



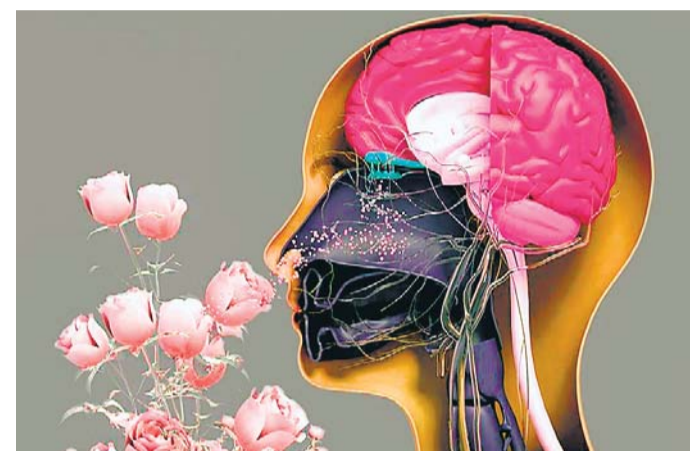
World Tourism Day

Travel has been said to broaden the mind, exploring the world and seeing the broad vistas and cultures that the people of the world offer. Tourism can describe travel for pleasure, both foreign and domestic, and has been happening as long as mankind. *World Tourism Day* is your opportunity to broad your own world a little, find a location you've always wanted to make time to visit, and finally, get around to making time to do it. So, find your inner traveller and get out there, and experience the places you've always wanted to see.

#COVID-19

Brain changes in people who lost sense of smell

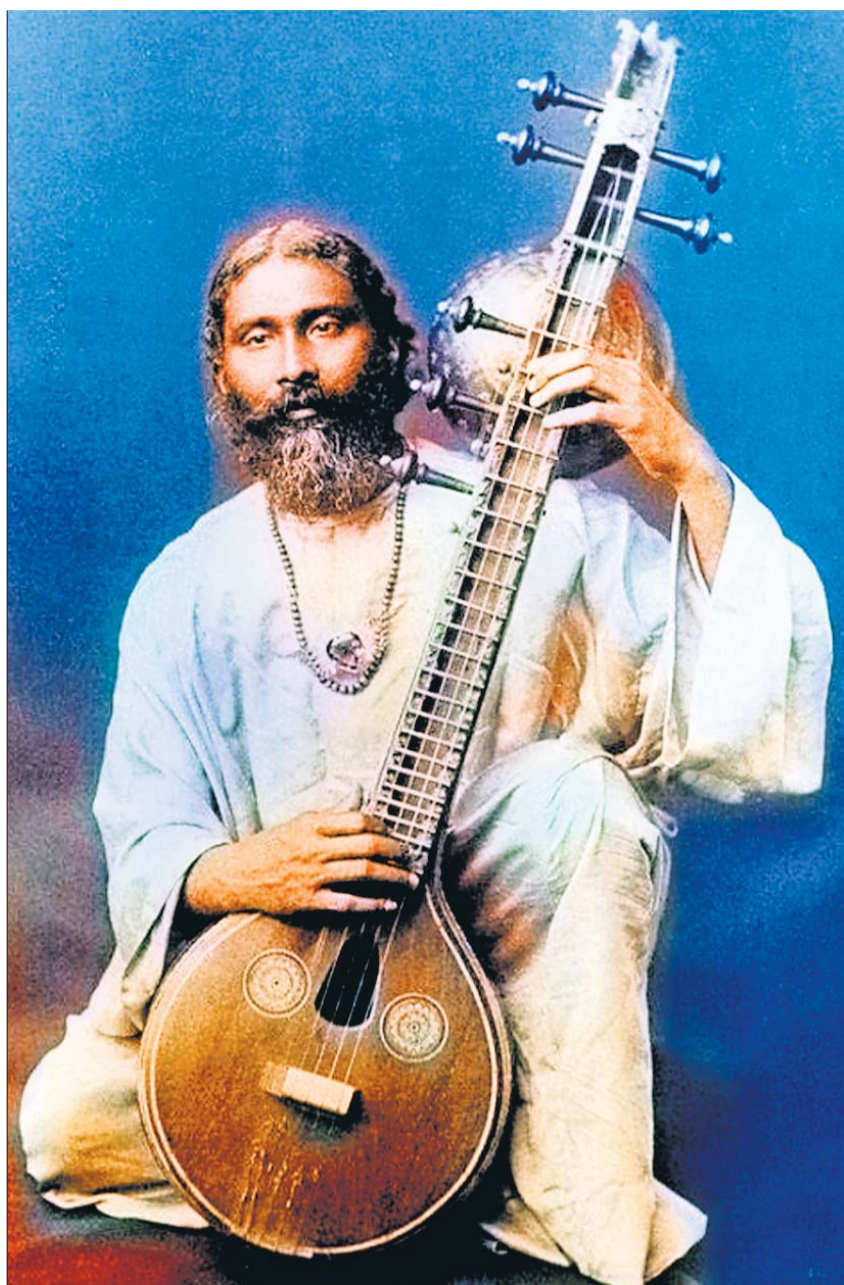
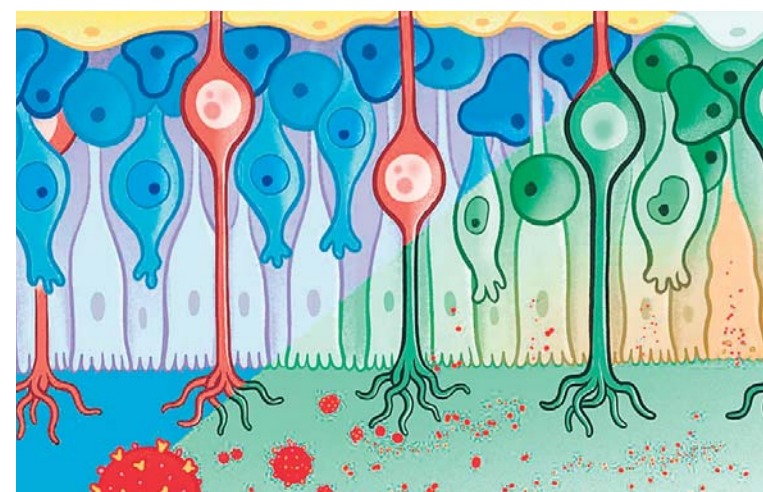
Covid-19's direct impact on the olfactory system often leads to a more pronounced, and sometimes, longer-lasting loss of smell.



