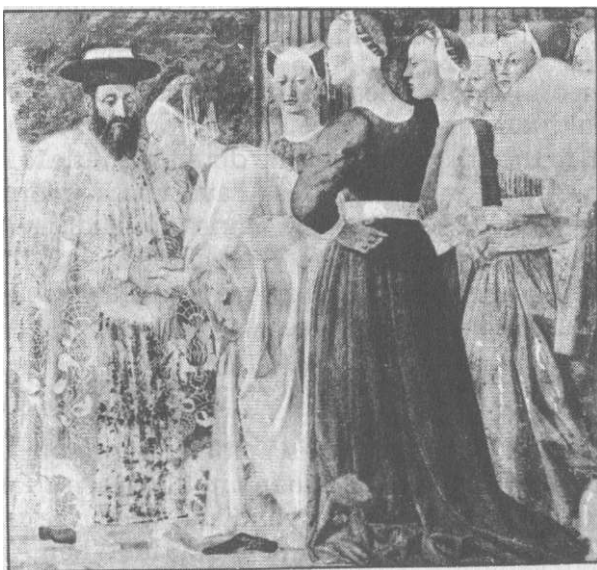
"King Solomon answered Queen of Sheba till she was satisfied. At last she was pleased with his answers and presented him with her gifts of gold, species and precious stones. After that she returned to her own country with her servants."

The same story is repeated in the 9th chapter of the Second Book of Chronicles, although with soikr changes. Despite the extensive accounts of Queen of Sheba, both the Books in the Bible do not mention anything about Sheba's country, her race, her name or about her appearance. While in the Gospel of St. Mathew, Jesus speaks of the queen of the south who "came from far away

parts of the earth to test the wisdom of Solomon." Thus, Bible stops any further information about Sheba. And because her name has been mentioned in the Bible, people took it for granted that a character existed by the name of Queen of Sheba. But the pertinent questions could not be answered e.g. who was she and from where did she come? Because such questions were not answered in the Bible, the name Queen of Sheba has remained mysterious for 30 centuries.

The question arises whether Bible can be taken as a base for historical truth? The first half of the First Book of Kings is the story of 40 years of Kings. And in this is written the story of King Solomon. It is assumed that the story of King Solomon must have been written shortly after his death. So, there must be some historical truth in the text.

According to the Bible, Queen Sheba visited Solomon when he was at the peak of his power. His garrison controlled all roads from the Euphrates to the Sinai Desert, and from the Red Sea to Palmyra. The visit of Queen of Sheba is specially mentioned. When she arrived, Solomon had completed the great temple and the royal city of Jerusalem. Queen of Sheba saw his wisdom and



King Solomon meeting the Queen of Sheba.

power and was greatly impressed. She gave the king a hundred and twenty talents of gold, and a great store of spices and precious stones. As she gave these things to the king, historians often guess that she must have visited the place for commercial agreements. And it is here that the Book of Kings fails. It says nothing about the practical aims of her visit. It says that she merely exchanged gifts and departed.

As far as facts about Solomon matters, the Bible gives enough evidence. According to the Bible, Solomon was the son of King David. He killed his eldest half-brother-Adonijah. Solomon retained peace in his kingdom by raising a great army of 12,000 horsemen and 1,400 war chariots. He consolidated his rule over the tribes of his kingdom. He formed alliances with his neighbours. And for cementing the alliances he married. He also married the daughter of the Pharaoh of Egypt.

Solomon took the help of the Phoenicians and traded extensively. He sent 10,000 men a month to work in the mountains of Lebanon. At home he had 70,000 hauliers and 80,000 quarrymen, working on his great temple. Solomon accumulated so much gold that he used it to cover the walls of the great temple to the glory of Jehovah. He himself sat on the throne of ivory laid with gold. He also ate in gold utensils.

Queen of Sheba also heard of such wealth. She was intrigued by the wealth and splendour of King Solomon, and hence, she paid a visit to the King. The Bible no doubt has little to say about her but the tradition and folklore have much information to impart. The religious art of the Christian Middle Ages and Renaissance often portray her. The sculptures of the Gothic Cathedrals of France, England, Germany and Italy often show her as a queen and at times as a sorceress.

In the 19th century, she played another role. In Gustave Flaubert's "Temptation of Saint Anthony" (began in 1846 and completed in 1874) the queen is made to represent Lust. She attempts to woo the hermit Anthony in the desert near Thebes. First she tempts him with her wealth and when she fails in her attempts then she tempts him with her body. When Anthony is not tempted by her physical charms also, then she reveals a deformed foot and goes away.

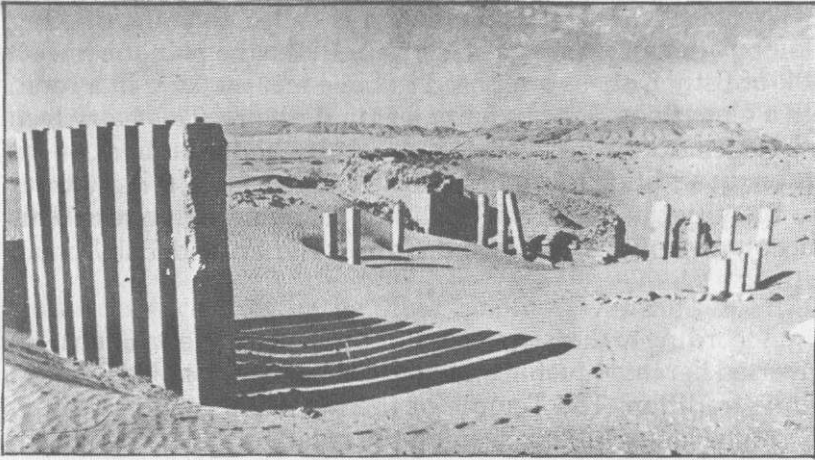
While in the Koran, the queen is called to court of King Solomon after an exchange of letters between them. In the Jewish Book of Esther, she is supposed to have met the king in a room with a glass floor. She has hairy feet in the story. This hairy feet, in the later stories transforms into a hairy body – a mark of the demon. In addition to all these stories, some of the Jewish stories also identify the queen with Lilith, a demonic seductress. This concept, is perhaps, borrowed from Assyrian and Babylonian myths.

According to the Islamic myth, Solomon married a Sheba. He converted her into Muslim and married her. She is called Bilkis in Islamic tradition. The Temple of the Moon in Yemen, is often called the Haram Bilkis, meaning the palace of Bilkis the Queen. The inference is obviously to the Queen of Sheba.

The view about Queen of Sheba had hardly undergone a change in the 20th century. She remains seductive. W.B. Yeats often portrayed her sexual and secular nature. Her name is mentioned in Rudyard Kiplings stories and in John Dos Passos' novel - 'Three Soldiers'. In 1934, French journalist - Andre Malraux claimed to have discovered her white city while flying over the desert of Southern Arabia. What he saw nobody could comprehend.

Some ancient writings point the Arabian Kingdom bordering the Red Sea as her Kingdom. Legends and myths surround her name. In fact, the birth of her name can be traced to Genesis where it was not a place but a person, a descendant of Noah's son, Shem, the father of the Semites. Sheba had 12 brothers. The names of the brothers were adopted by people and places in Arabia. Till 6th century A.D. Hazarmoth, Sheba, Ma'in and Qataban were combined together. Out of these four, the place Sheba was the biggest. Frankincense and myrrh trees were grown on the mountainous slopes of the country. Trade formed the basis of these trees. A Greek historian, Diodorus Siculus (1st century B.C.) described the riches of the capital city.

The natives of Sheba worshiped the Sun, the Moon and Venus. Their system of government by priest kings was similar to the Sumerian system. And their writings and alphabet were similar to those of the Phoenicians.



Temple of the moon: Had it to do something with the name of the queen of Sheba?

Sheba was protected from all sides by desert. In 25-24 B.C. Roman army under Aelius Gallus invaded Sheba, but many soldiers died from heat and thirst. It was only four centuries later that the region could again be attacked.

The name of Sheba appears in classical writings too. Herodotus, Strabo, Pliny the Elder and Diodorus Siculus all mention Sheba.

There are lots of tales about the Queen Sheba. But hardly any facts emerge about Sheba the land, the place. Many of the stories which surround her are faraway from rationality; her mystery still attracts and haunts the people. •

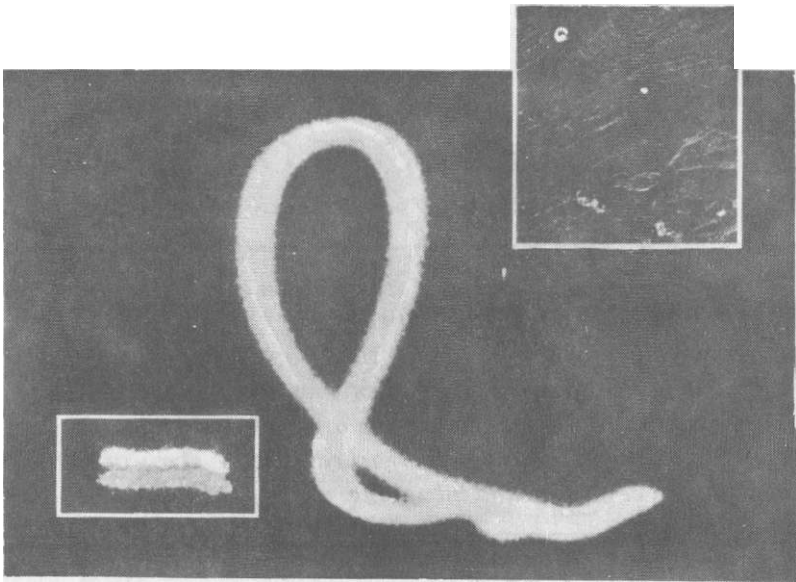
Project U.F.O

Throughout the ages, man has always been eager to explain the happenings in the sky. Unidentified Flying Objects (U.F.O.) pose a great mystery to the present scientists. Some American scientists have categorically negated the phenomenon. But some do agree. They explain U.F.O. as objects from other distant galaxy. Yet no unanimous decision has been reached. The mystery of U.F.O. continue to be elusive and intriguing.

Practically everywhere people have seen it. Reports of sighting U.F.O. (Unidentified Flying Objects) have come from 133 countries of the world. Out of the 70,000 reports, 95 percent have been dismissed as fake. They have been explained as weather balloons, lightning, rockets, birds and even insects. But the remaining 5 percent have not been explained till today. And these mysterious sightings have been called U.F.O.

In 1978, a unique case occurred in Melbourne. Pilot Frederick Valentich noticed something approaching towards him. He radioed, "The thing is orbiting on top of me. It's hovering and it's not an aircraft. It is" At this point the transmission broke off. Nothing further was heard from Valentich. It was thought that his plane must have crashed into the Tasmanian Sea. But no traces of the plane were found. On the other hand, there occurred more reports of mysterious objects in New Zealand.

These bizarre incidents caused Melbourne television crew to mark the airroute between Wellington and Christ Church. The TV Cameraman shot some 20,000 frames of 16mm film. They documented the presence of some mysterious objects. And when research was carried out by Dr. Bruce Maccabee, optical physicist at U.S. Navy, the film revealed an intriguing mysterious flying



A computer study of U.F.O.

object that oscillated at a constant frequency from a large bright yellowish white circular shape to a dim yellow and red triangular shape. Dr. Maccabee suggested that the object was throwing a powerful light, equivalent to 100,000 watts. He also calculated that each object must be between 60-100 ft. across and that they might be travelling at the speed of 3000 miles per hour.

The history of sighting such objects in the sky is quite ancient. Some of the sightings were raised to the pedestal of Gods by ancient people. Even in the biblical Book of Genesis, Jacob dreamt of an angel-lined ladder ascending to Heaven. Columbus also reported "a light glimmering at a great distance."

Some scholars have suggested that U.F.O. were nothing else but spaceships from another galaxy which visited earth. The most active propagator of this theory is the Swiss author, Erich Von Daniken. He published a book in 1968, 'Chariots of the Gods'. In this book he suggested that many of man's ancient works, like pyramids and the entire Summerian civilization must have been built up by the help of the superior beings from other planets.



Such rare cloud configurations are often mistaken for U.F.Os.

The serious modern research began sometime in 1947. Kenneth Arnold-a businessman and a pilot, was flying his own private plane when suddenly he noticed some disc like objects. The objects, he explained were flying in a chain and must be having a speed of 1200 miles per hour.

The experience of Arnold was boldly displayed in newspapers. Following his report, a series of such incidents were reported from elsewhere. So much so that some claimed that they had seen seven foot beings wearing transparent suits. While some narrated that they saw three footdwarfs A few even claimed that American government had arrested three such mysterious men and that President Eisenhower had personally met them. Some still believe in the veracity of this story.

The sudden outburst of so many hypotheses forced U.S. Airforce to tackle the subject seriously. The name given to the team was Project Blue Book. The research with barely three to four people continued for 20 years. The consultant of the team was Dr. J. Allen Hynek, who was an astronomer with Ohio State University. He later became associate director of the Smithsonian Astrophysical Observatory and Chairman of the astronomy department. For a few years Hynek did not believe in the existence

of U F O. But in 1960 he proposed that a proper research should be conducted in this field.

It was because of his efforts that presently there exists a centre for UFO Studies at Evanston, Illinois. The director of the institute is no other than Dr. Hynek. He has divided the sighting of U F O.'s into three classes - nocturned lights, daylight discs and radar visuals.

Hynek further classifies three different types of encounters - first, second and third kinds. The first encounter of the UFO is simply seen. It does not have a direct physical trace on the environment but emotionally it does leave an impact on the observers. He cites the case of Dale Spaur of Ohio. In the morning of April 17, 1966, Spaur and another person stopped at the side of a road to investigate an abandoned car. Suddenly they saw something rising above a nearby wood. They chased the object for more than 70 miles at the speed of 105 miles per hour. In this chase Spaur was helped by other policemen and radio too. The chase ended in Conway, Pennsylvania.

In 1970, an incident occurred in Saladare in Ethiopia. A redball, making a sound like an aeroplane swept the area. It destroyed houses and knocked down the stone walls of a bridge and uprooted trees. Surprisingly no incident of fire occurred. In 1972, several mysterious radioactive impressions were discovered in Nams Fjora. Contrary to the reports of destruction caused by UFO, there are many cases in which patients have got well, and they found to their amazement that their wounds healed.

The third category of encounter with UFO is completely different. In this category some of the creatures of the UFO are said to be human-like in appearance. Such encounters have usually occurred with clergymen, housewives, physicians and farmers. They claimed that they flew with UFO. But when asked to prove it, they merely said that they were kidnapped by Humanoids (as UFO beings have been nicknamed).

Most amusing are the reactions of the people toward UFO. The reactions of the people depict their cultural pattern. French curiously approach towards UFO humanoids, US citizens react

with fear and hostility and the priests of Papua Guinea wave at them.

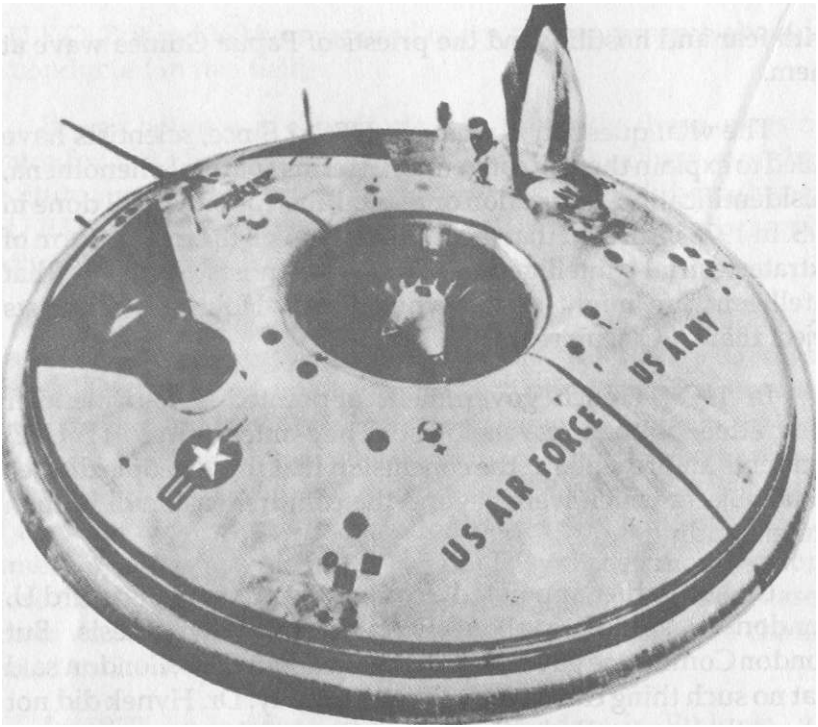
The vital question is what are UFOs? Since, scientists have failed to explain them in conventional terms - natural phenomena, misidentification, fabrication or mental aberration. A poll done in U.S. in 1978 indicated that most citizens took it to be some form of extraterrestrial intelligence. Some scientists believe that intelligent life might exist beyond Earth. However, scientists reject that UFO's are real.

In 1978, French government appointed a four-member committee, with a psychologist. They interviewed 11 UFO incidents and reached at the conclusion that these people did see some objects which were beyond the comprehension of human understanding.

US had earlier appointed a committee under Dr. Edward U. Condon to speculate about Extraterrestrial hypothesis. But Condon Committee gave the judgement about UFO. Condon said that no such thing can be proved scientifically. Dr. Hynek did not believe this report. Rather he blamed Condon for not researching on Extraterrestrial hypothesis - the cause for which Condon Committee was formed.

French researcher Jacques Vallee got interested in the idea. In his book - "Passport to Magonia", Vallee dissected the parallels between close encounters and myths from practically every culture, which talked about UFO. He came to the conclusion that - "In antiquity they were visualized as 'gods'; in our time, as interplanetary travellers. . . . It may be that there is inherent in our species, a sort of built-in defence mechanism that reveals itself in times of extreme social stress. And one of its manifestations is the phenomenon known as UFO."-

Majority of scientists believe that UFO is not a spaceship or any other earth's peculiarity. They do not know what it is. Although Dr. Condon categorically stated that all such literature on UFO should be banned and people who claim to have seen UFO should be ostracized.



A saucer like craft built by the U.S.

Despite such strong recommendations, people continue to witness UFO films and fiction is written about them. If so much continues to happen around the syndrome of UFO, certainly Dr. Condon could not have been right. Whatever are UFO - whether visitors from outer, distant galaxy or natural manifestation of unknown forces of human mind—the mysterious phenomenon does continue to elude any answers. •

The Mysterious Iron Pillar

The Iron Pillar situated in Meharauli (New Delhi) does not rust, although scientific studies reveal that the metal from which the column is made is full of impurities. How is it so? This is the question which baffles us. And we are still groping in the dark about the truth.

In the capital of India-New Delhi, is situated a place called Meharauli. This place is famous not because of nature's beauty but because of the Iron Pillar. It was built as a memorial to a king named Chandra.

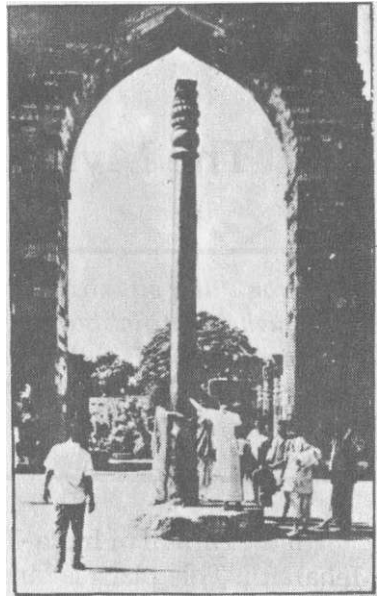
The height of this massive pillar is 22ft. It has a diametre of about 4V\$ft and is a solid shaft of wrought iron with an ornamental top. Its metallurgical skill speaks volumes for the workers and the era in which it was constructed. Scholars believe that it must have been constructed in the 5th century.

This Iron Pillar attracts attention not because of the ancient time in which it was, constructed, butbecause of its unimpairment. Despite years of exposure to wind and rain it has not rusted or has even weakened.

Many theories have been put forward regarding the pillar not having rusted. The most acceptable theory is that of Erich Von Daniken. In his book "Chariots of God"; he has written that structures like Pyramids, and Iron Pillar could not have been constructed or built without the "Super Intelligent" forces.

