

UNDERWORLD

The Mysterious Origins of
Civilization

Edited by Graham Hancock



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By the Same Author

The Sign and the Seal
Fingerprints of the Gods
Keeper of Genesis (coauthor)
The Mars Mystery (coauthor)
Heaven's Mirrior

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*The Mysterious Origins
of Civilization*

GRAHAM HANCOCK

Photographs by SANTHA FAIA



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For Santha ... for being there. Aga

With all my lov

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Graham Hancock,
London, January 2002

Initiatio

If you do not expect it, you will not find the unexpected, for it is hard to find and difficult.

Heraclitus

Five kilometres off the south-east coast of India, submerged at a depth of 23 metres beneath the murky, shark-infested waters of the Bay of Bengal, an ancient man-made structure sits on the bottom of the sea. The structure is U-shaped, like a huge horseshoe; its perimeter measures 85 metres and its walls are about 1 metre thick and 2 metres high.¹

The discovery was made by a team of marine archaeologists from India's National Institute of Oceanography (NIO) in March 1991, working off-shore of the Tranquebar-Poompuh coast of Tamil Nadu near Nagapattinam. Their equipment included side-scan sonar, which transmits an acoustic signal up to 1000 metres wide and measures the strength of the returning echo. Towed behind a research vessel, side-scan sonar is capable of building accurate maps of sea-bed contours and of identifying any obvious anomalies such as shipwrecks.

On 7 March 1991 a shipwreck at a depth of 19 metres was pinpointed by the sonar. It was investigated by divers on 8 and 9 March, who found many scattered objects including lead ingots and iron cannon on the surrounding sea-bed. The official report of the project then states:

Till 1.00 p.m. [on 9 March] the divers were working on the scattered objects. T. C. S. Rao who was carrying out sonar survey 5 km opposite Chinnavanagiri [not far from the wreck] reported another object 40 × 10 metres having the shape of a ship [?] recorded on sonograph. Shri Bhandodkar was sent to the site (designated PMR2) and he placed two marker buoys there. By 2.00 p.m. Manavi and Chinni dived but as the buoys had drifted the object could not be explored.²

A second side-scan sonar survey later in the afternoon refined the measurements suggesting that the object was oval and measured '30–35 metres east to west and 10 metres north to south with an apparent opening in one side'.³

On 16 and 19 March T. C. S. Rao continued the survey and now reported:

There are actually three objects, the central one being oval-shaped with an opening on the northern side. Its longer axis is 20 metres. There is a clay deposit on the eastern flank beyond which another semi-circular structure is seen. To the north-west of the central object one or more oval-shaped objects are found.⁴

Finally on 23 March 1991 three divers were able to go down but only had sufficient air to study the central structure. The official report describes what they saw as follows:

a horseshoe-shaped object, its height being one to two metres. A few stone blocks were found in the one-metre-wide arm. The distance between the two arms is 20 metres. Whether the object is a shrine or some other man-made structure now at 23 metres depth remains to be examined in the next field season ...⁵

Deep can mean very old

In the event no work could be done at the site in the next season, but in 1993 the structure was examined again by the NIO's diver archaeologists, who took careful measurements and eventually reported their findings as follows:

The structure of U-shape was located at a water depth of 23 metres which is about 5 kilometres off shore. The total peripheral length of the object is 85 metres while the distance between the two arms is 13 metres and the maximum height is 2 metres. The height of the eastern arm is greater than that of the western arm. The centre of the object is covered with sediment but some patches of rock were noticed. Hand fanning showed that the central part of the object is rocky at a depth of 10–15 centimetres. Divers observed growth of thick marine organism on the structure, but in some sections a few courses of masonry were noted.⁶

Since 1993, for want of funding, no further marine archaeology has been conducted along the Poompuhur coast and the general impression has been disseminated in archaeological literature that the NIO has not found any submerged structures there that are older than the third century BC.⁷ This is certainly true of numerous structures that were excavated very near to the shore, usually in depths of less than 2 metres of water and often half-exposed at low tide.⁸ But the U-shaped structure at 23 metres – more than 70 feet – is another matter altogether and cannot by any means be automatically assigned to the third century BC. On the contrary, since we know that the sea-level has been continuously rising during the last 19,000 years,⁹ common sense suggests that structures now submerged by 23 metres of water must be much older than structures in just 2 metres.

‘Nobody has looked ...’

In February 2000 I travelled to Bangalore to the home of the doyen of India's marine archaeologists, S. R. Rao, founder of the Marine Archaeology Centre at the NIO and the man who had led the Tranquebar-Poompuhur survey. Rao is a distinguished, lean-faced man in his mid-seventies, with boundless energy and enthusiasm for his subject. After the pleasantries were over I told him that I was intrigued by the U-shaped structure his team had found at Poompuhur: ‘Twenty-three metres is deep. Doesn't that mean that it could be very old?’

