

the RUIAITE monthly

MOVING BEYOND PAPERS



EDITORIAL

Dear readers,
New Year greetings from Team RUIAITE! Looking back, 2018 offered all of us many exciting, new things, as well as some surprises- both good and bad. However, looking at the brighter side, the good moments should be appreciated and the bad ones, taken as nothing but experiences which taught us something or the other. Taking the golden opportunity that 2019 has offered us, which is to present our readership another amazing edition of the RUIAITE Monthly, here is our very first edition for this year. Like always, we've brought you some really amazing reads for January month as well.

The flying time takes us to Insight, which talks about 'Time'- its various theories and many other interesting aspects. What exactly would it be? Gujarta waqt hi batayega...so make sure you have a good "time" reading it! A very crucial thing which has made a part of Mumbaikars' lives from time immemorial

is explored by Op-Ed: the magical 'Mumbai Local'. Explore what the passenger wants to say to the window seat in an open letter presented in Op-Ed. Buzz Around will take you to a political journey where you'll come across the Election fiasco, which will give you an insight of the current political situation in India. Do you know your Final Destination? Safarnama talks about the places where the columnists would like to settle in future, which would make you think about your favorite one.

Is technology always safe? Tech-tricked sheds light on some privacy issues faced by individuals due to the license agreement of companies, and the video morphing Artificial Intelligence which has its own perils. Discover some developments in science contributing to the welfare of mankind in Science of Everything, and read about the beautiful inspiration by the Moon in Open Forum. Fictionally Yours this times presents an interesting read on Historical Fiction, the

Brown History. Don't miss this one! Add colors to your life, as Art Wall talks about the spectrum of colors in an Avian. Know about various careers related to winter in Career Wise as you curl up with your phone, bundled up in a warm blanket!

Team RUIAITE Monthly congratulates Natyavalay on their amazing achievement, since it's another feather in Ruia's cap. Behind the Scenes will talk about Natyavalay's journey and the experiences of the team for 'Ekadashavtar', the play which made its place in the hearts of audience.

Enclosing, we wish you a very happy and prosperous 2019, hoping that you have another great year! Stay tuned on our Instagram, Facebook, and YouTube pages for updates, interesting videos, and much more! Till then, Happy Reading!

REPORTS



The Ruia College Alumni Association organized the Jewel of Ruia and Rising Star Awards function on the 15th of December, 2018 to felicitate those ex-Ruiaites who have excelled in their domains. This year's Jewel of Ruia awardees were Padma Shri Ujwala Patil Dhar, a freelance journalist; and Lt. Gen. Satish Prabhakar Nawathe, a Vishisht Seva Medal honoree. Along with these jewels, Ruiaites who have started their careers and are poised to soar high were presented the 'Rising Star' award. Mr. Nakul Ghanekar, a renowned face in the dance industry; and Ms. Yogita Tambe, a visually challenged musician who can play more than 50 instruments were felicitated. The chief guest for the program was Smt. Pushpa Bhawe, who is a social activist, and also an ex-faculty member of Ruia.

When the stars shined in their glory... THE 'JEWEL OF RUIA' AND 'RISING STAR' AWARDS CEREMONY 2018

Ramnarain Ruia College, Matunga



The function started with a speech by Mr. Padmakar Sathe, the President of the RCAA, followed by a listing of Ruia's achievements in 2018 in the address by Ms. Anushree Lokur, I/C Principal. The accomplishments of the awardees were showcased through a special video highlighting their endeavors in the past years, which contributed to their excellence and success in their field. This was followed by a reading of the 'Scrolls of Honor', which detailed the feats of the Jewels and the

Rising Stars of Ruia, and a message wishing them luck for the future. The awardees enlightened the audience with their experiences and the challenges they faced on their journey.

The RCAA took this valuable opportunity to release their Annual Newsletter, after which, the Chief Guest, Smt. Pushpa Bhawe addressed the guests and the audience. The program was concluded by Ms. Sanjeevani Gharge, the Secretary of RCAA who expressed her vote of thanks to the guests, awardees, and the RCAA members for making the program a success.

The Ruiaite Monthly congratulates The Jewels of Ruia and The Rising Stars, and wishes them all the best for their upcoming prospects!



UTSAV AAROHAAN 2018



Chilly days of December are synonymous with vivacious vibes echoing in the quadrangle of RamnarainRuia College as UtsavAarohan, the much awaited annual festival, marks its arrival.

Customarily, 2018 too witnessed the commencement of UA on December 19 with merry cheer lasting up to next four days. First day saw the amalgamation of Colosseum with Indoor and Outdoor Sport events namely Badminton,

Table Tennis, Chess, Carrom and many more. Colosseum was too organised by RSC (Ruia Students' Council) popularly known as VPM. It was followed by numerous colorful contests like Treasure Hunt, Singing, Dancing, Writing, Performing under various categories; which contributed to enhancement of creative skills of the competitors with winners celebrating their triumph with the presence of some wellknown bollywood celebrities.

What stood out as the pinnacle of this four day journey was the Silent Disco evening on

December 22 that put forth a crucial message of avoiding Noise Pollution without compromising on enjoyment. It pulled in a great number of party heads who danced their

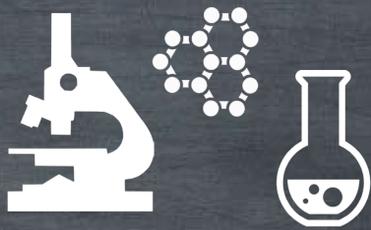
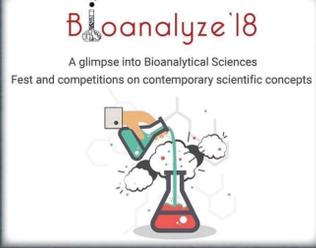
heads out to the tunes playing in headphones. The event ended on a grand note with happy tears in the eyes of seniors who relished it for one last time and tons of hopes and ambition in the hearts of juniors, pledging to carry the legacy ahead making it better with each year!

Bioanalyze is an academic festival organised by department of Bioanalytical Sciences as a co-curricular activity.

This year, it was held under the guidance of assistant professor Dr. Madhura Dhavale as an event co-ordinator and Head of the Bioanalytical Sciences, Dr. Sachin Palekar. Bioanalyze'18 was conducted on 24th December 2018 as a part of "Samnvay" which is an inter-department festival of Ramnarain Ruia Autonomous College. On the festival day, Dr. Sachin Palekar inaugurated the event with his cheerful and enthusiastic words. Students of M.Sc. Part-I class had decorated the corridor around N-213 with thoughtful scientific crafts. There was a witty and funny scientific photobooth and a special rangoli showcasing the immunology basics.

Students of M.Sc. Part-II class organised the various events in Bioanalyze'18. Brainvita was a combination of a general knowledge quiz and dumb-charades based on scientific terms. Labathon had created a miniature forensic laboratory

Bioanalyze 2018



set-up where deductive skills of students were tested. Hunt Mania was a treasure hunt, involving clues in the form of science-oriented riddles.