Any how, the theory is something which is open to criticism. The startling fact is that how can the Iron Pillar stand there so strongly without any patch of rust, even though scientific tests

There is no sign of rust on this ancient iron pillar—A fact that has baffled all.



have proved that the iron used is not hundred percent pure. And when science fails, myths and legends obviously take birth.

Over the years, myths have surrounded this, pillar too. It is said that if anyone is able to encircle the pillar, that person is supposed to be very fortunate. Perhaps, some have succeeded in encircling it or perhaps, some day someone will be able to.

It is true that the actual nature of the material used has not been known. But this also does not mean that science should give way to myths and suppositions. Science is getting modernized day by day. May be some day scientists will be able to know the true nature of the metal from which the column is made of. And the curtain of mystery would be raised away from the dark, tall, round and slippery Iron Pillar. •

The Secret of Tutankhamen's Mummy

American archaeologists succeeded in locating the Tutankhamen's mummy. They also unearthed the large amount of wealth buried inside it. But they could not solve two mysteries.

Inside the mummy, archaeologists discovered 150 amulets. They could not fathom its meaning. Secondly Tutankhamen's mummy had started decaying. Why? They could not answer.

The historians and archaeologists are still experimenting and speculating the significance of 150 amulets and the reason for decay of Tutankhamen's mummy..

Egypt inspires a traveller with awe and admiration. It is not only known for its historical civilization but also because of innumerable secrets buried beneath its monuments. Historians, archaeologists and scientists are still uncertain about the purpose of erecting pyramids and mummies.

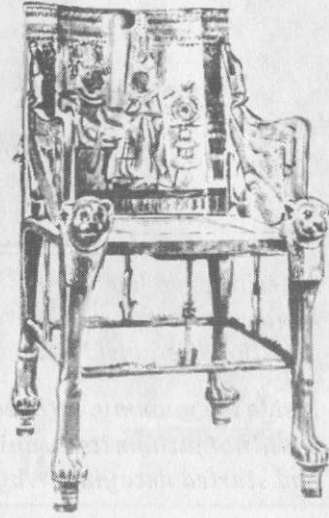
The most bewildering and baffling mummy is of Tutankhamen. Twelve centuries after the rule of Pharaoh Cheops, Tutankhamen became the ruler. His mummy is as mysterious as the construction of pyramids.

The first one to enter inside the mausoleum were Cartar and Karnakhan-the two American archaeologists. They discovered four graves. On the first grave, artistic designs were made out of gold and on two other graves pictures of Gods and Goddesses were found: This was done, perhaps, to protect the dead. In the fourth grave was kept the dead body of Tutankhamen. His 3,500 years' old mummy was found inside three coffins. The body was decorated



Head of the Tutankhamen's mummy.

Gold chair discovered from the grave



with gold ornaments. An iron pillow was kept below the head and a well decorated mask depicted the artistic maturity the civilization had attained.

There were other precious articles too in the grave—green glass, Neelam and Cornelian necklace. The fingers of both the hands were decorated with rings. There were five rings in the right hand and eight rings in the left hand. On the waist was a gold chain in which the sword was hanging. Even the sword was decorated with precious stones. Besides all this, the coffin was full of precious gems and stones. In fact, Tutankhamen's body was decorated with 143 valuable articles.

So far the discovery spoke of the artistic traditions of the civilization. But the intriguing mystery is of the 150 amulets which were found in the mummy wrappings of Tutankhamen. The second interesting point which arouses curiosity is why did Tutankhamen's mummy decay?

The 150 discovered amulets are the specimens of highly developed artistic traditions as well as they highlight the mysterious incomprehensible traditions of the Egyptians. The two well known amulets are 'Eye of Horus' and 'Buckle of Isis' but most important amulet is Scarab—a symbol of life and dedicated to 'Ra'—the Sun God. The Scarab was placed on the heart of the dead body before burying. It had a magical spell carved on its back—a request to God for immortality. As Scarab was in the shape of dung beetle, gradually, the latter became associated with the Scarab's power and infertile women began using it frequently in the hope of getting a child. The 'ankh', a cross with a ringed head, appeared as frequently as the Scarab and perhaps symbolised life and immortality.

Out of the 150 amulets discovered on the body of Tutankhamen, historians have been able to decode the meaning of these three amulets only. Horus and Isis also symbolised God. Horus was the God who weighed dead man's heart before pronouncing the final decision about him. J

How strongly did the Egyptians believe in the power of their amulets and the reality of the life after death is evident from their mummies. But as far as Tutankhamen's mummy matters it has given rise to another mystery—why did Tutankhamen's mummy decay? There are so many other mummies, much older than Tutankhamen's which have not yet decayed. Then, why his? This is the question which various historians ask.

According to some scholars the practice of rubbing oil on the dead body proved to be fatal. The scholars assume that with time as the oil penetrated deep inside the skin, it automatically ruined the skin. But they have not been able to prove it scientifically

Meanwhile, archaeologists have found immense wealth in this mummy. With the precious gems and stones they have also found a well-decorated throne, decoration pieces, artistic wood articles and a sculpture of Tutankhamen's queen.

The throne carved with gold and diamonds attracted many archaeologists before the two Americans could seep inside. And unfortunately, all others (20 in number) died midway in



Bust of Nefertiti, the Queen of Egypt.

mysterious circumstancesThe reason for their death has not been known till this day. The two successful American archaeologists did not find anything dangerous in the tomb.

If the mysterious cause for Tutankhamen's mummy getting spoiled is unravelled, perhaps, the world will also know the secret of mummies' construction. But till now archaeologists know nothing about it. •

The Jungles of Angkor

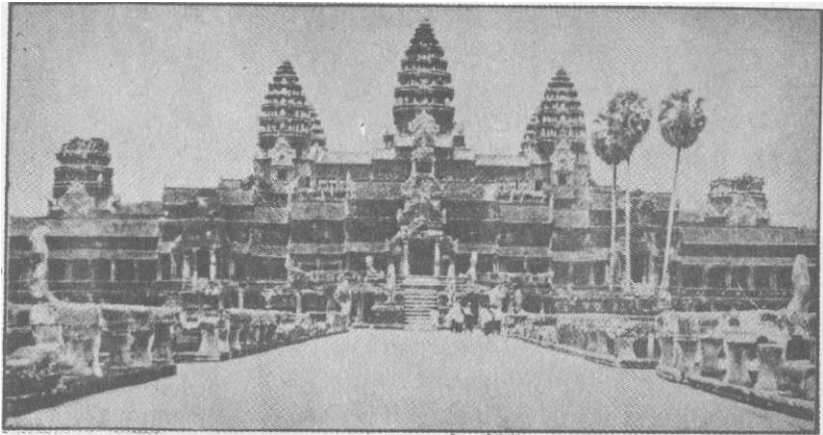
Angkor Thom, the remarkable capital of the Khmer empire, was the perfect combination of religious faith and economic necessity. The dense jungle of Angkor hid the secret of a civilization, where the rice farmers, with the help of their God-kings controlled the hostile surroundings. The kings built magnificent buildings, temples and tanks.

Yet, it saw its doomsday. It declined, degenerated and the people completely vanished into thin air. Even after so many years, historians have failed to know the place where they disappeared.

The mystery still hangs in the air.

In 1860, Henri Mouhot, a French naturalist had gone to Indo-China in search of rare birds and insects. He didn't find rare birds or insects but found monumental highways, artificial waterways and magnificently constructed towers. These he realized were not ordinary buildings but were the remnants of a splendid civilization. He recorded in his diary, "It is grander than anything left to us by Greece or Rome."

Unfortunately Mouhot fell sick. He could not pursue his quest and died of tropical fever. His reports were passed on to others. And all the details arrived at one conclusion - that there occurred a brilliant civilization. The minute details were later on discovered by the French government who set up an Exploration Commission. By 1885, they had worked up a chronology of the rulers and developed the outlines of a description of the civilization that had produced the wondrous city. They could document that Angkor had been constructed by a south-east Asian people, called Khmers. They developed militarily and



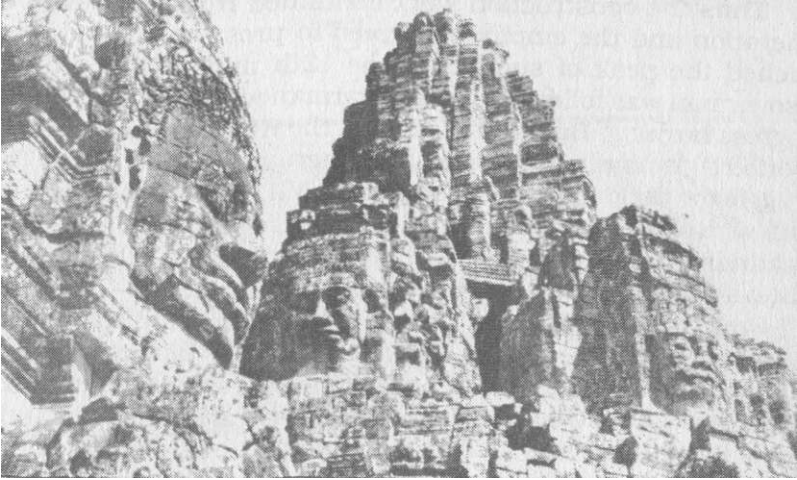
temple was built during 12th century.

technologically for 500 years. But the question which they could not answer was that how did the civilization decline and people disappear in the 15th century A.D.

The civilization began with the trade and other contracts between India and South East Asia. It took spiritual inspiration from India. And after a few years modern Kampuchea was formed. It was called Phnom or Funan which meant 'mountain'.

The founder of the Funan, according to the Khmer tales was Kaundinya, a Brahman. He came to the shore where a young woman paddled out in her canoe to greet him. She was Queen Willow Leaf, ruler of the country and daughter of a serpent deity. She was against Kaundinya, so she seized his ship. But Kaundinya proved to be more powerful. He shot a magic arrow into her craft. The queen realized that she was no match for him. So she made peace with him and shortly afterwards the two married. And from their union were born the ancestors of Funan rulers and generations of Khmer rulers. The kingdom progressed for five centuries and then around 550 A.D. the Funan Kingdom was overthrown by the Kambujas.

The first great Kambujan leader was Jayavarman II. With him started the brilliant Khmer empire and a royal dynasty. This dynasty flourished for more than 600 years. Jayavarman, meaning 'protector of victory', was a military genius. He ruled for



The remains of the splendid architecture,

48 years and unified the state and kept the state militarily strong. He set up a new capital on the mountain of Kulen. There he brought an Indian 'skilled in magic science' to exorcise all foreign demons and to establish the protection of his empire by Lord Siva. And to make his position all powerful, he declared himself as the God-king - the incarnation of Siva. The concept provided the mantle of legitimacy for 30 Khmer kings. It also became the inspiring force behind the feverish buildings which created the urban complex on and above the plain of Angkor.

Jaya varman created a hereditary office of high priest to assist in the task of administration. With him Jayavarman established a religious hierarchy to supervise every aspect of national life.

Jayavarman was followed by his nephew Indravarman I. He ruled for 11 years and solidified his empire by building barrages and raised water storage lakes. With the facility of storage water, the condition of peasants improved. They could irrigate their land throughout the year.

Indravarman's son and successor, Yasovarman I, also did much for the good of the kingdom. He constructed a funerary temple in the middle of a lake. He also created a stone pyramid and a barrage to the east of the royal city nearly 5 sq. miles in size.

Thus the construction work continued from generation to generation and the empire continued to prosper. The kingdom touched the peak of success in the 12th and 13th centuries. Yasovarman was followed by Suryavarman who kept the torch of progress burning. But after his death, the Khmer empire entered a period of decline, primarily because there was no direct heir. The struggle for throne began. Jayavarman VII, (brother of the dead king) who was in exile came and took the reigns of the state into his hands. He gave new light to the kingdom – architecturally and politically. He built temples in memory of his parents – To Prohm and Preadh Khan. He also polished and completed the Earlier unfinished temples. He dedicated a temple to himself and the Buddha, called the Bayon. The Bayon represented changes in architectural construction. Compared with earlier temples, this temple is cluttered and its 51 towers make the profile difficult to understand. More unique and unusual is the sculpture with huge smiling faces, which is a representation of Jayavarman VII in the aspects of Buddha.

He died in 1219 and from the 13th century onward, no Khmer king undertook the construction something like that of Jayavarman VII. In addition to weak kings, many social and economic factors contributed in weakening the empire.

The Chinese commercial envoy and traveller - Chou Ta-elaborately described the classes and division of people in Khmer. He noted that there existed slavery and that not everything was green and pleasant. The gulf between the rich and the poor had widened up. And this, perhaps, finally paved the way for the disintegration of a grand empire-

With the weakening process already started in the 13th century, darkness finally engulfed the whole civilization in the 15th century. The city fell to the Siamese. The end came about in seven months and Siamese returned with much loot and plunder. Siamese returned next year. But by that time the entire city was deserted. There was no trace that a civilization ever flourished in the jungles of Angkor. Where did the people disappear? Why didn't the people with such a splendid civilization and culture fight back? These are some of the questions which are still inviting attention of the archaeologists and historians and asking them to carry out more research!

-

PSI - The Science of Knowing the Unseen

It is a science of knowing something or about somebody without having been told or met or seen. It is a science of extrasensory powers. Animals are supposed to have been endowed with it. But some human beings also have it. And modern science's attempts to prove the existence of extrasensory powers have inevitably given birth to extensive research resulting in a few facts, but in the process giving rise to much more controversy around it.

How is it that at times two people have direct mental communication i.e. Telepathy? What is clairvoyance or second sight, that is, the specific perception of an event or object through means that do not involve the known senses? And how can some people perceive the future without deducing their occurrence from existing knowledge? These were some of the phenomena which were baffling psychologists. To these investigations Professor J.B. Rhine added yet another query - the psychokinesis, which was the use of the mind's powers to effect change in external matter. These four areas are called PSI - a word derived from the 23rd letter of the Greek alphabet. This is referred in scientific terms to mean an unknown quantity

Rhine wanted to prove these phenomena scientifically. But he also realized that to prove them would require gathering of anecdotes about PSI experiences. But even anecdotes and stories were not devoid of shortcomings. Rhine himself remarked, "there is no way of coming to grips with them. They happen and are gone, leaving nothing but memory, none of the hard reality of a meteorite or a fossil." So Rhine designed a series of sound, replicable experiments, for example, the card game. There were 25 cards and on each card was imprinted a star or a circle or a

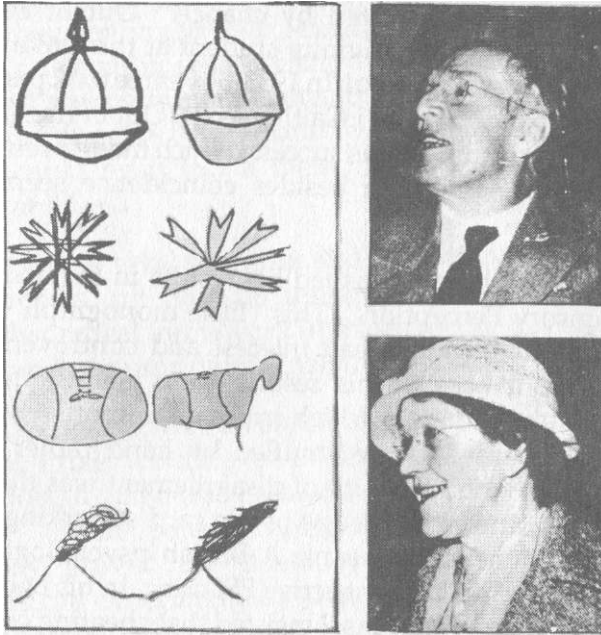


J.B. Rhine (right) working with his card game.

rectangle, a cross or a wavy parallel line. During the play the dealer was told to carefully shuffle the cards and then place the deck behind a small screen. Through this game Rhine was looking for evidence of a strange and remarkable capability which he called extrasensory perception.

However, as soon as Rhine began to probe the unexplained world of PSI, the crucial factors began to confront him. These crucial factors were - are conventional methods of scientific investigation appropriate in examining paranormal subject matter? Is it not possible that the act of scientific investigation may deform the very thing being studied?

Rhine, however, was not the first scientist who endeavoured to study PSI phenomenon scientifically. Before him Charles Richet in Paris, introduced statistical analysis, John Coover at Stanford University, and George Estabrooks and William McDougall at Harvard University, examined PSI phenomena. As early as in 1920's the author Upton Sinclair experimented with his wife, Mary. He attempted to show "mental radio" - telepathy. The book Sinclairs published, described their research including about 100 simple drawings that Sinclair had tried to transmit telepathically to his wife and the surprisingly parallel sketches and comments she had been able to make in



Upton Sinclair and his wife. He experimented on her.

response. The preface of the book was written by Albert Einstein. He commented that "Sinclair's good faith and dependability should not be doubted."

However, Rhine was the only researcher who brought devotion to psychical research. To test telepathy and other psychic abilities, he recruited subjects at random. He focused his research through Zenner Cards (named after Karl Zener, a fellow member of the Duke Psychology Faculty). In this experiment the sender concentrated on the symbol of a card he had turned up. And the subjects, may be in the same building or somewhere else, recorded his impression of the symbol. While for the clairvoyance experiments the subjects tried to perceive either the card being turned over or the order of the cards in a shuffled deck.

After two years of research Rhine found eight subjects who scored above the chance elements on the tests for telepathy and clairvoyance. These eight subjects, Rhine said, "underwent a total of 85,724 trials and achieved 24,364 hits. This was 7,219 more

hits than might be expected by chance." Out of these eight subjects, Hubert Pearce, divinity student at the Duke School of Religion was most successful. In 1933-34 Pearce took part in a long distance test conducted by J.Gaither Pratt. Out of the 1,850 trials, Pearce achieved stupendous success, which made even the critics concede that, "something besides coincidence seemed to be operating."

In 1934 Rhine published his results in the book entitled "Extra-Sensory Perception". This "little monograph", as Rhine called it, created widespread interest and controversy. Critics were against it because his results were against the laws of physics. One explanation which critics unanimously voiced was that the Zener cards were shuffled by hand rather than in a scientific way. Another point of disagreement was that subjects might have gained knowledge of the card's markings through some ordinary sensory means. A British psychologist, C.E.M. Hansel, was one of the most active PSI critic. In his book "ESP: A Scientific Evaluation", Hansel insisted that cheating could not be ruled out. Surprisingly, when Rhine himself redid the test so as to quieten the critics, he achieved only mixed results. Rhine and some other parapsychologists interpreted the failure to replicate due to the elusive, unpredictable, prey to the mood of both subject and experiment. To continue the experiment without any interference, Duke established a parapsychology laboratory with Rhine as its director.

Untouched by the criticism, Rhine once again plunged into the PSI research with new researchers. He continued his work with Zener cards. The procedure of Zener cards was tightened up with automatic card-shuffling machine.

Rhine died in 1980 at the age of 84. The half a century preceding his death was full of impressive results - millions of trails with ESP cards, random number generators and dozens of other devices had recorded significant scores in telepathy, clairvoyance, precognition or psychokinesis. Despite the progress, PSI research remained outside the mainstream of science. In fact, even now scientific journals exclude PSI articles from publication.

The remarkable feat of the PSI researchers is that despite the odds, they continued their research continuously. And they claimed that telepathic senses, clairvoyance and precognition not only existed among human beings but in animals too. Animals can tell about dangers before-hand by sensing change in weather and they could even locate their master at far off places by telepathic abilities.

Despite several successes and failures experienced by the PSI researchers, till now no researcher has come up with a coherent theoretical framework in which all the fragments of PSI research can be appropriately included.

Nonetheless, we can conclude with the remark made by the Nobel Prize winning physiologist Charles Richet about precognition, "I will not say that it is possible. I will only say that it is true". Some parapsychologists believe that they have successfully proved the existence of PSI. But unless such researchers can experimentally demonstrate PSI on demand, as one critic opined, "they must develop a plausible theory of PSI operations," it is difficult to believe them. And till then it is, "a no man's land between the lunatic fringe on the one hand and the academically unorthodox one on the other." •

The Secret of Mayas

Archaeology in America is in infancy. Still we have discovered a civilization par excellence. This civilization was called the Mayas. They were far ahead of the Egyptians and Greeks. They had the knowledge of Zero and build impressive architecture.

