

Bursting Firecrackers on Deepavali – An Ancient Bharatiya Tradition!

Dr. Sitaram Dixit – Chairman, CGSI

As Deepavali approaches we see the now familiar pattern of Hindu festival bashing with an ugly discourse of ‘Hindu festivals are environment unfriendly’. Uninformed ignorant celebrities start dissuading Hindus from bursting crackers as if the current deplorable environmental crisis is all a consequence of Hindus reveling in their festive spirit for a couple of days. The judiciary too do not want to be, left behind and profess their available insight by imposing a blanket ban on the sale of firecrackers across the country. However, no one of these self-proclaimed intelligent people have any exalted wisdom to offer on the ongoing continuous carpet-bombing taking place in Ukraine or in the Middle East region and its adverse impact on the world environmental pollution.



Holi, Ganesha Chaturthi, Durga Puja, Dusshera or Deepavali, every time we see Hindus falsely targeted in the names of pollution, sometimes water, sometimes noise and sometimes air. The judiciary banning the sale of crackers citing the reason of environmental air pollution is flawed by itself as scientific studies show why the whole positioning of Deepavali as the culprit is incorrect, since it ignores other major reasons like lifestyle, construction, the burning of stubble as responsible bringing with it a cloud of smog, causing numerous respiratory problems for the citizens. However, the fact remains that Hinduism has always been an environmentally sensitive philosophy, as most Hindu festivals and traditions share a healthy relationship with the environment and are eco-friendly in character.

This well-coordinated and concerted machination by anti-Hindu forces is to make Hindus feel guilty about their festivals and traditions that would result in many naïve young Hindus distance themselves from the rich cultural heritage, with a clear goal to Balkanize Bharat into pieces. In a paper titled [‘Spiritual Conflict in the Indian context’](#), a missionary movement identified ‘Unity of India’ as a major roadblock to Christian Evangelization. The spirit of being Indian is the binding factor which has

totally integrated the country into one culture and this display of ‘unity in diversity’, portrays Bharat as one entity. What we could consider as the merits of Bharat, are unfortunately the deterrents for evangelization’. Christian Evangelists strongly believe that our rich Cultural Heritage and our festivals, is what binds Hindus. So, the whole idea of these forces is that, if they can distance the Hindus from their festivals, it could serve their purpose, i.e., they can easily disintegrate this ‘Unity in Diversity’.

Keeping away Hindus from bursting fire crackers is only one of the various steps. Unfortunately, many Indians due to regular and continuous brainwashing by these anti-Hindu, anti-Bharat forces think that bursting crackers was never a part of Bharatiya tradition and so there is no need to continue it. These people believe that bursting firecrackers during Deepavali is a recently introduced innovation whereas the reality of bursting firecrackers has always been integral to Deepavali celebrations. The very crux of the myth viz., bursting firecrackers is not a part of the Bharatiya tradition is based on the false presumption that China invented gunpowder (and so fireworks) in the 9th century and then falsely crediting Muslims to have brought it to Bharat. This myth is so widespread that, such ignorant people even go on to say that gunpowder is one of the ‘Four Great Inventions’ of China. However, this myth starts falling apart when we examine Chinese sources themselves which says that a Bharatiya Buddhist monk brought gunpowder technology to China, in 664 CE, when he discovered soils in China containing Saltpeter (primary constituent of gunpowder). Various Chinese studies of chemistry of Saltpeter itself show evidence of its Bharatiya origin.

Meanwhile, a quite different technological dialogue was going on between India and China, conducted under Buddhist rather than Islamic influence. Although Buddhism had entered China a long time before, it developed deeper roots from about AD 500, and about that time spread to Japan. In the seventh century especially, many pilgrims went to India and brought back texts for translation, and were also responsible for the transmission of a range of technical information. Indian monks travelled to China too, and in 664, one Indian was able to identify soils in China which contained saltpetre, and demonstrate the purple flame which occurs when this material is put into a fire. Later Chinese studies of the chemistry of saltpetre show other evidence of Indian influence, which seems to have been the starting point for the Chinese investigations which led to the first recipes for gunpowder.

Fireworks have been an integral part of Bharatiya culture cutting across, caste, creed and gender for several centuries. The major constituent of fireworks is Gunpowder which consists of Saltpeter (Potassium Nitrate), Sulfur and Charcoal that act as fuel to prolong combustion. Saltpeter gives the characteristic purple flame in fireworks both for military and aesthetic (celebratory) uses. Many world historians confirm that ancient Bharat had a complete knowledge of gunpowder’s. Dr Gustav Oppert (a German Indologist) the foremost among them has done extensive research on this and has been an authority on this subject. Authors and

historians around the world widely accept and quote the research works of Dr. Oppert in their books.

