

## #MUSICAL

### Universal Language

Intro: It is an art of sound compiled and expressed following particular emotions and ideas in a significant form.



Music is considered a language people around the world connect universally. We find music as the best friend in happiness and sorrow. Music makes us feel special and gives us enthusiasm. It also makes us relate to the situations of life. For all the music lovers out there, here is a list of fascinating facts about music that will spellbind you.

We all sway to music that touches our hearts. Finding someone with the same taste is enthralling. Discussing topics related to music for hours is something we cherish. It has the potential to reunite the world and forget all boundaries. These facts will prove that music has the power of healing and drawing people closer.

#### What is Music?

It is an art of sound compiled and expressed following particular emotions and ideas in a significant form. It has melody, harmony, rhythm and tones that make us feel the song or instrumental played live or using a device.

#### Interesting Facts About Music

**Concentrate and Work Better**  
Whether you are a student or a professional, you will find music to be the best companion that makes you work better. Music can relax your mind and offer you a perfect channel to focus on a topic. You will also feel detached from the world and float in a world of your own where you feel comfortable.

It has been found that music also makes you work harder without even noticing. You will also not feel time passing by when your favourite music is being played. For instance, weightlifters and bodybuilders find their genres of music more motivating. They show more endurance, productivity, power, and strength.

**Keep Your Heartbeat Healthy**  
Researchers have found that listening to music of any kind can deliver excellent benefits to your cardiovascular health. The beats enable you to breathe better in rhythm with your heartbeats. For instance, when you listen to music while walking, your pace and rhythm of footsteps match with the music. This is why joggers like to listen to music to automatically focus on their heartbeats and keep them healthy.

**Music Changes Your Perception**  
This is one of the fascinating psychological facts about music that relates to the way you

feel the world around you. Have you ever felt that the meaning of a song differs with your age and state of mind? The lyrics and rhythm of music hit hard and deep when friend in happiness and sorrow. Happy songs make you happier and sad songs help you correlate with the hard truths of life. Your perception of life literally transforms.

**Music Can Give You a Frisson**  
A frisson is a strong emotional feeling that music lovers often feel when they listen to their favourite songs and instruments. You will feel goosebumps, a hair-raising effect when a certain part of a song plays. One of the scientific facts about a frisson suggests that music has the power of giving pleasure similar to eating good food or enjoying quality time with your close ones.

**Good for Your Plants Too**  
It has been proved by researchers that music can make plants grow faster and healthier. Research done by the National Institute of Agricultural Biotechnology, South Korea, suggests how plants can respond to good music and how it influences their growth. If you are a plant person and love listening to music, share it with your plants in the house.

**Power to Recall Memories**  
A research journal published in Neuropsychological Rehabilitation depicts the effect of music. It can help patients with brain injury recall certain memories which are not possible to recollect conventionally.

**Singing Dissolves Stress Excellently**  
Singing can significantly reduce stress. It is also a psychological impact of listening to music and singing. When you sing or listen to your favourite music, your endocrine system releases stress-busting hormones. We feel relaxed after a day of hard work when we listen to music.

**Music inside the Womb**  
One of the music fun facts is that babies can listen to music inside their wombs. They register the type of music and respond accordingly. They move their mouths, hands, and legs to respond when known music is played.

Music helps us to focus and do more work without feeling exhausted. It enables us to concentrate and do our work better. Music escalates our efficiency and accuracy. It also elevates mood and practically keeps our physiological functions in good condition.

**THE SECRET TO A LONG MARRIAGE IS TO STAY GONE.**  
-DOLLY PARTON

**BABY BLUES**  
By Rick Kirkman & Jerry Scott

**ZITS**  
By Jerry Scott & Jim Borgman

**Card Playing Day**  
The holiday season has come and gone, and the end of the year is in sight. You know what you need to do now? That's right, you need to sit back and play out a few rounds of solitaire, or maybe get the family together for a night of Texas Hold'em, Slap Jack, or War. Whatever your pleasure, Card Playing Day is a chance to wind down from all the kerfuffle of the season by engaging in a card game or three.

**#TREATMENT**  
**Dark Therapy**  
Amblyopia is a condition where the brain can't recognize sight from one eye and favours the other eye.

A new pilot study in mice investigates the mechanisms that underlie a treatment for patients with amblyopia, also known as "lazy eye."

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The researchers found evidence that a week after transient dark exposure, the brain's neural networks adjust the way they process visual information thereby improving vision.

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Brian Jeon, a postdoctoral fellow and graduate of Carnegie Mellon's biological sciences department,

conceived the study as a PhD student working in Kuhlman's lab. "Transient dark exposure is a treatment that people are exploring in humans," Jeon says. "We said, 'hey, maybe this has to do with how the brain encodes information, and maybe that gets disrupted when you remove inputs for an extended period of time.' We found there is some room for change, but actually, the system is very resilient."

For the study the researchers used two-photon calcium imaging to record neural activity in adult mice before and after transient dark exposure. This technique allows scientists to measure entire networks of neurons in living models.