And all this was grazed to the ground before Columbus discovered America. The world is still waiting for documents to prove that how did these people built up such a magnificent civilization at a place, where even to this day, life is an unending struggle for survival? How was it that a flourishing civilization was created by the people of Stone Age? And who were these people whose classical age collapsed before even Columbus could discover America?

Some scholars were exploring the forests of Middle America. They suddenly discovered some mounds covering the buildings. These buildings were apparently ruined by the encroaching forest. It was also clear that these buildings were no ordinary structures. They were remnants of a great civilization. The scholars got interested. They excavated more and discovered to their utmost surprize the remains of a flourishing civilization - the Mayas, as they named it. Thus, it was as late as in the 19th century that the secrets of a new civilization was unearthed.

For sometime, the scholars believed that Mayans must have been the descendants of ancient Egyptians or one of the lost tribes of Israel or Mayan culture might have been founded by the Greek colc v ists or Scythians or even by the Chinese and South East Asia's immigrants. But they could not ;ome to an unanimous decision. Nonetheless, the fact remains that even today Mayan culture is one of the most fascinating ancient civilizations. Its vast

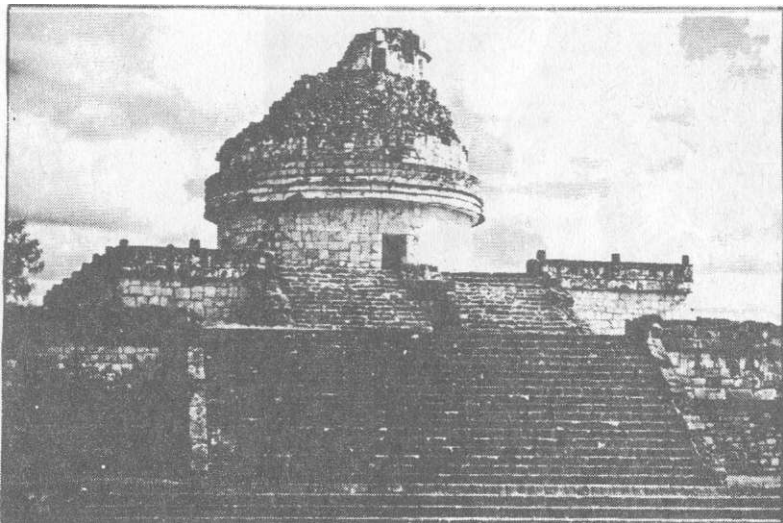


This Mayan statue depicts a player playing a kind of ball game

buildings with modern lines, surrounded by impenetrable forest, force the scholars to discern their antecedents.

The civilization of Mayas was situated in the heart of Middle America. It covered an area equivalent to France and spread across Guatemala, Belize and some parts of Mexico, Honduras and El Salvador. The civilization started in 2500 B.C. and continued its progress till 34 centuries later. Throughout their period of progress they curtailed and struggled against the invading forest. They used to burn off the plant cover and made the land fertile for cultivation. Their staple food was maize but with it they also grew various small plants which ultimately prevented the land from becoming infertile. However, this process was quite strenuous for the land remained fertile for a short time only and then they had to repeat the process elsewhere. Despite such time-consuming practice they found time to build remarkable buildings with good mortar, sandstone and volcanic rock.

Like the Egyptians, even the Mayans believed in eternity. And like the pyramids of Egypt, even Mayans built temples in the shape of pyramids. The head of these were priests who had such



Chichen Itza.

accurate knowledge of mathematical and astronomical tables which even Europeans did not know. The Mayans knew the art of writing, which perhaps, was one of the reasons for their being so successful. Mayan texts are found on stone tablets, wooden panels, on pottery and in books made of vegetable fibre paper. The books have been written in 800 hieroglyphic signs. Fortunately, quarter of their text had been deciphered. Their language is quite similar to ancient Egyptians and modern Japanese. It was written in a complex hieroglyphic script and composed of ideograms, which represented whole words or ideas and partly had phonetic symbols for sound. However, not all of their language is known. Scholars are still busy in trying to unravel the mystery of their language.

In mathematics also they were well ahead of other civilizations. They were well acquainted with the idea of zero. Because of their acquaintance with the zero the Mayans were able to express any number by the use of three symbols: the dot, the bar or dash, and a shell shape for zero. While the Greeks, despite their being innovative, wrote numbers by using letter of the alphabet, and the Romans used graphic system which meant writing four figures e.g. if they had to write 8; they wrote VIII. As Mayans were primarily agriculturists, the knowledge of seasons and time

was necessary. To know the accurate season and time, Mayans invented calendar. They divided their year into 18 months of 20 days. To this, they added five extra days and called it haab. These 360 days were called Tun by them. To date important and complex events they based the system on three different time scales - the solar year, the religious year and the venusian year. The Mayans calculated that 405 full moons occurred in a period of 11,960 days. Today's astronomers make it 11,959.888 days. So the Mayans were out in their calculations only by one day every 292 years or to be precise less than five minutes a year. They fixed the venusian year i.e. the time which the planet takes to make a complete circuit of the sun, at 584 days. The current calculation is 583.92 days. Thus they erred by six minutes a month only. Surprising is their achievement for they calculated all this without any elementary system of hour glass or a water clock or a telescopic instrument.

The archaeologists have divided the Mayan civilization into three periods. The period from 2500 B.C. to 300 B.C. is known as the formative period. This was followed by the so called pre-classical period. And next came the classical age which extended for 600 years and was in full bloom in Peten. A great renaissance took place in Yucatan and it took the thread of classical period from Peten. The Mayan civilization in Yucatan bloomed from the 8th to the 10th centuries.

The Mayan empire was divided into small political units. These units were bound to each other with culture, religion and a uniform system of writing. But each unit had its own government and policies and above all, had its own unique style in architecture and arts.

The highest authority in each unit or city was a priest, who was invested with the religious and civil powers - somewhat similar to Egyptian pharaohs.

The Mayan society was divided into classes. Beneath the ruler and his nobles were craftsmen and then peasants. The peasants were in large numbers and they did not disappear when the Conquistadores arrived. These people can still be found at places like Muna, where they live in thatched wattle and daub huts and surprisingly still talk in the old Mayan language.

Besides their language, Mayans contributed to the world by their superb architecture. Their buildings were very large. Some of them being as high as 230 ft. with a base of upto 130 by 130 ft. The slopes are steep with a dizzying stairway. At the top of the structure is often installed the shrine of the Mayan Gods. The design which adorn the Mayan palaces and towering structures is often geometrical and each elaborate face is carved to the same precise design.

The culture with such advancement also succumbed to the law of nature, 'every rise has a fall'. For many years their end baffled historians and archaeologists. They supposed the reason for decline being epidemics and famines. Some reasoned it due to internal wars. While some theorists lay the blame on the recurrent attacks by the nomadic tribes. These recurrent attacks, theorists argue, must have weakened the refined, complex structure of the life fabric of Mayans. Most of the scholars agree on the last possibility.

Thus, going by the above reason, the internecine wars from 13th to 16th centuries must have broken down the entire civilization. Therefore, when the Spaniards came at Yucatan in the 16th century they were met by only the primitive descendants of the most advanced cultures.

In addition to it, Spaniards were least bothered about the Mayan culture. The Spanish bishop Diego de Landa organized a series of solemn ceremonies at which the historical, religious and scientific writings of the Mayas were burnt. And all this was done in the name of Inquisition. Prior to this Inquisition ceremony, he had written a book, an "Account of the Affairs of Yucatan" in 1566. In this book he had written about the Mayan people and their life style. But the book by no account can suffice the loss which we incurred by the mass burning of the Mayan literature. Perhaps, it would have revealed to us more about the mysterious culture: But alas!

-

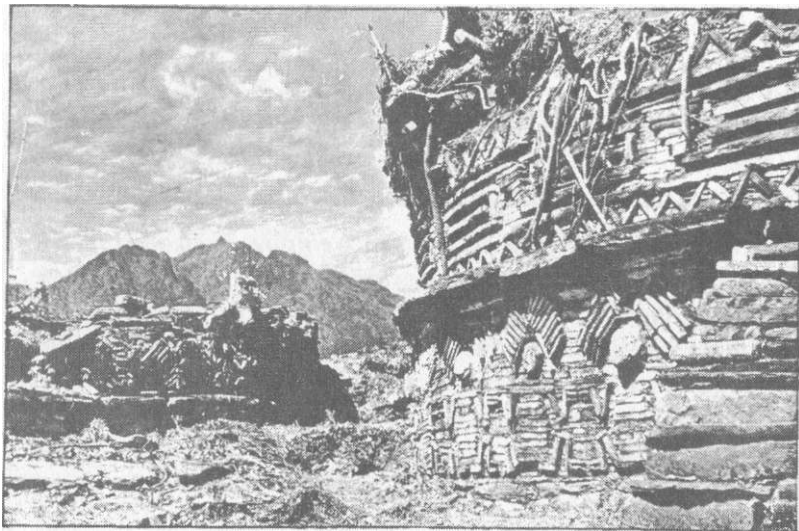
The Mysterious Inca Treasure

Conquistadors destroyed the great Inca empire. They destroyed it so completely that historical documents lack evidences. These Spanish Conquistadors indulged in loot, plunder, pillaging and burning. They enslaved the last Inca ruler and killed him. But before his death he escaped to jungles with the wealth. What happened to the great mass of wealth, is still to be identified. In fact, the identification of two primary cities - Vitcos and Vilcabamba is itself not known. The Spanish colonial maps do not mention it. But historians believe otherwise.

The scholars and adventurers have been eager to locate the last refuge of the Incas-one of the greatest civilizations of America. The scholars have been eager to locate the last hiding place of the Incas (Vitcos or Vilcabamba) because the local rumour goes that the last ruler had buried his treasures there. How far is the statement true, is still unknown. The place has still not been unearthed.

Inca was a powerful kingdom in America. But by 1527, a virulent epidemic swept Peru. It claimed the life of the emperor, Huayna Capac Inca and his successor Ninan Cuyachi. In the confusion that prevailed, Huayna Capac's two sons seized power. Huascar became ruler and Atahualpa took the command of the imperial army. Both the brothers tried to usurp the power from the other. Naturally, civil war ensued and finally Atahualpa won. But he was not destined to enjoy the fruits of his success for a long time. In 1532 the Spanish Conquistador Francisco Pizarro seized Atahualpa.

Atahualpa was eager to get himself released. For this purpose he lured the Spanish Conquistador. Atahualpa filled up



Was this the last refuge of Inkas?

a room with gold, jewellery, jars, pots, tiles and plaques and filled another room with silver. Pizarro accumulated the wealth and planned a plot against Atahualpa. He accused Atahualpa of plotting against him and had him killed. He then appointed Huascar's brother Manco as successor to the slain emperor.

Manco's fate was no better than of Atahualpa. He was subjected to daily insults and harassment. The frightened Manco when attempting to flee the capital was overtaken and imprisoned. Manco did not accept defeat. He plotted revenge and in 1536, Manco very smartly took the permission to pay homage to the ancient Gods at Yucay Valley. Manco promised to bring back the life-sized gold statue of Huayna Capac. Pizarro's judgment betrayed him at this point. The lust of gold had blinded him. He gave permission and within days Manco assembled an army of 100,000 strong men. He attacked the Spaniards and thus began a struggle led first by Manco and later by his sons that was to last 36 years -1536 to 1572.

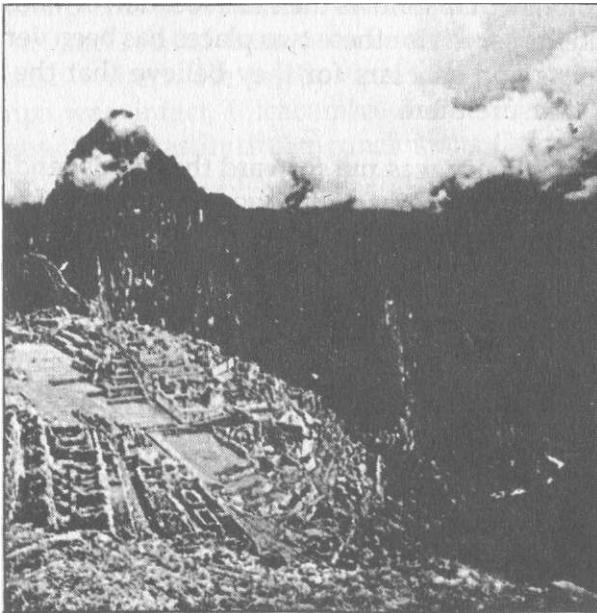
The Spanish forces accepted the challenge forcefully. The Spanish forces under Rodrigo Orgonez forced Manco to flee again to the valley of the Vilcabamba. The Spanish forces indulged in

loot and plunder at Vitcos. And when they returned to Cuzco in July 1537, Manco and the remnants of his army disappeared into the mountains.

In the court of Francisco Pizarro, human greed played its wicked role. The insatiable hunger for gold and empire led the Spanish to indulge in killing one another. Pizarro was murdered and when Manco's soldiers heard this news they burst into Pizarro's palace and hacked him to death with their swords. Some of the Spanish soldiers were taken prisoner. From them Inca army learnt the fighting techniques. Manco himself learnt to ride a horse and fire an arquebus (an old fashioned hand gun).

But even this blessing proved to be shortlived. Soon the fresh Spanish forces arrived from Spain and Manco was finally killed. Then the reins of rebellion were undertaken by Manco's son - Sayri Tupac.

Some years later Sayri Tupac accepted the Spanish offer. He was pardoned and taken to Cuzco, where a Christian marriage with Cusi Huarca was formalized. This marriage proved short-



The place, where Manco took shelter.

lived. After two years Sayri Tupac died (or was killed?) on his estate in the Yucay Valley.

After this death, second son of Manco Titu Cusi succeeded to the Inca throne. He died after eleven years and the succession passed on to Tupac Amaru, another son of the Manco. He was the last Inca emperor who led a strong crusade against the Conquistadors, which his father had started three decades earlier. In March 1572, the new viceroy of Peru, Francisco de Toledo, sent an emissary to Vilcabamba. But Toledo's envoy could not reach Vilcabamba. Inca soldiers intercepted and killed him. This enraged the new viceroy so much that he launched a brutal assault on the Inca's citadel.

The Spaniards entered the gates of Vilcabamba and were received by the smoking ruins of a deserted town only. Tupac Amaru with his followers had already fled into the vast Amazon jungle - only to escape death for a short-time. He was ultimately caught and beheaded before a huge crowd of prostrate Indians.

Surprisingly, despite such political intrigues, none of the Spanish Colonial maps shows the exact location of Vilcabamba or Vitcos. And the search for these two places has been very vital for archaeologists and scholars for they believe that the last ruler buried his treasure there.

In 1768 a theory was put forward that the legendary city of Vilcabamba was the ruins at Choquequirau - situated in the steep range near Apurimac river.

American scholar, Hiram Bingham started the search for Apurimac region in 1909. He found in the jungle the infested ruins of Choquequirau. But Lima historian, Don Carlos Romero and Bingham himself did not believe that Choquequirau was Vilcabamba for the description of the 16th century writers just did not correspond with the area discovered.

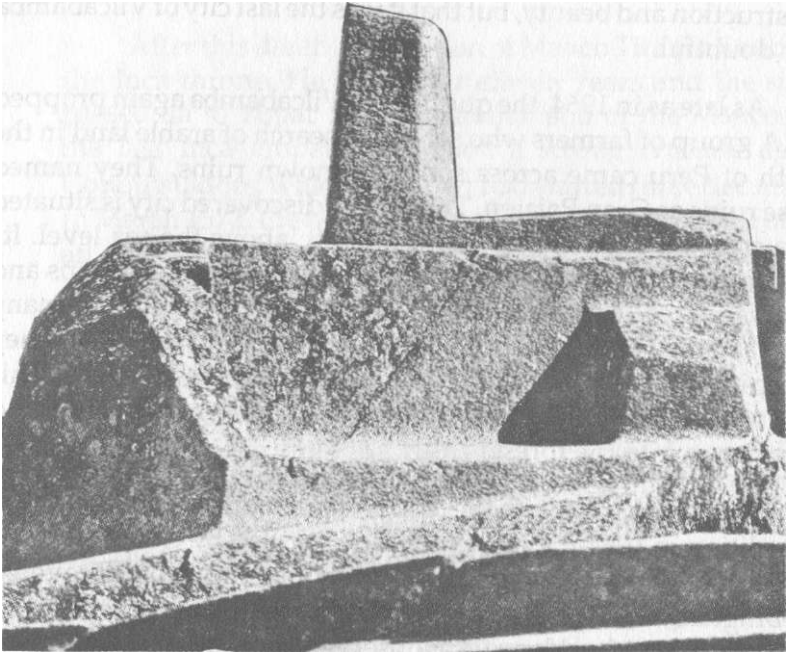
However, Bingham re-read the accounts and restarted his search. On the way he met an Indian, named Melchor Anteaga. He offered to reveal the secret to him and guided Bingham to some

ruins in the hollow peak towering more than 2,000 ft. above the Urubamba. These ruins were no doubt exemplary in their construction and beauty, but that it was the last city of Vilcabamba was doubtful.

As late as in 1964, the question of Vilcabamba again propped up. A group of farmers who set out in search of arable land in the north of Peru came across some unknown ruins. They named these ruins as Gran Pajaten. This newly discovered city is situated on a crescent-shaped cliff about 9,500 ft. above the sea level. Its architecture is round with paved paths, short flights of steps and small squares. An aerial survey showed that there were many ruins at Gran Pajaten. About 3,000 have been so far recorded. They are scattered over seven hills and are linked by a roadway. This roadway is in some places not more than 4 yards wide and disappears into the forest.

Still unsatisfied with the discovery, Americans started a new expedition in 1964-65. The expedition was led by General Savoy. He started where Bingham left. He identified the ruins discovered by Bingham at Espiritu Pampa and based his assumptions on several pieces of evidence. He observed the walls, the ceramics, the art and related them with several reports furnished by the Spanish writers. He finally drew the conclusion that Espiritu Pampa was, in fact, Vilcabamba. But several researchers do not agree with his hastily drawn conclusions. Only recently, one of the General Savoy's guides discovered yet another lost city with an area of just over a square mile. The entrance to this town is cut out of a single block of stone and instead of being trapezoid shaped in the Inca tradition this is in the form of a half moon. Some scholars put forward a theory that it could have been an attempt to build an arch, a sign of the presence of Spanish influence. The Indians who live there call it Hatun Vilcabamba, meaning Great on High.

Not all agree to this suggestion. The Indians who claim to be the only legitimate heir of Inca tradition do not agree with the several finds. According to them, the Inca treasures lay at the bottom of a lake which only they could approach. Even the Peruvian archaeologists do not make any remarks. They remain silent as there are many more ruins which are yet to be dissected.



The sacred stone at Machu Picchu. Its prism-shaped pillar was probably used as a Sundial

Thus, even till this day the controversy remains open. Nobody has or could so far authoritatively prove the place where the last Inca ruler hid his treasures. Anybody's guess and speculation are welcome! •

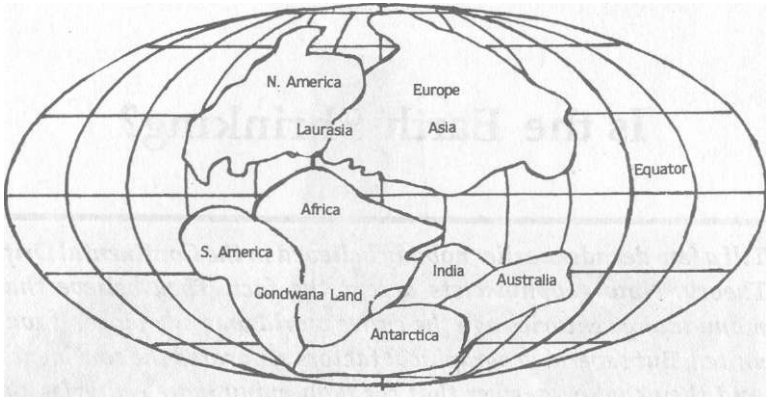
Is the Earth Shrinking?