As already mentioned earlier, much before Chinese invented gunpowder, Indians have been using it. It finds mentions and references in Ancient Sanskrit texts namely 'Kautilya's Artha Sastra' by Chanakya and 'Sukra Niti' or the teachings of Sukra Charya, referring to Saltpeter as 'Agnichurna', for producing smoke and useful to fight the enemy during the wars.

This document is at least 2300 years ago, very much before Islam was born and Muslims invaded Bharat.

Many writings also refer, 'Arabs learnt the manufacture of gunpowder from India, and that before their Indian connection they had used arrows of naphtha. Some also argue that though Persia possessed Saltpeter in abundance, the original home of gunpowder was India...' (Fire-Arms in Ancient India – By Jogesh Chandra Ray I.H.Q. viii. p. 586-88)

Gustav Oppert (1836-1908) in his work, Political Maxims of the Ancient Hindus, says, that ancient India was the original home of gunpowder and fire-arms. (Hindu Culture and The Modern Age – By Dewan Bahadur K.S. Ramaswami Shastri – Annamalai University 1956 p. 127)

The major constituent of fireworks is Gunpowder which comprises of Saltpeter (Potassium Nitrate), Sulfur and Charcoal. While the Sulfur and Charcoal act as fuel to prolong the combustion, it is the Saltpeter that gives the characteristic purple flame due to which fireworks use it not only for military but also aesthetic (celebratory) purposes. Moreover, Chinese texts dating back to 7th century acknowledge that Indians were aware of Saltpeter and its usage for producing purple flames for aesthetic purposes apart from military use. How would Hindus would have made use of Saltpeter for aesthetics without giving it some kind of structural form i.e., Fireworks?

Scholar Roger Pauly, a hardcore Sinophile, in his writings admits 'Indian inspiration'.

While gunpowder was primarily a Chinese innovation, it may have received some Indian inspiration. Just as China embraced Indian Buddhism, the subcontinent's fascination with fire may have likewise crossed the Himalayas. In 664 an Indian visitor to China reportedly demonstrated the peculiar flammability of saltpeter and provided instructions on how to locate it

Although, 9th to 10th century onwards the initial knowledge of gunpowder came to China from Bharat, without doubt we must agree that the Chinese improvised and made innovative contribution to gunpowder technology by making different types and forms of fireworks for celebratory use, like sky sparklers, skylight fountains, skyrockets, etc.

The narrator of Mahabharata, Vaisampayana describes the manufacture of smoke balls by ancient Hindus using Gunpowder that many scholars agree with.

Atharvan Rahasya mentions the use of charcoal, Sulfur and Saltpeter to make gunpowder, which are

to ensure the explosion to occur at a particular time."¹¹⁶
Vaisampayana mentions among the things to be used against enemies *smoke-balls*, which contained most likely gunpowder, and which were according to the explanation proposed by his commentator made of gunpowder.¹¹⁷
The following stanza, which is taken from the *Rajalakshminarayanahrdaya*, a part of the *Atharvanarahasya*, is no doubt a clear proof of the fact that the Hindus were familiar with gunpowder at a very remote period: "As the fire prepared by the combination of charcoal, sulphur, and other material depends upon the skill of its maker so also may thou, O! representative of knowledge (Lakshmi), by the application of my faith manifest thyself quickly according to my wish."¹¹⁸
The Sanskrit word for gunpowder is *agnicūrṇa*, fire-powder, which is occasionally shortened into *cūrṇa*. The Dravidian languages have all one and the same word for medicine and gunpowder; in Tamil *marundu*, in Telugu *mandu*, in Kanarese *maddu*, and in Malayalam *maruna*.

the same ingredients used even today to manufacture Gunpowder.

In-fact, workers at Sivakasi (Tamil Nadu) and all over in Andhra Pradesh use these ingredients to make modern fireworks even today.

Traditional makers of fire crackers to this day make simple form of crackers, using basic ingredients like

- Suryakara (सूर्यकार, Telugu) = Saltpeter
- Gandhaka (गन्धक) = Sulphur.
- Sand.

These were known in Bharat since ancient ages and there is no need for Bharatiya's to borrow this from China. The etymology of the ingredients in fireworks reveals their origin. The traditional Bharatiya firecracker workers of Andhra and Sivakasi still call the Indic Saltpeter as (सूर्यकार) whose origin is Sanskritic. They do not use Shora (شوره) which is Persian word for Saltpeter imported in medieval age by Muslims invaders during their rule.