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Brian's data helps shed light on the various, complex factors that drive plasticity in the visual cortex, and bring us one step closer to understanding how eye injury and disease might affect visual perception.

Along with clothes Father also decreed that we bring out the cricket bats and the tennis racquet as well. For making them suitable for play. Father had two prized possessions. I will call them NON STATE ACTORS. The first one was the Non Jar cricket bat and other one was the Slazenger tennis racquet. They were his prized possessions preserved with love and care reserved for humans.

## Winter & Non State Actors



### #SEASONS

They were to be spread on cots which were to be placed strategically in the backyard to catch the Sunshine all day till the Sun went down.

The cots here refer to cots made either from 'baan' or white 'newwad'.

You can still come across these cots neatly laid outside the 'chai dhabas' in north India.

The truck wallas use them for eating food as well as for taking naps.

But in 60s these were household items meant for summer sleeping arrangements under the sky.

In the evening the clothes were pulled into the patio to save them from getting dew wet.

The exercise was repeated for next several days till the odious smell of naphthalene balls went away.

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To make the cricket bats ready for use small holes were made by a needle in the cricket bats and then Singer general purpose was oil pushed into these tiny holes.

Then the bats were allowed to stand under the Sun rays for several days.

This made the cricket bats 'play

ready' for the upcoming cricket season.

Today the cricket bats come in ready to play like 'show room to the cricket pitch' format.

In those times, day cricket was largely played from October to April season.

Summer season was a big no no for cricket.

Now a-days cricket is played round the year

Some big change indeed! Back to Non-Jar.

Non Jar was a finely chiselled bat made out of fine wood without any knots.

It was well balanced and felt light in hands of the batsman.

It gave a 'thump' sound if the delivery was played with authority from the middle of the bat. The thump could be heard wide and far.

Of course Father had stopped playing cricket and tennis long ago.

Only Bhai Saheb and I were using the Non Jar. As Bhai Sahib was largely a spin bowler and batted lower down the order he never took the bat with him to the grounds.

But I did as I considered myself in the all-rounder mode but rarely stayed at the crease for long periods of time.

My son Gaurav also played with that Non Jar and enjoyed making some healthy runs.

By the way Gaurav was a far superior batter I ever was.

By the time I broke the bat into two playing an extravagant cross batted shot, Father was past caring.

But I can't put that bat out of my mind.

I treat Non Jar as a human and integral part of my life.

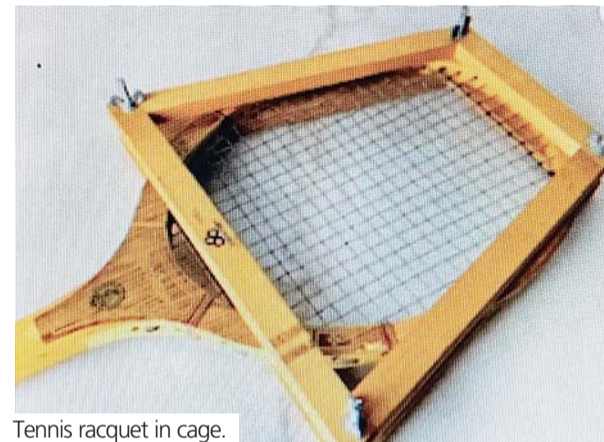
I miss it too.

Often, And tennis racquets also had to be uncaged from their wooden grips and exposed to sunlight to become straight and usable.

It was the same for the Slazenger. The guts were set in a finely carved



Tennis racket in olden days.



Tennis racket in cage.

wood to push the tennis ball across the Net with ease.

Those days the racket had to be re-gutted every year or so.

And we always went to the Hussein family who were experts at this job but lived 10 kms away at Nahri Ka Naka just below the Nahargarh fort hills.

They used the original animal guts which gave the strings just the kind of extra strength and lasted longer.

I enjoyed my tennis years with the Slazenger and never shared the racket with anyone.

I finally broke the Slazenger into two when I hit it hard on the cement courts having missed a simple volley. Simple Volley but a huge error as far as I was concerned.

Father again just accepted the inevitable without a murmur.

For many years the family followed this tradition. Once the siblings left home for employment the pattern changed. Also the home conditions changed.

How?

Entry of daughters - in - laws and grandchildren changed the family

**M** They simply 'order' the landlords to keep the buildings heated at 68 degrees during the day if the temperature falls below 55 degrees Fahrenheit, which it often does and 62 at night regardless of the temperature. New Yorkers also call it the start of the Cosying up season: outcome the second quilts, thicker socks, darkness by dinnertime and inevitably hunkering down in bed early and read and mate.

It's also about fun in the snow and snacking on Hot Dogs.

It's about Beer in the afternoons and Black dog with yummy Shamis in the evening.

And it's about Bonfire and Barbecue on the Charcoal.

Its fun time frolic time, with gaiety thrown in for good measure.