Till a few decades earlier nobody believed in the Continental Drift Theory. Now geophysicists accept the fact. They believe that many-many centuries ago the entire world was one place. It was united. But several geographical factors separated the continents. And they cannot answer that for how many more centuries the world will remain in its present condition.

Will the earth keep on shifting slowly, or, suddenly something drastic will happen, they do not know. The scientists and scholars only speculate.

Sometimes we read astonishing news in the newspapers. Scientists declare that settlements around sea are seeping inside the sea or at times we read that mountain ranges such as the Himalayas, the Andes, and the Pamir are shifting from their place. However, scientists claim that it is happening so gradually that the process will take millions of years. The important point is whether the parts of earth are moving or not?

The process of 'earth moving' is called the Continental Drift Theory. A microscopic look at the world map reveals that various islands which presently have zig-zag outline must have been a big circle. During earlier times scientists used to think like this but they were not able to prove their thought scientifically. It was in 1915 that German meteorologist Alfred Wegener produced a coherent picture of how the prehistoric earth might have looked with all its landmasses joined. At that time he was ridiculed. But today Wegener is considered to be the father of continental drift theory. He is regarded so great in the sweep of his theory that some have suggested naming a crater on the moon after him. It was as late as in 1960 that geologists found some evidence to



The map of the earth 20 crore years ago.

support Wegener's hypotheses. Today they have many evidences. They have based their result on modern topographic and core-sampling techniques. Out of these techniques the geophysicists have been able to draw out a more dynamic picture of the earth's crust.

Some years ago scientists proclaimed that long-long ago Australia, South Asia, Africa and South America must have been joined together. They derived this conclusion after conducting an extensive research in Antarctic. This declaration created an uproar in the world. Two American scientists - Dr. Robert and Dr. John took the challenge and to test the veracity of the declaration, they started doing experiments. The various points on which they carried out research were the speed at which an island floats, the direction where it shifts, its boundary line, the present position of the island, the expansion of oceanic rocks and the earlier direction of ocean bodies.

After researching on the above lines, Dr. Robert and Dr. John arrived at the conclusion that 22,50,000 years ago all the continents must have been joined together. This meant that there must have existed only one ocean. And this ocean was called 'Payjiya'. During those ancient times South America and Africa were very close to each other and the boundaries of eastern America touched northern Africa. India was between South Africa and Antarctic.

Australia was part of Antarctic. According to them the entire world was situated between 60° and 120° longitude.

However, this situation could not stay for long. After 50 lakh years of such an existence the earth started dividing. At first it was just divided into two parts - Laurasia in north and Gondwana land in south. In Laurasia were included North America and Asia and Gondwana Land had South America, Africa, India, Australia and Antarctic.

The shifting continued. And the earth came into its present shape nearly 6 crore 50 lakh years ago.

According to the geophysicists the continents and large islands are believed to ride on top of plate-like slabs of lower crust. These plate like slabs, collectively called lithosphere, float in turn on a semi molten sea of crystal slush called the asthenosphere. As a result, when molten rock from the asthenosphere boils into a crack separating two plates, it forces the plates and the continent apart. Dr. John and Dr. Robert also believed in this theory.

Dr. Dave and Dr. Bird extended the above theory. They claimed that when two continents - India and Asia collided, a crater was formed into the land. Both the continents slid down and their sides slid down into the crust. And below the crust when they again collided they came up vigorously and powerfully. So powerful was their thrust upwards that they took the form of a mountain. And this mountain is called Himalaya. It was difficult to refute Dave and Bird. For this is one of the reasons accepted for the formation of mountains.

Mt. Andes in South America was formed in a different way. Ocean crust moved under the crust of continent and earth buckled up high, which came to be known as Andes mountains. Scientists believe that such changes in the earth crust must have happened simultaneously.

Geophysicists have finally agreed to the theory that all continents are slowly moving sideways. What will happen next to the earth? Nobody can answer this question. One only hopes that nothing traumatic happens by which the entire mankind may vanish. •

The Unknown Message of Nazca Drawings

Some Specialists believe that the world's largest astronomical calendar was drawn by the Nazcas on the dry plains of southern Peru. While others believe that the lines drawn on the expansive wastes are huge birds, animals and geometric figures. What exactly do these lines signify - nobody knows. Yet they are laid across the desert by the Nazca Indians 1,500 years ago - even long before man could fly, although now-a-days it is crossed by the Pan American Highway.

The Nazca region lies between the Pacific coast of Southern Peru and the Andean foothills. The entire region is made up of strange lines - some in geometric shapes, some in the shape of animals and birds. The lines and pattern on the desert floor seems to be the work of a mad geometrician and a giant. This is one of the most baffling aspect. The archaeology and the archaeologists have no satisfactory answers.

Despite all the research, no plausible explanation has been offered. On the other hand it has facilitated the birth of innumerable suppositions and superstitions. Some people believe that these drawings must have been made by unknown extra-terrestrial beings. While others point out that the Peruvian desert was being used as an astroport by space craft thousands of years ago.

The lines are more bewildering as sometimes lines could only be seen from an altitude of above 1,000 ft. and some designs are so closely intermingled, that they give a picture of some science-fiction novel. In addition to these drawings and incomprehensible

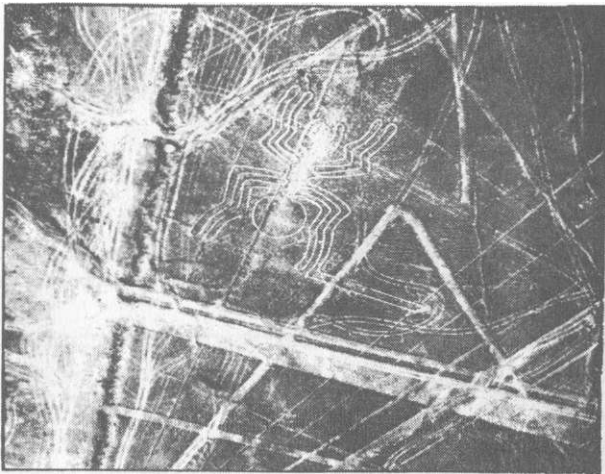


Maria Reiche, who spent her entire life studying the mysterious Nazca lines.

lines, the Nazca region has almost experienced no rain for 10,000 years. But this apparently has been due to a scientific reason - the cool prevailing winds from the ocean could hardly pick up the moisture from the chilly waters of the Humboldt current. Furthermore, the erosion on the slopes of Peru is quite similar to the space probes on Mars. To test it scientifically, the NASA (National Aeronautical and Space Administration) has sent a team of scientists to study the erosion and the possibility of life on Mars.

It was only in 1941 that these mysterious, enigmatic lines attracted attention. Dr. Paul Kosok of Long Island University was the first one to examine the land. He examined the plain from the plane and named the unique area as "the largest astronomy book in the world"

His work was followed by a German mathematician and astronomer, Maria Reiche. She studied the area for more than 30 years and is now 70 years old. She criss-crossed it step by step on triangular, quadrangular, or parallel lines and sometimes on zig zags. She researched exhaustively and drew the conclusion that tons of small stones must have been moved to create the outlines of each line. And the positioning must have been done in



Made out of only one line a fifty yards long spider's web-

accordance with a calculated plan. To draw lines, she proposed the theory that they must have stretched strings from posts. These posts are still visible. And the carbon -14 method has dated these post back to **AD. 500**. Maria Reiche also found out from the designs the unit of measurement that the Nazcas must have used.

The two members of the International Explorers Society of Coral Gables, Florida based their ideas on a painted Nazca ceramics. These two members - Julian Knott and Jim Woodman, said that the pieces of pottery invariably depicted an airship. These two men along with some other members believed that Nazcas could not have composed such complicated designs without having an aerial view.

Some other researchers have tried to reason out the secret of Nazcas by studying tombs in the Paracas region. They believe that the nearby site, Necropolis, dates to the same period and was used as the burial place for nobles and priests. In the excavation, about 400 mummies, wrapped in shrouds and elaborate cloaks have been found. The date of their burial is estimated to be about 2000 years ago.

Some Peruvian archaeologists share the views of Paul Korok and Maria Reiche. They agree that Nazca drawings are an

astronomical calendar. It is also presumed by some scholars that the Nazcas used to read the news of different weather signs from the flight patterns of seabird. In fact, Indians of Peru still believe in the magical powers of animals and they see the shapes of these animals in the stars. A few theorists believe that the figures of the desert zoo are reproductions of the shapes made by groups of stars. Another theory is that they could have been the magical religious cult expressed in a theatrical ritual.

Of the reason behind triangular, trapezoidal or quadrangular 'runway' opinions differ. According to some they were places of assembly. Others believe that they must have been astronomical observations. And according to some it would have been a ground, guided by the spirits. Another group believes that burnt offerings were made to the Nazca Gods there. There are innumerable beliefs. Theorists have not arrived on a single platform for agreement.

Astronomer Gerald S. Hawkins used computer in 1960 to check the astronomical interpretation of the Nazca Complex. The result was disappointing. The computer totally negated the research of so many years. It proved that Nazca lines were not designed as a calendar.

The question still remains - what did these unique lines signify? However, Peru government has taken precaution to avoid spoiling these designs. It has banned walking or driving over the area except by special permission. The tourists are allowed to see the enigma from a roadside observation tower. •

Is There a Second Life?

Science has failed to reason out its existence. Neither has it been able to disprove all the stories floating about this syndrome. Reincarnation till this day remains a mystery, beyond the comprehension of believers and non-believers.

It is believed that child prodigies e.g. Mozart who composed simple music at the age of four and the 17th century mathematician Blaise Pascal, who had outlined a new geometric system by the time he had reached 11 years of age may have been reincarnations of talented people from an earlier time. Annie Besant, 19th century feminist and leader in London's Theosophical Society, was convinced that she would be reincarnated.

In the 20th century, the case of Shanti Devi is too well-known.

Despite all the vividness of the cases, science has not been able to accept it. It demands scientific explanations.

She was born in Old Delhi in a middle class family. She grew up faster than the children of her age. When she was just three years old, she started narrating stories about a family living in Mathura. First, her mother just ignored her prattling. But when she repeated it quite often and said that she was the wife of a man named, Kedarnath, her parents got curious. They checked her story and to their amazement they found it all true. This little girl's name was Shanti Devi.

Shanti Devi provided extraordinary details about her past life. She could remember the colour of her house, the location of the house, the people living there and the circumstances in which

she died in her last life. There were enough details to provoke her family members to plunge into action. A close relative, Professor Kishan Chand took the challenge. He wrote a letter to her alleged widower, Kedarnath. Her husband doubted the truthfulness of the letter but at the same time curiosity made him ask his cousin in Delhi to investigate the matter. The cousin arrived in Shanti Devi's house in a disguise. But Shanti Devi recognized him. The cousin was shocked. He invited Kedarnath. The husband along with his son visited Shanti Devi. This was an extraordinary reunion. The little girl Shanti Devi not only acted as a dutiful wife but a loving mother to her son too.

These were enough incidents to provoke publicity. The media got interested and the case was blown up in almost all the national dailies. Shanti Devi became a known personality in a short time.

Shanti Devi's case was one of the thousands which came into limelight. There must be numerous others which go unreported. Such cases abound in almost all parts of the world, Latin America, Western Europe, Southern Asia, England and United States. Even folklore, myth and legend are based on the theory of reincarnation. Beneath this belief is the theory that each life is born again and again according to one's Karma. The theory of Karma is the idea behind rebirth. According to the Karma theory one is born again in accordance with one's deeds in past lives. The Hindus who strongly believe in the theory of Karma propagate that the soul may increase in purity during successive existence until it reaches a divine world.

The psychologists believe that this theory travelled to the western world with traders and migrants. Dr. Ian Stevenson, Director of the Division of Parapsychology of the Department of Psychiatry at the University of Virginia strongly emphasized the above point. And to confirm his theory he interviewed many migrants from Asia who reported memories of the former life and came to the conclusion, "I can imagine the 'perfect case', but have no expectation of finding it."

In Ohio on April 21, 1970, Mrs. Dolores Jay began to have visions of her past life. She stated that in earlier life she was



Dr. I. Stevenson

General Patton believed that he was a Roman warrior in his previous life



Dalai Lama

Gretchen Gottlieb and had lived in Germany during the 19th century. She started having visions when one day her husband, Reverend Carroll E: Jay, a Methodist minister, was applying hypnotherapy to ease her back pains. While he was attending her, he heard a strange, alien voice in German. For sometime Mr. Jay was nonplussed. After a few more visions Mr. Jay got used to it and started conversing with it. The various sittings suggested that Mrs. Jay perceived herself as Gretchen, daughter of Hermann Gottlieb, Mayor of the German town of Eberswalde. The Gottlieb family was not in the good books of the Federal Council of Germany and hence their daughter was murdered.

Research workers got interested in this case. And Mrs. Jay replied to the queries in German. To verify her statements research workers and psychiatrists went to Germany but returned with little success. Finally, the Jays themselves travelled to Germany and did succeed in finding correlations between the names of local places and the family names, mentioned by Gretchen.

Jay later wrote that the Gretchen case was an indication of reincarnation. Mrs. Jay could merely explain her vision in the following words, "Gretchen is a part of my life. I did not ask her to come, but she has been with us so long, she now seems like a part of the family."

These are the problems associated with reincarnation, which are still shunned by many parapsychology researchers. The only solution to the reincarnation theory is suggested by some as spirit possession, telepathy and even poltergeist activity. The last one is the physical disturbance due to a restless or mischievous spirit. In addition to psychological factors some researchers have attributed it to religious and cultural beliefs also.

Greek ideas on reincarnation were formed after communication with India. Ducasse elaborated on Plato's ideas about reincarnation in the following words, 'The soul which has seen most truth shall come to the birth as a philosopher or artist, or musician or lover; one who has seen truth in the second degree shall be a righteous king or warrior or lord, the soul which is of the third class shall be a politician or economist or trader, the fourth

shall be lover of gymnastic toils or a physician." The last degree of the soul is the tyrant. Professor Ducasse explained these theories in a simpler way as "one who lives righteously, improves, and one who lives unrighteously deteriorates.

Now-a-days hypnosis is the medium by which researchers analyse the psyche of a person who claims to have a vision of past life. Morris Netherton, Ph.D., in his book "Past Lives' Therapy" claimed that "almost invariably my patients have found that their mental anguish in this life could be pinpointed to a physical situation in a past life". Elucidating his findings, Netherton cited if someone suffers from an acute fear of heights, chances are that in the past life he must have succumbed to falling off a height. However, he does agree that such visions of the past could be "creative daydreams," and he himself admitted that "I personally believe in the theory of reincarnation."

Similarly Dr. Edith Fiore wrote in "You Have Been Here Before", that she was convinced that her patients' memories were not mere fantasies. She also noted that memories about past life may affect marital harmony or family relationships.

Psychologist Helen Wambach of Walnut Creek, California believed that hypnotic regression was the most appropriate means of discovering and studying accounts of earlier incarnations. She examined 2000 subjects and concluded that 90 percent of her hypnotized subjects could successfully recall scenes of their past lives. She also concluded that the 1088 past life descriptions she collected reflected estimates of components of the world's population. That is, she wrote that men and women were always nearly equally represented in the hypnotically induced past life tales, whether or not there were equal numbers of male and female subjects in the group that had been hypnotized. Past lives of the 19th century were twice as numerous as those of the 16th century, while past lives of the 20th century were four times as frequent as those of the century before.

Like Stevenson, Wambach also believed that earlier incarnations helped to account for existing emotional disturbances. She found through her research that people "who committed murder in a precious life often feel emotionally

disturbed. Once their past is revealed, and they see the reason for their trauma, they lose their feeling of guilt and can lead a normal life." Stevenson who investigated many cases also reached conclusions on similar lines. He found, for example, fear of water existed among several people. He found that people who were drowned in previous lives were particularly frightened of water.

Stevenson examined nearly 1600 past life claims. And he finally drew the conclusion that "We can never show that it does not occur, nor are we ever likely to obtain conclusive evidence that it does occur. All the cases I have investigated so far have some flaws, many of them serious ones. Neither any single case nor all the investigated upon cases together offer anything like a proof of reincarnation. They provide instead a body of, evidence suggestive of reincarnation that appear to be accumulating in amount and quality."

Some Unique Cases About Reincarnation

The year was 1933. The 13th Dalai Lama - Thupten Gyatso died at his summer palace in Lhasa. Tibetans did not take the death seriously. They believed that the successor would be born somewhere and would continue the reincarnate successor's line of Lamas which had been followed uninterrupted since 1391.

The dead body of the Lama was placed in a throne chair. His face was facing south. After a few days it was noticed that his face was turned towards the east. The Lamas concluded that the new Lama was to be found northeast of Lhasa. The regent and the senior Lamas travelled northeast. In 1936, three years after the death of the 13th Dalai Lama, the Senior Lamas travelling northeast reported the discovery of the green and golden

tr

roofs on the Kumbum monastery, and a house with turquoise titles in the nearby village of Taktser. In this lived a couple with their son who was two years' old.

This little boy identified the men who were in disguise. The Lamas conducted secret tests to verify the birth. The little boy replied all their questions and even recognized the stick belonging to the 13th Dalai Lama. The Lamas were then certain that the boy was reincarnation of the 13th Dalai Lama. They very cautiously transported the boy to Lhasa. On the 14th day of the first month of the year of the iron dragon (1940), the little boy was placed on the Lion Throne and was made 14th Dalai Lama.

Mr. and Mrs. Braborne were travelling to India for the first time. They got down in Bombay. The place should have been unknown to both of them but it wasn't so. Mr. Braborne seemed to know the place.

While walking on the streets of Bombay Mr. Braborne said, "Two streets down and we'll find De Lisle Road." His wife gave him a queer look and said, "You seem to know the place. How?"

Mr Braborne was himself surprised. He had never visited Bombay earlier, yet he knew the names of the places. Mr. Braborne asked a policeman whether there was a big house at the foot of Malabar Hill, with a big banyan tree in front. The policeman affirmed the fact but said that, "it had been torn down 90 years before. My father was a servant in that house, which had belonged to Bhan family." The name Bhan was more shocking to Brabornes for they had named their son as Bhan Braborne.

J

Bermuda Triangle - Is it a Reality?

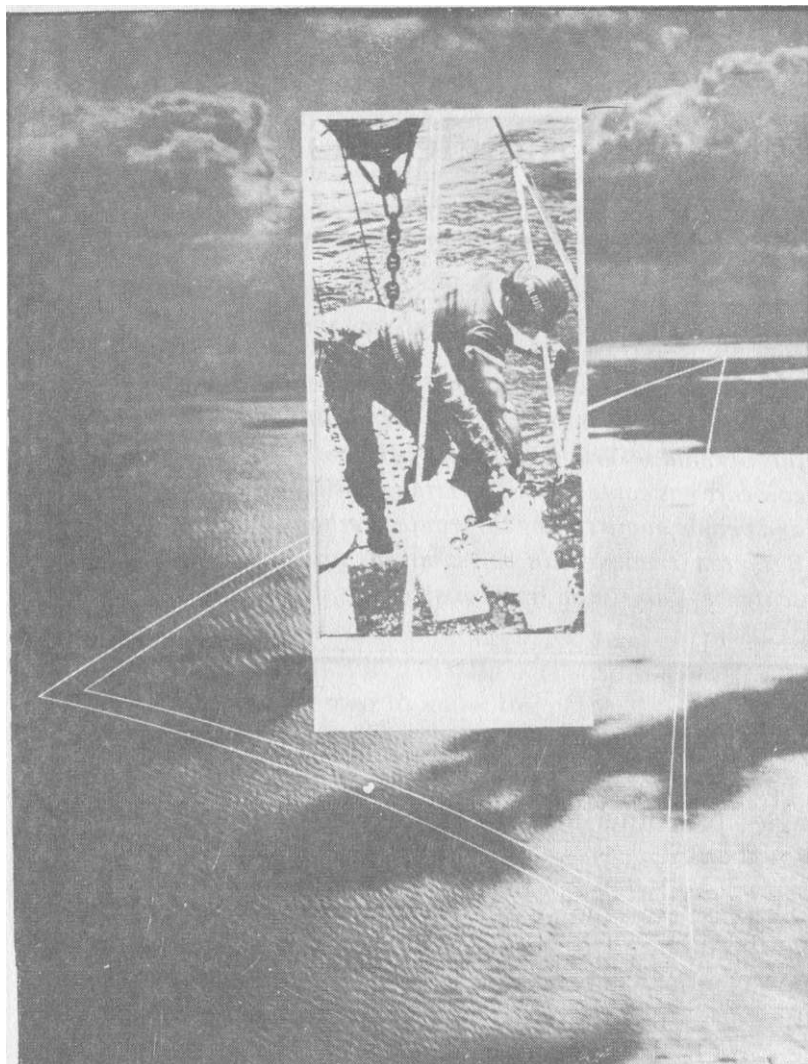
Is there any point in the Atlantic ocean which is suicidal? Or is Bermuda Triangle mere writers' imagination?