‘Correct, definitely,’ Rao replied. ‘That is what we are also thinking. In fact we took an ocean engineer also to see whether the structure had gone down as a result of erosion by the sea or by its own weight. I don't think that is the case, because it is a huge structure which has been built at that depth – at that time the sea was further out. This was built when it was above water. Then does the sea rise so much within such a short period was the question – 23 metres just within 2000 years or so?’

‘Maybe the sea-level rise that covered this structure took place a lot earlier than that,’ Rao offered. ‘Maybe it belongs to a much earlier period than the 2000-year-old ruins of Poompuhur up in the intertidal zone? There have been sea-level rises that could have done something like this but they took place a long time ago – at the end of the Ice Age.’

‘Correct. At that time it happened. You are correct.’

‘There were three large floods at the end of the Ice Age – and even the most recent of them takes us back 8000 years. Is that a possible date for the U-shaped structure?’

‘We don’t know,’ Rao replied, ‘because you see from whatever we have got we are not able to decide its date at all.’

‘Why is that?’

‘Because amongst the samples we took we found no organic materials that could be dated by carbon 14 and no pottery that could be dated by thermo-luminescence or by type. We have only stone which cannot be dated in any meaningful sense.’

‘Except by one factor – which is that the structure is now under 23 metres of water. So the sea-level rise itself can be helpful in indicating a date.’

‘Correct. I do know that for the Gulf of Kutch in north-western India an oceanographic study has been made and the oceanographers themselves have said that at 10,000 BC the sea level was 60 metres lower than it is today. If that is true there it is also true here.’

‘Which raises the possibility that we may be looking at remnants of a previously unknown ancient culture ...’

‘Ancient. Definitely!’ Rao exclaimed. ‘And, in fact, where really was the origin of India’s earliest-known civilization – the Indus Valley civilization? Scholars guess, but nobody knows. The Indus Valley script itself is already a highly developed script when it first appears in the third millennium BC. The early architecture is already developed – you have got brick structures, you have got drains, everything is planned and all that – so there must be something before that. Where is the evolutionary phase? We don’t know.’

Dr Rao was getting close to the real reason that I had come to see him. ‘Maybe the evidence of the evolutionary phase is underwater?’ I suggested.

‘It’s underwater. Quite possible.’

‘If so, then this underwater structure at Poompuhur could be incredibly important – simply because of its depth ...’

‘Twenty-three metres ...’

‘Twenty-three metres. That’s right. Now if we can rule out land subsidence, and further work must be done before we can rule that out, but if we can rule that out and if it’s an issue exclusively of sea-level rise, then we have a discovery here that calls into question the accepted chronology of civilization.’

Rao pondered for a moment before replying: ‘You see, some people, some traditions, do say that there was a continent in the Indian Ocean, a very long time ago, more than 10,000 years ago, that got submerged ... Quite possible. You see, we are not doing thorough research. If we had taken more time and more funds and all that, perhaps we could find many more structures, not only that one, and then you could come to some kind of conclusion about the much earlier epoch.’

I told Rao that I was familiar with the south Indian traditions to which he was referring. These describe extensive lands, submerged about 11,000 years ago, that had once existed in the Indian Ocean to the south of the present Cape Comorin. The name of these lost lands was Kumari Kandam. At the time of their inundation, the traditions say, they had been the home of a high civilization that had even boasted an ‘Academy’ of advanced learning where philosophy and literature were cultivated.

‘It must have existed,’ Rao asserted. ‘You can’t rule that out at all. Particularly, as I have said, since we have found this structure at 23 metre depth. I mean, we have photographed it. It is there, anybody can go and see. I do not believe that it is an isolated structure; further exploration is likely to reveal others round about. And then you can go deeper, you see, and you may get more important things.’

I asked if there had been any further attempt since 1993 to find underwater structures off the southern India.

‘No,’ Rao replied. ‘Nobody has looked.’

Ken Shindo’s story

In 1996, four years before my meeting with Rao, my book *Fingerprints of the Gods* became the number-one bestseller in Japan, a country that had fascinated me since childhood. The book’s success gave me my first opportunity to travel there.

I visited Japan twice that year to give a series of public lectures about the issues I explored in *Fingerprints of the Gods*. On the second visit I was approached after a lecture by a photojournalist named Ken Shindo, who works for the influential Kyodo-Tsushin News Agency. He showed me striking under water pictures that he had taken of a bizarre terrace structure, apparently a man-made monument of some kind, lying at depths of up to 30 metres off the south coast of the Japanese island of Yonaguni. My central research and writing interest, for years, has been the possibility of a lost civilization destroyed in the cataclysmic global floods that brought the last Ice Age to an end. So I was immediately fascinated by Shindo’s story: ‘An underwater ruin here in Japan!’ I exclaimed. ‘Is it definitely man-made?’

