

Newsletter

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Nehru Centre



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Events At a Glance...

Culture Wing

Megh Malhar

(Celebrating the legacy of
Pt. Kumar Gandharva and
Pt. Ram Marathe)

A two-day festival of vocal
classical music based on Malhar
and other monsoon ragas.

Friday, 19th July 2024

**Shri Bhuvanesh Komkali
&
Pandita Kalapini Komkali**

Saturday, 20th July 2024

**Smt. Swarangi Marathe
&
Shri Bhagyesh Marathe**

Time: 7.00 pm

Venue: **Nehru Centre
Auditorium**

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for the year 2024-2025 (April to
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Constituent Assembly Debates Draft Constitution (contd.)

Dr. B. R. Ambedkar - Part II

"Here I could have ended. But my mind is so full of the future of our country that I feel I ought to take this occasion to give expression to some of my reflections thereon.

On the 26th of January 1950, India would be a democratic country. What would happen to her democratic constitution? Will she be able to maintain it?

If we wish to maintain democracy not merely in form, but also in fact, what must we do? The first thing in my judgement is to hold fast to constitutional methods of achieving our social and economic objectives. It means we must abandon the bloody methods of revolution. It means that we must abandon the method of civil disobedience, non-cooperation and satyagraha. When there was no way left for constitutional methods for achieving economic and social objectives, there was a great deal of justification for unconstitutional methods. But where constitutional methods are open, there can be no justification for these unconstitutional

methods. These methods are nothing but the grammar of anarchy and the sooner they are abandoned, the better for us.

The second thing we must do is to observe the caution which John Stuart Mill has given to all who are interested in the maintenance of democracy, namely, not 'to lay their liberties at the feet of even a great man, or to trust him with powers which enable him to subvert their institutions'. This caution is far more necessary in the case of India than in the case of any other country. For in India, *bhakti* or what may be called the path of devotion or hero-worship, plays a part in its politics unequalled in magnitude by the part it plays in the case of any other country in the world. *Bhakti* in religion may be a road to the salvation of the soul. But, in politics, *bhakti* or hero-worship is a sure road to degradation and to eventual dictatorship.

The third thing we must do is not to be content with mere political democracy. We must make our political democracy a social democracy as well. Political democracy cannot last unless there

lies at the base of it social democracy. What does social democracy mean? It means a way of life which recognises liberty, equality and fraternity as the principles of life. These principles of liberty, equality and fraternity are not to be treated as separate items in a trinity. They form a union of trinity in the sense that to divorce one from the other is to defeat the very purpose of democracy. Liberty cannot be divorced from equality, equality cannot be divorced from liberty. Nor can liberty and equality be divorced from fraternity. Without equality, liberty would produce the supremacy of the few over many. Equality without liberty would kill individual initiative. Without fraternity, liberty and equality could not become a natural course of things.

We must begin by acknowledging the fact that there is complete absence of two things in Indian society. One of these is equality. On the social plane, we have in India a society based on the principle of graded inequality in which there are some who have immense wealth as against many who live in abject poverty. On 26th of January 1950, we are going to enter into a life of contradictions. In politics, we will have equality and in social and economic life, we shall, by reason of our social and economic life have inequality. In politics, we will be recognizing the principle of 'one man, one vote' and 'one vote, one value'. In our social and economic life, we shall,

by reason of our social and economic structure, continue to deny the principle of 'one man, one value'. How long shall we continue to live this life of contradictions? How long shall we continue to deny equality in our social and economic life? If we continue to deny it for long, we will do so only by putting our political democracy in peril. We must remove this contradiction at the earliest possible moment or else those who suffer from inequality will blow up the structure of political democracy which this Assembly has so laboriously built up.

The second thing we are wanting is recognition of the principle of fraternity. What does fraternity mean? Fraternity means a sense of common brotherhood of all Indians. It is the principle which gives unity and solidarity to social life. It is a difficult thing to achieve.

These are my reflections about the tasks that lie ahead of us. They may not be very pleasant to some. But there can be no gainsaying that political power in this country has too long been the monopoly of a few and many are only beasts of burden. This monopoly has not merely deprived them of their chance of betterment, it has sapped them of what may be called the significance of life. These down-trodden classes are tired of being governed. They are impatient to govern themselves. This urge for self-realization in the down-trodden

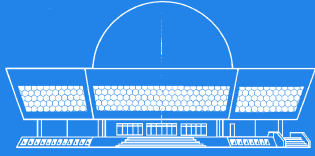
classes must not be allowed to devolve into a class struggle or class war. It would lead to a division of the House. That would, indeed, be a day of disaster. For, as has been well said by Abraham Lincoln, "A House divided against itself cannot stand very long". Therefore, the sooner room is made for the realisation of their aspiration, the better for the few, the better for the country, the better for the maintenance of its independence and the better for the continuance of its democratic structure. This can only be done by the establishment of equality and fraternity in all spheres of life. That is why I have laid so much stress on them.