Many books have been written on this topic. The U.S. - Soviet scientists have even done a long arduous research on the Bermuda Triangle. Yet, till now, no satisfactory evidence has come forth. The Triangle still baffles everybody and people avoid taking this route. Perhaps, the mystery of Bermuda Triangle can be summed up in the following sentence - 'at times truth is stranger than fiction'.

One of the most baffling, puzzling and intriguing mysteries that has bewildered the world so far, is the famous, Bermuda Triangle. No other mystery is so well known, yet so little is known about it.

Situated in the western Atlantic, it has seemingly swallowed up hundreds of ships and thousands of human beings. Yet no scientist has been able to detect the reason for its being a death trap, and more so why its victims have left so little evidence of their unpredicted, untimely ill

This dangerous Bermuda lies between Florida, Bermuda and Puerto Rico. In the beginning the sudden and unexpected disappearance of the ships and human beings was considered to be just coincidental. But gradually the number of victims increased so unexpectedly that people became curious to know the reason. And they could not arrive at conclusion. The victims had not left any evidence behind. The case became interesting and the scientists took it as a challenge.



U.S. and U.S.S.R. scientists working at the Bermuda Triangle

Every possible imaginable theory was put forward. Some observers think that it may be due to the extreme gravitational and magnetic deviation that radios fail and compasses provide wrong readings. Others suppose that extraordinary modern machinery of the lost Atlantic civilization is still functioning and that Bermuda triangle is the base of it. Overlooking all scientific

explanations, the third group proposes that the triangle may be the hunting ground for predatory visitors from outer space.

There is no end to hypotheses and suppositions. No wonder, almost all hypotheses have failed to impress or satisfy rationality of the human mind. The question arises then what is the truth about the Triangle?

The history of the Bermuda Triangle is not very ancient. It originated in an article written by Vincent H. Gaddis for the 'Argosy' magazine in 1964. Some other articles followed Vincent's claim and most of them were a rehash of original writing. However, Ivan T. Sanderson, an occult writer took the subject seriously. He studied Vincent's article seriously and further wrote that the Bermuda Triangle was one of the many unknown regions-"Vile Vortices". He called them regularly spaced about the earth. By 1973 the mysterious Bermuda Triangle had created so much interest that" even "Encyclopaedia Britannica" accorded it recognition and mentioned it. In the same year the first best seller on the subject was published. The book was Wallace Spencer's "Limbo of the Lost." In 1974, Charles Berlitz wrote "The Bermuda Triangle". It took the book-stand by surprise and became one of the biggest best sellers. And as if these books were not enough on the subject, Lawrence D. Kusche published a devastating attack - "The Bermuda Triangle Mystery Solved."

Kusche was very practical. The first question he asked was whether there existed a mystery at all. Kusche approached the topic in a completely different way. He analysed the reports of a lost ship and aircraft-in the Triangle from 1800. To the surprise of many he explained that either disappearances never occurred and if occurred, were purely explainable. He pointed out that such accidents had occurred in other oceans too.

To prove his analyses Kusche took the story of the Lost Patrol (1945). In this incident five Fort Lauderdale based Grumman Avenger torpedo bombers disappeared during a routine patrol on December 5, 1945. Surprisingly it was manned by the five most experienced pilots and the flight leader had called the Fort Lauderdale control tower saying that they were

lost. Before the final disappearance, he had said, "we don't know which way is west. Everything is wrong Strange we can't be sure of any direction. Even the ocean doesn't look as it should." And then after sometime another voice reported to the control tower, "we must be about 225 miles northeast of base. It looks like we are". This was followed by a complete silence. The control tower immediately dispatched a 13 man Martin Mariner flying boat. But after a few transmissions, even the boat fell silent. No traces of either the Avenger or the Mariner could be found.

Kusche took this case. He researched and carefully dissected the Navy report. To everybody's surprise he declared that the Avenger was not managed by the experienced pilots. He declared that all were new except the flight leader, Lt. Charles Taylor. And even he was new to the area. Kusche proved that no transmission took place between the Avenger and the control tower. This he substantiated by saying that Taylor's compass malfunctioned and he got lost. And by 8 p.m. they ran out of fuel and because of the complete darkness, the Avenger crashed.

As far as Mariner flying boat matters, Kusche explained that it did not take off before 7.27 p.m. He reported that the members of the steamship Gaines Mill, which was stationed some miles away, saw an explosion in midair. And moreover, Kusche said that Mariner planes were quite prone to accidents and the accidents were so common that public often joked about Mariners as "flying gas tanks".

Kusche may be right in his analyses. The scientists have only believed it with the prefix 'if and 'but'. Anyhow, continuing the scientific research, the United States-Russian scientists combined their research in the Triangle. The Russian scientists discovered whirlpools in the Bermuda but they could discover no mysterious forces working on the spot. As they could not find any mysterious, invisible forces at work, the U.S. Coast Guard seconded Kusche's views, "The combined forces of nature and the unpredictability of mankind outdo even the most far-fetched science fiction many times each year."

The incidents may be stranger than fiction but the question arises that why did so many accidents occur at one point only?

The Stones Which Speak of Past Artistry

The huge upright stones standing erect with an air of mystery make an unforgettable impression. These are called stonehenge. They have attracted men from all fields to study them. Scientists, astronomers, archaeologists, spiritualists - all studied them but failed to come to a conclusion. The questions remain unanswered. WAS it a temple? Was it an observatory? Was it a magic shrine? WAS it a computer built much before we came to know about the computer?

There are questions and questions. Perhaps one day we will be able to discover the true and actual meaning of these splendid

l l l l i i B ^

In southern England on Salisbury Plain a ring of grey stones, usually 13 ft. high, make powerful impression. The centuries of rain, frost and wind have made crevices in the sandstone. But their beauty has not declined. The stones stand erect and tell the story of the powerful tools which shaped them 4,000 years ago. These are called Stonehenge.

Stonehenge is the only monument whose stones were artificially shaped and combined into an architectural plan. The stones were carefully cut on the curve so that when they were assembled they formed the outline of a circle. The upright stones were shaped with a bulge, similar to the columns of many classical Greek temples. This was apparently done to give the effect of a straight line when seen from below.

The effort behind shaping these remarkable structures must have been of the highest magnitude. The question then arises for



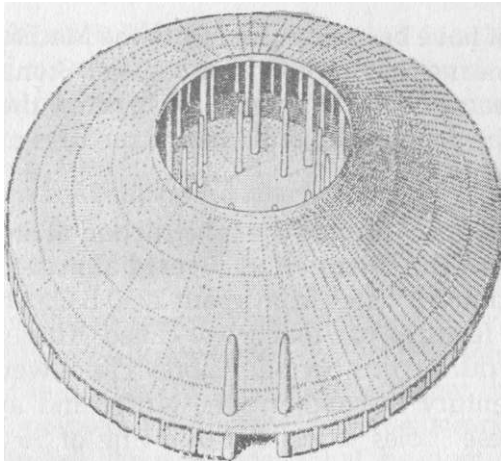
Stonehenge: After all what was the purpose?

what purpose were these stones? Was Stonehenge a royal palace? Was it a temple for magic and ritual or was it a scientific observatory built for watching the sun, moon and stars in their courses?

The historians in the 17th century believed that Stonehenge was built by the Druids-the white-robed Celtic priests of Britain and Gaul. Little is known about these priests as Roman writers had hardly mentioned anything about them. Some scholars do agree with this theory.

But the Druid is not the only one. Seventeenth century architect Inigo Jones believed that Stonehenge must have been the work of the Roman architects. He said that the thoughtfully and carefully planned designs could only have been done by the Roman architects. Somewhat similar theory was proposed 50 years ago by some scholars. While archaeologist Elliot Smith proposed that the designers must have been Egyptian or Phoenician.

Stonehenge aroused more interest with the discovery of a number of prehistoric graves. These graves were full of bronze daggers, personal ornaments of sheet gold, bone, amber and fine glazed pottery. In 1808, a well-known English antiquary, Sir Richard Colt Hoare set his labourers to excavate a prehistoric burial. In the burial he found the skeleton of a tall, sturdy man, an axe, several daggers and ceremonial equipments such as mace, polished stone head and carved bone mounts. In addition



4000 years old wooden structure. It, perhaps influenced the builders of Stonehenge.

to these there was a gold hook and two lozenge shaped ornaments of sheet gold.

The artistry of the gold work found in the burial and the unique quality of the Stonehenge architecture made Hoare and some of the other archaeologists to draw the conclusion that the ancient Britons must have imported their skills from abroad. A few also suggested that the number of Bronze Age warriors establishing themselves at Stonehenge must have directed the inhabitants to construct such a monument. The question then arises as to who were the invaders? To this the archaeologists suggest that invaders must have been Mycenae-the place where gold was in abundance, so much so that it was called the 'Land of Gold'.

However, these hypotheses became useless with the fact established by the carbon-14 dating method. It proved that the architecture of Stonehenge was inspired by the Aegean era because these stones which were used belonged to a time as much as four or five centuries before the Mycenaean period. And contrary to the Mycenaean belief, the two different types of burial objects along with the gold objects were found to be belonging to a much later period. The scholars believing in this school of thought substantiate their reasoning by saying that the gold

articles must have been imported from the Mediterranean. This ultimately means that trade existed between Stonehenge and the Mediterranean people. Whoever constructed them one fact is apparent. The people who built these structures must have been skilled carpenters.

Archaeologists divide the construction of Stonehenge into three phases. The first period covered almost 1000 years of prehistoric time. It dates from about 2750 B.C. One of the most mysterious features of Stonehenge called Aubrey Holes were constructed during this period. Aubrey Holes were named after the 17th century discoverer, the writer and antiquary John Aubrey. These holes consisted of a ring of 56 shallow pits carefully spaced out just inside the line of the bank. The famous Heel Stone and irregular lines of wooden posts were also constructed during this phase. These posts were set outside the entrance to the north-east.

The second phase of Stonehenge began from 2000 B.C. It began with the building of a long avenue of twin parallel banks and ditches. The stones for this were brought from Hampshire Avon, a place nearly two miles away. Each stone weighed more than 4 tons. That they were particularly transported from such a distance, means that these stones must be having some sacred value.

The third phase started from about 1900 B.C. And after seeing the construction of these places, one really wonders whether the Stonehenge people really belonged to the primitive age. There are about 75 blocks of the tough sandstone called sarsen, in the region around Avebury. Each sarsen stone must have been dragged by ropes to the site to Stonehenge, which was nearly 20 miles to the south.

After the transportation, the stones obviously must have been given shape and after giving them shape, lintels must have been placed accurately on top of the uprights. As the ground on which Stonehenge stands is not levelled (it slopes downwards for 18 inches across the ring towards the north-west), providing stability to each stone must have depended a great deal on the experience and judgement of the workers.

No doubt, archaeology has succeeded in solving the riddle of its method of construction, but it fails to provide any answer to the most vital question; why were they built and what was their use?

No debris has been found near Stonehenge. This very fact has made some to believe that Stonehenge must have been a sacred place, visited only on special occasions.

The other theory makes Stonehenge an observatory. As early as in 1740, William Stukeley wrote a book - "Stonehenge, a temple restored to the British Druids." He noted that the axis of the monument pointed to the midsummer sunrise. In 1840, Reverend Edward Duke proposed that the monuments situated across the Salisbury plain were set out as a gigantic model of the solar system and Stonehenge represented the orbit of Saturn.

In 1901 Sir Norman Lockyer and in 1963 Gerald S. Hawkins, astronomer at Boston University compared it to computer. Scientific curiosity or religious motive, or perhaps a mixture of both were the reason behind the construction of such mysterious stones, which speaks of the architectural skills of a surprisingly high order. Besides bowing down to the architectural genius of that prehistoric period, we have little evidence about the motive behind their construction. The primary reason remains elusive and a mystery of air surrounds them. •

'The Navel of TheWorld'

Easter Island is called the 'Navel of the World'. Its inhabitants are cut off from the rest of the world. It is the loneliest spot on earth. Yet, the inhabitants produced one of the most magnificent statues. They managed to create a prosperous society. They built and transported giant statues weighing upto 90 tons.

The mystery prevails about their motive behind constructing such sculptures and how did they manage to do it?

The tiny Easter Island is the most isolated spot in the Pacific ocean. It is separated from the rest of the Polynesian chain by the ocean water. The island is surrounded by three volcanoes - Rano kau, Maunga Terevaka and Katiki. These three volcanoes make the island appear triangular. The island is full of volcanic soil but it is evident that some time ago there must have existed green vegetation and animal life. Today there are hardly any trees, and animal life is sparse. Its temperature is moderate - about 72° F and yearly rainfall about 50 inches. As it is situated in such a remote place, the earliest inhabitants called it te pito o te henua, meaning 'the navel of the world'.

This tiny island was first discovered by the Englishwoman Katherine Routledge in 1914-15. She described the island as the one where the past is the present "...the shadows of the departed builders still possess the land.....". Indeed, the Easter Island is the fascinating place with surging breakers, precipitous cliffs, towering volcanoes and open, windswept slopes. And above all are the island's famous statues.

These statues are massive and built of buff coloured volcanic stone called Moai. About 1000 of such statues have been



In 1960 these seven stones were restored to Easter Island

found which are 12 to 15 ft. tall and weight of about 20 tons. The largest of such a statue is 32 ft. tall and weighs 90 tons. Some unfinished statues have also been found. These are more than twice the size of the finished largest statue.

What astonishes a viewer is that what do these giant structures symbolise? Who constructed them? What happened to the men who carved them? And from where did they get the timber to accomplish this task?

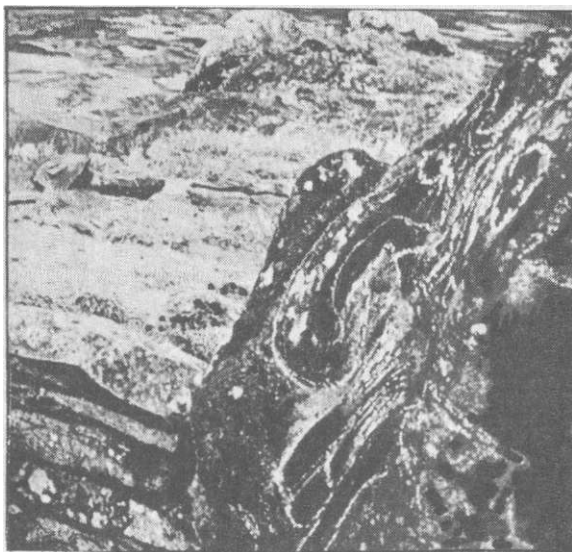
Jacob Roggeveen, the first European who visited this island never answered these questions. He visited the island in 1722. Roggeveen discovered that islanders lived in thatched huts and could barely make out a meagre living by doing a little bit of cultivation.

In 1770 the Spaniard Felipe Gonzalez visited the place. Four years later the great English explorer Captain James Cook visited the island. For a few years the island hardly saw any visitors. Then in 1786 French Admiral Jean Francois La Perouse visited the place. But all these visits were very short and hardly gave any new insight to the world about the island except that the number of people living was 3000 to 4000, that these people ate human beings, and that tribal chiefs were always busy fighting with each other.

By 19th century the situation changed. Explorers became exploiters and soon the isolated islanders were transformed into slaves. In 1805 the American Ship 'Nancy', carried away 22 islanders as slaves. Peru also invaded the island and from 1859 to 1862 about 1000 islanders were shipped off to Peru as slaves. Many of the islanders who were put into slavery were skilled artists and with them passed away the secrets of the trade too. Later on about 100 were released but only 15 of them reached the island. Others died on the way and even the 15 Who reached the island were infected with the dreaded smallpox. The disease spread and soon the population of the island decreased further. By 1877 only 111 of Easter Island's inhabitants were left. When the Chilean colonists arrived they found the islanders living in complete misery and poverty. From then on the island came into the possession of Chile and the world started taking deep interest in the giant statues.

The notable research was done by the American W.J. Thomson (1886), Katherine Routledge of England (1914-15), Alfred Metraux of France and Henri Lavachery of Belgium, (1934-35), the German missionary Sebastian Englert (1935-39), the Norwegian Thor Heyerdahl (1955-56) and by the American anthropologist William Mulloy. Because of these

Engravings on the rocks



researchers many fallen statues were restored to their original positions.

The question arises that who were those men who carved such beautiful statues ? Some scholars have disclosed amazingly interesting stories. According to them Easter Island was the lost continent. Some opined that it was inhabited by beings from outer space and some said that they were direct descendants from ancient Egyptians. However, modern researchers have unanimously put forward the theory that the people who carved moai were no other but Polynesians.

Contrary to these surmises, the islanders give their own tale of descendancy. According to their legend, their religious leader - Hotu Matu'a was defeated in the battle and was forced to leave his homeland - archipelago of Hiva. One of his associates had a vision of a new homeland somewhere in the direction of the rising sun and seven men were sent to locate it. And in this way Easter Island was discovered. Hotu Matu'a arrived on the island with various plants and animals. Hotu Matu'a did not live for long. But before his death he divided the island among his children - a reason for the island being divided into so many groups.

To some extent scholars do agree to this native legend. They believe that the descendants of Hotu Matu'a produced the great statues. From A.D. 1110-1205 and till A.D. 1650 they built classical statues. During this time the islanders were divided into two main groups. The dominant group was called Hanau Eepe, meaning 'heavy set people' and the other class was called Hanau Momoko, meaning 'slender people'. According to tradition the second class was the direct descendant of Hotu Matu'a.

Tired of oppression, Hanau Momoko rose in revolt against Hanau Eepe which made the master to flee to the slopes of the volcano Poike. At this site Hanau Eepe dug a long fortified trench. They filled the trench with fuel to repulse any further attack. Unfortunately a spy betrayed them and the enemy attacked from behind. Hanau Eepe themselves jumped into the flaming pit and ultimately only one person was spared. Some of the present day islanders still claim descent from him. Even the remains of this historic trench is still visible.

From the radiocarbon dating it is known that all construction stopped by A.D. 1650. The question remains how far did it take islanders to carve the giants and how did they transport and raise the statues? Archaeologist Arne Skjolsvold of the Heyerdahl expedition did some careful experiments and concluded that a 16 ft. long statue could be completed in a year but by many sculptors. The second question how could statues be transported gave birth to many assumptions. According to the island traditions, the statues were full of super-natural powers called mana, and themselves walked to their appointed places. Another island story is that carpets of sweet potatoes and crushed yams were laid on the slopes and the statues were slid along them.

Recently, William Mulloy suggested that the statues were put on a Y-shaped curved bottom sledge. He argued that the jutting out belly and chin were not done to give any style but because of the use of the Y-shaped sledge. Once the statue was kept on the sledge, the statue was pulled by the ropes on a road covered with reeds and grass.

Despite such research on the topic, the truth about the purpose of constructing such giant statues still eludes us. We still do not know that how did a civilization evolve on the remote island? We still do not know the reasons for its destruction. We do not know what compelled the islanders to produce a vast wealth of art and architecture. The solemn faces of the stone giants of Easter Island are still looking up into the sky. Perhaps they are inviting scholars to reveal their true mystery ! •

The Splendour of Pyramids

The skyline of the Nile Valley seems to be dominated by the mountains. But these are no natural mountains. They are man made mountains, known as Pyramids.

What exactly was the purpose behind the construction of these pyramids, is unknown. Perhaps they were intended by the god-kings of Egypt as the everlasting sanctuaries for their dead bodies, since they believed in the theory of life after death.

The question arises how did the ancient Egyptians raise such tall structures? Who built them? Why did they build them? Is it true that the kings had some secret motive which passed away with them? There are questions and questions as the enigma of pyramids astonishes a traveller.