Shindo laughed: ‘Some people say it’s a freak of nature but they haven’t spent time on it like I have. I’m absolutely certain it’s man-made.’

‘Does anyone know how old it is?’

Shindo told me that he had been working with Professor Masaaki Kimura, a marine geologist and seismologist at the University of the Ryukyus (Okinawa), who had been studying Yonaguni’s mysterious underwater structure since 1994. Kimura too was convinced it was man-made. His extensive survey, sampling and measurement had shown that it had been hewn out of solid bedrock when the site was still above water. If sea-level rise were the only factor to take into account, then provisional calculations would indicate a date of inundation of around 10,000 years ago.

That’s approximately 5000 years older than the oldest known monumental buildings on earth – the ziggurats of ancient Sumer in Mesopotamia.

Davy Jones’ Locker

I knew that I had to learn to dive and talked my wife Santha into doing lessons with me when we were on a visit to Los Angeles. We took our PADI Open-Water courses in the chill, kelpy waters off Catalina Island in November 1996.

My first reaction to diving was that it was a weird and scary experience, contrary to the

laws of nature, and that I was unlikely to survive it. I was wrapped up like the Michelin Man in a full-body neoprene wetsuit, and there seemed to be a ludicrous amount of equipment strapped, velcroed or clipped on to me.

Let's start at the feet. Here the diver wears short rubber boots tucked inside the ankle-cuff of his wetsuit. The wetsuit works by taking in a thin layer of water between the skin and the suit; this is rapidly warmed to body temperature and remains warm for some time because the neoprene of the suit is an excellent insulator. Over the boots are strapped the diver's fins without which he would be almost as clumsy and immobile submerged as he is on land with all his gear on, and would unnecessarily waste a great deal of energy thrashing about. Strapped to his calf there should be a strong stainless-steel knife with a sharp blade – this can be life-saving if you get caught up in a drifting fishing net or some other equally uncompromising, usually man-made, hazard.

Around the diver's waist is a belt through which are threaded a number of lead weights to compensate for the natural buoyancy of the body and the additional buoyancy of the wetsuit. These days I can often get away with 2 kilos, but inexperienced divers need a lot more. On my first dives back in 1996 and into the first half of 1997, I remember having to use 12 and in one case even 14 kilos – a horrendous load.

Moving on up the body, the next item of equipment the diver wears is a partially inflatable sleeveless jacket called a Buoyancy Control Device – 'BCD', or just 'BC' for short. The scuba tank which provides the diver with air to breathe underwater is strapped on to the back of the BC and typically comes in 10, 12 and 15 litre sizes. A mid-sized tank weighs more than 10 kilos and for most dives is filled with nothing other than normal air under enormous compression. This is delivered to the diver through two transformers which step down the pressure of the air to a level where it can be breathed easily. The 'first-stage' is mounted immediately on top of the tank and removes most of the pressure, from here a rubber hose leads to the 'second-stage', or 'regulator', which is placed in the diver's mouth and provides air on demand. Three other rubber hoses also emerge from the first-stage. One of these connects to the BC, allowing the diver to power-inflate it direct from the tank. One leads to a dangling instrument-console usually containing a compass and gauges that tell you how much air you have left and how deep you are. The last, called the 'octopus', is a spare second-stage for use in emergencies – for example to provide air to another diver whose own tank is empty.

Sometimes divers wear a rubber hood, since heat loss from the unprotected head is very rapid. A glass-fronted mask, without which the human eye can only perceive blurred images under water, covers the eyes and nose. The final major pieces of equipment are a small wrist computer, which can save your life by warning you if you are ascending too fast from depth, and a pair of gloves to keep your hands warm and prevent grazing or accidental contact with unpleasant marine organisms like fire coral.

Wrapped up in all this stuff, with our total scuba experience at that time amounting to just three half-hour swimming-pool dives each, Santha and I contemplated the waters of the Pacific with certain misgivings. To be honest, we were afraid. It looked deep and dark and dangerous down there, down amongst the waving streamers of kelp, down in Davy Jones' Locker ... But if we wanted to see that incredible underwater structure in Japan for ourselves

then we were going to have to do this. On our instructor's command we jumped in and paddled out from shore.

Four days later we were licensed but definitely not yet experienced enough to dive Yonaguni.

