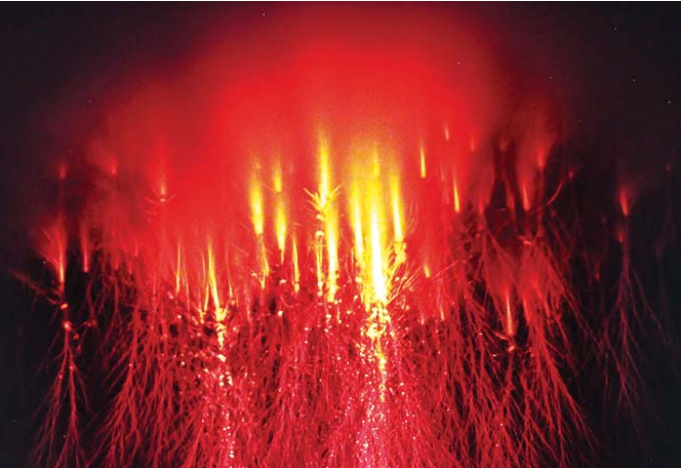


#SKYWARD SPECTACLE

Himalayan Night Sky Ignites with Red Sprites

The numbers and intensity of sprites documented above the Himalayas suggest that they are the world's most electrified!



Astrophotographers have recently turned their lenses skyward over the Himalayan range and stumbled upon a stunning, once-in-a-lifetime celestial display: more than 100 dazzling red sprites dancing above the peaks, stretching from north-

ern India into the rugged terrains of Tibet. These fleeting light shows, captured during a single series of Himalayan thunderstorms, are reshaping our understanding of atmospheric electricity and offering new insights into the dynamic and interconnected systems that govern Earth's upper atmosphere.

What Are Red Sprites?

Red sprites are high-altitude electrical discharges that occur in the mesosphere, generally between 50 and 90 kilometers above Earth's surface. Triggered by powerful lightning strikes in thunderstorms below, they manifest

as brilliant, jellyfish-shaped flashes of red and orange luminescence. First discovered in 1989, sprites remained largely mysterious due to their brevity (often lasting just a few milliseconds) and their remote occurrence above storm systems.

The Himalayan Phenomenon

During a recent scientific expedition to the Himalayas, a team of astrophotographers documented over 100 distinct red sprite events stretching across a vast swath of sky from the foothills of northern India to the Tibetan Plateau. These sprites appeared during intense monsoon-season storms, when massive lightning systems generated sudden electrostatic perturbations in the meso-

sphere. Using high-speed cameras and advanced detection equipment, researchers traced the timing and altitude of each sprite. Their observations confirmed that Himalayan storm systems, capable of spawning storms with extraordinary vertical development, some reaching altitudes of 20 kilometers, are uniquely suited to triggering such spectacular upper-atmospheric light shows.

Why It Matters

- New Frontiers in Atmospheric Electricity**
Red sprites serve as a window into the complex electrical coupling between low-altitude thunderstorms and the upper atmosphere. By studying their frequency, altitude distribution, spectral emissions, and morphology, scientists can refine models that explain how clouds and charged particles communicate across vertical layers of Earth's atmosphere.
- Lightning-Climate Connections**
Thunderstorm activity and upper-atmospheric phenomena like sprites are vital indicators of broader climate dynamics. Sprite frequency and intensity could inform our understanding of how global warming may be influencing storm patterns, particularly in sensitive, high-altitude regions like the Himalayas.
- Technological Implications**
Though brief, red sprites produce bursts of electromagnetic energy that travel downward and above Earth's surface. Better knowledge of these discharges could improve satellite and radio communications systems by helping to anticipate and account for transient electromagnetic disturbances.

Next Steps for Science

Scientists are now planning coordinated campaigns across multiple Himalayan mountain stations, equipped with synchronized high-speed cameras, VLF/LF (very/low-frequency) electromagnetic receivers, and spectral sensors. Joint efforts with meteorological agencies could also integrate radar profiling, lightning detection networks, and infrasound monitoring to track the entire lifecycle of sprite events, from storm formation to upper-atmospheric response.