For more than 40 centuries the majestic pyramids have dominated the skyline of Egypt. These monuments are the only witness of the technological advance which ancient man possessed. Still we do not know why and how these structures were constructed? Although Arab scholars had earlier declared that the whole of ancient Egyptian knowledge was inscribed inside the Pyramids.

As late as the 19th century the European scholars began to take interest in these giant tombs. The scholars came to know that these structures were in fact expressions of religious faith, as Egyptians believed in life after death. About the royal tombs they said that they may have been solar monuments, as the sun was the symbol of the falcon-headed God Ra. In fact, the shape of the great Pyramids suggests the rays of the sun falling from the sky.

As the Egyptians believed in the life after death, they

Chephren, Who constructed the second pyramid of Ciza.



perfected the art of embalming, to preserve the body - and the personality - for all eternity. It was called mummification which was a long and costly process in which the internal organs which were to decay fast were removed and the body was dried by soaking it in a salt solution and then a carbonate of soda was sprinkled on it. After this the body was wrapped in bandages which was then soaked in oils and finally put in painted coffin. As Egyptians believed that mummies enjoyed perfect life, they placed all the necessary items beside the dead. Often the rich Egyptians set aside a part of their wealth to maintain a priest. The duty of the priest was to restock the tomb regularly.

During the golden age of the Old Kingdom -2686-2181 B.C. the concept of pyramids reached its zenith. The first great pyramid was built during the reign of Zoser. The pyramid was called The Step Pyramid and was built by a brilliant artist Imhotep.

The greatest of the pyramids was built for King Khufu, the son and successor of Seneferu. This monument just a few miles away from Cairo is about 756 ft. square at its base, spreads to over 13 acres and the sides vary in length by 7.9 inches. It was built from about 2,300,000 blocks weighing a total of 6,500,000 tons.

The fact that such a massive structure was built by ancient people has obviously aroused much debate and speculation. The Scottish astronomer Charles Piazzi Smythe and the London publisher John Taylor evolved the theory that the Great Pyramids were built under divine guidance and that it incorporated cosmic wisdom as the true value of 'pi' the ratio of the circumference of a circle to a diameter.

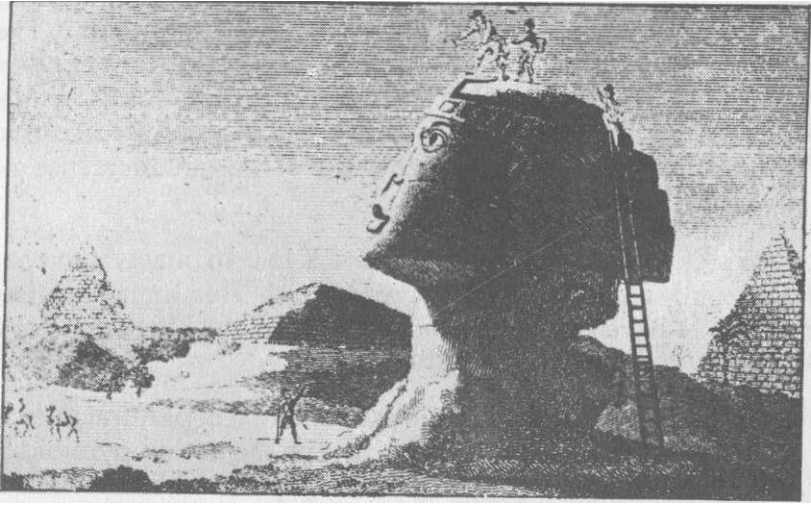
In 1954, a sealed pit was discovered. In it an intact cedar boat about 140 ft. long and 16 ft. wide was found. This, archaeologists argue must have been a 'solo boat' in which the king must have taken his voyage to immortality.

The second giant stone - the pyramid of Chephren stands at a higher level than the pyramid of Cheops. Near this pyramid is built a funeral temple and the guardian Sphinx. Near them is a small pyramid of Mycerinus'. After this probably the construction of pyramids stopped. Mycerinus' successor Shepseskaf abandoned the Giza site and had his own funeral monument which looked like a giant sarcophagus. He built this in the southern necropolis of Saqqara.

The pyramids were built during the Golden Period when there was no one to challenge the supremacy of Pharaohs. So the Pharaohs built the pyramid to symbolise the distance between them and the masses. They made themselves appear like god-kings.

This Golden age lasted about five centuries and was followed by a period of uncertainty and unrest. The supreme power of the Pharaohs was challenged by the nobility.

A vital question arises that how did Egyptians build such massive structures when the knowledge of wheel was unknown? Archaeologists believe that they must have built a big ramp. Stones must have been hauled to the lip of the ramp before sliding them into place on a bed of liquid mortar. With the rise of the pyramids, the ramp must have been lengthened. After finishing the work, the ramp, archaeologists say, must have been dismantled. Remains of such ramps have been discovered at the pyramids of Maidum and Lisht, south of D-ahshur.

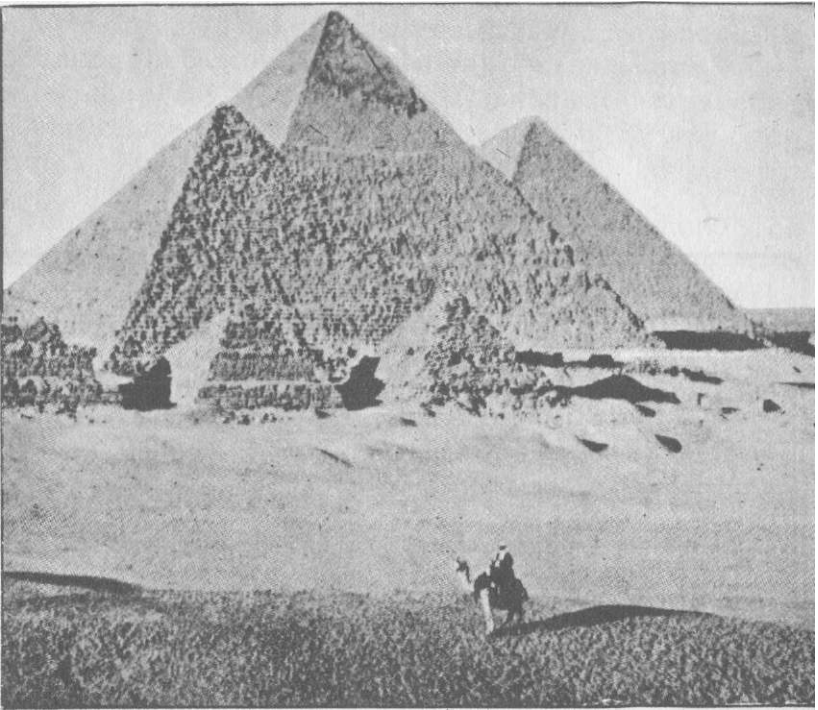


Napoleon examining the Sphinx of Giza with his men.

Contrary to the above suggestion, Herodotus, the 5th century Greek historian mentioned that the Egyptians possessed hoisting machines. These machines were made out of short planks of wood. But, till now, excavators have not found any traces of such wooden hoisting machines. Herodotus also gives the figures of the labour force. According to his account the work force for Cheop's pyramid was 100,000 men who were replaced every three months for a period of 20 years.

Contemporary historians have not disproved it, neither have they accepted the figures in totality.

Despite all the contradictions and speculations about the minute details of these pyramids, one cannot overlook the fact that these structures were built by the workers whose skill till present day is unsurpassable. The Greek historian Diodorus Siculus, contemporary of Julius Caesar wrote, "It is agreed that these works surpass anything in Egypt, not only for their great mass and high costs, but also for the beauty of their construction. The workers. . . . are more worthy of praise than the kings the kings merely provided wealth, gained through inheritance or extortion."



The great pyramid of Cheops at Giza

The Roman Author Pliny Elder A.D. (23-79) was critical of pyramids. He called it "a foolish ostentation of the fortunes of kings."

Whether the exercise was foolish or not, we cannot comment on till all the mysteries regarding the purpose and motive behind the construction is unravelled. And it' is immaterial whether pharaohs achieved immortality or not, but certainly these monuments have. •

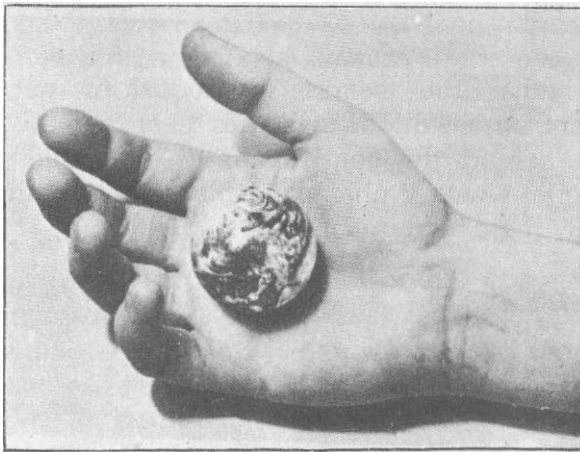
Black Hole of Siberia

What was that which hit Siberia on June 30 at 7.17 a.m. in 1908? The question till now remains unanswered. Scientists have proposed many suggestions but they do not agree on any one reason.

Many suggest that it was a meteorite. Some say it was an atomic blast from some far off unknown spaceship. To some it was a blackhole.

There are various suggestions and in fact speculation is still on. But one thing is certain that it was a catastrophe of the highest magnitude and it scarred the face of the earth.

June 30, 1908 was a drastic day for Siberia. Something unusual, unexpected happened. The Tungus area of Central Siberia suddenly experienced a mid-air explosion. All trees



If earth is made to appear like a tennis ball then its gravitational pull would be so strong that nothing would escape it. It would be a black hole.

within a radius of 20 miles were uprooted. The effect was visible in 1960 also. The charred tree trunks with their bark torn off were seen from the plane. It formed a striking pattern of lines radiating from the centre of the area where the devastating explosion occurred.

The entire experience seemed to be a magic show. The researchers were silent. They did not know what had happened. Some of the inhabitants who witnessed the entire exercise explained the phenomena - "A fire ball crossed the sky. It was so bright that it made even the light from the sun seem dark." The force of the explosion was felt more than 400 miles away at Kansk. Houses were thrown down and some people sustained the flash burns. A farmer, S.B.Semenov, who was sitting on the steps of his house at a distance of 40 miles saw the flash. He closed his eyes but experienced the heat. Narrating the incidents he described his experience, "My shirt was almost burned on my body, and when I opened my eyes I could not see the fire ball. A little later it appeared as if somebody hurled me away from the stairs. I became unconscious." His neighbour, P.P. Kozolapov experienced burning sensation in his ears.

The explosion even wiped out 1500 reindeers. So powerful was the explosion that it burnt the entire clothes and silverware of one herdsman.

The scientists were puzzled. They researched hard to know the causes of such a devastating explosion. Subsequently five different theories were put forward.

The first theory put forward was that the heat must have been generated because of the fall of meteorite. But experts on the expedition to Tungus could not find any meteorite.

In the 1950 s some scholars suggested that it must have been the impact of a mid-air nuclear explosion by some advanced civilization. In 1958 and 1959 high level of radioactivity was detected there. But in 1961 the investigation of the area once again proved the theory to be false.

The most accepted theory is that a comet's head entered into the atmosphere with such a speed that it inevitably exploded in

mid-air. The scientists argue that it must be held responsible for the pale 'white night' skies visible over Europe for so many days after the incident.

Another theory was put across in 1965. According to this theory 'anti-rock' made of anti-matter entered the atmosphere and collided with atoms of ordinary matter. This accident produced gamma rays and an explosion. This, scientists accounted, caused the flash burns and the reason for absence of any residual material.

The latest explanation is that a tiny 'black hole' hit Siberia. According to this theory, the scientists argue that it passed through the entire earth and emerged in the North Atlantic.

The concept of black hole on the surface appears to be vague. The idea, to many scientists appear to have been directly lifted from science fiction. Yet some scientists have gone deep into the explanation and had done research work. They have endeavoured to explain in the term 'black hole'. According to them, a black hole is a huge lump of matter which had shrunk so much that it has become invisible. But any light rays passing near automatically drawn in. And because of its density it generates gravity of such a magnitude that not even light could escape it. This is a black hole.

Such concepts obviously aroused interest and curiosity among the scientists. The theory of anti-matter aroused the interest of British scientist P. A. M. Dirac in 1928. He suggested that there must be a particle identical to the electron. This particle, he opined must be having positive electric charge instead of a negative one. Four years later his theory was proved right in the laboratory. It became clear that each particle had anti-particles and if each particle was gathered into atoms and atoms into stones, they would become anti-matter. And as soon as anti-matter meet an **atom** of ordinary matter, they are destroyed. And their destruction is full of consequences. An intense flash of light with violent radiation occurs.

The above theory was further examined by the wellknown Nobel Prize Winner Williard F. Libby. He got the award for

his discovery of radioactive carbon dating. He concluded that both anti-matter and matter would be converted into energy if it falls into the atmosphere. The reaction of this, he claimed, would be equal to that of an atomic bomb.

Libby and his colleagues examined the Siberia mystery and concluded that the effect was only one seventh of what it should have been, if there occurred a meteorite of anti-matter. So they dismissed the theory of anti-matter being the reason for the Siberian explosion.

In 1973 two scientists of Texas University, A. A. Jackson and Michael P. Ryan, Jr., offered a theory that the 1908 Siberian devastation was caused by a mini black hole. A mini black hole is the leftover of a giant star that has collapsed and has left behind a mass more than twice that of the sun.

This theory was totally rejected by the scientists. They asked if such a black hole did hit Siberia, then, where are the cataclysmic signs of its passage. A somewhat similar incident should have happened somewhere else too on its route to Siberia. And since no such incident was recorded elsewhere, scientists totally disagree with this suggestion.

Majority of the scientists do agree to the concept of meteorite hitting the earth and disintegrating. Once again some scholars fear that in future if something happens like this, then perhaps, atomic war may arise, for, its explosion resembles it.

So, once again the concept of black holes attracted attention. In fact, the concept of black holes lies far back in the history of astronomy. In 1844 F.W. Bessel discovered that the path of the Sirius, the brightest star, was irregular. Bessel concluded that Sirius has an unseen companion and that the two stars were encircling each other. This other star was seen after 19 years by an American telescope manufacturer, Alvan Clark. The new star was as white as Sirius. The star was called 'White Dwarf'. Later on, other white dwarfs were also located.

British scientist R.H. Fowler and Indian scientist Subra-

manyam Chandrasekhar gave the theory of a star burning up all its fuel and collapsing because of its own weight. The star became an object of great density - like a big frigid molecule. Chandrasekhar believed that 50 times bigger stars than the sun are burning and burning so intensely that their life times are limited to 10 to 20 million years only. Innumerable stars must have already experienced such a fate but he gauged, "A star of large mass cannot pass into the white dwarf stage." So, the question remained what happened to those stars? No answer was given to this.

J. Robert Oppenheimer, one of the prominent leaders in the making of an atomic bomb, studied the collapse of the stars, intensity of gravity on the heart of the star, and supported this theory. Einstein theory of gravity (so called general theory of relativity) helped scientists to understand the mystery of stars and the ultimate destiny of such a black hole.

With the advancement in science, 'pulsars' or pulsing radio sources have also been discovered. With them, the possibility of even more extreme forms of contraction black holes also seemed possible. But all astronomers do not agree to this theory. They argue, "Either there are holes in the sky or there are holes in the general theory of relativity."

So, the mystery of black hole remains unsolved. If black hole did not hit Siberia then what was that which created such a horror? •

Scythians - The Great Warriors

The Scythians were immensely rich. They had large amount of gold and made many beautiful artefacts. But they were not mere smiths. They were nomads of the Russian plains. They exercised unimaginable brutality and barbarous acts. They killed and strangled their own people. They used to peel off the skin of their enemies. They drank blood. But above all they were great warriors.

Surprisingly, they had no knowledge of writing .We have no written account by them. Their history is known to us by Greek historian -Herodotus. Living on chivalry/obviously they faded out of history, leaving the query about their origin for scholars to resolve.

Scythians were magnificent warriors. They were embodiment of horror. Nobody dared to fight against them. The fear was logical. They were quite barbaric in their treatment of the enemy. They used to behead their enemy and often skinned them alive. Even this was not enough to quench their blood thirst. Scythians indulged in the most brutal tactics of cleaning their enemy's skull by sawing through below the eyes and dipping it into a richly appointed drinking vessel. The royal funerals were drenched in blood.

However, Scythians were not only barbaric. They were remarkable military strategists and created innumerable dazzling golden objects. Combs, breastplates, chalices, scabbards, helmets, rings, all made of gold, have been found amidst the carnage of royals graves.

Scythians were an odd mixture of gold and blood, beauty and bestiality, fact and myth. These are some of the inexplicable



A warrior on the horse.

paradoxes of the Scythians. Besides these, we do not have much details about them. Scholars are unsatisfied with these facts. They ask who were they, where did they come from and what was their life like, 2,500 years ago? As they have left no written record or coin, there is no evidence to prove their odd mixture of beauty and bestiality.

Fortunately, Father of History, Herodotus, and Peter the Great have mentioned about them in their accounts. Herodotus has written about them in his book-'Persian Wars'. He took great pains in accumulating facts about Scythians. He travelled to the Don river, to the west of the Carthian mountains, to the Danube river and to the Pontic steppes.

Herodotus wrote that Scythians made coats, caps and cushions out of the human skins. The skull was cleaned and used as a drinking cup. The guests, Herodotus wrote, were often served drinks in these cups and the host proudly narrated the incident where and how they committed the 'glorious' act. With

all this, Scythians themselves were blood-thirsty. They drank the blood of the first enemy they killed. It was considered to be a disgrace for a Scythian not to have killed anyone since the last festival. They used the scalp of their enemy as a napkin. The more the number of the napkins, the more chivalrous he was considered to be. However, all prisoners were not scalped. They left some to be offered as a sacrifice to God of war. Even the sacrifice was offered in the most peculiar way. The prisoner was first killed then his right hand and limb were severed. The severed arm and limb were tossed into the air.

Besides these interesting incidents which Herodotus has described at length, he has also provided a grim picture of Scythian society. He tells that Scythians were wild people with cavernous eyes, long and untidy hair and hardly ever took a bath. Herodotus tells that men were cruel and hard and had many wives.

Herodotus has also described the Scythians' victory over Darius' powerful armies. The Persian force of 700,000 was very neatly finished by the Scythians who fought brilliantly and used to take the enemy by surprise. Finally Darius had to leave because of the sudden paucity of food. The Scythians were left complete masters of the steppes.

Scythians were not agriculturists. They depended on cattle for their living. They had no houses and lived on wagons. Hippocrates, the Father of medicine described the wagon having four wheels, constructed in the manner of houses and being pulled by oxen.

Despite the vivid portrayal of Scythians' nature, their origin remains unknown. Herodotus himself told three conflicting stories about their origin. According to one story it is suggested that they came from Asia. Second theory suggested that they descended from Targitaus and the third story suggests that they descended from the union of Heracles and a half woman, half snake creature who lived in the Scythian woodlands.

Such bizarre tales were not believed and Herodotus's

version about Scythians' origin was dismissed as craftwork of the 'Legend monger'. Herodotus was called 'Legend monger' by the philosopher Aristotle.

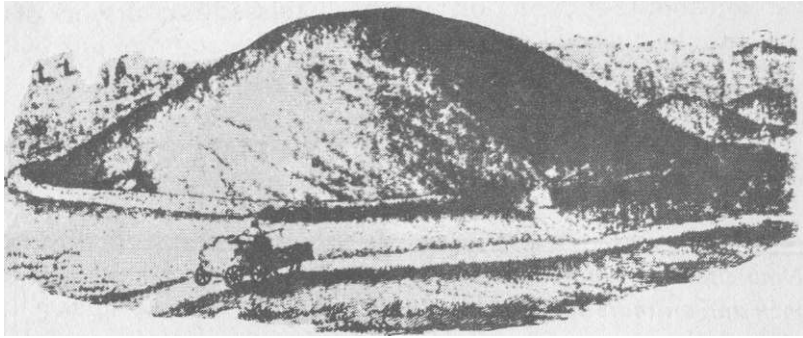
It was in 1715, that the truth about Scythians came to limelight. A Siberian mine owner gave a gift of gold to Tsar, Peter the Great of Russia which sparked the excavations. The graves of Scythians were excavated. And with each opening of the grave and the gold treasure unearthed from them, scholars came closer to Herodotus' view about Scythians' funerals.