A generous offer

I did not know when we would be able to organize a diving trip to Japan but knew only that it would be expensive. Then a strange synchronicity occurred. Out of the blue some time in January 1997 I received a fax from an American company representing a Japanese businessman. The fax said that the business man had read *Fingerprints of the Gods* and would like to invite Santha and me to fly first-class to Yonaguni at his expense to explore the island and to dive at the monument. He would ensure our safety by sending a group of top-flight diving instructors with us from the Seamen's Club, a hotel and dive school on the neighbouring island of Ishigaki. He would also provide us with a fully equipped dive boat and all other facilities.

There were no strings attached to this generous offer, which we accepted. In March 1997 we flew from London to Tokyo and then via Okinawa to Yonaguni to do our first dives there. This was the beginning of a long-term friendship with the businessman (whose privacy I protect) and of what began as an informal project to explore, document and try to understand the sequence of ancient and highly anomalous structures that have been found underwater at Yonaguni and at other islands in south-west Japan.

Yonaguni

The first anomalous structure that was discovered at Yonaguni lies below glowering cliffs on the southern shore of the island. Local divers call it Iseki Point ('Monument Point'). Into its south face, at a depth of about 18 metres, an area of terracing with conspicuous flat planes and right-angles has been cut. Two huge parallel blocks weighing approximately 30 tonnes each and separated by a gap of less than 10 centimetres, have been placed upright side by side at its north-west corner. In about 5 metres of water at the very top of the structure there is a kidney-shaped 'pool' and near by is a feature that many divers believe is a crude rock-carved image of a turtle. At the base of the monument, in 27 metres of water, there is a clearly defined stone-paved path oriented towards the east.

If the diver follows this path – a relatively easy task, since there is often a strong west-to-east current here – he will come in a few hundred metres to 'the megalith', a rounded, 10-tonne boulder that seems to have been purposely placed on a carved ledge at the centre of a huge stone platform.¹⁰

Two kilometres west of Iseki Point is the 'Palace'. Here an underwater passageway leads into the northern end of a spacious chamber with megalithic walls and ceiling. At the southern end of the chamber a tall, lintelled doorway leads into a second smaller chamber beyond. At the end of that chamber is a vertical, rock-hewn shaft that emerges outside on the roof of the 'Palace'. Near by a flat rock bears a pattern of strange, deep grooves. A little

further east there is a second megalithic passage roofed by a gigantic slab that fits snug against the tops of the supporting walls.

Two kilometres to the east of Iseki Point is Tategami Iwa, literally 'The Standing God Stone', a natural pinnacle of rugged black rock that soars up out of the ocean. At its base, 1 metres underwater, there is a horizontal tunnel, barely wide enough to fit a diver, that runs perfectly straight west to east and emerges amidst a scatter of large blocks with clean-cut edges.

A three-minute swim to the south-east brings the diver to what looks like an extensive ceremonial complex carved out of stone. Here at depths of 15 to 25 metres there are massive rectilinear structures with sheer walls separated by wide avenues.

At the centre is the monument that local divers refer to as 'the stone stage'. Into its south-facing corner either man or nature has carved an image that looks to some like a gigantic anthropoid face with two clearly marked eyes ...

Kerama

At Aka Island in the Kerama group 40 kilometres west of Okinawa, local divers have been aware for some years of the existence of a series of underwater stone circles at depths of 3 metres. There are also associated rectilinear formations within the same general area that show some signs of having been cut and worked by human beings.

Diving conditions at Kerama are atrociously difficult (as indeed they often are at Yonaguni too). There is a killer current, but this drops away almost to nothing for approximately an hour between tides. Only in that lull is it possible to get any serious work done and to gain perspective on the enigmatic structures without constantly having to fight against the sea.

Kerama's most spectacular feature is 'Centre Circle', which has a diameter of approximately 20 metres and a maximum depth of 27 metres. Here concentric rings of upright megaliths more than 3 metres tall have been hewn out of the bedrock surrounding a central menhir.

A second, similar circle, called 'Small Centre Circle' by local divers, stands immediately to the north-east. It is not noticeably smaller than the first.

A little to the south is 'Stone Circle', which is made up of much smaller, rounded stones. It has a huge diameter of about 150 metres. Within it are subsidiary stone circles sometimes touching one another at their edges like the links of a chain.

Aguni

Aguni Island, 60 kilometres north of Kerama, has steep and forbidding cliffs. On the south-west side of the island these cliffs overlook an area of turbulent water that local fishermen call the 'washing machine'. The turbulence is caused by the presence of a sea-mount that ascends from much greater depths to form a small plateau only 4 metres under the surface. This plateau, perpetually swept by strong currents, contains a series of circular holes that look initially like well-shafts.

As they are lined with small blocks, there is little doubt that these shafts are man-made.

The largest and deepest has a diameter of 3 metres and reaches a maximum depth (below the summit of the sea-mount) of about 10 metres. Others are typically 2 to 3 metres in diameter with a depth of less than 7 metres. A few are narrower and shallower. One has a small subsidiary chamber cut sideways into the wall of the main shaft.