I do not wish to weary the House any further. Independence is no doubt a matter of joy. But let us not forget that this Independence has thrown on us great responsibilities. By independence we have lost the excuse of blaming the British for anything going wrong. If hereafter things go wrong, we will have nobody to blame except ourselves. If we wish to preserve the Constitution in which we have sought to enshrine the principle of government of the people, for the people and by the people, let us resolve not to be tardy in the recognition of the evils that lie across our path, nor to be weak in our initiative to remove them. That is the only way to serve the country. I know of no better."

What Nehru said....

Dharma really means something more than religion. It is from a root word which means to hold together; it is the inmost constitution of a thing, the law of its inner being. It is an ethical concept which includes the moral code, righteousness, and the whole range of man's duties and responsibilities.

...from Chapter 3, *The Indus Valley Civilization, The Discovery of India*.



NEHRU PLANETARIUM

Tel: 022-40245413
Mobile : 9892890510

SKY SHOW : BIOGRAPHY OF THE UNIVERSE

12 noon (Hindi) 1:30 p.m. (Marathi)
3:00 p.m. (English) 4:30 p.m. (Hindi)

(MONDAY CLOSED)

Tickets will be available online and at the Booking Counter.
Visitors are expected to strictly follow Covid-19 norms.

Email: managernpmumbai@gmail.com

Varahamihira (505–587 AD)

Unlike other scholars of his time, Varahamihira's birth date is not known. In his work, *Brhaj-jataka*, he states that he was a native of Avanti¹ and resided in Kapitthaka, a village which was about 15 kilometers away from Ujjain. His father was Adityadasa, who taught him astronomy and astrology. He was also called Varaha (an avatar of Vishnu) or Mihira (or the Sun). Both father and son were sun worshippers.

The primary source of information about Varahamihira's work are the commentaries written by the 9th or 10th century astronomer and writer Utpala, also known as Bhattotpala or Bhatt-Utpala. He hailed from the Kashmir region of present-day India and is credited with several texts on astronomy and astrology. His works were studied by Arabs and Chinese scholars.

Pancha-siddhantika (five doctrines) was his magnum opus in which he summarised the contents of the treatises of the five contemporary schools of astronomy (*siddhantas*) prevalent in India then. He also added corrections or modifications to these works. Unfortunately, the *Pancha-siddhantika* of Varahamihira is lost and we know about it only from the writings of Utpala.

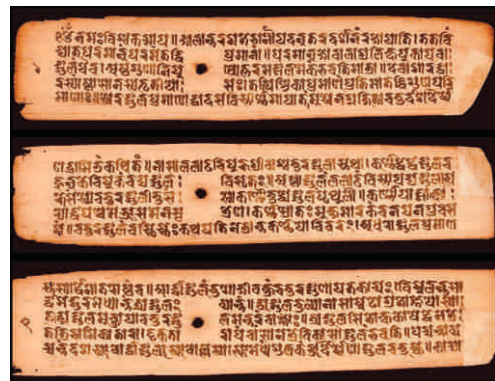
The first treatise that he summarised was *Surya Siddhanta*, by Aryabhata and his student Latadeva. In it, he described the rules for calculating the Sun's motion, the planets' positions, and the Moon's position relative to various *nakshatras*. He also calculated that the Earth's diameter was 12875 kilometres, about 1% larger than the diameter measured using modern techniques. Varahamihira calculated the Moon's diameter to be 2862 kilometres, about 11% larger than the value accepted today.

Next was *Romaka Siddhanta*, based on the astronomical learnings of the Byzantine period. In *Romaka Siddhanta*

(Doctrine of the Romans), Varahamihira dealt with Roman astronomy and improved upon it. He described *yuga, ahargana* (the number of days that have elapsed between two dates) and intercalation (or adding of the lunar months to highlight the elements of astronomy and the tropical year). Using the rules provided, calculations of the position of the Sun and the Moon were more accurate than those derived from using rules and methods given by Ptolemy.

In *Paulisa Siddhanta* the third of his *Pancha-siddhantika*, Varahamihira discusses Hellenistic² astronomy (323 BC to 30 BC).