A scientific poster competition was held in Bioanalyze'18 as a part of DBT star college activity. The topics for the poster competition were- "Biology and Society", Bio-entrepreneurship- a way to prosperity, and "Futuristic Bioanalysis." The competition was judged by Dr. Ajit Datar, Sr. Advisor, Shimadzu Analytical India Pvt. Ltd. and Dr. Aarti Sohoni, Vice Principal, Ramnivas Ruia Junior College.

The department continued its tradition of playing Scientific Housie towards the end of the festival. It was housie with a twist of science, general knowledge, sports, films, and cartoons. Prize distribution ceremony took place after the scientific housie.

To conclude the ceremony, a vote of thanks was presented by Dr. Sachin Palekar and Dr. Madhura Dhavale. The Bioanalyze'18 ended on a happy note and with great memories and excitement for the coming years.

At 10 am on 24th of December, 2018, a Monday in S1 began a session celebrating vivid sexual preferences. The English department's annual Literary festival titled Madhatters had 'Gender Bender' as it's central theme. Efficiently planned and managed by the Students of the department, the schedule was linedup with events and competitions. Decorated with fancy hats, cute creative clocks and fascinating gender symbols. The venue looked magnificent with Fairy lights and thematic posters. Volunteers wore a black T-shirt and a quote displaying the tagline of the event - "What's your pronoun?"

It began with enacting excerpts of a sexist play 'Dance like a man' by the Indian playwright Mahesh Dattani which was beautifully performed by the SYBA students. It was followed by a humorous skit by TYBA students entitled as R.I.P. English highlighting the common errors in spoken English. Literary taboo, Cannon-Fandom quiz along with open mic and creative writing contest were the highlights of the event. The 'Literary taboo' encouraged the participants to

Madhatters



brainstrom on gender based concepts and terns while their cannon and fandom skills were tested in the challenging 'Cannon fandom quiz'. 'Creative writing competition' was organised in which the students were made to choose a chit and in the perspective of the persona given, they had to edit a given excerpt. The 'Open mic' encouraged the participants to express their opinion on themes like gender, sexist and gendering.

Mrs. Seema Rajendran (parent of a TYBA English lit student) sponsored delicious food for the event. Prizes and certificates were distributed to the winners of all events and the actors of the first two skits. After which, a brilliant guest lecture was given on the taboo topic of LGBTQ by Dr. Raju Patole, a dignified professor. Madhatters, 2018 elevated not only the intellectual aspects but also proved to be an enriching experience in understanding the idea of Gender.

Himadree Devnath (TYBA English Literature)

The month of December is a month of festivities and enjoyment in all the colleges. Under the Samanvay (Departmental Festivals) the Department of History -Rajatarangini had its annual festival " Mudra " on 24th December 2018. The theme for this year was FOLK-E-STAAAN. Accordingly, the five events were designed which portrayed the Folk Culture of India.

The event was inaugurated in full vigour with a display of the Maratha weapons by the Dharmayodha Shambhuraje Yuva Sanstha. By performing different deadly stunts with the Dandapatta, Talwar, Bhala, Katyaar, Kurhad and several others they left the audience in their awe. After this grand inauguration the competitions began. The first event was "Itihaas Gawah Hai" (Quiz) an event in which the teams had to face the questions based on the Folk Culture of India. The teams were very enthusiastic and went through all the challenging rounds. The next event was "Folk Artefact" (Best out of the Waste) in which the participants had to make something showing the Folk Life from the waste materials provided to them.

"FOLK-E-STAAAN" A Day to celebrate Folk Culture of India



The participants made very unique items like a traditional bride, musical instruments and even a whole scene of a village life. Mrs. Vijaya Kadam who is the Junior College teacher of History of Ruia college judged the event.

A workshop on Warli Painting was organised wherein Ms. Vishakha Howal, a Warli Art Professional introduced the participants to this tribal art and later even judged the participants' work. The post-lunch events were more engaging and gathered a huge audience in the auditorium. Beginning with the "Folk Walk" (Folk Fashion Show) which was

judged by a successful model like Ms. Malaika Kokane and Actor, Lyricist and short film Director Mr. Sanman Chandanshive. The audience were enthralled when the judges walked the ramp. This was followed by the "Lok Kala Manch"(Folk Performance) event. Well known singer Mr. Ajay Dehade and famous Actress and dancer Ms. Sukanya Kalan judged the event and even performed for the audience. There was a large participation of students from different colleges of Mumbai for all the competitions. The Chief Guest for the Valedictory function was the eminent Marathi actress Ms. Aditi Sarangdhar who shared the memories of her college days with the audience and distributed the prizes to winners. Finally the day ended with the wonderful cultural performances by the department students on Folk Culture of India.

The event was well managed by the volunteers and was a success because of the great motivation and support of the teachers Dr. Pradeep Waghmare, Dr. Mohsina Mukadam and Our Head of the Dept Prof. Dr. Louiza Rodrigues.

-Riddhi Joshi TYBA (B)

BUZZ AROUND

A new twist in Indian politics

Elections are always seen as the main event in our country. So when it came to results of assembly polls of Rajasthan, Madhya Pradesh, Chattisgarh, Telangana, and Mizoram, on 11th of December, the whole nation was seeing this blockbuster as a prequel to 2019 Lok Sabha elections.

But somehow when the results came out the majority of the Indian population was either shocked or surprised.

The most epic battle was fought in Madhya Pradesh where BJP had an advantage of 0.1% over congress in vote share yet Congress managed to go ahead as it won 114 seats and BJP won 109.

What made the difference was a dip in BJP's urban vote share which was largely capitalized by Congress. Congress was only two seats short of the majority in the 230 seat assembly. A few days later Congress claimed support of 121 MPs including

BSP, SP, and independent candidates. There was a race between Kamal Nath and Jyotiraditya Scindia but later that week Kamal Nath swore in as the chief minister.

Rajasthan was the next victim of a dip in BJP's urban vote share. The situations were similar to that of MP as BJP won the rural vote. But seat share changed a lot as Congress managed to win 100 seats but BJP won only 73. Congress led by only 0.5% in vote share but a decrease in urban support resulted a drastic drop in seats won. In Rajasthan, Congress just managed to cross the simple majority mark which resulted in instant discussions of chief minister's post. Among the candidates were Ashok Gehlot and Sachin Pilot, out of which Ashok Gehlot swore in as CM on December 17.

Chattisgarh was the most comfortable victory for Congress as

it won 68 out of 90 seats. Chattisgarh saw a drop in rural vote share which led to BJP's poor performance in the farmer dominated state. Bhupesh Baghel swore in as the next chief minister.

In Telangana, under the charismatic leadership of K. Chandrasekhar, the ruling party Telangana Rashtra Samithi retained power by securing a landslide victory. TRS won 88 out of 119 assembly seats in the election. Large credits were given to welfare and mega irrigation schemes. K. C. Rao again took the oath as the Chief Minister of Telangana.

Mizoram voted for the Mizo National Front (MNF) as people took away Congress's last outpost in eight state northeast. This ended the 10-year rule of Congress party in the state. MNF chief Zoramthanga swore in as the next CM.

BJP has a lot to learn from these results as they prepare to face the big test again in 2019.

Recap 2018!

As we proceed to the next year, here is a look at the important events that happened this year.

