ENIGMA IN THE DESERT: Large glass rocks have been found in the deserts of Libya, the Sahara, and Mojave. WAEL ABED/AFP/GETTY IMAGES

Ancient atomic bombs

By LEONARDO VINTIÑI
Epoch Times Staff

"Now I am become Death, the destroyer of worlds." —The Bhagavad Gita

Seven years after the nuclear tests in Alamogordo, New Mexico, Dr. J. Robert Oppenheimer, the father of the atomic bomb, was lecturing at a college when a student asked if there were any U.S. atomic tests before Alamogordo.

"Yes, in modern times," he replied.

The sentence, enigmatic and incomprehensible at the time, was actually an allusion to ancient Hindu texts that describe an apocalyptic catastrophe that doesn't correlate with volcanic eruptions or other known phenomena. Oppenheimer, who avidly studied ancient Sanskrit, was undoubtedly referring to a passage in "The Bhagavad Gita" that describes a global disaster caused by "an unknown weapon, a ray of iron."

While it may be alarming to the scientific community to speak of the existence of atomic weapons before the present cycle of civilization, evidence of this phenomenon seems to whisper its verses in every corner of the planet.

DESERT GLASS

This evidence comes not only from the Hindu verses but also from ample extensions of fused glass fragments scattered throughout many deserts of the world. Silicon crystals, curiously cast, resemble remarkably the same fragments found after the nuclear explosions in Alamogordo's White Sands atomic testing site.

In December 1932, Patrick Clayton, a surveyor from the Egyptian Geological Survey, drove between the dunes of the Great Sand Sea, close to the Saad Plateau in Egypt, when he heard crunching under the wheels. When he examined what was causing the sound, he found great chunks of glass in the sand.

The find caught the attention of geologists around the world and planted the seed for one of the biggest modern scientific enigmas. What phenomenon could be capable of raising the temperature of desert sand to at least 3,300 degrees Fahrenheit, casting it into great sheets of solid yellow-green glass?

While passing through Alamogordo's White Sands missile range, Albion W. Hart, one of the first engineers to graduate from the Massachusetts Institute of Technology, observed that the chunks of glass left by nuclear tests were identical to the formations that he observed in the African desert 50 years earlier. However, the extension of the cast in the desert would require that the explosion be 10,000 times more powerful than that observed in New Mexico.

Many scientists have sought to explain the dispersion of large glass rocks in the deserts of Libya, the Sahara, Mojave, and many other places in the world, as products of gigantic meteorite impacts. However, due to the absence of accompanying craters in the desert, the theory doesn't hold up. Neither satellite imagery nor sonar has been able to find any holes.

Furthermore, the glass rocks found in the Libyan Desert present a grade of transparency and purity (99 percent) that is not typical in the fusions of fallen meteorites, in which iron and other materials are mixed in with the cast silicon after the impact.

Even so, scientists have proposed that the meteorites causing the glass rocks could have exploded several miles above the surface of Earth, similar to the Tunguska Event, or simply rebounded in such a way that they carried with it the evidence of the impact, but leaving the heat from the friction.

However, this doesn't explain how two of the areas found in close proximity in the Libyan Desert show the same pattern—the probability of two meteorite impacts so close is very low. Nor does it explain the absence of water in the tektite specimens when these areas of impact were thought to be covered in it some 14,000 years ago.

MOHENJO DARO'S ANCIENT CATASTROPHE

The city where culture emerged in the present-day Indus Valley is a great enigma. The rocks of the ruins have partially crystallized, along with its hazy inhabitants. Moreover, mysterious local texts speak of a period of seven days of gratitude toward flying cars called Vimana for saving the lives of 30,000 inhabitants from a horrific episode.

In 1927, years after the discovery of the Mohenjo Daro ruins, 44 human skeletons were found on the outskirts of the city. The majority were found face down, lying in the street and holding hands as if a serious catastrophe had suddenly engulfed the town. In addition, some bodies present signs of unexplainable radiation. Many experts believe that Mohenjo Daro is an unequivocal sign of nuclear catastrophe two millennia before Christ.

Nevertheless, the city is the not the only ancient locale suspected to have gone nuclear. Dozens of buildings from the ancient world present bricks with fused rocks, like the heat test that modern scientists cannot explain:

Ancient forts and towers in Scotland, Ireland, and England

The city of Catal Huyuk in Turkey

Alalakh in northern Syria

The ruins of the Seven Cities, near Ecuador

Cities between the Ganges River in India and the Hills of Rajmahal

Areas of the Mojave Desert in the United States

In whatever place of the world, the presence of an abysmal temperature and vivid descriptions of a terrible cataclysm suggest that there may have been an earlier epoch in which possibly nuclear technology was already known—an epoch in which atomic technology was turned against man.