One particularly ambitious goal: Comparing sprite activity across different climate zones in the Himalayas. Higher-altitude passes and colder, drier plateaus may reveal variations in sprite frequency and brightness, while monsoonal basins could yield contrasting behaviour. Understanding such patterns could unlock clues to the intricate balances that govern our planet's electrical environment.

There Has To Be War Before There's Peace

The major criticism of Wilson's legacy in relation to the Nobel Peace Prize lies in the ultimate failure of the United States to join the League of Nations. Furthermore, some aspects of the Versailles Treaty itself, which Wilson helped shape, were seen as punitive measures towards Germany. It contributed to future resentments that arguably laid the groundwork for World War II. Domestically, Wilson's presidency also saw significant restrictions on civil liberties during the war and a mixed record on racial equality. Some see this as detracting from his image as a champion of universal peace and human rights.



Dr. Goutam Sen
CTVS Surgeon
Traveller
Storyteller

Since the beginning of the 20th century, four US Presidents have been awarded the Nobel Peace Prize. Theodore Roosevelt (awarded 1906) received the Nobel Peace Prize 'for his role in bringing to an end the bloody war recently waged between two of the world's great powers, Japan and Russia.'

He skillfully orchestrated peace negotiations between the warring parties, culminating in the signing of the Treaty of Portsmouth in September 1905. His diplomatic intervention was crucial in de-escalating the conflict and preventing further bloodshed. Roosevelt was thus the first American President to win a Nobel Prize. Roosevelt's mediation of the Russo-Japanese War is widely regarded as a significant diplomatic achievement. His use of 'big stick diplomacy' was often about wielding power to achieve stability, and in this instance, it worked to achieve peace.

In retrospect, the controversy is- Was that Nobel Peace Prize Justified?

While his peace efforts were commendable, his foreign policy was characterized by a strong imperialist streak. His presidency saw the expansion of American influence through military intervention or the threat of it as manifested by the intervention in Panama for the canal. His peacemaking in one arena was offset by

#TRUMP



Theodore Roosevelt.

aggressive and expansionist policies in others. However, the specific act of mediating the Russo-Japanese War stands as a testament to his peacemaking abilities.

Woodrow Wilson (1919) was awarded the Nobel Peace Prize for his role as founder of the League of Nations' and for his efforts in ending World War I. Throughout the conflict, Wilson articulated a grand vision for post-war peace, most famously in his 'Fourteen Points' speech in January 1918. This plan called for principles such as self-determination, freedom of the seas, open diplomacy, and crucially, the creation of a 'general association of nations,' which materialized as the League of Nations.

Wilson's idealism and his tireless efforts to establish a framework for collective security were groundbreaking. The League of Nations, though ultimately flawed, was the first significant international organization dedicated to maintaining world peace



Jimmy Carter gets the Nobel Peace Prize.

and preventing future wars. He genuinely believed in a new global order based on cooperation rather than power politics and he dedicated immense personal energy to this cause.

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Jimmy Carter (awarded 2002) received the Nobel Peace Prize 'for his decades of untiring effort to find peaceful solutions to international conflicts, to advance democracy and human rights, and to promote economic and social development.' The award specifically highlighted his post-presidency work through The Carter Center founded in 1982. It has been instrumental in mediating peace agreements in conflicts in Ethiopia, Eritrea and North Korea's nuclear program. His organisations monitoring over 110 elections in 39 countries to ensure fairness and transparency as well as advocating for human rights globally and condemning abuses was unique. Efforts to combat diseases like Guinea worm disease were all worth appreciating.

Carter's Nobel Peace Prize is almost universally seen as richly deserved. His work in the post-presidency period through The Carter Center is tangible, impactful and has directly improved lives of millions. Carter's active engagement in global issues truly embodies the spirit of the prize.