The symptoms of Long Covid, which has a lasting effect, continue to emerge. Now, a new study has shed light on apparent brain changes or neurological consequences of COVID-19, especially in those who lost their sense of smell, post-diagnosis. Published in *Scientific Reports*, the study found that those with anosmia (the loss of smell) during Covid-19 showed alterations in 'brain functional and even physical structure during recovery'. According to reports, this study is among the first to link Covid-19 related loss of smell to significant brain changes.

The August 2024 study studied this subject, given the early reports of neurological symptoms in patients affected by Covid-19. "We wanted to contribute from our unique perspective to understanding the potential damage caused by SARS-CoV-2 infection in the central nervous system. This led us to initiate this study in which we evaluated recovered Covid-19 patients using structural and functional magnetic resonance imaging. At the same time, they performed decision-making and cognitive control tasks, as well as tracking their evolution with electroencephalography," the authors noted.

"Loss of smell in Covid-19 occurs due to the virus' impact on the olfactory system in the nasal passages," said Dr. Ravi Shekhar Jha, Pulmonologist, Director, Pulmonology, MD, MRCP, Fortis Hospital, Faridabad. "Specifically, the SARS-CoV-2 virus targets cells in the upper part of the nasal cavity, where the olfactory neurons are located. These neurons are responsible for detecting smells and sending signals to the brain," explained Dr. Jha. According to him, the virus infects supporting cells around the olfactory neurons, causing inflammation and disruption of normal function. "This inflammation can lead to a blockage of the nasal passages or direct damage to the cells that help detect smells, resulting in temporary or prolonged loss of smell," said Dr. Jha. Unlike other respiratory infections, where congestion may block the sense of smell, Covid-19's direct impact on the olfactory system often leads to a more pronounced, and sometimes, longer-lasting



The Sufi Hazrat Inayat Khan

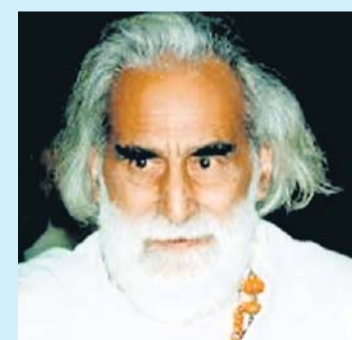
PART:2

Inayat Khan's grandfather, Maula Baksh Sholay Khan was a renowned *Hindustani* musician and Sufi. For sometime, he was a musician in the court of Maharajah Ram Singh II of Jaipur. In his childhood, he had come under the influence of a *Brahmin* in Kerala, who introduced him to Hindu philosophy and teachings, which he incorporated into his own Sufi beliefs.