1. We lost many famous and important personalities including our Former Prime Minister – Shri. Atal Bihari Vajpayee, eminent scientist Stephen Hawking, actress Sridevi, politician M. Karunanidhi and the creator of comic superheroes - Stan Lee.
2. Boxer Mary Kom, Shuttler P.V. Sindhu were among the many sportspersons who brought glory to India.
3. The world's tallest statue of Sardar Vallabhbhai Patel - 182 meters tall, overlooking the Sardar Sarovar Dam on the Narmada river was inaugurated by Prime Minister Narendra Modi on October 31, 2018.
4. #MeToo Movement in India gained momentum.
5. Natural calamities like the Kerala deluge, Cyclone Gaja and California wildfires brought immense damage to life and property.
6. ISRO added a feather to its cap by launching many satellites including India's heaviest satellite – GSAT -11.
7. A five-judge bench of The Supreme Court by unanimous decision decriminalized Section 377 on September 6, 2018, making homosexuality legal.
8. The Supreme Court gave a 4-1 historic verdict against the rule that disallowed girls and women in the 10-50 age group from entering the Sabarimala Temple in Kerala on September 28, 2018.
9. Pakistan opened the Kartarpur Sahib Corridor in November to facilitate visa-free pilgrimage by Indian Sikhs to Kartarpur Sahib Gurudwara in Narowal district.
10. The Delhi High Court convicted senior Congress leader Sajjan Kumar in 1984 Anti- Sikh riots case.
11. The Supreme Court gave a clean chit to the government in the Rafale Jet Scam.
12. Congress made a comeback in the recent elections held in the states of Madhya Pradesh, Rajasthan, and Chattisgarh.

Swati Achwal

Top 10 News of the Month

1. Former economic affairs secretary Shaktikanta Das was named the 25th governor of the Reserve Bank of India (RBI) to succeed Urjit Patel, who quit abruptly amid a bitter dispute over the regulator's autonomy.

2. PM releases Rs 100 commemorative coin in memory of Vajpayee.

3. Indonesia tsunami: 373 dead, over 1,000 missing. Disaster struck the coast of southern Sumatra and the western tip of Java when a volcano known as the "child" of Krakatoa erupted, which in turn, triggered a tsunami - in which powerful waves of a height of 30-90 centimeters (1-3 feet) lashed the area.

4. P.V Sindhu - The world champion. She won her maiden gold at World Tour Finals Championship held in Guangzhou, China.

5. The US government shutdown as the Congress rejected President Trump's proposal for building the wall on the border with Mexico which would cost 5 billion dollars.

6. Finance minister Arun Jaitley said the Centre and states were close to completing the first stage of GST rationalization by removing most items from the 28% slab with a convergence of the 12% and 18% bracket being the next step in the process.

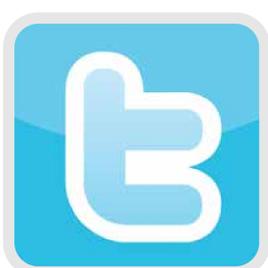
7. Assam Railroad Bridge, India's Longest, opens on 25th December. The Bogibeel Bridge in Assam has a two-line railway track on the lower deck and a three-lane road on the top deck. It will reduce the Delhi to Dibrugarh train travel time by about three hours.

8. Close aide of Kashmir al-Qaeda cell chief Zakir Musa among six militants killed in the encounter. The six killed are said to have belonged to the militant group Ansar Gazwat ul Hind, led by terrorist Zakir Musa

9. The government is considering changes in the IT Act to force internet, chat and social media companies to trace and identify people behind objectionable and unlawful content posted or spread over the internet.

10. Delhi records coldest December in 12 years as the temperature dropped to 3.7 degree Celsius.

Pushkar Bhatlekar



Twitter tweet:

Narendra Modi on twitter :

"At the core of good governance is compassion and taking steps that bring a positive difference in the lives of the poor. "

CAREERWISE

Cold Wintery Careers

Winter is here and so is the season for various seasonal careers. Winters boost not only traditional careers but also the tourism industry and others. This time, let's look at some careers which are particularly visible during the winter season. Some of them are well-known while some of them will surprise you!

Camping

Want a weekend getaway with friends? Here is the answer! Camping is an outdoor activity involving an overnight stay away from home in a shelter such as a tent. People leave worldly luxuries and amenities behind for a few days and spend time in more primitive and natural conditions. Think no proper housing, electricity, or network. Camping can be enjoyed in all four seasons, but we see a number of campers during the winter season. One of the greatest aspects of camping is being away from the monotony of daily life. Spending quality time with each other and just enjoying the wonderful views.

There are various types of camping such as tent camping, summer camps, hiking, and backpacking etc. One of the simplest types is tent camping. You get to experience nature and the great outdoors. It warms a person's heart. You also get to do amazing activities throughout the day which will teach you a lot of new things. Camping is a great holiday. It takes time and effort to set up time and place and work but each time a person camps he will find a better way of doing some things and that is part of the fun of camping. However, it is all worth the effort as you will love it. So people should be encouraged towards camping for

being more sporty, adventurous and doing some things just out of the blue for better memories and incredible experiences.

However, you can turn your love for camping into a career. With the popularity of camping on the rise, the career opportunities have also improved. There are various job opportunities in this field :

- Camp director ordinarily refers to a person who is directly involved with the operation and management of a camp program and whose duties cover both the administration and creating the program.

- Camp administrator ordinarily refers to a person who administers more than one camp program and coordinates administrative functions, relying on support from the onsite director or program director. Director of outdoor programs or some variation may be used to specify the person who administers various programs in the outdoor field — day and/or resident camps, outdoor education, conferences and retreats, outdoor events, troop camps, etc. This position more often involves coordinating, planning, and administrative responsibilities.

- Associate or assistant director is the person who assists the administrator and is often responsible for an aspect of camp or for directing a specific program such as environmental education or the camp/conference center.

- The trip leader is the person who, under various titles, leads groups on expeditions, trips, and outdoor experiences, usually for extended periods.

- Site and facilities manager is the person who oversees the maintenance and upkeep of the campsite and facilities.

Food service director has the responsibility to plan, direct, and supervise the camp's food service.

-Qualifications required for a career in Camping: Advanced degrees are helpful but not always essential. A B.A. or B.Sc. degree is usually required and is helpful in the areas of recreation, youth development or group work, liberal arts education, outdoor education and/or camping. Training usually includes a broad liberal education and camp administration.

So if you like to spend your time camping in nature and want to explore it more career then camping is an optimum choice for you.



Snowboarding

Snowboarding is a recreational activity and an Olympic and a Paralympic sport which involves descending down a snow-covered hilltop on a snowboard. It was invented in the US in the 1960s and later featured in the winter Olympics for the first time in 1998. Some of the larger snowboarding contests include the European Air & Style, the Japanese X-Trail Jam, Burton Global Open Series, Shakedown, FIS World Championships, the annual Dew Winter X Games and the Winter Dew Tour.

Snowboarding requires one to have a great body balance in order to be successful. Also, you need to be on your toes at all times as you will be achieving great speed coming down the slopes. You also need to have excellent vision in order to see the obstacles in your way while there is snow all around. You need to be flexible and have a good body posture which will help you do all the amazing acrobatics snowboarders do while airborne.

Being a professional sport, earnings solely depend upon how good you are at the sport. Sponsors and sports endorsements are a very important part of a sports person's earnings.