There is very little significant controversy surrounding Carter's Nobel Peace Prize. His prize stands out for being awarded primarily for his work after relinquishing the immense power of the presidency and showcasing a dedication to service beyond political office.

Barack Obama (2009) was awarded the Nobel Peace Prize 'for his extraordinary efforts to strengthen international diplomacy and cooperation between people besides his promotion of nuclear non-proliferation and his vision for a world free from nuclear weapons.' Obama received the prize in less than a year into his first term as President. The decision was highly unusual and for many, surprising, given his limited time in office. His acceptance speech thoughtfully addressed the complexities of war and peace acknowledging the reality of his role as commander-in-chief of a nation at war.

His nuclear non-proliferation efforts, particularly the Iran nuclear deal (JCPOA), were significant diplomatic achievements, although it failed in the long term. His focus on climate change as a global security issue also aligned with broader peace efforts.

The timing of Obama's award was premature, as he had not yet had sufficient time to achieve concrete results in the areas cited. He was still prosecuting wars in Afghanistan and Iraq. His administration later authorised drone strikes and military interventions in other regions. The idea of awarding a peace prize to a sitting president, engaged in military operations, raised questions about the criteria. Some viewed it as an 'aspirational' award, meant to encourage future action rather than recognise past achievements.

In conclusion, the US Presidents, awarded the Nobel Peace Prize in the 20th and early 21st centuries, represent a fascinating cross-section of leadership and a variety of approaches to peace. The first two fall short of the promise seen in their actions in the later years. Probably, Carter is the only one who deserved it as his efforts were after he demitted the office of power and achieved long term benefits. Finally, Barack Obama's award was largely an acknowledgment of a perceived shift in US foreign policy towards multilateralism and diplomacy. No real action towards peace was taken and as such does not deserve the prestigious award.

Now, another President of USA has been hankering for the Nobel Peace Prize. Donald Trump is the first one to actively express a desire for the award. In his earlier term, he thought he deserved it for the Abraham Accord when he negotiated an accord between the Muslims of Saudi Arabia, UAE and Jews of Israel. It was an accord based on trade rather any ethnic or religious issue.

Even before he was elected for his second term, he started claiming that he had the magic formula for creating a ceasefire between Russia and Ukraine in one day. He has until now failed



could not do the complete destruction of the deep seated installations, Trump used his mighty power and sophisticated weapons to destroy the Iranian Nuclear installations. The ceasefire did take place at the cost of many civilian lives. This certainly does not stand good for his claim to the Nobel Peace Prize.

It remains to be seen how neutral the Nobel Peace Prize Committee is.

The nomination of Donald Trump by Pakistan for the Nobel Peace Prize is a highly political and performative act. While Pakistan genuinely believes Trump's intervention was critical in a moment of regional crisis, the broader context of his presidency, his controversial foreign policy record and India's counter-narrative make this nomination a subject of considerable debate. It highlights the often-complex interplay of geopolitics and national interest. The highly coveted nature of the Nobel Peace Prize often lead to nominations, that are as much about diplomatic signaling as they are about universally recognized contributions to peace. Ultimately, the Nobel Committee operates independently and the criteria for awarding the Peace Prize are based on significant contributions to peace, international fraternity and disarmament. Whether or not his actions in the Israel-Iran conflict will ultimately lead to him receiving the prize is a decision for the Nobel Committee to make, based on their evaluation of his efforts and their lasting impact. Whether the Norwegian Nobel Committee will seriously consider this nomination, given the controversies surrounding both the specific grounds cited and Trump's overall international aggressive image, remains to be seen.

Woodrow gets Nobel Peace Prize.

to do so. In fact, all he has achieved is to gain the rare earth mineral rights of Ukraine without benefitting Ukraine in any manner. It was a well-planned ransom for the arms that the USA had supplied earlier. He later went on to claim that he was responsible for the ceasefire between India and Pakistan. It is a controversial claim where Pakistan claims it to be major diplomatic feat deserving of the Nobel Peace Prize (Field Marshal Munir's Statement) while India vehemently denies any such mediation. The truth behind this ceasefire will forever be mired in doubt and no way deserves the Prize.