An extremely colonized mindset alone can claim that Hindus were incapable of making simple fireworks themselves when they had all basic ingredients since antiquity and Hindu society had to wait for Muslims to come and teach them to put all these ingredients in a container and make fireworks. The facts are clear, and i.e., Hindus had a complete knowledge about use of Saltpeter and gunpowder and were perfectly capable of making fireworks themselves.

Why we burst fireworks in Deepavali and what is the underlying theology?

Hindus believe that our departed ancestors (Pitrs) who had come down for Pitru Paksha would return on the night of Deepavali Chaturdashi and Amavasya. The light and noise show Pitrs their path in the dark. Hence, we illuminate our houses. The

Skanda Purāṇa the largest of the 18 MahāPurāṇas, describes the rites we must perform on Deepavali and it mentions this belief. The Vaiṣṇava-khaṇḍa of Skanda Purāṇa says

तुलासस्थ सहस्रांशु प्रदाष भूतदशयाः ॥
 उल्काहस्ता नराः कुर्युः पितृणां मार्गदर्शनम् ॥ ६५ ॥
 नरकस्थास्तु ये प्रेतास्ते मार्गं तु व्रतात्सदा ॥
 पश्यंत्येव न संदेहः कार्योऽत्र मुनिपुंगवैः ॥ ६६ ॥
 आश्विने मासि भूतादितिथयः कीर्तितास्त्रयः ॥
 दीपदानादिकार्येषु ग्राह्या मध्याह्नकालिकाः ॥ ६७ ॥
 यदि स्युः संगवादवगिताश्च तिथयस्त्रयः ॥
 दीपदानादिकार्येषु कर्तव्याः पूर्वसंयुताः ॥ ६८ ॥
 ॥ ऋषय ऊचुः ॥
 कौमोदिन्यास्तु माहात्म्यं प्रष्टुमिच्छामहे द्विजाः ॥
 तस्मिन्दिने तु किं भोज्यं कस्य पूजां तु कारयेत् ॥ ६९ ॥
 विमर्शं विनाये सा न तस्मात् कस्य चेत्तदा भवेत् ॥

The Skanda Purana says that we should celebrate Deepavali by holding Ulkas in our hands as this will show path to our ancestors by serving its two main purposes.

- 1) Make noise
- 2) Illuminate the sky.

What are 'Ulkas'?

In Sanskrit the original meaning of Ulkā (उल्का) is a 'meteor'. If the ancient combustibles used in Deepavali were just lamps, how could the ancients give this name. Fireworks were Ulkas, because of the similar visual appearance of fire crackers to meteors. G. V. Tagare translates it as 'firebrands. [Firecrackers in their early form were firebrands]. Such firebrands illuminated the sky which explains commentators describing उल्काहस्ता of Skanda Purana as दीप, changing the meaning of this word with time. This was older, original form. See this painting from Mir Kalan school depicts what is close to older form:



Firecrackers used in ancient Bharat were surely different from today's modern fire crackers. Just because the chairs used in ancient Bharat were different from modern chairs, can we conclude that chairs did not exist in Bharat earlier? Everything we use today are different from its predecessor. It is quite simple to understand that the concept of firecrackers or the use of a combustible substance on the night of Deepavali to make a lot of noise, and illuminate the sky and show the path to our departed ancestors existed irrespective of whether Ulka means modern fire crackers or not. Advancement of technology, changes everything, but that does not mean that firecrackers is a foreign import or medieval 16th century concept.

61. O great sages, a goddess called Mahārītrī⁶¹ was born (appeared) on the fourteenth day (of the dark half of Āśvina). Hence those who are devoted to worship of Śakti should celebrate her festival.
 62-64. After coming to the kingdom of Bali, Yakṣas, Gandharvas, Kinnaras, medicinal herbs, ghosts, Mantras, magic crystals etc., all of them get delighted. They dance in the early part of the night. There is no doubt about this that those Mantras will be accomplished in the kingdom of Bali. Just as the people coming to the kingdom of Bali are highly delighted, so also on that day the people should be full of delight.
 65-68. When the sun is in Libra, on the nights of Caturdaśī and new-moon day, men should celebrate the festival of "showing the path into the Pitr's" with firebrands in their hands. The dead men and ghosts who are in hell see the path, due to this Vrata always. No doubt need be entertained in this respect by leading sages.
 In the month of Āśvina three Tithis have been glorified beginning with Caturdaśī. They should be taken when they spread over the midday for the rites of offering lamps etc.
 If these three Tithis fall before Śmṛṅṅovā (second of the five divisions of the day), the celebrations of offering lamps etc. should be conducted when they are in conjunction with the previous Tithis.