#RARE PEOPLE

Vilayat Inayat Khan, 1916-2004

Soon and spiritual heir of Inayat Khan, continuing his father's legacy became a teacher of meditation and the traditions of the Chishtiya Sufi order. His teachings were derived from the tradition of his father and incorporated elements of Buddhism, Yoga and the Upanishads. He is the founder of the Sufi Order of the West, now named the *Inayati Order*, and is tailored to the needs of Western seekers. Prior to his teaching career, he worked in London



Vilayat Inayat Khan.

as an assistant to Ghulam Mohammed, the Pakistani Finance Minister and Prime Minister, Liaquat Ali Khan. In 1975, he founded the *Abode of the Message*, which serves as the residential community of the Sufi Order International. He died in 2004 at the Sufi centre in Suresnes, France. On his death, the Dalai Lama wrote, "I have much admiration for him. His passing away is a loss to all believers and promoters of spirituality."

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Inayat Khan was born in Baroda, where his father was a court musician and he, too, served in the Baroda Court. Later, he was to migrate to Mysore and some other princely courts. On the advice of his *music guru*, Inayat Khan travelled to the West in 1910, taking his Sufi and music teachings. His Master said to him, "Go to the Western World, my son, and unite East with West through the magic of your music." Obeying his master's command, Inayat set up the first Sufi centers in the US and Europe. One of his first stops was Moscow, where he composed and choreographed a ballet, *Shankuntala*, based on Kalidasa's play. But why *Shankuntala*? I leave it to one of the greatest founding fathers of the *Age of Enlightenment* in Europe to

remind ourselves and the world that both, the Wahabis and the Iranian Ayatollahs, have deep rooted connections with India. The founder of the Wahabis was close to Ibn Saud, who, with his help, was able to dominate most of the Arabian peninsula. The Turks, fearful of resurgence of Arab nationalism, used their proxies, the Egyptians, to invade Arabia and many of the Wahabis were forced to flee to India, where they set up seminaries in Deoband and Bareilly.

A descendent of one of them, Shah Abdul Ghann, returned to Arabia, when the Ottoman hold on Arabia weakened and restarted the seminaries that had been shut down by the Turks. The *Saudis* acknowledge this and have helped to set up and patronise thousands of seminaries all over the world as affiliates of the Deoband Seminary. There are 600 Deobandi Seminaries in Britain alone. Another interesting and not often acknowledged fact is that most of the senior leaders of the *Taliban* are students of Deoband.

As for the Ayatollahs, the founder of the present dispensation in Iran is Ruhollah Khomeini, whose grandfather,

Syed Ahmad Masavi, had migrated from Kintoor in Barabanki district of UP. In Iran, he was known as Ahmad Hindi. In Iran, he settled in a town named Khomaya, hence the name Khomeini. Inayat Khan's grand-



A still from the Ballet, *Shankuntala*, performed at the Bolshoi Theatre.

answer this. Goethe, after studying the play, said, "If Heaven and Earth and everything else were to go by one name, I would name thee 'Shankuntala.'" Goethe understood that Shankuntala was the greatest literary and philosophical work of mankind and its message is as relevant today, as it was two thousand years ago, when it was first written by Kalidas.

In his lectures, he strongly emphasised the fundamental oneness of all religions. He was deeply concerned that many of the western religious traditions had lost knowledge of the 'science of the soul' and the prayer and meditation techniques necessary to develop higher consciousness in mankind. He drew inspiration from an earlier Sufi exponent from Andalusia in Spain, Ibn Arabi, and said, "Beware of confining yourself to a particular belief and denying yourself and denying all else. Be in yourself for all forms of belief, for God is too vast to be restricted to one belief or another."

These and other words of his echo the teachings of another Holy Master, Abdul Baha, the head of the Bahais. We do not know if he ever met Abdul Baha but we do know that he was travelling in the West at the same time as Abdul Baha was, and would definitely have come into contact with other Bahais, and in all, probably discussed matters concerning spirituality with them. Like the *Bahai House of Justice*, Inayat Khan set up centres of Universal Worship to show the people of different cultures the many common elements that they share in their religious traditions, and to create a sense of unity among them to read each other's scriptures and pray each other's prayers.