FURTHER READING:

http://www.biblioteca-pleyades.net/arqueologia/esp_mohenjo_daro_1.htm

http://skepticreport.com/sr/?p=288

http://forteanswest.com/wordpress-mu/nevadalowfi/tag/robert-oppenheimer/

http://www.marmet-meteorites.com/id37.html

SCIENCE MATTERS

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Inaction on climate change comes with a huge price tag

By DAVID SUZUKI WITH FAISAL MOOLA

It's interesting to see the reaction to a report just released by our foundation and the Pembina Institute. The Globe and Mail called our analysis of the costs of fighting climate change "unsaleable and dangerous".

But the Globe and Mail's John Ibbitson wrote that "The Pembina Institute and the David Suzuki Foundation have had the courage to uncover and to tell us the truth. Now Canadians must decide what to do."

Yes, it is up to Canadians to decide what to do. Do we plug our ears and close our eyes and go about business as usual while the world strains under the damage we are inflicting? Do we leave our children and grandchildren a world of misery? Or do we pull together to confront this challenge, as we have with other major threats the world has faced?

Keep in mind that the report, Climate Leadership, Economic Prosperity, while pointing out that reducing the impact of climate change will come with some costs, also concludes that our economy will remain healthy. In fact, the analysis, conducted by M.K. Jaccard and Associates, says that Canada's gross domestic product would continue to grow even if we adopted the stronger measures that environmental organizations are calling for rather than the weak measures the federal government has proposed.

Still, comments in the news, and from people who post their reaction to news sites, show that many people aren't willing to make tough decisions for the sake of our collective future – for the sake of our children and grandchildren.

Let's be clear. Resolving a global problem like climate change will cost money. But doing nothing will cost much more. The very survival of people, not to mention many other plants and animals that we share this small planet with, may well be at stake.

Former World Bank chief economist Lord Stern has estimated that to keep heat-trapping greenhouse gas emissions below levels that would cause catastrophic climate change would cost up to two per cent of global GDP, but failure to act could cost from five to 20 per cent of global GDP.

And those are just numbers. In the real world, runaway climate change could have devastating impacts on our water and food supplies, could lead to waves of refugees escaping uninhabitable drought-stricken areas or vanishing islands, and could wreak havoc on the world's oceans and cause major extinctions of plants and animals. Some of this is already happening.

And consider what will become of our economy if we continue to fuel it with nonrenewable resources like oil and coal while the rest of the world switches to renewable energy. The demand for fossil fuels will dry up as the reserves become depleted. Where will that lead us?

And yet, we still have people saying it would cause too much hardship to act, or that it would be dangerous or divisive. Are we really that selfish? Well, not everyone is. It's been heartening to see so many people, especially young people, taking to the streets and Parliament Hill, writing to MPs and prime ministers, and joining campaigns to urge governments to be part of the solution to global warming.

Millions of people turned out recently for more than 5,000 International Day of Climate Change events in 180 countries. The message was loud and clear: We expect our political leaders to work for the benefit and security of all of the world's people when they meet in Copenhagen in December to work on a climate change agreement to continue and strengthen the Kyoto Protocol.

What these people realize is that the price we will pay to fight climate change is a good investment in a healthy and prosperous future. Some of the costs include investments in public transit and renewable energy, in programs to reduce greenhouse gas emissions in other parts of the world, and in helping people cope with higher transportation and home-heating costs during the time of transition.

The Globe and Mail, and others, may think all of this is "unsaleable and dangerous", but it's only dangerous to those who insist on staking their future on polluting, unsustainable non-renewable resources, and it's only unsaleable to those who don't care about the future. We can't afford not to take action. We can't afford to let our leaders let us down. We must continue to tell them that we expect them to work for us in Copenhagen.

Dr. David Suzuki is a scientist, broadcaster, author, and chair of the David Suzuki Foundation and Dr. Faisal Moola is the Director of Science at the David Suzuki Foundation.

Take David Suzuki's Nature Challenge and learn more at www.davidsuzuki.org.

Identifying molecules in infrared could lead to new medicines

National Science Foundation

An interdisciplinary team of researchers has created a new, ultrasensitive technique to analyze life-sustaining protein molecules. The technique may profoundly change the methodology of biomolecular studies and chart a new path to effective diagnostics and early treatment of complex diseases.

Researchers from Boston University and Tufts University near Boston recently demonstrated an infrared spectroscopy technique that can directly identify the "vibrational fingerprints" of extremely small quantities of proteins, the machinery involved in maintaining living organisms.