Dr. G. V. Raghavan professor of Sanskrit and historian after analyzing these verses, concludes that (an early form of) crackers have been a part of Deepavali celebrations since earliest times. He says that their religious purpose was to illuminate and resonate the path of departed Pitr's.

of the *Dīpāvali*. They are not, as popular imagination may assume, part of merry-making, but are part of the religious beliefs behind the association of the dead ancestors with this holy season. The *Pitr's* or manes who came down during the *Mahālaya* are to go back now and it is to light their path along the firmament that lamps on tops of poles are set up and crackers are made to burst in mid air. This is called in the texts *Ulkā-dāna*. In a Sanskrit text called *Dīpāvali-kṛtya*¹ (on things to be done at *Dīpāvali*), it is said that after oil bath in the early hours of the morning, the setting up of images of Lakṣmī, Kubera and Indra and their worship, the ceremony called *Dīpa-śrāddha*,² worship of ancestors with lamps, should be performed. *Mantras* or verses are to be recited to the lamps and they are to be offered (*Ulkā-dāna*) to the manes for lighting their path in the other world. One of the ślokas in the text says: "Leaving the realm of Yama, they who came down during the *Mahālaya*, let them, the ancestors, depart making their way with the help of these brilliant illuminations."³ This is the meaning also of the *Ākāṣa-*

Like the day that precedes it, Diwali is a day for performing ancestral mortuary rituals. Worship of Yama, both the god of death and the world of the dead, is important during the Diwali season, as is concern with one's departed ancestors. A month before Diwali is a fortnight dedicated to ancestral worship (*mahālaya*), when one invites one's ancestors to abide among the living and receive their attention. On Diwali, the ancestors are shown the way to leave, with firecrackers and lights illuminating their path (Raghavan 1979, 165-66). But the leaving is also potentially a leaving from undesirable, hellish worlds, as during Narak Caturdaśī, to journey onward to more desirable realms. Hence Diwali is a celebration of the spiritual advancement of one's ancestors, not simply their return to worlds from which they came.

In her thesis, Indologist Tracy Pintchman says that the core of Deepavali festivity is illuminating the path of deceased ancestors with firecrackers and lights, a strongly corroborated fact in Ananda Ramayana an epic by Maharishi Valmiki, that also mentions that people burst fireworks during Lord Rama's homecoming. It mentions about firecrackers which burst and shine in the sky (gaganantarvirajitan).

But what is our *Dīpāvalī* without the crackers which are fired after the bath and the wearing of new clothes? How do the crackers come in? They are not new but are perhaps among the oldest, essential features

I. See for example, *Nāradaparvata*, I. III. 18-19.

167

of the *Dīpāvalī*. They are not, as popular imagination may assume, part of merry-making, but are part of the religious beliefs behind the association of the dead ancestors with this holy season. The *Pitrs* or manes who came down during the *Mahālaya* are to go back now and it is to light their path along the firmament that lamps on tops of poles are set up and crackers are made to burst in mid air. This is called in the texts *Ulkā-dāna*. In a Sanskrit text called *Dīpāvalī-kṛtya*¹ (on things to be done at *Dīpāvalī*), it is said that after oil bath in the early hours of the morning, the setting up of images of Lakṣmi, Kubera and Indra and their worship, the ceremony called *Dīpa-srāddha*,² worship of ancestors with lamps, should be performed. *Mantras* or verses are to be recited to the lamps and they are to be offered (*Ulkā-dāna*) to the manes for lighting

Some colonial Indologist object saying that Ananda Ramayana is a work of 15th century. However, these very same colonized Indologists assign a date of 500-100 BCE (i.e., post Buddha) for Valmiki Ramayana.

In Hindu Dharma, date does not determine validity unlike other religious faiths, but the acceptance of the texts among Sampradayas. Ananda Ramayana easily qualifies such test since most Sampradayas accepts it is genuine.

"As regards Practice,—that which consists in what is actually done, with a view to invisible results, by persons learned in the Veda,—its authoritative character is exactly like that of *Recollection* (*Smṛti*); because that also has its basis in the Veda. On the other hand, wrong Practice is generally based upon visible causes (of greed, &c.), and unlearned persons are apt to commit mistakes; hence it can not have any authority at all.

We see such an idea in Medhātithi's 11th century commentary on Manu Smṛiti 2.6. He says that persons learned in the Veda and has the authority of Smṛiti carry of the practice (in our case the bursting of firecrackers), is to acquire some important and valuable invisible results.

Hard archaeological evidence for all festivals is present in wall murals of the 9th century Tyagaraja temple in Tamil Nadu. They depict festival celebrations with firecrackers.

See alongside.