Chatan

The coastline around Okinawa has been the subject of intensive development during the past half-century. Thirty kilometres north of the capital Naha, on the west coast of the island, is the popular resort area of Chatan. Here, less than a kilometre off-shore, at depths of between 10 and 30 metres, is strewn a looming underwater fantasia of 'walls' and 'battlements' and 'step pyramids'. Are these weird submerged structures natural or man-made? And if they are man-made then when, and by whom?

One possibility suggested to me by local fishermen is that the 'structures' could be artefacts of relatively recent military dredging. Certainly, several large US Air Force bases are located very close to Chatan and the site is constantly overflown by all kinds of American warplanes doing manoeuvres. I still remain open to the possibility that dredging could have produced some of the features to be seen underwater, but against this I have received a report from Akira Suzuki, a Japanese historical researcher, who has carefully investigated both US and Japanese archives in Okinawa and has been unable to find any record of such operations in this area.¹¹

The most striking of the Chatan structures is a wall with its base on the sandy bottom at a depth of 30 metres. It rises to a 'battlement' with a sunken 'walkway' about 10 metres above the sea-bed. At a certain point the walkway is broken by a vertical U-shaped shaft cut through the entire height of the wall.

To dive at Chatan is to be reminded of an episode in the *Nihongi*, one of Japan's most ancient texts, a chronicle of the earliest times. Here, in a long introductory section entitled 'The Age of the Gods', there is a passage that describes how a deity named Ho-ho-demi no Mikoto climbed into an upended waterproof basket and descended to the bottom of the sea. In this makeshift submarine 'he found himself at a pleasant strand ... proceeding on his way he suddenly arrived at the palace of the Sea-God. This palace was provided with battlements and turrets and had stately towers.'

No doubt the many curious things that the *Nihongi* has to say about the Age of the Gods may all be explained as mythology and imagination. Still, I find it curious in Japan, where there are so many underwater 'anomalies', that such a venerable ancient text contains a clear tradition of submerged structures that can only be visited by divers.

15,000 years

Between 1996 and 2000, while I increased my practical diving experience of Japan's underwater ruins, I several times got caught up in the virulent debate about their provenance. Some scholars and journalists think they are entirely natural or 'mostly natural' (Robert Schoch of Boston University, for example). Others, such as Professor Kimura and Professor

Teruaki Ishii of Tokyo University, remain convinced that they are man-made but are uncertain as to their antiquity (in addition to sea-level rise, complex factors such as possible land subsidence – through volcanism, plastic flow or isostatic rebound – must be taken into account when determining the date of submergence of any given site).¹² No early resolution of this debate can be expected, since we are dealing here as much with matters of opinion as with matters of generally agreed fact. Those who think the structures are natural are likely to go on thinking so no matter what the other side says – and vice-versa. It looks like a stalemate.

Yet there is a potentially fruitful line of inquiry, capable of shedding light on this problem which neither side has yet considered. Whether they were flooded by rising sea-levels or because of some form of land subsidence into the sea (quite possible in an area of great seismic instability like Japan) all the underwater ruins were above water at some point between 17,000 years ago (the end of the Last Glacial Maximum) and 2000 years ago – the latest date that anyone has suggested for their submergence.

What happened in Japan during this 15,000-year period? Could it be that there is something concealed in the remote prehistory of these islands that would provide a context and perhaps even a completely rational explanation for the underwater ruins?

Alexandria

During 1998 and 1999 the Egyptian Mediterranean city of Alexandria was much in the news. French archaeologists, led by the melodiously named Dr Jean-Yves Empereur of the National Centre for Scientific Research, had announced the discovery of submerged ruins, complete with underwater columns, sphinxes and granite statues. In the same location they also claimed to have found the remains of the famed Pharos, or Lighthouse – 135 metres tall and one of the Seven Wonders of the ancient world¹³ – that had overlooked Alexandria's Eastern Harbour from the point where the fort of the Mameluke sultan Qait Bey now stands. Though it was thought to have been built in the early third century BC, historical reports suggest that at least part of the giant lighthouse remained intact until 8 August AD 1303, when a tremendous earthquake struck the Egyptian coast.¹⁴

Researching my earlier books had given me little reason to go to Alexandria. During a decade of travels in Egypt my focus had always been on the oldest sites – those going back to the third millennium BC and perhaps further – sites like Giza, with the three Pyramids and the Great Sphinx, Saqqara, where the remarkable *Pyramid Texts* are inscribed inside the tombs of Fifth and Sixth Dynasty Pharaohs, and Abydos, with First Dynasty boat graves and the mysterious Osireion.¹⁵

Since it was common knowledge that Alexandria had not existed until 332 BC, the date of its foundation by Alexander the Great,¹⁶ I had always felt that it was unlikely to hold much interest to me. I was vaguely aware that it had been built upon the site of an earlier settlement named Rhakotis or Raqote, but since this was usually described as 'an obscure fishing village',¹⁷ I never suspected for a moment that there might be significant traces of

earlier monumental constructions in the area.