One can also become a snowboarding instructor. Deciding to become a snowboard instructor isn't the easiest career decision. It's definitely a long way from the standard 9 to 5 and the seasonal nature of the sport can often encourage a complete lifestyle change. And if you're female, sometimes a career in sport can feel even more challenging. But if you love life on the snow, there's more than a 'snow load' of reasons why a career as a snowboard instructor could be for you.

Qualifications: There are various courses run for the same which helps you to be an instructor -not only in India but across the world. There are other useful qualifications to help you stand out: First Aid, Avalanche Safety Training (AST), Snow Park Certificate (freestyle instructor), Race Coach and Adaptive Coaching Qualifications among others. While the key levels of instructing are the most important (Levels 1-4), additional courses such as those mentioned can really help to bolster your knowledge, expertise, and responsibility around the resort- all areas that Ski & Board Schools look for.

While English may be the international language of the world, many take that for granted and just assume they will be ok. A large percentage of the world's resorts will hire English speaking instructors but having an additional language under your belt will really set you apart, and could be the difference between you and someone else getting the job.

Snowboarding is a challenging career for sportsperson as well as for the instructors. However, if you get experienced and well versed with it no one can stop you from ascending.

Internships for Students

The winter holidays and the winter semester is usually seen as a phase for all the students to grab internship opportunity to enhance their curriculum vitae. There are various platforms to help students in this process like the following:

Internshala is an internship and online training platform, based out of Gurgaon, India. Founded by Sarvesh Agrawal, an IIT Madras alumnus, in 2010, the website helps students find internships with organizations in India.

How to apply for an Internship:

1. Make the subject line of your internship application stand out-make it specific and relevant enough for the recruiter to be intrigued to open your email. Go window dressing!

2. Keep your cover letter simple, short and specific - don't leave it blank and don't give your 5-page life history either. Relevance is the key. Think if you were the recruiter what information you would be looking for in the cover letter to interest you to open the CV.

3. Please, please, and please do NOT mass email - it doesn't work. It never has and it never will.

4. Spend time researching a bit about the company, or individual and their focus areas and how what you have to offer matches with their requirement. Don't go carpet bombing!

5. Spelling mistakes, SMS language, improper gender address are a big NO - they feel like a piece of stone under your teeth while having a meal. However delicious the food may be, we all know what a bad taste the experience leaves.

6. Having done everything right so far, spend 10 extra seconds and please name your CV as your nameplate and don't just leave it as "CV.doc", "MyCV.doc" etc. - don't make it hard for the employer to find your resume at a later date if needed.

Winter means a long vacation and this is the correct time to do an internship which will help to build a good resume.

Woolen Textile Industry

Every season has a specific clothing pattern to suit the climatic changes as well as the comfort of the people. In winters, woolen clothing becomes the most suitable as well as trending clothing choice.

The woolen textile industry is a small segment of the Indian textile industry comprising of cotton, synthetic, silk etc., yet it has the privileged distinction of producing a wide range of products required by the civilian population, defense forces, home furnishing

and industrial applications in the form of technical textiles. The product range comprises of apparel fabrics, blankets, knitwear, carpets, upholstery and technical textiles having varied applications. These products are made in a variety of specifications catering to both poorer sections of society as well as affluent and sophisticated consumers. In recent years, the industry has also expanded its manufacturing capacity for ready-made apparels made out of worsted and woolen fabrics to extend the value addition chain.

• The wool industry offers a career opportunity for everyone - no matter what your skill or passion.

• Jobs that woolgrower to a researcher to a bank manager.

• Graphic designers, marketing executives, fashion designers and retailers all have career opportunities in the wool industry

Careers in the wool industry can be divided into two main areas - on-farm and off-farm.

On-farm: Working in the on-farm sector involves a career that supports wool production.

People who enjoy working with animals might consider one of the following careers:

• livestock manager

• veterinarian

• woolhandler

• livestock nutritionist • farm consultant

• working dog trainer • livestock agent

• wool broker • wool classer

Someone who is more interested in plants might consider a career as a:

• plant breeder

• pasture agronomist

• environmental scientist

• pasture researcher.



Many careers that support the on-farm sector might not seem to be in the wool industry, but are indirectly involved:

• bank manager • accountant

• rural counselor • rural merchandiser.

Off-farm: There is a wide range of jobs that support the wool industry based in large cities, both in India and overseas.

People who are creative could find the perfect career in:

• graphic design • fashion design

• advertising

• rural journalism.

Many more people are employed in the wool industry in:

• research and development • science communication

• wool buying and processing • retailing

The opportunities are endless!

The Indian wool industry provides thousands of jobs both in the country and overseas. No matter where your interests lie, the wool industry has a career path suited to you. Ranging from people of arts faculty to science and commerce, woolen textile industry can provide a successful career to all of them. It is an industry that is at its peak during winters but also popular during other seasons. A career in this industry will give you stability and help you pour out your creativity.

These were some of the interesting careers of winter. So make your winter season fruitful and productive with these career branches.

Happy Winters!

BEHIND THE SCENES



पडद्यामागचा अवतार

Ruia is a second home to so many of its students. It has been a hub for nurturing talent and at the same time, giving a sense of family. Speaking of the talents that our college houses, one such remarkable team is the dramatics department or more famously known as 'Ruia Natyavalay'. Their plays are so emotionally moving, the audience gets goosebumps everytime. Their flawless acting and awe-inspiring scripts are something that all students in the college have loved and respected. Ruia Natyavalay has been a part of our college's culture since the very beginning of Ruia and is an inherent part of its legend. Whenever a student speaks about the college's dramatics department, it is always followed by the words 'their plays are a must watch'. The department comes with its own list of laurels and awards, adding to the college's pride. It has also produced some of the finest actors in the Marathi acting industry. Dilip Prabhavalkar, Spruha Joshi, Isha Koppikar and Kranti Redkar are just a few of the gems produced by Ruia Natyavalay. With many awards and achievements in their bag, Ruia Natyavalay lives up to its name with their latest achievement: they bagged the first place in INT 2018. We all know about Ruia Natyavalay, but only from the audience's perspective. Not a lot of people actually know what really happens behind those curtains, what preparation everyone goes through and who all are responsible for the stunning performances. In this article, we explore all these questions.



पडद्यामागचा अवतार

रुईया महाविद्यालयाची एकादशावतार ही एकांकिका या वर्षी एकांकिका स्पर्धामध्ये अक्षरशः गाजते आहे. INT मध्ये प्रथम येण्याचा मान पटकवण्याबरोबरच अभिनय , लेखन , दिग्दर्शन , संगीत , नेपथ्य यासाठी अनेक पारितोषिके तिने मिळवली. उत्सव , कोकण चषक , मुणालताई करंडक या सारख्या अनेक स्पर्धामध्ये एकादशावताराने प्रेक्षक आणि परीक्षकांवर आपली ठसठसशील छाप पाडली. तर या लेखाच्या निमित्ताने जाणून घेऊया या एकांकिकेच्या पडद्यामागच्या अवताराबाबत.