Having failed in justifying these two mediation efforts for peace, he now claims to have orchestrated the ceasefire in the Israel-Iran conflagration. Here too, there is an uneasy peace but there are surmises that Trump himself instigated the Israelis to attack Iran and deactivate their Nuclear installations. Since Israel

Reliving Your Childhood

National Be a Kid Again Day is celebrated on July 8th, encouraging adults to reconnect with their inner child and embrace the carefree joy of youth. It's a day to let go of adult responsibilities and worries, indulge in childhood activities, and rediscover the simple pleasures that often get overlooked in daily life. To celebrate the day, you can revisit your favourite childhood books, movies, or music, or engage in playful activities and indulge in childhood treats like sweets or ice-creams. So, this National Be a Kid Again Day, take a break from your responsibilities and enjoy the moment without dwelling on the future.



Barack Obama receiving Nobel Peace Prize.

#ARCHAEOLOGY

Early Harappan Burials in Gujarat

Excavators unearthed large stone structures, a human burial, and a plethora of pottery and artefacts.



In the last month, much of the media coverage around archaeological research in Gujarat has focused on dates. Various reports have announced the unearthing of 5,300-5,000-year-old settlements in Kutch by the University of Kerala. The emphasis, however, has been on the

numbers rather than the archaeological depth of the research. In this flurry of numbers, we have ignored the actual significance of these excavations and the decades of scholarship and fieldwork they are built upon. Gujarat's archaeological record shows that its history is long and non-linear. In this land, occupying the northeastern corner of west-

ern India, hunter-gatherers co-existed with agro-pastoralists and early copper users long before the rise and fall of Harappan culture. Against this background, the recent excavation at Lakhpur is significant not merely for the age of the findings, but for the evidence it offers about life, landscape, and cultural evolution.

Gujarat's Archaeological Past	Cultural Crossroads
Since prehistoric times, early humans have inhabited this region, as evidenced by research undertaken by many scholars. Palaeolithic (Old Stone Age) imprints are marked by stone tools found along ancient rivers such as the Mahi and Sabarmati. As the region transitioned to the New Stone Age, sites like Langhnaj in north Gujarat offered a rare glimpse of Mesolithic foragers. Their geometric microlithic tools and evidence of hunting-gathering, combined with domestication and burial practices, signal a significant juncture in the adaptive history of western India. This gradual transition towards domestication and sedentary life are evident by the 4th millennium BCE at sites like Prabhas Patan in Saurashtra, Padri near Somnath, and Loteshtar in north Gujarat. These sites reveal the	A few years ago, Ajit Prasad of MSU Baroda excavated another Early Harappan burial site at Dhaneti in Kutch. It revealed multiple burials with grave goods and pottery, an important find, as distinct Early Harappan cemeteries are rare. Most Harappan burial data comes from the Classical or Mature Harappan phase. Therefore, sites like Dhaneti offer great insight into this early period before the onset of urbanism. What distinguishes them from other Early Harappan sites like Dhaneti is not the number of burials or their age, but their potential to reshape our understanding of how regional communities co-existed, interacted, and may have participated in the rise of the Indian Subcontinent's first urban civilisation.

Excavation at Lakhpur



Excavation team at Lakhpur village in Gujarat. Photo: Abhayan GS and Rajesh SV, University of Kerala.

The archaeological site at Lakhpur village in Kutch was identified in 2022 with the help of Narayanbhai Jajani, former sarpanch of Lakhpur, and later excavated by Abhayan GS and Rajesh SV of the Department of Archaeology, University of Kerala. The site was identified as Early Harappan (c. 3300-2600 BCE), and the excavation builds upon earlier work at the nearby Early Harappan cemetery in Juna Khatiya, excavated in 2019, 2020, and 2022 by the same team.