None of the underwater discoveries that were made public at the end of the 1990s did anything to change my view. They too belonged to what is called the Ptolemaic period of Egypt, named for the ruling dynasty – of which Cleopatra was the last monarch – established soon after Alexander's death by his general Ptolemy. I was at first intrigued to learn that inscriptions belonging to much earlier Pharaohs had been found amongst the underwater ruins – the cartouche of Rameses II (1290–1224 BC) on pink-granite 'papyriform' columns from Aswan, an obelisk of his father Seti (1306–1290 BC), a sphinx from the time of Senuser III (1878–1841 BC) and numerous other artefacts and objects bearing ancient inscriptions.¹⁸

On good grounds, archaeologists did not regard such discoveries as evidence of any earlier monumental settlement in Alexandria but rather of a well-known Ptolemaic habit of borrowing pieces of religious art and architecture from temples that had been built throughout Egypt by earlier Pharaohs.¹⁹ Jean-Yves Empereur was very clear on this point:

The numerous products of the Pharaonic period – sphinxes, obelisks and papyrus columns [found underwater around Qait Bey] – do not make any significant difference to what we already know about the history of Alexandria and its foundation by Alexander the Great.²⁰

Diving with Empereur

A research trip to Alexandria was easy to talk myself out of. Since what was known of its history was that it had no history before the end of the fourth century BC, there was obviously no good reason for me to go there. The ruins of the Pharos and of what looked like an extensive complex of buildings seaward of it had not been submerged in the period I was interested in – the end of the last Ice Age – but between the fourth century BC and the thirteenth century AD, most probably as a result of what geologists call 'vertical tectonic subsidence' caused by earthquakes.²¹ Besides, there is a complicated permissions order which one must undergo if one wishes to dive at Alexandria involving the Ministry of Information, the Ministry of National Security, the Supreme Council of Antiquities, the Police, Customs and the Navy. The whole process routinely takes a month ...

So I'd pretty much quashed the idea before it took shape when I remembered that my good friend Robert Bauval was born in Alexandria and that several members of his large, globe-trotting family were still living there. On a whim I telephoned him – he lives just outside London – and asked him if he knew anything about Empereur and whether he thought it would be possible to fix up a day of unofficial diving with the French team.

Rob is reputed to have worked miracles in Alexandria, even from as far away as England. I therefore wasn't too surprised when he called me back the next day and informed me that he had spoken to his great-aunt Fedora, who knew Empereur well; she in turn had put in a good word with the archaeologist. The upshot was that we would be allowed to dive at Qait Bey without formality, any time that suited us in the next few weeks.

Sleep of years

On 30 September 1999 Santha and I, hefting our gear, met up with Robert at the gatehouse of Qait Bey fort. He ushered us inside its medieval limestone walls, soothing the guard in Arabic, and led us to a yard where scuba tanks were laid out and a group of young archaeologists, the men muscular, with stubbly chins, the women tanned and serious, were donning wetsuits and checking gear.

Empereur, in his late forties, was older than the rest of his team. He was wearing a tropical linen jacket and a Panama hat and carrying a briefcase. 'Excuse me,' he now said as we shook hands, 'but I have to rush off, so I won't be diving with you today.'

'No problem. I'm really very grateful to you for allowing us to do this at all at such short notice.'

Empereur shrugged: 'My pleasure. I hope you enjoy yourselves.' He introduced us to the other team members, then we shook hands again and he strode away.

Because it's hard to take notes underwater, I normally document my dives on video. It was my intention to do so now, but as we were getting ready I was told that this would not be permitted. Santha, likewise, was asked to leave her three Nikonos 5s behind. Apparently there was something to do with an exclusive deal that had been signed with the French photo agency Sygma. Robert protested vociferously on our behalf and as a compromise it was ultimately agreed that Santha could use her cameras but that my video would not be allowed under any circumstances.

Once that was settled we were led down through a series of dank stone corridors with arrow-slits overlooking the sea until we emerged at the edge of the island – long since disconnected to the mainland by a causeway – on which Qait Bey stands. Here we put on our gear and tanks, jumped into the water with one of the archaeologists as our guide and descended at once into a submarine wonderland less than a dozen metres below us.