रुईयामधल्या रामचंद्र गावकरकरडे संकल्पना होती, "एका गावात जत्रा आहे, त्यात दशावतार नाटक येते आणि विष्णूचे पात्र करणारा व्यक्ती मोर्चांमुळे येऊ शकत नाही, मग पुढे काय घडेल?" यासाठी आध्यात्मिक गोष्टी माहीत असलेल्या लेखकाची गरज होती. प्राजक्त देशमुख आगदी योग्य होता. "आम्ही नाशिकला त्याच्याकडे जाऊन व्यक्तिरेखा ठरवल्या आणि त्याने 5-6 दिवसांत नाटक लिहूनही दिले. ह्या सगळ्या अभिनेत्यांमध्ये मला ती पात्र दिसू लागली एवढे ते एकदम झाले. सगळ्यांनी स्वतःला झोकून देऊन काम केले ", असे दिग्दर्शक रणजित पाटील सांगत होते.

"INTच्या पाहिल्या फेरीनंतर दोन दिवसांत थोडे बदल करावे लागले, तेव्हा सगळ्यांनी मेहनत घेतली आणि एकदम 'कडक' सादरीकरण केले. मी त्यांना नेहमी म्हणतो कि स्पर्धा असणारच आहेत, नाटक चांगलं होणं महत्त्वाचं. दिग्दर्शक हा फक्त मार्गदर्शन करतो, दिशा दाखवतो, पण नाटक हे नटाचेच माध्यम आहे. नाटक चांगलं झालं तर लोक नटांना भेटायला येतात आणि वाईट झालं तर दिग्दर्शक कोण आहे असे विचारतात. 10 वर्षांनी रुईया INT जिंकल्यावर माझ्यावरही जबाबदारी होती. 'कोकण चषक' स्पर्धेत प्रथम आलो, 'मुणालताई' आणि 'उत्सव' स्पर्धामध्ये विदतीय आलो. या सगळ्यांनी केलेल्या मेहनतीचे बीजे झाले."

नाटक बसवितांना एक म्हातार्याचे पात्र डोक्यात आले. संपूर्ण नाटकात त्याला एका ठिकाणी एकच "हम" असा संवाद आहे. त्याला परीक्षक आणि प्रेक्षक यांचा खूप छान प्रतिसाद मिळाला. मी मूळचा कोल्हापूरचा, पण शिक्षण मुंबईत झालं. त्यामुळे दशावताराविषयी माहिती काढणं महत्त्वाचं होतं. त्यात बालली गेलेली भाषा, हेल, वेशभूषा, अभिनयशैली हे आढून ताणून वाटता नैसर्गिक वाटावं म्हणून नाटकातल्या प्रत्येकाने तेवढीच मेहनत घेतली आहे.



संदेश

"आपल्या सर्वांना माहीत आहे विष्णूच्या दहा अवताराविषयी, पण त्यानंतर काय? अकरावा अवतार तुम्ही स्वतः आहात. कोणीतरी येऊन तुम्हाला मदत करेल असे म्हणून अवताराची वाट बघत बसू नका. ब्रह्मा उत्पत्ती करतो, विष्णु पालनकर्ता आहे आणि महेश लय करतो. उत्पत्ती करणारे आपण आणि नाश करणारेही आपणच. 'विष्णु वेगळा शोभायला जाऊ नका, विष्णु आपल्या स्वतः मध्येच आहे!'"

नाटकाच्या वेळी बॅकस्टेजला एक वेगळं नाटक सुरू असतं. हे नाटक सेटच्या हिशोबाने तसे भव्य आहे, त्यामुळे बॅकस्टेजच्या टीमला प्रचंड मेहनत घ्यावी लागते. नाटक सुरू झाल्या सेकंदापासून पडदा पडपर्यंत धावपळ सुरूच असते. बॅकस्टेजला काम करूनसुद्धा बरेच काही शिकायला मिळते. सगळ्याच महत्त्वाच्या आहेत पण त्यातही 20 महत्त्वाच्या भूमिकांमधून हे नाटक उलगडत जाते. एका व्यक्तिरेखेसाठी 2-3 जणांनी फक्त ऑडिशनच नाही, तर तालीमही केली. दिग्दर्शकाने ग्रामीण ढब नीट हेरल्याने आणि लेखकाच्या लिखाणाने प्रत्येक व्यक्तिरेखा तितकीच हवीहवीशी वाटते. एखाद्या नाटकाचे बरेच प्रयोग झाल्यावर आम्ही नटांची अदलाबदल करून तालीम करता, कारण प्रत्येकाला संपूर्ण नाटक पाठ असलेच पाहिजे, किंबहुना ते हातच पाठ.

काणतीही भूमिका मनापासून केली की ती निश्चित प्रेक्षकांच्या लक्षात राहते.

सुगंधर साळवी

रंगभूमी आपल्याला खूप काही देऊन जाते.

INTच्या इतिहासात रुईया 11 वेळा जिंकलेय, हे सर्वाधिक आहे, यंदाचे 12वे वर्ष आहे जिंकण्याचे. अमेय नारकरने सलग 4 वर्षे प्रमुख भूमिका केल्यात आणि ह्यावेळी बॅकस्टेजचे काम केले, हे फक्त थिएटरमध्येच घडू शकतं. आम्ही सगळ्या गोष्टी तेवढ्याच मजने करतो. त्यामुळे जेव्हा एकाला पुरस्कार मिळतो, तेव्हा ते अख्ख्या टीमचं यश असतं.

INT एलिम्सच्या वेळी मला एक वाक्य कसे घ्यायचे ते समजत नव्हतं. प्रयोग करताना हवेमुळे विंगचे केश चेहर्यावर आले आणि ते वाक्य खूप विनादी झाले, खूप हशा मिळाला, मग पुढे ते तसेच करत गेलो. त्यामुळे चुकून झालेलेसुद्धा कधीकधी आपसूक छान होतं. तालीम पूर्ण दिवस चालते पण कधीच त्रास होत नाही किंवा कंटाळा येत नाही. "मन से जो करत है, वो अच्छा लगता है" एकदा माणूस थिएटर करायला लागला कि ते आपसूक आवडतंच जाते, नवनवीन गोष्टी शिकतो. नाटक सादर करताना बाकी काहीच विचार येत नाहीत, नाटक जगायला लागतो आपण!

त्रास होत नाही किंवा कंटाळा येत नाही.

श्रीनाथ म्हात्रे

बॅक टू बॅक प्रयोग

एनर्जी देऊन जातात.

काही वेळा दिवसभरात दोन किंवा तीन प्रयोग होतात. पण नंतर त्याची सवय होते आणि एकांकिकेच्या प्रेमात असलेले कलाकार प्रत्येक प्रयोग त्याचा आनंद घेऊन करतात. कोणाची तब्येत बरोबर नसली तरीही नाटकात ते अजिबात जाणवत नाही. किंबहुना कलाकारालाही त्याचा विसर पडतो. आपली भूमिका चाख वेठवायची असते. प्रत्येकाने पूर्ण लक्ष देऊन प्रयोग केला तर त्याचा खूप छान आणि वेगळा प्रभाव पडतो आणि तो प्रेक्षकांच्या लक्षात राहतो.