Putting all the evidence together, I am fully convinced that Inayat Khan was inspired by the teachings of Bahauallah and Abdul Baha, which he incorporated into his version of the Sufi tradition.

In 1914, Inayat Khan met Mahatma Gandhi and had long discussions with him. Finding the Mahatma's views to be in consonance with his own beliefs, he became an ardent admirer of Gandhi, which were transmitted to his own children.

Though Inayat Khan spent much time teaching his version of Sufism, he continued to give concerts, some of which were recorded and are still available. In many of his compositions, which are in Marwari, Gujarati and Braj Bhasa, he has incorporated *bhajans* of Meera Bai and other Hindu saints. He authored several books, including *Musical and Spiritual*. His music is available on YouTube.

Although he travelled, India remained his permanent home. He died in 1927, and was buried in a quiet corner of bustling Old Delhi. Musical sessions are held at his graveside, every Friday.

rajeshsharma1049@gmail.com

#CLIMATE MODELS

A record of the Earth's Temperature

A strong link between carbon dioxide and global temperatures.



Global temperature records go back less than two centuries. But that doesn't mean we have no idea what the world was doing before we started building thermometers. There are various things, tree rings, isotope ratios, and more, that registered temperatures in the past. Using these temperature proxies, we've managed to reconstruct thousands of years of our planet's climate.

But going back further is difficult. Fewer proxies get preserved over longer times, and samples get rarer. By the time we go back past a million years, it's difficult to find enough proxies from around the globe and the same time period to reconstruct a global temperature. There are a few exceptions, like the Paleocene-Eocene Thermal Maximum (PETM), a burst of sudden warming about 55 million years ago, but few events that old are nearly as well understood.

Now, researchers have used a combination of proxy records and climate models to reconstruct the Earth's climate for the last half-billion years, providing a global record of temperatures, stretching all the way back to near the Cambrian explosion of complex life. The record shows that, with one apparent exception, carbon dioxide and global temperatures have been tightly linked, which is somewhat surprising, given the other changes that the Earth has experienced over this time.

Past Climates

The work done here by an international team involves a combination of proxy data and climate models. While there are a number of land-based proxies, they tend to come with very large uncertainties. So, the researchers focused on a single type of proxy, the ratio of oxygen isotopes found in the shells of sea organisms. There are some questions regarding the accuracy of these, as using them requires that the ratio of these isotopes in

the oceans has remained constant over time. To compensate for that, the researchers used two methods of converting these proxies into temperatures. One method assumed that oxygen isotope ratios in seawater have remained constant, the second method used a slow, constant change over the time period covered.

Climate models provide a way of converting these proxies, which typically come from a single geographic location, to a global temperature. By using details like the continental configuration and carbon dioxide levels, the models can estimate which reasonable global temperatures are consistent with the proxy data, meaning a specific temperature at a specific location on the globe. The researchers used an ensemble of climate models so that the results weren't dependent on any particular implementation of atmospheric physics.

The results, which the researchers call *PhanDA*, estimate global temperatures over the last 485 million years, going back to the end of the Cambrian, the period that saw the diversification of the major groups of present-day animal life.

So, what does *PhanDA* look like? One key feature is that it overlaps with the Cenozoic, which started with the mass extinction that ended all non-avian dinosaur lineages. We've got a better history of the

Cenozoic climates, so, these provide an important test of whether *PhanDA*'s temperatures match those obtained independently. The consistency between them is an important validation of the new work.

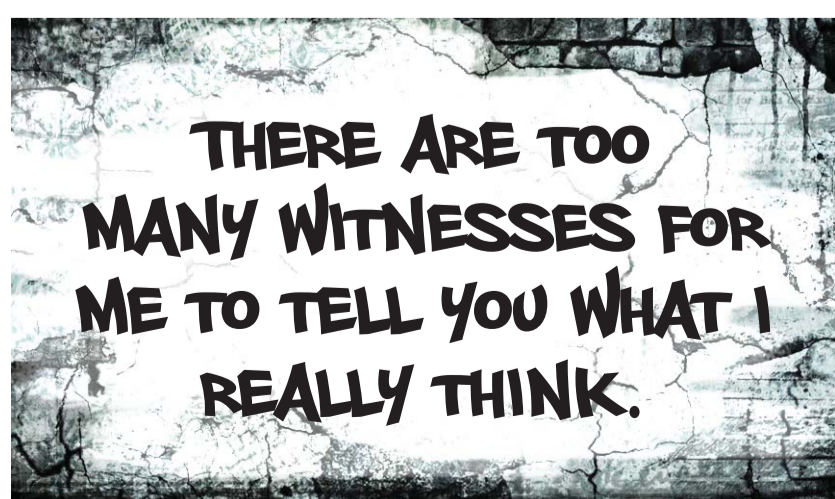
Overall, the researchers find that the global mean temperature has likely varied from a low of about 11° C, seen in the recent glacial periods, up to a high of 36° C, seen about 90 million years ago, though, similar extremes were seen during the PETM. Other major climate events, such as the warming produced in the wake of the eruptions that formed the Siberian Traps, showed up in the record. There are both long periods of warming trends (such as one that covered most of the Mesozoic) alternating with cooling (which has dominated the present Cenozoic). The researchers suggest that these are driven by the assembly and breakup of supercontinents.