तथा कृत्रिमवृक्षांश्च पतकाश्च ध्वजास्तथा । वह्निसंगादोपधीनां पुष्पवृक्षविनिमित्तान् ॥३०६॥
तदित्प्रभोपमांश्चापि गगनान्तविराजितान् । वह्निसंज्ञादोषांभ्यः प्राकारान् विविधान् वरान् ॥३०७॥
चंद्रज्योत्स्नाकृत्रिमांश्च दीपवृक्षान् सहस्रशः । दीपमालाश्च व्याघ्रादीन्कृत्रिमान् रथमस्थितान् ॥३०८॥
आपधीभिः प्रतितांश्च कक्षोचक्रोपमादिकान् । ददृशुवराणद्रथ्या एवं ते राघवादयः ॥३०९॥
तदा देवा विमानस्था ददृशुः कौतुकं मुदा । एवं नानोत्सवैर्बाला ययुर्जनकमदिरम् ॥३१०॥
अवरुण गजेन्द्रभ्यस्तस्थुस्ते मंडपांगणे । मधुपर्कविधानानि विष्टरादीनि च क्रमात् ॥३११॥
तयोर्गुरुं चक्रतुस्तौ वसिष्ठगौतमात्मजौ । शान्मीक्यादिमुनिगणेष्वेष्टितौ तुष्टमानसौ ॥३१२॥
ततः पूजां वधूनां च मुदा दशरथो नृपः । चकार गुरुणा युक्तस्तदा स मंडपाङ्गणे ॥३१३॥
ततो लम्नमुहूर्ते तान् वधूभिश्च पृथक्वरान् । वेदिकासु स्थितान् कृत्वा दम्पत्योरंतरे पटान् ॥३१४॥
कृत्वा मंगलधोपांश्च मुनिभिश्चक्रतुर्गुरुः । तदा तूर्णो सभायां ते शुभ्रवुः सकला जनाः ॥
पुष्पोपैः पीतधान्यैश्च वधुपुर्दम्पतीन् । स्त्रियः ॥ ३१५ ॥
श्रीदेवीतनयो शिवः सुखकरो मित्रः शशा कंठनः सर्वे ते मुनयथला दश दिशः सर्पा सुगोद्राः स्वभाः ।
नयःपुण्यसरोवराणि दितिजास्तीर्थानि कंजासनश्रेष्ठौ बह्वधमरा नदी जलधयाः कुर्वतु वो मंगलम् ३१६॥
तदेव लभं सुदिनं तदेव तारावलं चंद्रवलं तदेव । विद्यावलं देववलं तदेव काशीपतेर्यत्स्मरणं विधेयम् ३१७॥
एवं मंगलशब्दैश्च महावाद्यपुरःसरम् । तेषामंतःपटान्मुक्त्वा अंगुष्णोऽस्तु चतुर्गुरुः ॥३१८॥
तासां ते पाणिग्रहणविधानं विधिपूर्वकम् । लाजाहोमादिकं सर्वं चक्रुर्मंगलपूर्वकम् ॥३१९॥
तदा महावाद्यधोपा निनेदुमंडपांगणे । ननुतुवारनायैश्च जगुर्मागधवदिनः ॥३२०॥
मनोहर मिट्टी आदिकं बने हुए गमलों, वृक्षों तथा फूल-पतियोंसे बनी हुई वादिकाओंको, कृत्रिम वृक्षांको, पताकाओंको, ध्वजाओंको, अग्निके संगोसे जलनेवाले, तद्विके समान रोशनीवाले और आकाशमें चमकनेवाले नामा प्रकारको आसवाओंसे सब पुष्प-वृक्ष-लता आदिको, हजारों चन्द्रमाओंको चंद्रनीक कृत्रिम दीपवृक्षोंको, दीपमालाओंको, रथोंमें रखे हुए बनावटा व्याघ्र-नख आदिको, औषधिसे भरे हुए मोर

Bogar SattaKandam a book attributed to Tamil Siddha Saint Bogar, traditionally dated to 500 BCE, which some modern scholars date as 5-7th century CE, clearly describes the use of Deepavali firecrackers.