It may be the most beautiful ancient site I have ever had the privilege to explore. The visibility was poor, which added a kind of foggy glamour to the scene, and we had to cross the ruin-field many times, over three lengthy dives, before I began to appreciate how vast and how heterogeneous it was. There were huge numbers of columns, some broken, some virtually intact, but all tumbled and fallen. There were Doric column bases surrounded by tumbled debris. Here and there one or two courses of a wall could be seen, rising up out of the murk. There were dozens of metre-wide hemispherical stones, hollowed inside, of a type that I had never encountered before in Egypt. There were several small sphinxes, one broken jaggedly in half, and large segments of more than one granite obelisk seemed to have been tossed about like matchsticks. There were also quarried granite blocks scattered everywhere. Most were in the 2–3 square metre range but some were much larger – 7 tonnes or more. A notable group of these behemoths, some a staggering 11 metres in length, lay in a line running south-west to north-east in the open waters just outside Qait Bey. When I researched the matter later I learnt that they were amongst the blocks that Empereur had identified as coming from the Pharos:

some of them are broken into two or even three pieces, which shows that they fell from quite a height. In view of the location the ancient writers give for the lighthouse, and taking into consideration the technical difficulty of moving

such large objects, it is probable that these are parts of the Pharos itself which lie where they were flung by a particularly violent earthquake.²²

There were exquisite moments when the sun broke through the clouds that lay over Alexandria that day and cast a beam of light down into some dark corner of the submerged ruins. Then the vanquished structures over which we were diving seemed to regather their former stature, like ghosts returning to flesh, before collapsing once again into their sleep of years.

Treasure of the sunken city

A few weeks later I still hadn't been able to get the images of what I'd seen underwater out of Qait Bey out of my mind, or quite rid myself of the feeling that I might have missed something important there. Without any particular objective I began to buy books about Alexandria and to acquaint myself better with the story of its past. Visiting Amazon.com one evening in mid-October, I found that someone was offering a second-hand copy of *Alexandria – A History and a Guide* written during the First World War and published in 1922 by the British novelist E. M. Forster.²³ I bought it at once, for it is rumoured to be a font of wisdom. Then I snapped up, in quick succession, *The Library of Alexandria – Centre of the Ancient World*, edited by Roy Macleod; *Life and Fate of the Ancient Library of Alexandria* by Mostafa El-Abbadi; *Philo's Alexandria* by Dorothy L. Sly; and *The Vanished Library* by Luciano Canfora.²⁴

Oddly enough, Amazon's search-engine couldn't immediately find me anything when I entered the keyword Pharos. While I was thinking about what to search for next – maybe Seven Wonders of the ancient world? – I called up Jean-Yves Empereur's name to see the complete list of his publications. I already owned his book *Alexandria Rediscovered*, which told the story of the underwater excavations at Qait Bey, but I hoped that he might have written other books about the region. He hadn't and I found myself looking at Amazon's sparse sales page for *Alexandria Rediscovered*.

There was one review, from a reader in Phoenix, Arizona. He wrote that he wished not in disrespect to Dr Empereur; however, after seventeen years as an archaeological diver in Egypt, he could not agree that Empereur's team had found the Pharos. What they had found was interesting, yes, important, yes, but it was definitely not the Pharos.

What was someone who'd worked for seventeen years as an archaeological diver in Egypt now doing in Phoenix, Arizona? And what did he know – or think he knew – about the Pharos? My instincts told me that there could be a story here, and although the reviewer did not give his name, there was an e-mail address. I sent him a message at once, explaining my interest in the underwater ruins of Alexandria and asking him to elaborate on his views about the Pharos.

The next day, 17 October, I received this reply:

Mr Graham,

My name is Ashraf Bechai. I am the former leader of the Maritime Museum underwater team (1986/89). I am also a former diving engineer of the Institute of Nautical Archaeology. You can find a little more about me on the Institute

web page. I will be glad to help you with any question you have.

Sincerely, Ashraf Bechai,

Phoenix AZ, USA.

Attached was an extraordinary 23-page report titled *Treasure of the Sunken City: The Truth About the Discovery of the Lighthouse*.

Ashraf Bechai's story

What came across in Ashraf's Bechai's angry and impassioned report was a sense, above all else, of intellectual outrage. In his view Jean-Yves Empereur and his team had been altogether too narrow-minded in their interpretation of what they had found underwater at Qait Bey:

During the last three years there have been many claims that the French marine-archaeological team that has been working underwater in the area of Qait Bey Fort has found the remains of a great building, identified by French and Egyptian archaeologists as the remains of the Pharos lighthouse.

But is it the Pharos?

I don't see why we have to take it as they say without asking any questions. I don't see why we're expected to suspend our common sense just because this stuff is underwater and looks very spectacular on television.