More of this period was spent in warm greenhouse climates (41 per cent of the period) than in icehouse climates (31 per cent). The researchers found that most of the difference between these climates occur in the polar regions. Changes do occur in the tropics, but they're considerably smaller in magnitude. So, during an icehouse period, the difference between equatorial regions and high latitudes is on the order of 30° to 50° C. By contrast, during hothouse periods, the equator-to-pole difference tended to be on the order of 15° to 25° C.

Heating the globe

One thing that is clear from comparing this record with carbon dioxide is that there's a close correlation between the two. There are some exceptions, but the two tend to move in parallel throughout this entire period. The big exception is in the Cretaceous (a period dominated by dinosaurs), which saw a hothouse climate develop, while carbon dioxide levels appeared to remain flat. We've known about this discrepancy for a while but don't have a good explanation for it. The new research doesn't really change that situation.

THE WALL

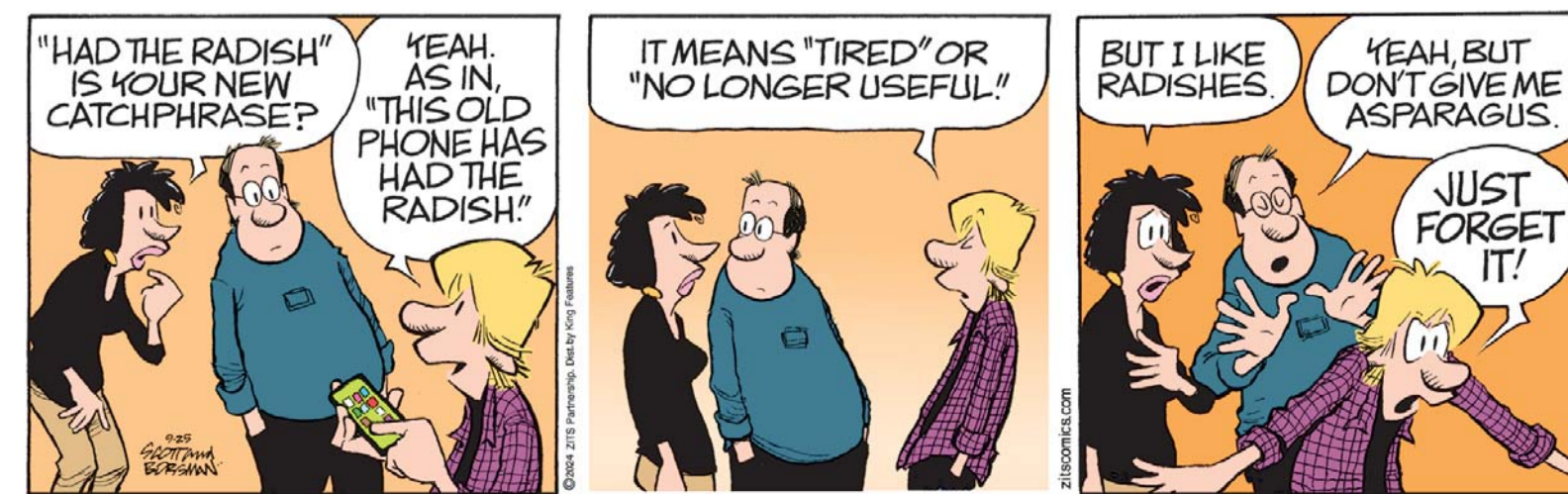


BABY BLUES



By Rick Kirkman & Jerry Scott

ZITS



By Jerry Scott & Jim Borgman