சரக்கு வைப்புக்கு வேடிப்புச் செய்தி
காணென்ற சரக்குவைப்புச் செய் திருக்கும்
சாங்கமாம் வேடிப்புச் செய் திருக்கும்
காணென்ற வேடிப்புப் பந்ததாம் நூறு
கூலிகட்ட சாம்பலு பழமும் நூறு
பாணென்ற பரும்பாண்டித் தன்லிம் விட்டுப்
பண்களென மொன்றக்கு நூறு தானும்
காணென்ற ஒக்கவிட்டுக் கரைத்து வைத்த
உயர் சென்ற தாளம்நூள் கொடுக்க வைப்பே

414

கொடுக்கவே உப்பெலாந்தன் லீரித் தெருகு
குறிபார்த்து வடிக்கெழுப் பாண்டி திட்டு
அதிகவே யடுப்பென்போல் காமற் காப்பீரி
அப்புறைதல் பதம்பார்த்தோ லைதனிற் குத்துப்
பதிகவே பருப்புப்போல் உறைதல் கண்டால்
பதமென்ற மறுசட்டித் தன்லிம் காற்ற
உதிகவே ஆறினலித் தன்லீர் நிற்றும்
காற்றெய் தன்லீர்சரக் காப்பீர்க் கொள்ளே

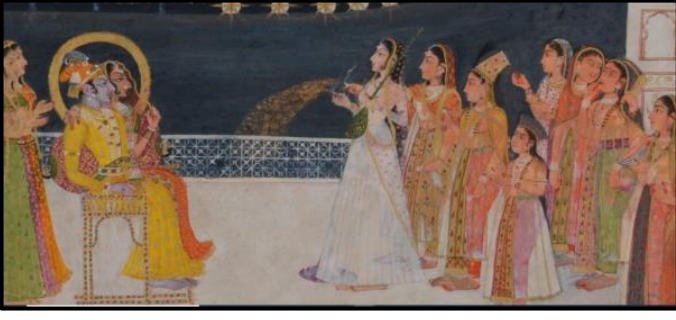
415

காய்ச்செய் மூல்பதப்போத் குத்திப் பார்த்துக்
கறிமூல்வைக் காப்பவைத்துக் கண்காய்த் தூக்கிப்
பாய்ச்செய் பழம்புலிதாம் சாணுச் சேர்த்துப்
பாங்களைக் கீழூலி விடித்து வைப்ப
தாச்செய் பூநீறு பழமு மொன்று
சத்தியென்ற சாரமது பந்ததா னென்று
மாச்செய் மதியுப்புப் பந்ததா னென்று
மாட்டியே மூல்மகுத்தி விடித்துக் கொள்ளே

416

Bogar describes the method of preparing the Saltpeter solution (Vediuppu Cheyanir) for all types of Sarakku Vaippu. Fireworks, gunpowder etc.





A painting of Krishna watching Deepavali fireworks. From Kishangarh (Rajasthan)

Hindu tradition civilizational memory always remembers and considers firecrackers as an integral part of Hindu tradition with thousands of paintings made all over Bharat showing Sri Krishna celebrating Deepavali by bursting firecrackers.

Here is one from Rajasthan school:



Colonialized Indologist object saying these paintings belongs to the 16th century. This is precisely the point to note that Hindu art and tradition do not see firecrackers as an alien custom absent in Sri Krishna's era. How is it possible they remember these medieval fireworks as a successor of something which had ancient roots in Bharat and in their memory had been integral part of Hindu culture? Hindu civilizational memory does not see Deepavali firecrackers as an alien import. Rather it is exactly the opposite.

Were our Hindu ancestors such idiots that they made thousands of paintings depicting Sri Krishna



celebrating fireworks which may not have existed during his time? Think about it!

Keemat: November – December 2023

As another example of civilizational memory, is the great Marathi Saint Eknath (16th cent CE) who describes firecracker celebrations in the wedding of Rukmini and Krishna.

He describes Agniyantra, Havai, Sumanmala, Chichundari, Bhuinala etc. We find all these firecrackers even today in Deccan.

“ भरुनि रजतम औषध ।
 करुनि अग्निपत्र संज्ञद ।
 कृष्णपुडें अतिविनोद । एक प्रबुद्ध दाविती ॥ ११७ ॥
 अग्नी लावुनी ठायीं ठायीं ।
 ममता जाळिती हवई ।
 गगना उसळली पाही । धुवोन ठायीं निमाली ॥ ११८ ॥
 मोहयन्त्री सुमनमाळा ।
 अग्निपुष्पें भासती डोळा ।
 फुलें म्हणती अचला । पाहतां डोळा ते राख ॥ ११९ ॥
 अतिलोभाची चिचुंदरी ।
 अग्नि लावुनी टाकिली दरी ।
 पेटल्या पडती जनावरी । उरी शिरी जाळीत ॥ १२० ॥
 देऊन उपशम अनळा ।
 जाळीती कौधाचा भुडनळा ।
 भडभडा निघति ज्वाळा । तोही तत्काळ निमाला ॥ १२१ ॥
 हाती धरुनि कृष्णलीला ।
 जाळिती कामाचा हातनळा ।
 धरु नेणती त्या बरळा ।
 जिवीं जिवाळा पोळती ॥ १२२ ॥” etc.