एकांकिकेत एका सीनमध्ये एका पात्राच्या हातात तांब्या असणे आवश्यक आहे. एका प्रयोगात बॅकस्टेजला थोडी गडबड झाली आणि तांब्या एका विंगीतन दुसऱ्या विंगीत पोहोचवायचा राहिलो. म्हणून मग त्या पात्राच्या हातात काहीच नव्हते आणि पुढचा संवाद हा तांब्यावर आधारित होता. त्यामुळे मग प्रयोगावधान राखून विंगीतन रंगमंचावर तांब्या चकक फेकला गेला आणि आमच्या कलाकाराने तो झेलला. प्रेक्षकांना हा योजिलेला प्रसंग वाटला आणि या सीनला हशा-टाळ्यांची भरभरून दाद मिळाली.

जयेश वाव्हळ

बॅकस्टेजेने खूप काही दिलं !

गेली तीन वर्षे मी नाट्यवलायत बॅकस्टेज करतोय, इथे आपलं काम प्रेक्षकांना दिसत नाही पण त्याचं मला कधीच वाईट वाटलं नाही. कारण आम्ही सगळेच नेहमी एक टीम म्हणून काम करतो. सेटवरचे खिळ टोकणे, ते लावणे, ब्लॅकआउटमध्ये त्यात बदल करणे हे सगळे नेहमीच मला खूप रंजक वाटत आलेय. या एकदर प्रोसेसमध्ये एकरूप झाल्यामुळे खूप काही शिकलो. मनापासून केलेल्या तालीमीमुळे संबंध एकांकिका मला तोंडपाठ असते. या वर्षी पहिल्यांदाच एक भूमिका मिळाली ; थोडाफार अनुभव होता म्हणून तिला त्याय देता आला आणि पहिल्याच प्रयत्नात अभिनयासाठीचे पारितोषिकही मिळाले.

सुहास आलदर

सगळं श्रेय टीमचं !

मी देखील गेली तीन वर्षे बॅकस्टेज काम करायचो. एकदशावतारमध्ये प्रथमच ऑनस्टेज काम केले आणि बक्षीसही मिळवलं. पण मला वाटतं की बक्षीस हे एका अभिनेत्याचं कधीच अस् शकत नाही. कलाकाराचा मेकअप करणारा आर्टिस्ट , विंगत त्याच्यासाठी प्रॉपर्टी घेऊन उभा असणारा , लाईटमन , म्यूझिक आर्टिस्ट या सगळ्यांच्या एकत्रित मेहनतीला मिळालेली ती पावती असते. अभिनेता कितीही उत्तम असला तरीही या सगळ्यांच्या समन्वयाशिवाय अपेक्षित परिणाम त्याला साधता येत नाही.

अजित्वय मणचेकर



घड्याळाच्या काट्यावर !

एकादशावतार ही एकांकिका पेलायला तशी अवघड आहे. सेट बऱ्यापैकी मोठा आहे. त्यामुळे स्पर्धेच्या वेळी बॅकस्टेजच्या कलाकारांवर मोठी जबाबदारी असते. सेट लावायला ठराविकवेळ वेळ असतो आणि एकांकिका सादर झाल्यावर तो मर्यादित वेळेत काढला गेला नाही तर परीक्षक गुण वजा करतात. एकादशावतारमध्ये नाटकात नाटक असा प्रकार असल्यामुळे हा पसारा सोभाळणं म्हणजे एक तारेवरची कसरत आहे. जो सेट लावायला पंधरा मिनिटे लागतात तो कधीकधी पंधरा सेकंदातही आऊट करावा लागतो. या धावपळीत बऱ्याचदा कलाकारांना दुखापत होण्याची शक्यता जास्त असते. अशाप्रकारे पडदा उघडल्यापासून तो पडपर्यंत आणि त्याच्या आधी आणि नंतरही बॅकस्टेज अतिशय हॅपनिंग असतो.

एकादशावतार या एकांकिकेत जवळपास पन्नास कलाकार आहेत. त्यातले वीस आगदी प्रमुख कलाकार आहेत. त्यांना संवाद आहेत. प्रत्येक पात्राला स्वतःची अशी वेगळी लकब आहे. प्रत्येकाची खासियत वेगळी असल्यामुळे पात्र आपल्या लक्षात राहतात.



नाट्यवलायची खासियत

रुईयाच्या नाट्यवलायत स्पर्धा जवळ आली की सकाळी सातपासून रात्री दहा वाजेपर्यंत तालमी चालतात. आपलं तन , मन , धन लावून सराव करणारी ही मंडळी म्हणतात - "दिवसभर आम्ही तालमी करतो. ती एकांकिका मनापासून जगतो. त्यातल्या भूमिका आम्हाला जीवंत वाटू लागतात आणि त्या नकळत कुठेतरी भेटतातही. या संबंध प्रोसेसमध्ये प्रत्येक बारीकसारीक गोष्टीचा बारकाईने विचार केला जातो. सहकलाकारांशी छान बॉन्डिंग तयार होतं. इथे एकमेकांच्या डब्यांबरोबरच सुखदुःखही शेअर होतात. ऑडिटरियम आमचं घर होऊन जाते. कारण घरापेक्षाही जास्त वेळ आम्ही इथेच घालवतो ! फावल्या वेळात कधी थोडी झोप काढली जाते तर काही वेळेस गप्पा रंगतात. यापैकी अनेकजण कल्याण , पनवेल , विरार अशा ठिकाणी राहत असून दररोजचा लोकल ट्रेनचा प्रवास करतात. एकांकिकेचं जग आम्हाला आपलं वाटतं आणि तिथे आम्ही आपोआपच ओढले जातो."

शैक्षणिक वर्षाच्या सुरुवातीला नाट्यवलयकडून ऑडिशन घेतल्या जातात. यातून नवोदित कलाकारांची निवड केली जाते. एकादशावतारचं कार्टिंग हे बरेचसे ऑडिशन घेताघेताच झालं. मुलांमध्ये आम्हाला एकांकिकेतली पात्र दिसू लागली , असे दिग्दर्शकाने सांगितले. ही एकांकिका एका गावात घडत असल्यामुळे ग्रामीण बोली अवगत असलेल्या मुलांच्या आम्ही शोधून काढतो. कार्टिंग बरोबर जमल्यामुळे पुढचं काम खूप सोपं झालं. सुरुवातीला गोलात बसून संवादांवर स्पीच वरक करायचो. पाया पक्का झाल्यावर मग स्टॅडिंग रिहर्सल्स सुरू केल्या. तालमी करता करता अनेक नवनवीन कल्पना सुचत गेल्या आणि एकांकिका बहरत गेली. प्रत्येक प्रयोग वेगळा होतो. रिपीट ऑडियन्सला दरवेळी काहीतरी नवीन देण्याचा आमचा प्रयत्न असतो. आता सर्वाई हे एकादशावतारसाठीचे लक्ष्य आहे.

Ask any stage actor and they would tell you the importance of being a part of the right theatre group. To these young budding actors, Natyavalay is more than just a theatre group....It's a family that has taught them to grow as actors. Natyavalay is what gave them the courage to dream and go towards that dream. These youngsters set such a great example about the importance of overcoming hardships and believing in your passion. Hearing them share their stories of their personal dreams and how they made Natyavalay what it is to this day makes it clear about how much they contribute to it and learn from it. For them, Natyavalay has been instrumental in harnessing the power of young talent to nurture their common passion for acting and making use of their abilities to the fullest. More than anything else, they taught us one thing: that everyone has a role to play, and it's a monumental role, big and small does not matter, like gears in a clockwork, working together. So we should all do our parts and respect the stage. With great achievements under their names and several more to go, they look together at the future with bright eyes and a fresh outlook.