Scythians used to slit open the dead body of the king. They used to clean the corpse and used to fill it with various aromatic substances, such as crushed galingale, parsley seed and anise. Their body was then sewn up and was coated over with wax. With the king his concubine, butler, cook, groom, steward and chamberlain were also strangled to death and buried with him. Horses and gold cups were also buried with king. After the burial ceremony, the tribesmen used to raise the mound of earth as high as possible.

In 1898, N.I. Veselovsky excavated Kurgans at Ueski Aul in the Krasnodor district, north east of the Black Sea. After digging 49 ft. high grave he discovered 360 skeletons of horses. In 1971, a Russian archaeologist discovered a similar grave near Ordzhonikidze, on the Dnieper. These discoveries once again proved Herodotus to be correct. Herodotus had earlier written that on every death anniversary 50 of the dead king's attendants along with 50 horses were strangled and buried.

The Scythians believed in shaman - a unique mixture of partly medicine man, partly magician, soothsayer and an animal. The shaman it is assumed, might have served as a kind of artistic touchstone and the vital source for the animal themes which so dominated Scythian art. Perhaps, Scythians like so many other ancient people viewed their world in animistic terms.

These are not enough factors to explain the myth surrounding Scythians. One cannot comprehend their barbarity and love for gold. Perhaps, there exist some more secret evidence! Or it could be that Scythians purposely exerted in



Grave of a Scythian tribal leader

barbarous acts so as to frighten the other enemies. For, they had enemies all round as they occupied the most primary route of invasion between East and West.

This is a mere hypothesis. But whatever good or bad, we know about Scythians, it only highlights the brutal, rapacious chapter of human history.

The riddle of Scythians remains unsolved. We have no indepth knowledge about their society and origin. However, facts exist about their decline. They were driven out by Souromatae. Some Scythians crossed to Romania, while some remained in Russia and mixed with the invaders. Their final annihilation came in 106 B-C. when they were completely defeated and killed by Mithradates the Great, King of Pontus.

But with their destruction, the history of Scythians did not end. Even today, historians are busy solving the riddle of a race which was an odd amalgamation of good and bad qualities. •

Was Sahara Desert Evergreen?

Now Qievery name Sahara makes one think of sand and Iteat, and men and animals dying of thirst But few knoiv that once upon a time Sahara was a beautiful fertile land where rainfall was a common feature, and trees, grass and streams flourished. Many animals were found there. Art too was impressive.

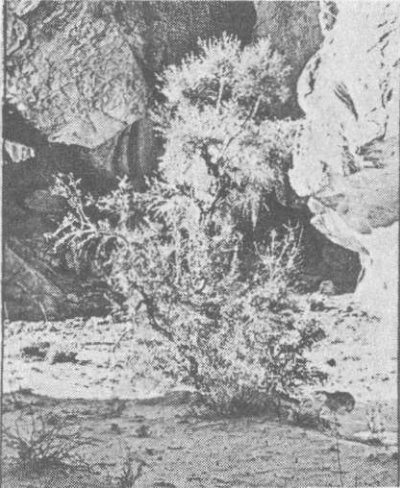
This was Sahara of centuries ago. So, what transformed green, pleasant Sahara into a horrid desdrt? Why did rainfall stop occurring? Were inhabitants responsible for the drastic change?

There are many queries which still surprise scientists and they are groping in the dark to search the answers.

The scenery of sand and heat, with high dunes and vast waterless regions was first described by Herodotus in about 430 B.C. He described it as a desert with hillock of salt and inhabited by people with strange and exotic customs.

More than 2000 years have passed since this description was alive. But the picture has not changed. Spreading on an area of 3.3 million sq.miles, it still has some unknown areas which are inaccessible and has violent extremes of climate. The persistent drought has forced its population of 20 lakhs to dig wells at random. And this practice of digging wells frequently, has in its turn, lowered the level of the water table. Even the modern scientific methods have proved futile in reversing the trend.

The vast Sahara desert was not always like this. Many centuries ago, it was a green and fertile country. The Negroid people lived there. They hunted a large variety of land and water animals. The geological and archaeological factors reveal this fact. The cave and rock paintings found at Tassili N' Ajjer



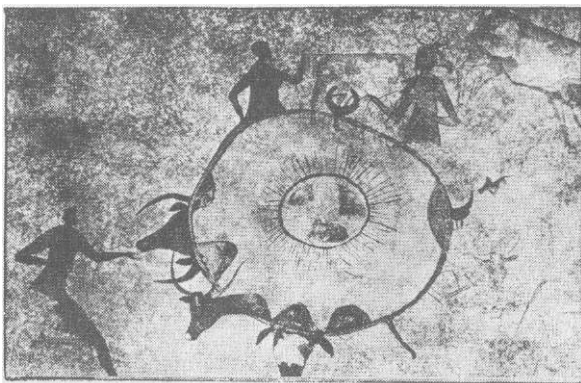
The growth of this shrub indicates that the Sahara desert was not a desert long-long ago.

highlight this bewildering spectre. In fact, the number of rock paintings at this place is much higher than found anywhere in the world.

Well, then the question arises as to what happened to the green fertile land? What caused it to become the perfect death land today?

The scientists reason it out as due to the monsoon rains. According to the scientists the Sahara flourished during prehistoric culture as the monsoon rains expanded far northwards. By 10,000 B.C. conditions began to remain moist and from 7000 to 2000 B.C. the climate remained wet for most of the part. But after that due to some unknown reasons, monsoon rains began to be less and an imbalance was created between rainfall and the rate of evaporation. As a result, the moisture soaked up by the sun's rays was more than the moisture the land received from the clouds.

Environment was not only responsible for this deprived condition of the Sahara, but human being also contributed to it. The increasing number of domestic animals destroyed plant life. Mountainous woodlands were burnt off and reduced to grazing land. And gradually vegetation degenerated - from savannah it became steppe and from steppe it became desert. The only remnants left were paintings and artefacts which



Details from a painting found at Tassili N' Ajjer.

reminded later generations of the past glory of the vast desert land.

The journey into the Sahara's glorious past came to be known only during the 19th century when Europeans entered the desert. The first three adventurers were Dixon Denham, Hugh Clapperton and Walter Qudney. In 1826^ Major Alexander Gordon Laing, a Scotsman crossed the Sahara and became the first European to reach the fabled city of Timbuktu. He was murdered there. In 1828, the Frenchman Rene Caillie, disguised as an Arab started from Timbuktu. He reached Morocco after facing torrid heat, whirlwinds, water shortage and often lured by the torment of the mirage.

Caillie's journey was a remarkable feat. From then on followed the regular encroaching journeys of the French. Soon Frenchmen embarked on colonial activity—military campaigns and building of trans-Sahara railways. For their excursions they had to produce the definite maps of the area. And the map revealed the true picture of the Sahara. It showed the high mountains, dotted with olives and cypresses. This map was prepared by the German explorer - Heinrich Barth. It was his findings that so wed the seeds for archaeological research. Going by the Barth's research the Sahara period was divided into two - pre-camel and post-camel periods. French geologist, G.B.M. Flamand did comparative study of the cave engravings of Southern Oran in Algeria and supported the findings of Barth that there existed a pre-camel and post-camel period.

By 1956, the scientific interest in Sahara grew. Numerous French expeditions were sent to Tassili N' Ajjer. On the fragmented plateau of Tassili N' Ajjer numerous paintings were discovered. The proper examination of the paintings revealed that the earliest one were probably made by a negroid ethnic group. Some primitive artefacts were also found at various places. These artefacts showed that the area, perhaps, was inhabited from the very dawn of man's existence.

Besides the art, research also unmasked the political history of the Sahara desert. It revealed the continuous struggle between the tribes. Due to the frequent appalling warfare the population decreased and the kingdoms disintegrated. The reason for the warfare might have been acute droughts. Even in the 20th century, famine and drought are the two recurrent factors. In 1913, a terrible famine struck the region. In this famine more than one million people died. Murder and fratricide occurred commonly.

However, gradually life began again. And then in 1972-74 another disaster hit the Sahara. Famine and influenza epidemic heightened the horror of the Sahara region and of the human beings there. Hunger made them commit the most dreadful acts -murder, loot, killing ones'own children. Surprisingly, there are no statistics of the victims but it is assumed that International aid prevented the tragedy of 1913 famine.

Despite such catastrophies the Sahara still exists. The people are still living there. These people continue to practise the disastrous habit of their predecessors, as they plunder the dwindling vegetation and sink deeper wells. Will they also face the fate of their predecessors? This is a question which haunts every scientist. People look up the sky and ask, "can Sahara be not made what it was thousands of centuries ago - a fertile land!"

The Forgotten Voyagers of the New World

Some 500 years before Columbus discovered America, the men from Norse tribe had already reached America. But now some disagree with this. There is an increasing belief that much earlier than the Norse tribe, Phoenicians, Chinese and Portuguese had reached this amazingly controversial land. Many remains of these cultures have been unearthed at the New World.

The research is continuing on the topic. And it is debatable whether these voyagers ever reached the Western Hemisphere?

Since time immemorial men have been fond of discovering new things. From 1450 to 1550 various discoveries were made. So, rightly this century was called the "Age of Discovery". It was in this century that man's longing for new world was satisfied. America was discovered by Columbus. And this discovery obscured other discoveries.

If we believe in the assumption that American Indians crossed from Asia into the Americas more than 40,000 years ago by land bridge, the question arises that why they continued to remain in the primitive state, although the inhabitants of Mexico, Yucatan and Peru created complex societies much earlier than Incas and Aztecs?

Phoenicians claimed that they were the first voyagers to embark on the journey of discovering America. More than believing in their claim, it is better to believe in the fact that they were the finest sailors of the ancient world. There are accounts describing how these men set sail down the Red Sea and returned after three years. Pharaoh Necho of Egypt commissioned the

voyage. And after sailing around Africa, they claimed that they saw the sun on the right side. Herodotus laughed at their claim and dismissed it, saying, "which some may believe, but I do not". Whether we believe this statement or not is immaterial. But this statement convinced the scholars that Phoenicians voyaged around Africa and they sailed beyond the Tropic of Capricorn where the sun crosses the sky in the north - to the right of the ships heading east.

The Phoenicians of Carthage also sailed the Atlantic. They reached Azores where many Carthaginian coins were discovered in the 18th century. In 1872, on a Brazilian plantation a stone with an unknown inscription was found. The Director of the National Museum in Rio de Janeiro, Ladeslau Netto, translated it. The coin inferred that the sailors were in the sea to please Gods and Goddesses. They had also sacrificed a boy and were out in the sea with 10 ships; "We were at sea together for two years around the land belonging to Ham (Africa) but were separated by storm and we were no longer with our companions. So, we have come here, twelve men and three women, on a new shore which I, the Admiral, control. But auspiciously may the exalted Gods and Goddesses favour us!" So read the inscription on the coin. The words 'new shore' was interpreted as 'an island of iron', because the coin where it was found, has enormous reserves of iron ore.



This Phoenician stone writing suggests that the Phoenicians sailed across the sea



Sculptures of a Chinese and a Negro •

Not all agree with the above story. Samuel Eliot Marison, author of the definitive history of the America's discovery, completely dismissed the version. He said that it was "purely an invention as neither the stone nor the original copy of the inscription can be traced." Even Frank M. Cross of Harvard outrightly rejected the story.

Another relic found at Bourne on Cape God, Massachusetts, in 1658, confirmed the Phoenician landfall in the Americas. But Yale historian Robert Lopez rejected the Bourne stone as "hoax".

There are many who believe that Phoenicians were the first one to discover the New World. They have advanced a number of evidences in support of their theory. One of these is a map of the world, prepared by the Turkish admiral and cartographer Piri Reis. This school of historians contends that the Reis map is 100 per cent true as it was based on charts, that were housed in the giant library at Alexandria before fire destroyed it completely in 47 B.C. Even the Greek author Diodorus Siculus who wrote in the 1st century B.C. believed Phoenicians to be the true founders of America.

Besides Phoenicians, Chinese have also been considered the founders of America. The Chinese traveller Hui Shen and four

other Buddhist monks who set sail in A.D. 459, it is assumed, may have taken the great circle route across the north Pacific. They may have reached North America and then perhaps sailed down the coast to Mexico.

The Chinese traveller discovered the Fu sang tree about which he wrote, "the tree had sprouts like bamboo shoots that the people eat." Chinese also wrote, "these people spin thread from the bark and make coarse and also a finer fabric. The wood is used to built houses, and the bark to make paper."

Hui Shens' description also mentions horses, cattle, and deer which were used to draw carts. But history tells us that American Indians had not seen vehicles with wheels before the Spanish conquests. Hence, the account of Hui Shen, inevitably presents contradictions.

However, archaeological discoveries apparently confirm the link between Asia and America. In Mexico, pre-Columbian terracotta heads of Chinese, Phoenician and Negroid have been found. And amidst the Mayan ruin at Copan, a carved elephant head and mahout have been discovered. Because of so much Asian links, anthropologists and historians do not hesitate in saying that Asiatic influence changed the structure of native society.

The third theory put forward is by Jacques de Machieu, a French explorer. He said that Viking ships on their way to Iceland in A.D. 967, were blown off to Mexico and that their leader Ullmann, became the original Quetzalcoatl and over the next 300 years they established societies in Mexico and the Andean high plateau. There are many indications that Vikings set up a culture at various places and named the places according to the specialities of the place, e.g. the place which produced vines and grapes was called Vinland.

In 1004 Viking Thorvald discovered Cape Keelness. But whatever little information we gather from the accounts of Viking is all very incoherent and we cannot even believe or disbelieve it in totality.

However, modern scholars agree that Helluland of the past

is the present day Baffin island marked with white beaches, is on the 30 miles long Labrador and Vinland is Newfoundland.

In addition to the above various theories, there is one more addition. Even Portuguese claim that they discovered America. The Portuguese historian Dr. Antonio Baiao argues that "the existence of islands beyond Azores was known to Portuguese." And he further states that Columbus took the hint from Portuguese and sailed to America.

Florentine Amerigo Vespucci, after whom the country has been named, has nothing to do with the discovery of America. He falsely claimed to be the founder of America, and German cartographer Martin Waldseemuller liked the name and put it on the map of the New World in 1507.

There are many suggestions and guesses about who discovered America. The question is whether Columbus was the real founder or the claim of Phoenicians, Chinese and Portuguese is true? If the claim of Phoenicians, Chinese and Portuguese is untrue, then where did they go? But the primary question is -was it geographically possible to discover the New World before Columbus? •

Which was The First City of the World?

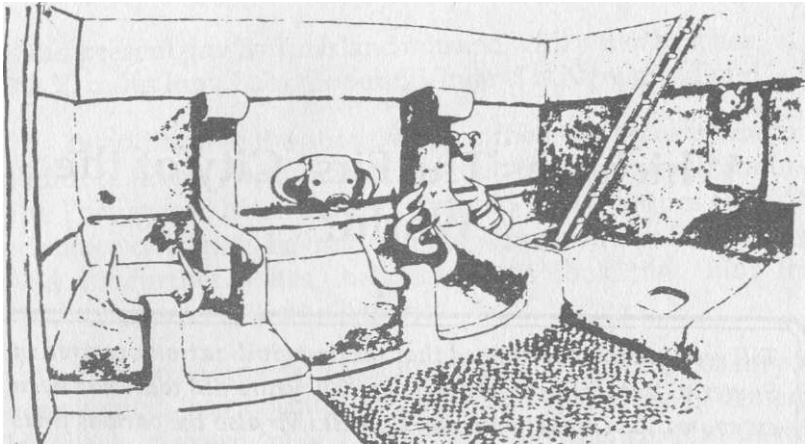
Till recently it was believed that the first civilization occurred in Sumeria. But not now. At Jericho 9000 years old wall has been excavated. At Catal Huyuk and Lepenski Vir also the various finds indicate the birth of a civilization.

The finds at these three places shattered the belief that the world's first city originated 5000 years ago in Sumeria. Now the question arises whether developed cities occurred before Jericho and what happened between the gap of these three cities and Sumeria?

Till a few years back it was believed that the world's first city was built by Sumerians about 5000 years ago in the area between river Tigris and Euphrates. It was believed that Ur, Uruk, Eridu, Lagash and Nipuri were the wealthy cities of the Sumer where civilization dawned. Before these cities there was a void in prehistory.

However, recent discoveries made the historians to recheck their records. They had to announce that it was not Sumer where civilization took birth but even before it there were cities with an advanced culture. These cities were Catal Huyuk, Jericho and Lepenski Vir.

The advanced prehistoric research began after the Second World War. The carbon 14 dating technique enabled researchers to date ancient sites. They found out that man has been the only form of Homo sapiens on earth for last 30,000 years. After this fact the researchers were sure that civilization could not have started just 5000 years ago but it must be older than that and subsequently they discovered three cities which were much older



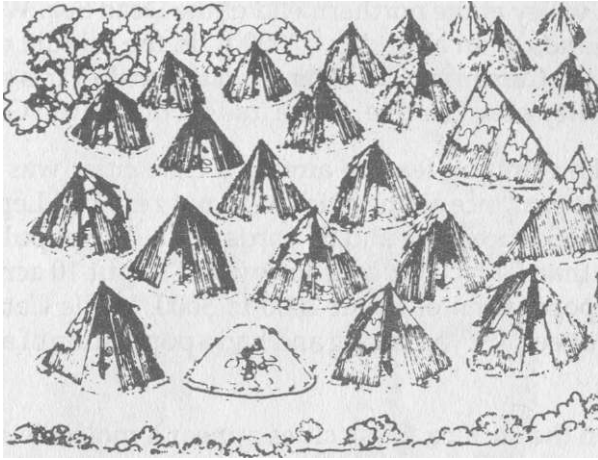
A line drawing of a temple found at the Catal Huyuk .

than Sumer. But with this discovery they also faced another question - are these cities much older than Jericho, Catal Huyuk and Lepenski Vir?

Bible mentions Jericho as the 'city of palm trees'. It owes its existence to the fresh waters of the Aines Sultan spring or fountain of Elisha. They discovered that this city existed 9000 years ago - 4000 years ago before Sumer.

The biblical account of Jericho comes from the Book of Joshua. It says that Moses died before he could cross Jordon. His son Joshua guided the people of Israel out of the desert and across the river. After crossing the river, these people captured the first canaanite city - Jericho. The entire city crumbled and the local population was murdered.

Archaeologists proceeded according to the above mentioned account. For nearly a century they excavated in futility. Between 1952 and 1958, British archaeologists Dr. Kaithleen Kenyon found some ancient crumbled walls. By carbon-14 dating the researchers came to know the exact date of its existence. The dates indicated that the walls were built in approximately 7000 B.C. And according to the history, the people of Israel fought their battle sometime between 1400-1250 B.C. So, it became clear that Joshua destroyed a city which was already at least 5,500 years old.



Lepenski Vir must have looked something like this .

After Jericho's discovery, another city was discovered by British archaeologist - James Mellaart at Ankara in Turkey in 1961. This was Catal Huyuk.

Following this discovery was the knowledge of Lepenski Vir, situated on the right bank of the Danube river in Yugoslavia. This city was discovered in 1965.

Archaeologists yet do not know how to place them in the general story of the evolution of New Stone Age Culture. Catal Huyuk, particularly offer rich archaeological material for further research. Catal Huyuk progressed as a city from 6250 to 5400 B.C. In 5400 B.C. it was finally abandoned. Unlike Jericho, Catal Huyuk offer very many details. It was at Catal Huyuk that archaeologists discovered a well developed economy and religious and artistic life.

Contrary to Catal Huyuk, the remainings at Lepenski Vir suggests that there occurred a society of hunters and fishermen, belonging to old Stone Age. The research has shown that this city was in the transitional stage. They were moving from encampments to houses.

Out of the three cities, the oldest one is the Jericho. It is an

oasis in a valley at the northern end of the Dead Sea. While Catal Huyuk stands at an altitude of 3000 ft. in the middle of a fertile valley on the Carsamba Cay river. And Lepenski Vir is situated in a small valley near Danube, in the middle of the Iron Gate gorge.