Chatrapati Shivaji Maharaj's Guru, the great Sant Samarth Ramdas also describes various kinds of fireworks burst by Sri Rama's army in his Ramayana. Firecrackers described are havaiya, nala, phula (phuljhari), ghosha etc.

निशी प्राप्त झाली असंभाव्य दाटी ।
 बहू दीवळ्या लज्ज कोळ्यानुकोटी ।
 किती एक ते उंच नेले उमळे ।
 नळे जाळितां घोष तैसे उफाळे ॥ ३२ ॥
 सरारां फुलें धावती अंतराळी ।
 कडाडीत घोषें निराळीं निराळीं ।

भुरारां हवाया किती एक वेळां ।
 बळें पाहती ऊर्ध्वनक्षत्रमाळा ॥ ३३ ॥
 बहू औषधें दिव्य नानापरीचीं ।
 किती एक तेजाळ तीं कूसरीचीं ।
 घडीनें घडी तेजपुंजाळ होती ।
 उजेडेंचि ते लोक लोकां पहाती ॥ ३४ ॥”

Take Kaunriya Kathi of Odisha. It is a basic Deepavali firebrand without gunpowder. But it illuminates and makes noise.



Let us pause and logically think ourselves. If Muslims had imported firecrackers from China, the inevitable conclusion is that all the great Hindu painters, poets and scholars were collectively wrong and deluding themselves when they mentioned fireworks in ancient Bharat.

At one point (surely before Muslim age), Saltpeter was present in firebrands. While use of such firecrackers gradually became widespread, more conservative ones persisted with the older form of firebrands which explains why few ancient texts describe this innovation. To understand all this we just need some simple common sense.

Practical use of fire crackers in ancient Bharat by our ancestors.

Hindus celebrate Deepavali to mark the return of Bhagwan Ram and Devi Maa Sita, to Ayodhya after their exile. However, it also signifies the beginning of the autumn season (early days) that bring changes in the climate and the environmental ecosystem which our ancestors were aware of.

Bharat is an agricultural society with rice as the staple food for most of the states. During the month of autumn 'tiny leafhopper' (an insect of the cicadellidae family) grows in large numbers. Feeding on plant sap these insects transmit plant-infecting viruses and bacteria.

Numerous species of leafhoppers and planthoppers are present worldwide that are serious pests of rice, frequently occurring in large numbers enough to completely dry the crop, or at least to reduce the rice yields. Apart from direct crop damage, leafhoppers and plant hoppers are also vectors of most currently known rice virus diseases. The more damaging

species are green leaf hoppers *Nephotettix* spp., the zigzag leafhopper *Recilia dorsalis* (Motschulsky), the brown plant hopper *Nilaparvatalugens* (Stål), the small brown plant hopper *Laodelphaxstriatellus* (Fallen), the white backed plant hopper *Sogatellafurcifera* (Horváth), and the ricedelphacid *Tagosodes* (=Sogatodes) *orizicolus* (Muir), etc., also a serious threat to the paddy crop too. Hence, we need to control the cicadellidae family of insects else they can multiply significantly causing not only severe damage to the crops but also may spread various diseases including flus to humans, cattle and the plants.

Affordable treatment of ancient times

Use of Sulfur, known as Gandhak (in Hindi/Sanskrit) to control these insects from damaging the crops of rice and paddy was common. Modern day research also shows that Sulfur treatment is one among the best treatments for controlling such insects. We can use Sulfur not only to treat rice or paddy crops from these insects but also grapes, potato crops from these insects. Crackers contain Sulfur in them, so our ancestors used to burst crackers during Deepavali days to indirectly fill the atmosphere with Sulfur gas as natural treatment for the pests as a very cost effective and quick method.

People in every nook and corner of the country make use of fire crackers containing Sulfur during Deepavali days along with the use of small oil lamps, lit using castor oil that are also known to purify environment harmlessly.

Ancient Tradition - The Tubri competition

The Purbannapara community of Makardah village in West Bengal holds an annual competition or 'protijogita' for making the brightest and biggest 'tubri' or firework-candle.

Tubri, looks like Christmas tree or resemble a Roman candle. In this village elders teach the younger generation to make Tubri and other types of fireworks during Kali Puja (worshipped during Deepavali in the eastern part of Bharat especially West Bengal and Odisha) See Photo in the next page.

A tubri consists of a powdered mixture of Saltpeter, Sulfur and Charcoal, combined with iron filings stuffed tight into a spherical shell made of baked earth with a small hole at the top of the casing that allows lighting the powder.