The next two *Siddhantas*, which are *Vasishtha Siddhanta* and *Paitāmaha Siddhanta*, are commentaries on the works of sage Vasishtha and sage Pitāmaha.



Palm leaf manuscript of Brihat Samhita

His *Brhat Samhita*, in Sanskrit, is an extensive treatise on divination and contains valuable information about Indian geography and society. *Brhaj-jataka* and *Laghu-jataka* are his major and abridged works on genethiology, which are still referred to for natal horoscopy. He wrote *Brhad-yatra* and *Yoga-yatra*, which are larger and abridged treatises on military astrology.

According to Utpala, Varahamihira had an excellent knowledge of Greek astronomical works. He described that

the Greeks had good knowledge of science. He Sanskritized 35 Greek astronomical terms.

Brahmagupta (598 – 668 AD)

Brahmagupta was an Indian mathematician and astronomer. He was born in 598 AD in Bhillamala in Gurjaradesa (modern Bhinmal in Rajasthan) during the reign of the Chavda dynasty (690 to 942 AD) ruler Vyagrahamukha. Bhillamala was a major learning centre for mathematics and astronomy and Brahmagupta lived a major part of his life there. He was such a great teacher that he was known as *Bhillamalacharya*, the teacher from Bhillamala.



Brahmagupta calculating the eclipse

Brahmagupta studied the works of his predecessors, such as Aryabhata, Latadeva, and Varahamihira. He had studied the *Pancha-siddhantika*.

At the age of 30, he composed the *Brahmasphutasiddhanta*, or an improved treatise of Brahma. He incorporated great originality into his revision, adding considerable new material. The book consists of 24 chapters with 1008 verses in the Arya meter³.

The *Brahmasphutasiddhanta* primarily deals with astronomy. It also has chapters on mathematics, including algebra, geometry, trigonometry and algorithmics in which he deals with new insights on various topics, some of which are explained below.

He mentions and gives clear arguments to support his idea that the Sun is farther from the Earth than the Moon. He also says that the degree of the illuminated part of the Moon depends on the relative positions of the Sun and the Moon. This can be calculated by measuring the angle between the Sun and the Moon.

Brahmasphutasiddhanta is one of the first books to discuss the idea of positive and negative numbers and their mathematical properties. It also discusses zero. Here it is pertinent to explain positive and negative numbers.

A negative number is a number whose value is always less than zero. A negative number is represented by prefixing the minus (-) sign before it. The concept of negative numbers can be explained using what is called a number line. On this line (see below), positive numbers are to the left and negative numbers are to the right, with zero in the middle.

We encounter negative numbers in our daily lives. For example, sub-zero temperature is represented as a negative number. In accountancy, a deficit is shown by prefixing a negative sign before the value.



Brahmagupta explained the mathematical properties of addition, subtraction, multiplication and division of negative, positive and zero values. Brahmagupta was aware of the fractions of numbers, like $10/4 = 2.5$. His notations of fractions, though, differ from the modern number system.

He was the first to talk about *gurutvakarshanam* which meant that the force was the same everywhere on the Earth and all heavy things fell to the Earth. Centuries later, Sir Isaac Newton gave the mathematical formulation of gravity.

Towards the end of his life, Brahmagupta moved to Ujjaini. Here, at the age of 67 (in 665 AD), he wrote his other major work, *Khanda-khadyaka*, which literally means 'edible bite'. It is an astronomical treatise covering topics such as the longitudes of the planets, diurnal (daily) rotation, lunar and solar eclipses, the moon's crescent, its risings and settings and conjunctions of the planets.

REFERENCES

- 1 Avanti was one of the sixteen Mahajanapadas (or kingdoms), covering the region around Ujjain and parts of the Narmada River.
- 2 Hellenistic period was between the death of Alexander the Great in 323 BC and the death of Cleopatra VII in 30 BC.
- 3 A meter in poetry describes the rhythm. A verse in Arya meter is in four metrical lines called *padas*. Arya meter is a meter used in Sanskrit, Prakrit and Marathi verses.

Culture Wing



Celebrating the legacy of
Pt. Kumar Gandharva
& Pt. Ram Marathe



A two-day festival of vocal classical music
based on Malhar and other monsoon ragas

Friday, 19th July 2024

Shri Bhuvanesh Komkali, Dewas MP
Pandita Kalapini Komkali, Dewas, MP



Bhuvanesh Komkali

Grandson of Pandit Kumar Gandharva and son of Mukul Shivputra, Bhuvanesh's musical quest continues under the tutelage of Smt. Vasundhara Komkali and Shri Madhup Mudgal. He is currently engaged in enriching the archives of Pandit Kumar Gandharva's music using the latest in digital technology. Bhuvanesh has successful performances in music festivals worldwide.