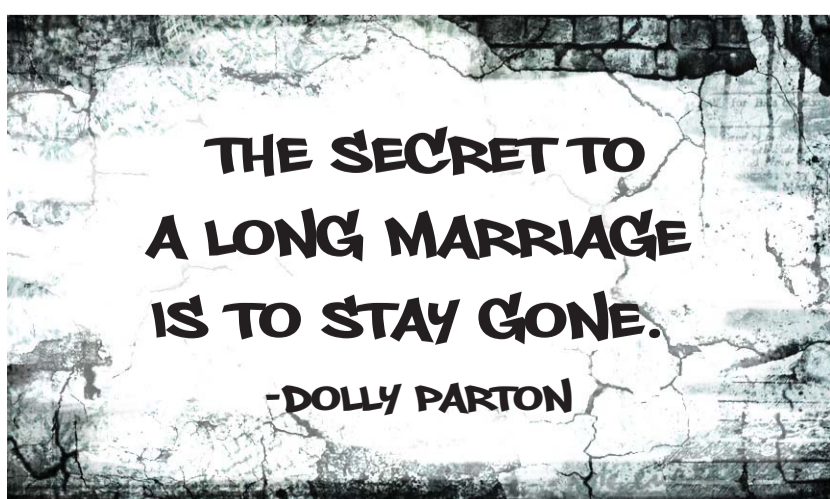
It's also about singing Christmas Carols and ringing in the New Year! So here's wishing my readers and everyone else A Merry Christmas and a Happy New Year 23.

Ciao. | | | | |  
writetoarbit@rashtradoot.com



Merry Christmas

## THE WALL



## BABY BLUES



By Rick Kirkman & Jerry Scott

## #TREATMENT

### Dark Therapy

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**The Matter with Antimatter**

While the data proving both the existence of the Big Bang and antimatter are simply overwhelming, there is a problem. When one combines these two facts, a puzzling mystery arises:

The energy released when the matter and antimatter annihilated is everywhere. We see it as a bath of radio waves, called the cosmic microwave background radiation (CMB). It's by measuring the CMB and counting the protons in the Universe that the matter-to-antimatter ratio was determined.

**An Asymmetry Mystery**

How is it possible that there could be a tiny imbalance in the matter and antimatter of the early Universe? We don't know, but scientists have some ideas.

For instance, in the 1960s, scientists discovered that the Universe slightly favors certain subatomic matter particles over their antimatter equivalents. These particles are called quarks. However, the disparity between quark and antimatter quarks isn't enough to explain the Universe, so researchers have another idea.

Neutrinos are very low mass particles that are produced in some forms of radioactive decay, and the biggest nearby producer of neutrinos is our own Sun. Researchers are building particle accelerators and detectors to study the behaviour of neutrinos and antimatter neutrinos to see if they are different. If neutrinos and antimatter neutrinos act differently, it could be the answer to the mystery - which might mean that our Universe formed via leptogenesis ("creation from low-mass particles").

So, where is all the antimatter? If we are not saved by the possibility that matter and antimatter galaxies exist, where are we? We are left with the very strange possibility that somehow, when the Universe began, there was more matter than antimatter. And, indeed, this appears to be the case.

Exploration of other planetary objects results in the same conclusion for our cosmic neighbourhood: The solar system is made of matter. But what about other stars? We can be certain that other stars in the Milky Way galaxy are also made of matter.

Stars like our Sun are constantly emitting particles, what is called in our planetary system "the solar wind." Basically, it consists of atoms from the Sun that

fly out into interstellar space. If there existed antimatter stars, they would shoot out antimatter atoms, and matter and antimatter atoms would intermingle in the depths between the stars. Occasionally, matter and antimatter atoms would touch and annihilate. When that happened, the result would be a very specific form of gamma radiation (which are like very energetic X-rays).

Because no such gamma radiation has been detected, we are certain that other stars are also made of matter. And the same

evidence indicates that very early in the history of the Universe, less than a second after it began, for every two billion antimatter particles, there were two billion and one matter particles. The two billion matter and antimatter particles annihilated each other, leaving the one matter particle to join up with all the other leftover matter particles to make up the matter we now see around us.

Why is half the Universe missing?

Scientists know an astonishing number of exotic things. For instance, we know that the Universe began nearly 14 billion years ago in a cataclysmic event called the Big Bang. The first experimental evidence that the Big Bang happened was reported in 1929, and the case has only strengthened in the last century. There is no credible doubt that it happened.

We also know that, in addition to the ordinary form of matter that makes up you and me, there exists an exotic form, called antimatter.

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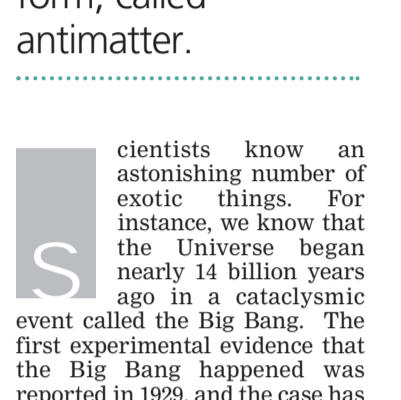
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## #SCIENCE

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