The common feature among all the cities was water. In physical appearance all the cities were not very big. Lepenski Vir was only 185 yards long and 55 yards wide. The population was not more than 200 to 300. Jericho covered about 10 acres of land and had population of about 2000 to 3000. While Catal Huyuk must have been 492 yards long and had a population of about 6000 to 10,000.

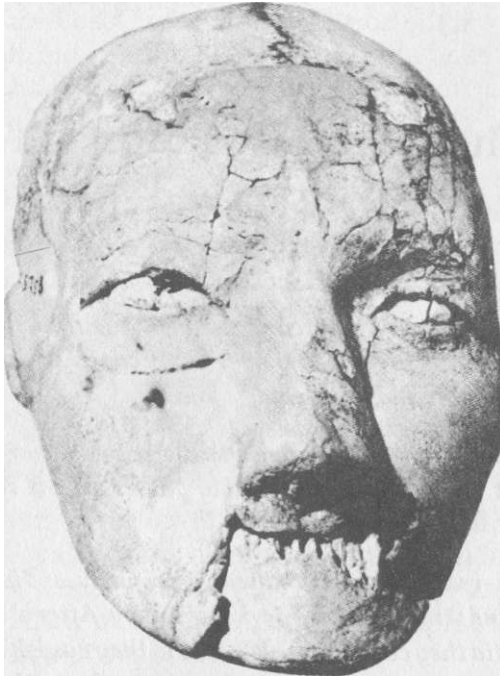
On the surface, these cities appear a molecule in front of Sumer which covered hundreds of acres of land and had thousands of inhabitants. Still these cities show a great diversity in architectural design and planning.

The excavation at Jericho has revealed that these people lived in houses made up of curved mud bricks. The natives built rectangular houses which were built close to each other and had just one door as the opening.

At Catal Huyuk there were no **surrounding** walls. The houses were joined with each other and the only way by which one could enter was through the roof. Hence in their long history of 2000 years, we have no records of the city being ever sacked. The houses were built of rectangular clay bricks which were joined with mortar. Most of the houses had just two rooms. The main room was about 20 by 13 ft. and the other room was used as a granary.

The outline of Lepenski Vir was entirely different. The houses were built away and separate from each other. But they were all same and had a tent like shape.

At Catal Huyuk and Jericho we find evidence of many public buildings. While at Lepenski Vir there are only four buildings which could have been temples. The excavations at Catal Huyuk has also revealed that women were respected and mother goddess was worshipped. The diseases which often struck



A 9000 years old portrait of one of the first city-dwellers, found at Jericho.

the inhabitants were malaria, pneumonia and arthritis. At Lepenski Vir the people followed strict traditions and were dependent on a community for a livelihood. But in Catal Huyuk social life was more complex. Some sort of social inequality persisted. This is evident from the varying sizes of buildings and differences in possessions and burial gifts.

In fact, Catal Huyuk achieved some level of technological advancement as they utilized both copper and lead metal art the main researcher suggests "Catal Huyuk is nearly as great as that of developed civilization of the Early Bronze Age."

There is no doubt that recent research as a fundamental force has made the historians to rewrite the history of civilization. But they still do not know the answer to the question what happened in the period between these cities and Sumer? How did the civilization progress between these two points? This is a missing link that needs answer. •

Teotihuacan, The Place where Gods Lived

Long after its fall, Teotihuacan continued to influence middle American civilizations. It was the religious capital of Mexico. Its art and architecture was supreme. It shined.

Even the brave Aztecs were moved by the grandeur of the place. They called it "the place of those who possessed the road of the Gods."

But it disintegrated and crumbled. The natives disappeared. Temples fell and streets became dark and lonely. After all who were they? Where did they come from? Where did they vanish? These are the queries which are still to be resolved. Like Gods, the people of the city of Gods also left a puzzle behind.

1400 years ago when barbarious tribes were attracting the attention of missionaries in Western Europe, a city was developing on the other side of the Atlantic. About 150,000 people were living in this place and it was called Teotihuacan.

Teotihuacan was the religious capital of Mexico. According to the American scholar, Thelma Sullivan, the word Teotihuacan suggests "the place of those who possessed the road of the Gods." When Aztecs occupied Southern America, the city was in complete ruins. After a long and arduous research we know a lot of details about Aztecs but still we do not know about the people who lived in Teotihuacan, from where did they come and how did they vanish and which language did they speak?

About 9/10 of the city is still buried. The city was built on a plateau which is situated at a height of 7,500 ft. It links the valley



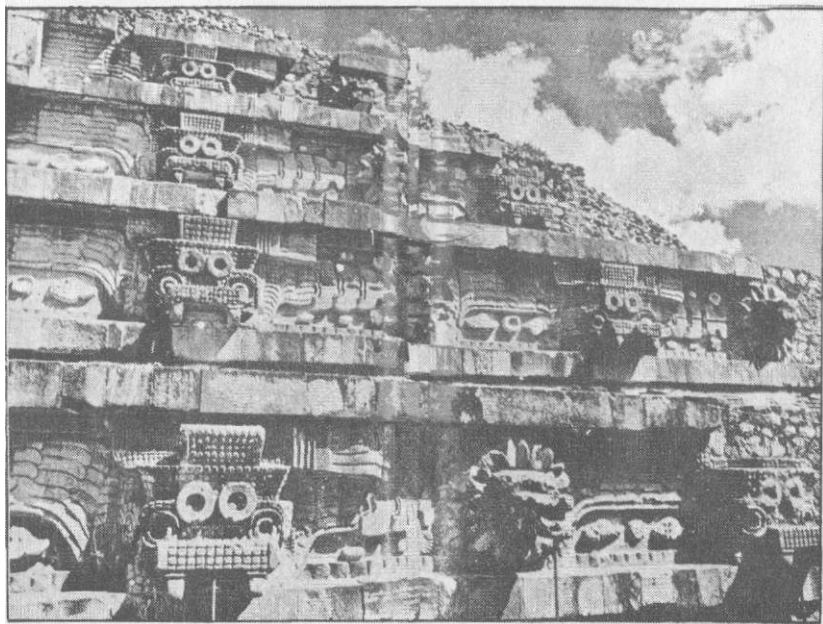
Pyramid of the Moon and pyramid of the Sun.

of Mexico and the valley of Puebla. Teotihuacan was surrounded by a fertile valley and streams which provided water to the inhabitants. Besides these, the Volcanic environment gave out obsidian - a raw material, which was used for making utensils, instruments and weapons.

The plateau was inhabited by Indians. They lived in wattle-and-daub huts in villages of 100 to 300 people. It is believed by the historians that these local people must have helped the founders of Teotihuacan in constructing a magnificent architecture. Moreover, as before Teotihuacan another culture blossomed in America, they left a legacy for others to follow. This culture was called Olmecs and they rose and fell between the 13th and 1st centuries B.C.

The civilization was first discovered by a Frenchman - Desire Charnay in 1880. He took it to be a Toltec city. But research later on showed that Toltec culture began in the second half of the 10th century A.D. By this time Teotihuacan was already in ruins. Moreover, Toltec had their capital in north at Tollan, the present day town of Tula.

Some archaeologists do agree with Charnay. Their bone of contention is that as the word Toltec means - 'great craftsmen', it symbolises the unparalleled architecture of the Teotihuacans. But this is an explanation at a very superficial level.



The Temple of Quetzalcoatl •

French archaeologist, Laurette Sejourne has recently given a new explanation. He has suggested that the entire Teotihuacan city must have been built to the glory of Quetzalcoatl. Sejourne opined that since Quetzalcoatl represents the creation of the universe - the alliance of heaven and earth and the union of spirit with matter, Teotihuacan must have been built by and for men who believed and understood their role in the cosmos.

A few others believe that the Quetzalcoatl was by and large worshipped by priestly class, who built and governed Teotihuacan. But who were they and from where did they come to make Teotihuacan a spiritual centre is still unknown.

The city Teotihuacan was constructed in a vast geometrical pattern on two huge avenues which crossed each other at right angles. The main road was called the Avenue of the Dead. It was named the Avenue of the Dead by the Aztecs, who took pyramid-shaped platforms along its length to be tombs. Hence the name - Avenue of the Dead.

To the east of the Avenue of the Dead is the Pyramid of the

Sun. Rising 216 ft. above the ground and with a base of 720 by 760 ft., this pyramid was completed in the 1st century **A.D.** It is estimated that it took 50 years for completion.

At the north end of the Avenue of the Dead is the Pyramid of the Moon. This Pyramid is smaller than the Pyramid of the Sun but is constructed similarly. At the other end of the Avenue of the Dead is the Citadel. It is surrounded by platform temples. And rising up from the centre of this Citadel is the Temple of Quetzalcoatl.

In spite of the various theories suggesting it to be a religious centre, there are many reasons to believe that Teotihuacans were excellent artists and sculptors too. Their artistic skill is shown remarkably in the burial masks which were huge, with oval eyes and broad faces. They modelled their masks in clay, obsidian, opHITE or onyx which surpassed the art of Egypt also.

Various frescoes discovered in Teotihuacan confirm the fact that they were excellent artists. It is our bad luck that till now historians have failed to decipher the hieroglyphic code inscribed on the art piece. If the code is deciphered, the world will be in a better position to appreciate their masterpieces.

Excavation at different places has revealed that Teotihuacan's influence reached till Guatemala. The Olmec country and Gulf coast were also influenced by Teotihuacan's culture. At Kaminaljuyu, pyramids were made in the style of Teotihuacan.

Despite having such a splendid civilization, Teotihuacan decayed. Scholars have attributed different reasons for its downfall. Some say that Teotihuacan was invaded and destroyed by nomadic warrior tribes from the north. They argue that as Teotihuacans were ill-prepared for any warfare, they must have been easily defeated. The Swiss writer Henr Stierlin believes that the barbarian invasion must have occurred which forced Teotihuacans to indulge in mass exodus. According to him the natives migrated towards the Kaminaljuyu, 700 miles south east of Teotihuacan.

Most of the scholars agree that the downfall of the city started in the 7th century. They say that if decline was not due to outside invasion, then it must have occurred due to the new aristocratic class. This class, scholars guess, must have arisen to compete with oppressive form of government, giving rise to general disorder, and finally causing the downfall of a civilization.

But these are all hypotheses. No accurate data is available to tell us the reasons for the downfall of a blooming civilization in a pre-Columbian past. Only one fact remains. That there existed a priestly culture—a pure source of civilization in ancient Mexico. But who were they and how did they construct such a beautiful land - the city of the Gods - is still a mystery. •

Magic Healing

Psychic' healing and biofeedback system are the two most mysterious medical science treatments. The two treat a patient without ever giving any medicines.

In psychic healing a patient is cured by a touch and by biofeedback a patient is taught to concentrate. Surprisingly, both the branches of medical science have taken birth from the ancient Indian Culture.

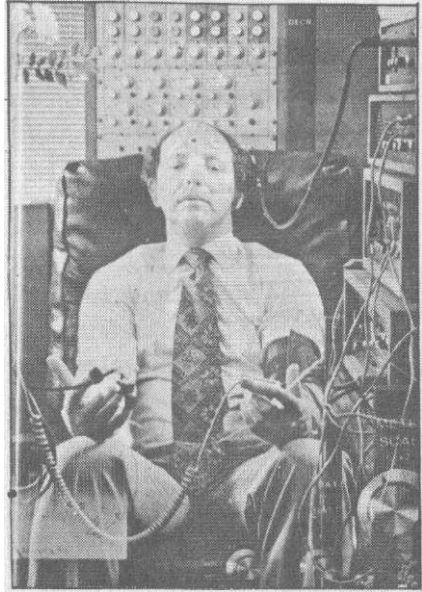
Some patients have been cured by these two. Yet, medical scientists refuse to believe in them. They are not convinced by them. But the founders think otherwise.

The patient, a 61 year old man, was suffering from throat cancer. All the medicines had failed to cure him. So he agreed to Dr. O. Corl Simonion's experimental regimen of brief mental exercises. These exercises were to be repeated three times a day. First, the patient was told to meditate for 7>h minutes. He was to silently repeat the word 'relax' with every relaxed breath. At the same time he was to relax the jaw and throat muscles. Next he was asked to visualize something pleasant. Next he was to imagine tumour and then to imagine particles of radiation bombarding it. And finally to imagine the cleaning process done by the white blood cells.

The patient followed this routine for seven weeks. After this his condition improved. The growth of tumour was arrested. The patient was released from the hospital. He was declared fit.

This is not the only case where magic healing was done. In fact, science is one field where magic often works. At times a

Dr. Green is shown attached to the biofeedback devices.



patient becomes perfectly normal after just a touch by someone who claims to be possessed with some magical charms. And at times without even touching the patient, the disease vanishes. Both the systems are unique and both have cured many patients. The second system is called biofeedback system and the former one is merely psychic healing or therapeutic touch. Both the systems have nothing to do with medical science in the traditional way. Hence, the medical scientists are still at 3 loss in attributing any definition to them for these two branches have no relationship with either acupuncture or the traditional age old custom of magical witchcraft. The research still continues. However, only some experiments have been conducted.

In 1971, Dr. Dolores Krieger of New York University found out that there existed similarities between haemoglobin and the energy-giving substance which Hindus called 'prana' – the force that keeps the body alive. She made a theoretical connection between the two and the work of Sister Justa Smith on the effect of a healer's treatment on the enzyme trypsin. Sister Justa Smith was a biochemist and had done research on the effects of enzymes by touch.



*Dr. Green examining a **yogi** sitting on a bed of nails-*

Krieger took the help of Oskar Estebany. She transported a test group of 19 sick people and a control group of 9 healthy people to a farm in Massachusetts. During the 6 days of the experiment, each sick person was treated by Estebany. All medication was stopped and sick and healthy people were given the same diet and had the same routine. Haemoglobin was taken in the beginning and at the end of the experiment. The results were astonishing. Changes occurred in the haemoglobin of those who were ill.

Krieger wrote about the experiment, "Taken together they indicate impressive evidence that something happens during laying on of hands." She further asked upon that the topic should be researched more.

Similar results were obtained in other experiments of psychic healing. The scientists explain that something may happen when healers direct their energy to the sick, but what that energy might be and whether it triggers off cure, is still open to controversy.

In the meanwhile, therapeutic touch has gained immense popularity in America. Nurses in America practise this quite often. Dr. Krieger wrote in the 'American Journal of Nursing', "I

Dr. *Krieger*.



became convinced that healing by the laying on of hands is a natural potential in man, given atleast two intervening variables, that I think are critical to the process: the intent to heal another, and a fairly healthy body," Krieger herself first experimented with it, then expanded her research to include 32 nurses. She decided that half would indulge in therapeutic touch and half would not. She reported that the results were as before. The treated group recorded significant changes in the haemoglobin value.

In 1972, Krieger began teaching her therapeutic touch at nursing schools and soon organised a national network of nurses trained in the technique. Today, therapeutic touch is the common practice. Even though the medical groups are unconvinced of her claims, they have not been able to disprove it either.

Another magic treatment is the biofeedback system. This system trains people to control many bodily functions and processes – like temperature, blood pressure, muscle contraction and even heartbeat. In biofeedback a patient is connected to a sensitive monitor which provides a commentary on the relevant body activity. The patient is asked to picture his body to do, for example to lower his heart beat or blood pressure or any other thing. The patient tell his body to do it and



The famous spiritual healer applies her healing touch.

he himself relaxes. After this the monitor begins to feed back the information to the patient that his heart beat slowed down by one count or two counts. The repeated announcements fill the patient with more confidence and he starts doing it more confidently. Ultimately, the signs of disease disappear.

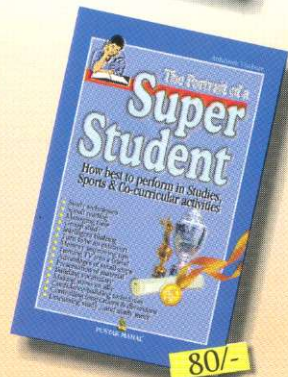
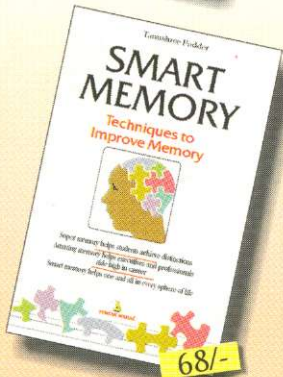
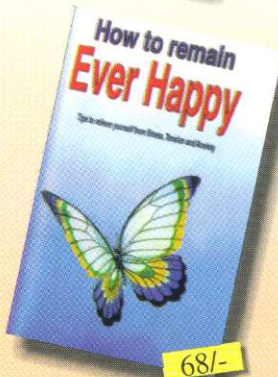
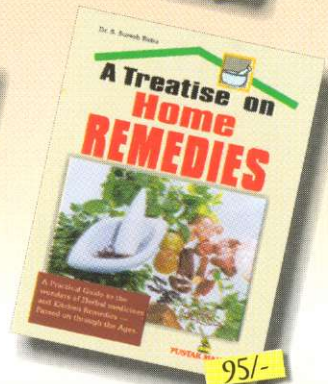
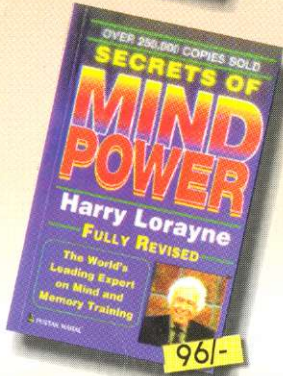
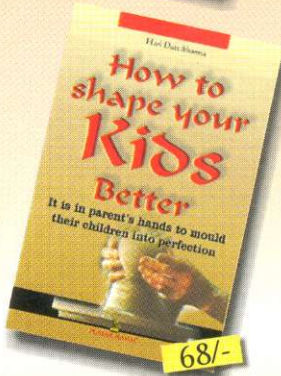
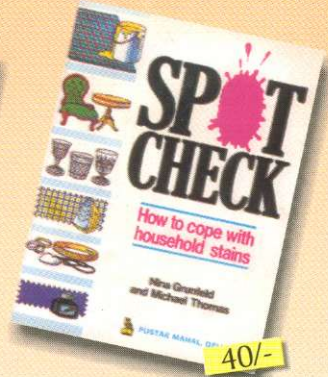
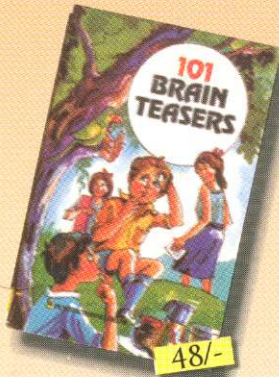
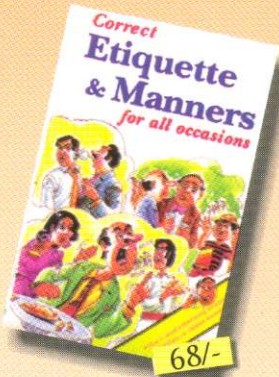
Presently, Kansas is the most well known place for biofeedback system. Alice Green and her husband Dr. Elmer Green are the founders of this system. They say, "it does nothing to the person. It is only a tool for releasing a potential".

However, the research is still continuing on this subject in America. At Emory University in Atlanta, biofeedback is used to rehabilitate damaged muscles. At the centre for Behavioral Psychiatry and Psychology in Birmingham, Michigan, this system is used to cure migraine headaches. While at Columbia Presbyterian Medical Centre in New York, Dr. Kenneth Greenspan, a psychiatrist has used biofeedback to treat post surgical cardiovascular patients. He achieved a great success. He treated 22 patients over a period of three months and cured them completely. By the end of the treatment all the patients achieved remarkable improvement in mobility and relief from pain. Dr. Greenspan has included in his biofeedback treatment meditation and breathing exercises too.

In fact, the abilities which biofeedback begins in patients – control the nervous system and concentration - are similar to the achievements of Indian Yogis. Anyhow, the efforts to improve the biofeedback system throughout the world has started. The research is still being conducted to make it more accurate.

In spite of the success met by both the unique medicine research, there are still many questions which remain unanswered. The words why, what and how are still not satisfactorily explained by the believers and founders of the treatment. If the satisfactory answers are given to these questions then perhaps these two – psychic healing and biofeedback system, will become an integral part of the medical science. •

Best Selling Books



World-Famous Unsolved Mysteries



PUSTAK MAHAL®

5126 F