Pandita Kalapini Komkali

She is the daughter and disciple of the legendary Pandit Kumar Gandharva and has also been trained by her illustrious mother, Smt. Vasundhara Komkali.

Her range of swaras has the ability to convey various bhavas (emotions). The improvisations made by her are generally rooted in the Gwalior gayaki but carry her distinct identity.

Saturday, 20th July 2024

Smt. Swarangi Marathe-Kale, Mumbai
Shri Bhagyesh Marathe, Mumbai



Swarangi Marathe-Kale

Swarangi Marathe-Kale, is a Hindustani classical singer, who acts in Marathi movies and serials. Her father Pandit Mukund Marathe is also a classical singer. She is the grand daughter of the renowned Indian classical vocalist Sangeet Bhushan Pandit Ram Marathe.



Bhagyesh Marathe

Bhagyesh Marathe, born in a musical family is the grandson of the legendary Indian classical vocalist Sangeet Bhushan Pandit Ram Marathe. He has performed in various youth festivals and sangeet mahotsavas in India.

Bhagyesh has won many awards and competitions.



This two-day festival
will be compered by
Smt. Mangala Khadiilkar

19th - 20th July 2024

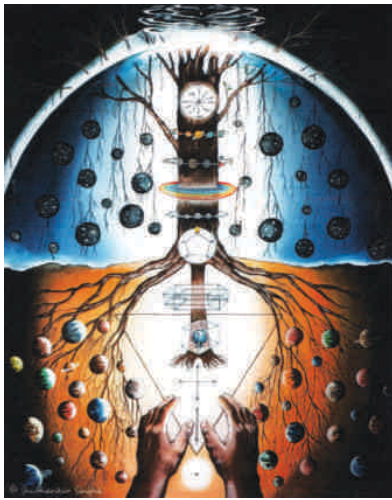
7.00 p.m.

Nehru Centre Auditorium

Entry: Entrance Cards will be available on 15th July 2024 from 10.30 a.m. until availability from the ticket counter of the Nehru Centre Auditorium.

Both galleries will be closed for maintenance from 2nd July to 22nd July 2024

SHUBHANKAR SINGHA
ABHIK SARKAR
PRATICK MALLICK
NIRANJAN GOHANE
KAMALIKA BISWAS



Shubhankar Singha



Pratick Mallick

An exhibition of Visual Arts "Hues of Hope" will be showcased by five young and talented artists.

Tuesday 23rd July 2024
to Monday 29th July 2024
(AC Gallery)

NEHRU CENTRE
COLLECTION OF STUDY
CAMPS



Amit Dhane



Dinesh Dhurandhar



Vaibhav Jagtap

Collection of students' art works from various Study Camps organized by the Art Gallery will be on display.

Tuesday 23rd July 2024
to Monday 29th July 2024
(Circular Gallery)

BHAVYA RAMAKRISHNAN



Bhavya works as an archivist at the Tata Institute of Fundamental Research. Her art works are in acrylic and water colours on handmade recycled paper.

Tuesday 30th July 2024
to Monday 5th August 2024
(AC Gallery)

DEPARTMENT OF PALI,
UNIVERSITY OF MUMBAI



Pradnya Ganar

Subhash Shegokar

The artist students of the Department of Pali, University of Mumbai will showcase works based on ancient Buddhist Art in this show.

Tuesday 30th July 2024
to Monday 5th August 2024
(Circular Gallery)

RAMSAR WETLAND SITES IN INDIA

17. Odisha (Part 2)

Hirakud Reservoir

Hirakud Reservoir is one of the largest man-made reservoirs in India and is built across the Mahanadi River with a total length of almost 26 kilometres. The reservoir helps regulate the water level of the river and moderates the impact of floods in the Mahanadi Delta. It is the longest soil-filled reservoir in the world. The Hirakud Reservoir, is also one of the first major multipurpose river valley projects started after India's independence.

It provides habitat for over 130 bird and 54 fish species, out of which one is classified as endangered and six others are near-threatened. 21 fish species are economically important to the region as they provide a total yield of 480 tonnes per year, supporting the livelihoods of over 7,000 fishermen.

Hirakud Reservoir was declared a Ramsar site on 12th October 2021.