Each team has its own secret formula for the quantities and graininess of the ingredients, pounded and mixed fresh for maximum effect. The competition commences with the lighting of a tubri. The firework is set inside a cubical metal frame, designed and made by local engineers, to protect the audience from flying fragments. Judges sitting at tall building roof tops grade the height and other attributes of the fireworks and declare the winners.



Savarkundla residents fight cracker wars

Savarkundla is a city municipality in Amreli district in the state of Gujarat. It is a twin city formed when the cities of Savar and Kundla merged. Residents of the two villages gather on their side of the river every Deepavali and throw fire-crackers at each other as if they were fighting a war. Even today, Savarkundla villagers do not buy firecrackers from the market but make it locally at home and call these homemade firecrackers as ‘Ingoriya’ and ‘Kokdi’. When lit, both burn like small flowerpots.

‘Ingoriya’ is the fruit of a wild tree. People fill up the hollow shell with potash, coal powder and other inflammables after removing the pulp and seed inside the fruit. Kokdi is also a wood firecracker derived from wild bamboo’.

Muslims and Fireworks

Mughal Tyrant Aurangzeb during his rule, from 1665 onwards, banned the use and display of fireworks during Deepavali because he considered it to be a ‘Hindu practice’. The exhibit preserved at the Bikaner Museum is a proof on the same. Anti-Hindu, pro-Muslims politicians present in I. N. D. I. A., along with their associates, the anti-Hindu Indian Judiciary (Supreme Courts & High Courts) are today banning fireworks display, the traditional ritual of the Hindus during Deepavali celebrations under the garb of it creating pollution, to complete the circle.

Additionally, behind this is also the ideology of Communism (or rather the communist party leaders) that benefits when the country’s citizens (so-called oppressed class and so-called oppressor class) themselves are at war with each other.

Communists Naxals for this reason, alone keep opposing all established policies and democratically organized set-ups (Govt), country culture, its traditions and practices, etc., to keep the country and the people living there in continuous unrest and strife. The all-time communist ideology is always to grab power at any cost! Basic communist philosophy is to oppose, establishments in power in the garb of helping the poor and the downtrodden until they come to power, and then loot the country’s wealth filling up their own pockets with the legitimate wealth of others with impunity, without conscience.

Adherents of communism exist and thrive in every country all over the world. The so-called self-proclaimed liberals, influenced by communism normally present themselves as elite, urban educated, organized suave influencers in the world and always oppose Hindus, their festivals and the supporting nationalist forces to achieve their personal, political and ideological goals in line with their agendas.

<p>اخبارات دربارمیلے ماہ شوال سنہ ۱۰ ۲۲ مہینہ یوم اثلث بہ جمودۃ الملک فرمودند کہ بہ متصرفان صوبہ جہاد مالک محروسہ بہ نگار دکر انتہائی مانع نماید بہ خولاد خان نیز حکم شد کہ در شہر منادی بگزارند کہ کسی آنتہائی نماید -</p>	<p>Exhibit No. 32: Restriction on atishbazi. Akhbarat-i- Darbar-i- Mu'alla Julus 10, Shawwal 24 / April 9th 1667.</p> <p>“The Emperor ordered Jumdat-ul-Mulk to write to the Mutsaddis of all the subahs (provinces) of the empire that display of fire-works (atishbazi) is being forbidden. Also, Faulad Khan was ordered to arrange for announcement in the city by the beat of a drum that no one is to indulge in atishbazi”.</p> <p>Note: The Hindus celebrate Diwali to commemorate the return of Lord Ram to Ayodhya, after fourteen years of exile and victory over Ravana, by lighting lamps and bursting crackers etc. Some time before imposing the ban on atishbazi (fireworks) Aurangzeb had written (22 November 1665) to the Subahdar of Gujarat that “In the city and parganas of Ahmedabad (or Gujarat) the Hindus, following their superstitious customs, light lamps in the night on Diwali.... It is ordered that in bazars there should be no illumination on Diwali”. (Mirat, 276).</p>
---	--

The traditions associated with Deepavali, including the bursting of crackers has a deep significance and to brand it as environment unfriendly is biased. The vilification of Deepavali and Hindus who celebrate it, by basing it on environmental grounds is reckless and patently unfair. The Green Deepavali syndrome is to make Hindus weak by killing their local rituals and its associated vibrancy basically to make them become consumerist slaves. Getting rid of our ancient customs and traditions just because certain individuals, with vested interests say it is harmful for the environment, only results in diluting the knowledge acquired after some thousands of years of practical wisdom! **Think logically! Behave wisely!**