Bechai pointed out that if the Pharos had indeed been more than 100 metres tall, as all historical sources maintain, then it must have been a truly enormous building. The Great Pyramid of Giza, for example, which is 150 metres tall, with a base area of more than 13 acres, weighs 6 million tonnes and consists of 21/2 million individual stone blocks.²⁵ Since the building technology of the fourth century BC was, if anything, inferior to that of the third millennium BC, it is therefore unlikely that the lighthouse – with a reported height of 135 metres – could have had a base area of less than 12 acres or a weight of much less than 6 million tonnes. 'Imagine how big the pile of stones that should remain from a building like that,' suggested Bechai:

Could this great amount of stone just disappear? Vanish in the water? The truth is that this much stone would have created an island in the sea and all the statues, sphinxes and other ancient Egyptian artefacts that the French team have found intermingled with the blocks would have been buried forever under a great pile of rock.

Even if one supposes – against the evidence – that a far superior building technology existed in Alexandrian times than in the times of the Great Pyramid, and even if one reduces the height of the Pharos from 135 metres to 100 metres, it is still extremely unlikely that it could have been built with less than half a million individual stone blocks (as against the Pyramid's 21/2 million blocks). But let us reduce it still further – to just 100,000 blocks, or even 50,000.

Yet Empereur writes: 'As soon as one puts one's head under the water around Qait Bey one begins to feel dizzy at the sight of the 3000 or so architectural blocks which carpet the seabed.'²⁶ It was precisely this 'dizzying' spectacle of only 3000 blocks that bothered Bechai. If the ruins around Qait Bey were the remains of the lighthouse and associated structures, the

3000 blocks was nowhere near enough:

Three thousand blocks wouldn't even build a large temple let alone a lighthouse 100 metres high! And many of the blocks in Empereur's survey are scattered very far from Qait Bey. Some are almost a kilometre away. There is even one 75-ton granite block half a kilometre out to sea and 1.5 kilometres distant from Qait Bey. Are we supposed to believe that the earthquake was powerful enough to throw a 75-ton block as far as that?

Bechai also made another valid point. Ancient texts referring to the Pharos concurred that it had been built of blocks of 'white stone' – limestone – which is plentifully available locally. Yet the underwater ruin-field outside Qait Bey consists primarily of scattered granite blocks and other architectural elements, such as columns, also made out of granite – a much more intractable material that had to be brought to Alexandria from quarries almost 100 kilometres to the south. Whilst admitting that limestone does have a much faster rate of erosion than granite, Bechai did not believe that the vast amount of limestone that would have been required for the Pharos could possibly all have eroded away. He concluded:

What we have at this site are scattered artefacts from different ages, different designs of blocks, columns and statues – not an indication of one thing but an indication of many things.

The giant blocks of Sidi Gaber

Before I was half-way through the report I realized that it pinpointed paradoxes and anomalies that I had completely missed during my dives with the French team. No doubt Empereur would have answers to all these questions but at this stage I had to admit that the questions themselves sounded reasonable.

As I read on I realized that Bechai was agitated about much more than just the problem of the Pharos. He wrote: 'I have seen things underwater in Alexandria during the last 17 years that challenge all our knowledge of the history of this area.' As an example he reported how in 1984 he had gone spear-fishing with some friends off-shore of Sidi Gaber, a district along Alexandria's crowded Corniche, some 3 kilometres to the east of Qait Bey:

We were about two kilometres from shore, diving off a small boat. I remember that the visibility underwater was exceptionally good. We hadn't been expecting that because there had been a storm a few days before which moved around a lot of the sand and silt on the bottom. Suddenly I saw hundreds of huge sandstone or limestone blocks laid out in three rows, each two courses high, that had been exposed on the sea-bed at a depth of about six to eight metres. The blocks appeared to be of identical dimensions – four metres wide by four metres long by two metres high. They were stacked up on an underwater ridge of some sort, because there was deeper water between them and the shore. All around there were hundreds more blocks of similar size that were heavily eroded, or damaged, or had fallen out of line.

This group of blocks has been seen on and off by fishermen and divers over at least 25 years and there is still no proper explanation for it. I have never been so lucky with the visibility there again, nor the same bottom conditions, and despite many subsequent attempts to relocate the site I have so far failed to do so.

Another interesting site, one that Bechai hadn't seen himself, was the so-called Kinessa, an Arabic word meaning 'church' or 'temple':

If you have lived in the wonderful city of Alexandria long enough and had connection with fishermen who do

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- [Everything Is Obvious: How Common Sense Fails Us book](#)
- [read online **Unnatural History \(Pax Britannia, Book 1\) here**](#)

- <http://nautickim.es/books/Beginning-JavaScript-with-DOM-Scripting-and-Ajax--2nd-Edition-.pdf>
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