Satkosia Gorge

Satkosia Gorge is a gorge in eastern Odisha carved by the Mahanadi River. The gorge is located within the Satkosia Tiger Reserve which is a United Nations Protected Area. It extends for a length of 22 km from Sunakhania village in Boudh to Badmul village downstream. It is a patchwork of wetland habitats with rivers and tropical evergreen forests at the meeting point of the Deccan Peninsula and the Eastern Ghats.

These wetland habitats support a variety of plant and animal communities. Notable plant species include dhaura, simal, Indian thorny bamboo and Calcutta bamboo while animal species include red-crowned roofed turtle, Indian narrow-headed softshell turtle, tiger and black-bellied tern. The Satkosia Gorge is known for providing a variety of ecosystem services like fishing, recharging of groundwater, climate regulation and safety from floods. It also provides recreational and tourism opportunities and supports spiritual and cultural practices.

It was designated as a Ramsar site on 12th October 2021.

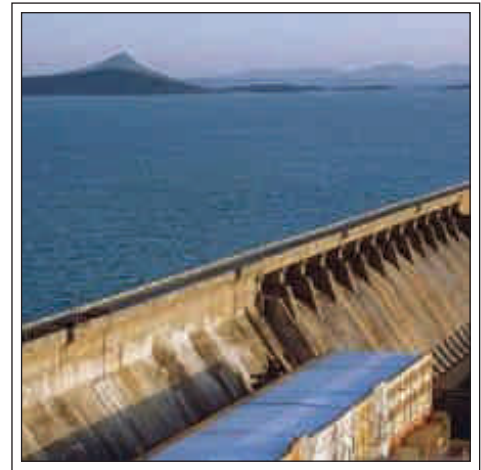
Tampara Lake

Tampara Lake is a freshwater wetland situated on the right bank of the Rushikulya River along the east coast of Odisha. The flood waters from the river enriches its biodiversity, and helps in supporting 60 bird and 46 fish species. The wetland is an important source of livelihood for the local population and also provides water for agriculture and domestic use as well as for providing passage for local transportation of goods. Chatrapur town also uses water from this lake for drinking purposes. In recent times, this lake has gained popularity in water sports and for the Indian Army's water activities training centre.

It was declared as a Ramsar site on 13th August 2022.

Further Reading at Nehru Centre Library:

- The beautiful India: Orissa by S.A. Rahman, Reference Press, 2006, Call no. 915.413/Rah, Barcode: 13328



Hirakud Reservoir



Satkosia Gorge



Tampara Lake

NEHRU CENTRE PUBLICATIONS

Books for Sale

Nehru Revisited
India's Defence Preparedness
Nehru and Indian Constitutionalism
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in South Asia
मुंबई: काल आणि आज
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Challenges to Democracy in India
Rule of Law in a Free Society
Science in India
Exploring The Universe

Colourful art catalogues for sale

- (1) GOPALRAO DEUSKAR (1995)
 - (2) VINAYAKRAO KARMARKAR (1996)
 - (3) MITTER BEDI (1997)
 - (4) S. L. & G. S. HALDANKAR (1998)
 - (5) BALAJI & HARISH TALIM (1999)
 - (6) D. G. KULKARNI (DIZI) (2001)
 - (7) NARAYAN L. SONAFADEKAR (2003)
 - (8) NAGESH B. SABANAVAR (2004)
 - (9) SAMAKALEEN (2005)
 - (10) VINAYAK S. MASOJI (2006)
- and many more...

ART FUSION catalogues

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New Arrivals: Books

Sr. No.	Title	Author/s
1.	Fraternity: Constitutional norm and human need	Rajmohan Gandhi
2.	Jagdish Chandra Bose: The reluctant physicist	Sudipto Das
3.	Just a mercenary? Notes from my life and career	Duvvuri Subbarao
4.	Once upon a city: Making the little stories of Mumbai matter	Meher Marfatia
5.	The making of a metropolis: The story of Bombay	Mohanlal Gandhi
6.	Mohandas Karamchand Gandhi: I am an ordinary man: India's struggle for freedom (1914-1948)	Gopalkrishna Gandhi
7.	The final farewell: Understanding the last rites and rituals of India's major faiths	Minakshi Gokhale
8.	Crosswinds: Nehru, Zhou and the Anglo-American competition over China	Vijay Gokhale
9.	The Rajiv I knew: And why he was India's most misunderstood Prime Minister	Mani Shankar Aiyar
10.	The Sherpa trail: Stories from Darjeeling and beyond	Nandini Purandare and Deepa Balsavar

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