INSIGHT

TICK-TOCK, TICK-TICK

What is time? The hour hand on a clock, the sand in a glass or something more than that? How does it run away? Or sometimes, just pauses. Yes, as the new year is here, it is time to talk about time itself!



HICKORY, DICKORY, DOCK

It starts with a jolt of realisation that brings your blissfully ignorant routine to a lurching pause, as if shaken by the universe itself, making you simultaneously entranced and unsettled—a sudden awareness of the vastness of time and space and thus, the stillness of your being in the midst of it—a semblance of infinity trapped in a moment. It forces you to feel the length of each second that passes, lifelines encompassed in the ticking of the clock and the count of your pulse, the weight of each heartbeat that still exists.

It is perhaps human nature to feel oppressed by the relentless passage of time. It started with the fascination of our ancestors who tracked the movement of the sun, bleeding into the obsession of the modern man frantically checking his watch every few minutes. It is quite strange for him to picture the life of an animal which is never late or early to places, which is without a checklist of things that ought to be done by seven in the evening, which does not lie in fear of the regrets that might come with the inevitable end. Thus, it is animals who truly fear death; humans bear the fear of time running out instead.

The weight of this knowledge, that life is so much shorter against the backdrop of infinity dawns on him and he trains one eye on the fading scenery, one hand reaching out for that which has long

since slipped away while the other eye tries to catch a glimpse of the ever-arriving horizon, the other hand reaching forward to grip onto something recognizable, leaving no room to grab what he has now. He longs to shed the dragging past and tighten his hold on the reigns of the future that always seems to arrive before he is prepared—that he always loses track of, as soon as it becomes the present, that he only laments as soon as it becomes the past. There is nothing more human than the desire to anchor oneself against the current of time, to wish to remain away from the rapids ahead and to still feel the conformity of being stuck in the current time, the count of every moment passing by, every second that has slipped; or, as the clock helpfully provides you with the—tick, tick, tick.

-Anushka Nagarmath (FYBA)

Time-Please!

Ever wondered how Lucy, Peter, Susan, and Edward just pass through that door as kids, grow into their youth fighting the White Witch and rule the Kingdom of Narnia, and then return to their real world as kids? As if nothing just happened! Like, time really paused! Is that really possible?

Time isn't the same all over the surface of the Earth. It has a peculiar relationship with the gravitational force. This difference between time at the same moment at different places is nothing but time dilation which is the difference in the elapsed time measured by two observers, either due to a velocity difference relative to each other or by being differently situated relative to a gravitational field. Too much physics, eh? Well, here are a few bizarre theories about the phenomenon of time, that might make you doubt that ticking clock on the wall.



Tik Tik 1- Higher the distance from earth, faster will the time run. The closer you are to the earth, the greater the gravitational force is which slows down the time.

Tik Tik 2- Time slows down depending on how fast you move! Scientists used two atomic clocks (most accurate clocks created by science) to test this theory set down by Einstein. They sent clock 1 on a plane ride around the world, while the other clock stayed back. The clocks were perfectly synchronized at first, but the traveling clock came back from its 50 hours, 800-kilometer trip, missing 230 or so nanoseconds.

Tik Tik 3- Time is a relative concept. Each individual's 'time' is personal and different according to Einstein's theory. No doubt, a minute seems like 10 minutes at times, while that minute passes by in a blink on other occasions. Neuroscientist Warren Neck says that this happens because there isn't a single 'brain clock', rather there are multiple brain clocks, all running at different speeds.

Tik Tik 4- Light-Speed particles might help time travel research. Scientists have discovered subatomic particles known as neutrinos that can maybe, possibly, potentially travel faster than the speed of light. If this proves to be true, there is a slight possibility that time travel may be possible. Right now there is a lot of cross verification doing the rounds about this new discovery, so till that settles down, let's hope Flash gets to full-speed soon.

Bonus!
Tik Tik 5- Time stops in the periphery of a Black Hole. Remember gravity? Statue!

-Sara Chavan (SYBA)

THE CAGE OF TIME

At least once in our lives, we've all sat down, knees cradled in our arms- against our chest and wished for the ability to turn back time. After a dreadful exam, after spitefully shouting curses at your loved ones, after being too late for something important. What we may not have stopped to consider, however, are the consequences of altering time at our every whim.

Science fiction has thoroughly explored the concept of time travel starting with H. G. Wells' "The Time Machine" and continuing up to modern movies and books like Passenger or Deadpool 2. While the above-mentioned pieces of fiction contain exciting and seemingly unlimited travel both into the past and to the future; reality is not so malleable.

Time travel firmly remains a fixture of science fiction and for good reason, too. If every Tom and Joe could move back and forth in time the consequences could be devastating.

The most commonly discussed consequence is the grandfather paradox. If you go back in time and somehow

cause your grandfather's demise—the major plot line in the "Terminator" movies — before he could have children, then you wouldn't have been born in the first place. Hence, you would never be able to cause his death and he would survive, which would lead to you going back in time and causing his demise. You would be thus stuck in a time loop.

According to the theory of composability, however, what can happen in time travel is limited to what did happen. In order to prevent logical contradictions, the time traveler's actions are limited. The past cannot be changed.

The Novikov self-consistency principle states that any actions taken by a time traveler or by an object that travels back in time were part of the history all along, and therefore it is impossible for the time traveler to "change" history in any way. The time traveler's actions may be the cause of events in their own past though, which leads to the potential for circular causation, sometimes called a predestination paradox, ontological paradox, or bootstrap paradox.

Thus, coming back to reality: One could theoretically travel at the speed of light or stand on a neutron star in order to experience time dilation and reach a future, though not his. But the past remains out of reach. Perhaps, we must take it as an omen. The past is the past and there is nothing to be done that can alter it. So, instead of crying bitter tears and building air castles, we must try ceaselessly to craft the future we desire instead.

-Lakshmi Kalarikkal (FYJC)



"Time and tide wait for no man."
Wise words said by the wise bard.

Time is money.
How distance is measured in our busy tinsel town. How time is valued, monetarily.

Time-bound
We are time-bound in this life. Time ends with death. But perhaps as Jainism philosophy says that it is us, we-mortals, who are time-bound, divide time. Time which has a start, which has an end. But it is we who have a start, have an end, time is continuous. It is we that exist in time, for some time. It is not time that is spent, but we.

Time-less
Ah, but only we can be timeless, through something else. There is no plus, no minus in time. An attribute of us, not for time.

Tense
Tenses, the verbs of time.
Past, Present, Future.
Simple, Continuous or Perfect.
Never enough to time time.