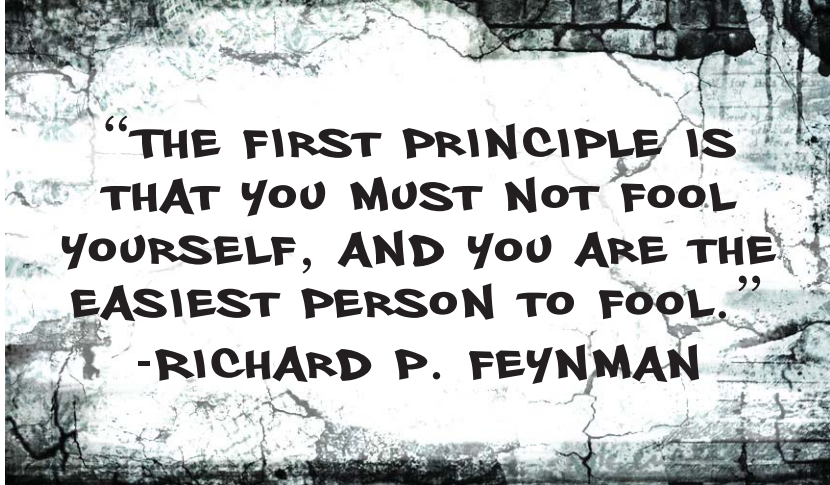
The Juna Khatiya excavation yielded around 197 burials. When combined with the findings at Lakhpur, they reinforce the idea of a broader network of interconnected Early Harappan settlements in this region. Excavators unearthed large stone structures, a human burial, and a plethora of pottery and artefacts. These structures, built using local sandstone and shale, indicate organised construction and systematic planning.

According to the archaeologists, the most significant discovery is the presence of pre-Prabhas pottery, named after the type-site Prabhas Patan in Saurashtra and also found at Datrana and Janan. This rare ceramic type, characterised by specific forms and fabrics, suggests interaction with regional Chalcolithic communities that co-existed in the region.

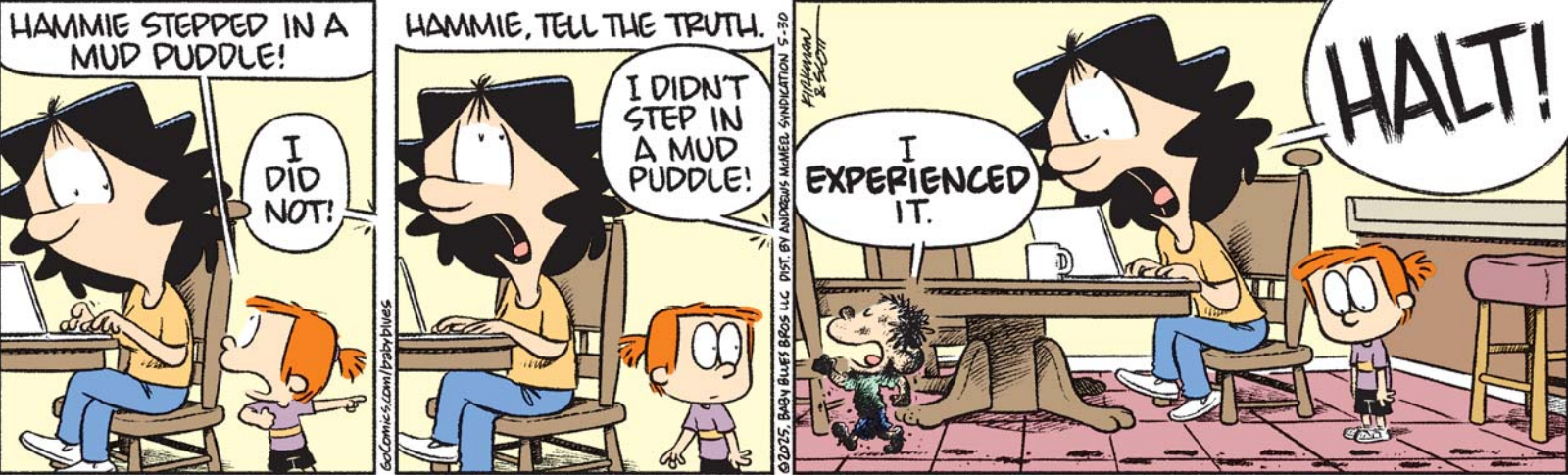
The human burial at Lakhpur, found within the habitation area,