The new technique exploits nanotechnology to overcome several limitations of current, conventional techniques used to study biomolecules. "It allows identification of a protein by directly analyzing its vibrational fingerprint signatures," said team leader Hatice Altug, an assistant engineering professor at Boston University. "It may lead to a new toolkit for studying biomolecules."

The advance is reported in the Proceedings of the National Academy of Sciences. The National Science Foundation supports the research.

Previous biomolecular study methods commonly use fluorescence spectroscopy, where biomolecules are labeled with very bright fluorescence tags to track how efficiently they interact with each other. Understanding interactions is important for medical drug research.

Fluorescence spectroscopy is quite sensitive at the single molecule level. However, the tags can be as big as the biomolecules themselves and interfere with the biomolecular interactions.

"There is currently a need to develop label-free biodetection technologies," Altug said. "Infrared spectroscopy is a label-free method, because if you tune your 'eye' to the infrared frequencies, you can directly see the biomolecules without any labels."

Molecules consist of atoms bonded to each other with springs. Depending on the mass of atoms, how stiff these springs are, or how the atoms' springs are arranged, the molecules rotate and vibrate at specific frequencies similar to a guitar string that vibrates at specific frequencies depending on the string length. These resonant frequencies are molecule specific, and they mostly occur in the infrared frequency range of the electromagnetic spectrum.

The sensitivity of infrared spectroscopy previously had been too low to detect these vibrations, particularly from small quantities of samples. The new method demonstrated by Altug's graduate student Ronen Adato and her postdoctoral fellow Ahmet Ali Yanik combines the strengths of nanotechnology and nanophotonics and overcomes the problems that prevented past use of infrared spectroscopy.

"We use arrays of tiny gold nanoparticles as efficient plasmonic nanoantennas to greatly amplify the ability to detect a molecule's inherent frequency," says Yanik. With their technique, the team obtained vibrational signatures from nearly 145 silk proteins deployed at the tip of each nanoantenna.

"Our technique gives researchers an ability to enhance inherent vibrational signatures more than 100,000 times," says Altug. "This allows us to sensitively study molecular structures and biological functions of extremely small quantities of molecules."

Altug anticipates that these new tools someday will help researchers design drugs, minimizing the complications of life-altering diseases such as cancer and Alzheimer's. "This advancement is fundamentally important for bio-chemistry," she says.

"Our plasmonic method is quite general and can also be adapted to enhance the infrared fingerprints of other molecules than proteins" said Altug. "It therefore provides a general purpose toolkit and may help amplify chemical sensing capabilities that are of particular concern to national defense."

Jason Amsden, Fiorenzo G. Omenetto, and David L. Kaplan from Tufts University also collaborated on this research.

Divers probe Mayan ruins submerged in Guatemala lake

GUATEMALA CITY (Reuters)—Scuba divers are exploring the depths of a volcanic lake in Guatemala to find clues about an ancient sacred island where Mayan pilgrims flocked to worship before it was submerged by rising waters.

Samabaj, the first underwater archaeological ruins excavated in Guatemala, was discovered accidentally 12 years ago by a diver exploring picturesque Lake Atitlan, ringed by Mayan villages and popular with foreign tourists.

"No one believed me, even when I told them all about it. They just said 'he's mad,'" said Roberto Samayoa, a businessman and recreational diver who grew up near the lake where his grandmother told him legends of a sunken church.

Samayoa dived for years at the lake, often stumbling across pieces of pottery from the Mayan pre-classic period. In 1996, he found the site, with parts of buildings and huge ceremonial stones, known as stelae, clearly visible.

He named it Samabaj, after himself, but only in the past year have professional archeologists taken an interest, mapping the 4,300-square-foot (400-square-meter) area with sonar technology and excavating structures on a raised part of the lake bed.

Researchers believe this area, 50 feet (15 meters) below the lake's surface, was once an island until a catastrophic event, like a volcanic eruption or landslide, raised water levels.

The rising lake drowned the buildings around A.D. 250, before the height of the Mayan empire, and ceramics found intact there suggest the inhabitants left in a hurry.

"We have found six ceremonial monuments and four altars, and without doubt there are more, which means this was an extremely important place from a spiritual point of view," lead archaeologist Sonia Medrano told Reuters in an interview.

The Maya built soaring pyramids and elaborate palaces in Central America and southern Mexico before mysteriously abandoning their cities around A.D. 900.

Medrano, whose work is funded by the U.S.-based Reinhart Foundation, says the island has ruins of small houses for about 150 people and is crammed with religious paraphernalia, leading researchers to believe Samabaj was a pilgrimage destination.