also included a pre-Prabhas pottery assemblage. Abhayan and Rajesh noted a considerable difference between this burial and those at Juna Khatiya: it lacked burial architecture or surface markers and was placed directly into a pit. This makes it the first burial in Gujarat with pre-Prabhas, Chalcolithic pottery linked to an Early Harappan site. Furthermore, a large portion of the habitation layers closely resembles Early Harappan Sindh-type settlements, as also seen at Juna Khatiya. Such findings indicate cultural interactions, not only with co-existing early Chalcolithic groups, but also with Early Harappan cultures of Sindh, dated to around 3300 BCE, or roughly 5300 years ago.

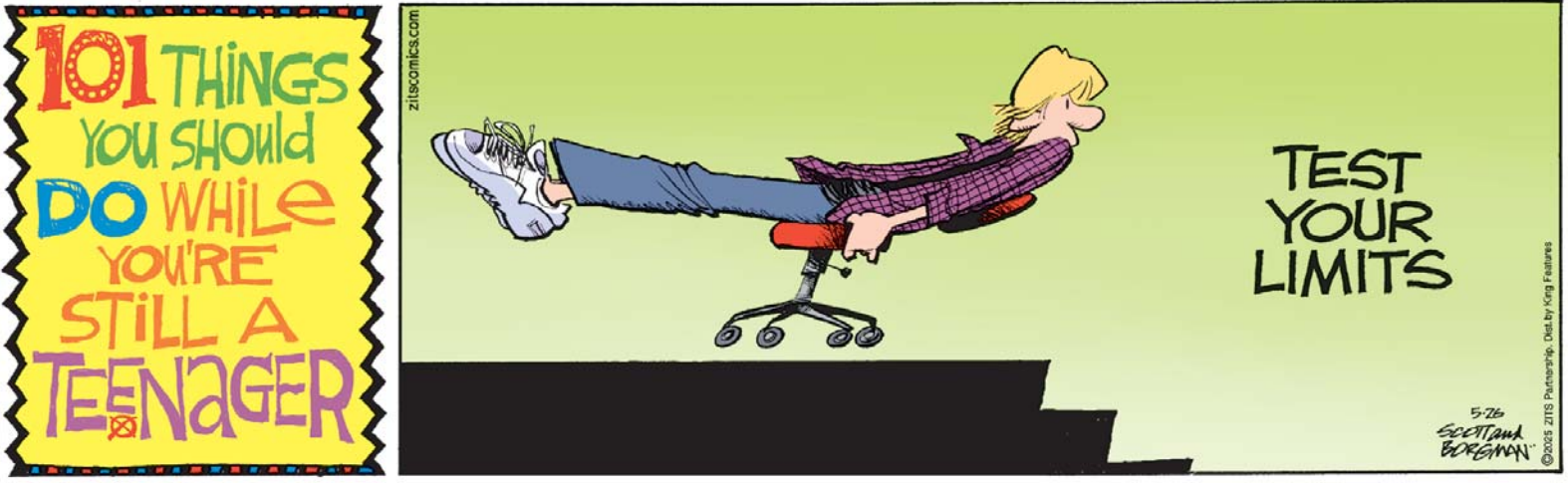
THE WALL



BABY BLUES



ZITS



By Rick Kirkman & Jerry Scott

By Jerry Scott & Jim Borgman