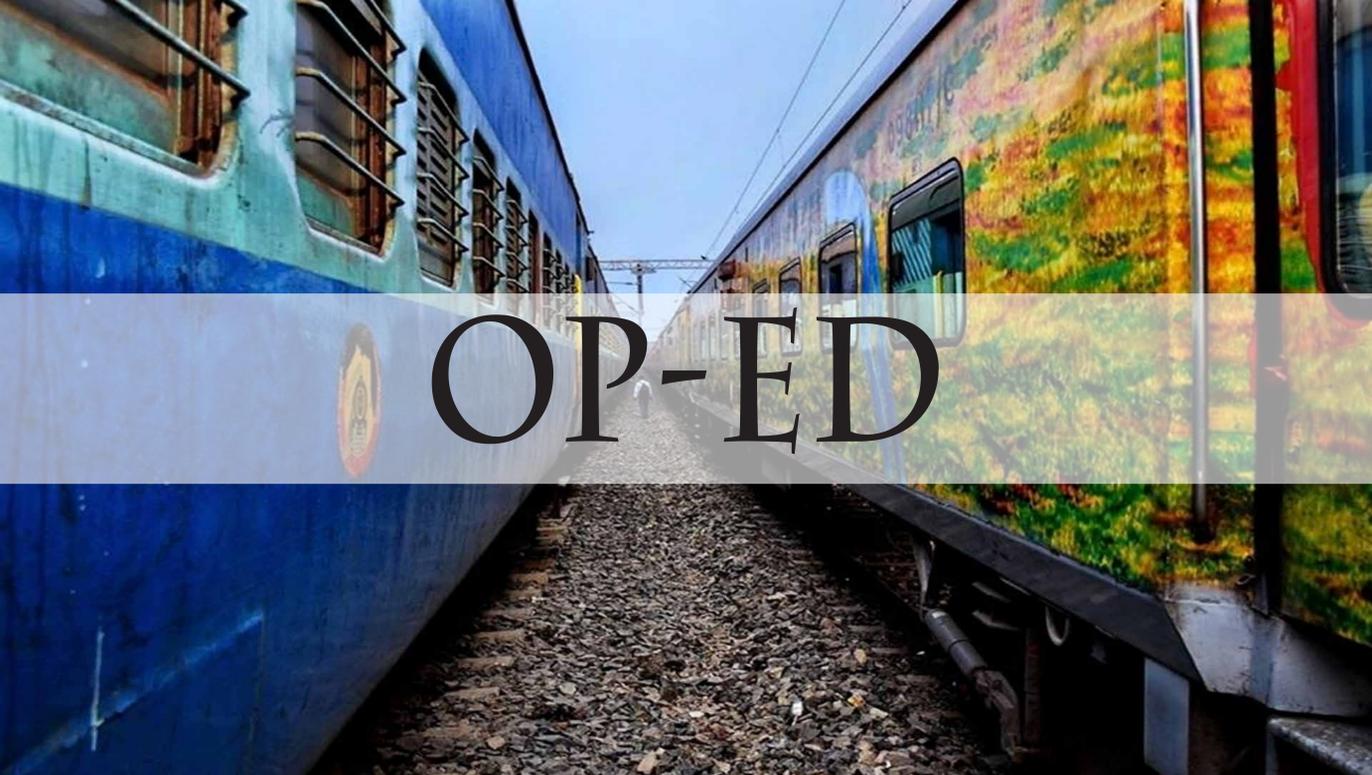
Who has seen time?
Where is time?
What is time?
Inquires the poet,
Javed Akhtar in "Waaqt";

*Ye waqt kya hai,
Yeh jab na guzra tha,
Tab kaha tha,
Kahin toh hoga,
Guzar gaya hai,
Toh ab kaha hai...*

*Kal kisne dekha hai?
Kya yeh keh, shaayad pooch, rahe hai
waqt kisne dekha hai?*

With that said, did we ever describe time, not in relation to us? Then, what is time as time?
That which is, not passes, is continuous, but just IS.

-Tanvi Padia (SYBA)



OP-ED

People and the fast moving trains

Every morning as you rush to catch a train while munching on your half-eaten breakfast, you learn a lot more than the fact that Thane trains won't take you to CST. The chutney green colored bogies bring a daily dose of fervor into our monotonous lives. Trains taught me that a simple sorry can bring smiles and end serious consequences and a single tiffin box can fill the belly of many. From gossiping about Deepika Padukone's wedding lehenga to sympathizing with a stranger whose weeping eyes remind you of your own hard times- trains are like eternal observants who have seen the youth dying, the old gleaming as well as the rich sobbing and the poor rejoicing. Maybe life is not as hard as getting the window seat but as simple as asking for a fourth seat. Trains not only take you to your destination but emancipate you from all the bonds that scare you before you reach your destined station. It unintentionally makes you feel one among many, hence establishes a bond between you and the city. Many people debate over what makes Mumbai this welcoming and united. In my opinion, it is the Mumbai local that has always brought this vast city together by connecting the diverse suburbs and varied people and built it into this gigantic city of which we are proud residents today.

- Disha Shanbag



A letter to the window seat

Dear Window Seat,

You are one of the most prized things in all of Mumbai during the morning peak hours. Hundreds of people fight for you every morning but only the ones with the nimblest of feet are blessed with the luck and the honor.

Today morning I got a window seat. The best one, with the winds caressing my face instead of making a nest of my hair. I knew that my day was going to be just fine.

I watch a fishnet on my arm that the morning sun draws while streaming in through the window and I'm lost. The way my skin turns gold under the light is more fascinating than any gossip that the aunties sitting across from me enjoy over a packet of salted peanuts. The train takes me to the college but the windows, they take me away from the drab reality.

I have memorized all of the buildings that line the railway tracks. It's like the entire world is one big zoetrope and it's putting on a show for me. I have some special songs ready for when I get a window seat. Coldplay to Kodaline, Adele to Arijit Singh to Prateek Kuhad- everyone comes closer to me. My music is more magical in your company.

Thanks for making my hectic commute a hundred times more pleasant. I'd write a million letters if I could but I think this one will do for now. Thank you!

Yours truly,

A girl on the train.

- Shabduli Shinde



त्या दोन मैत्रिणी

त्या दोघी एकाच वेळी निघायच्या रोज. फक्त पहिलीला जायची काही घाई नसायची तर दुसरीला मात्र आराम माहीतच नव्हता. पहिली मैत्रीण जरा मोठी वाटायची, काहीशी थकलेली, खूप वर्ष काम केल्यासारखी पण तरीही उत्साह कमी नव्हता तिचा. दुसरी मात्र एकदम फ्रेश वाटायची, आताच तारुण्यात प्रवेश केल्यासारखी. त्यांच्याकडे पाहून असं वाटायचं कि दुसरी म्हणजे नवी नवरी आहे आणि पहिली म्हणजे खूप वर्ष लग्न करून आता सगळ्याला सरावलेली! कधी वाटायचं दुसरी काही दिवसांनी पहिलीची जागा घेईल.

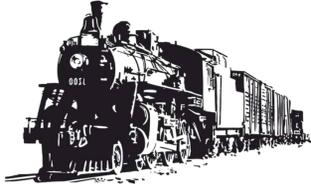
खूप वेळा पहिलीला दुसरी मुळे सापत्नपणाची वागणूक मिळायची. दोघी जर एखाद्या ठिकाणी एकत्र गेल्या तर दुसरीला आधी जाऊ देत आणि मग पहिलीला कारण दुसरीचं महत्त्व जास्त असायचं ना !!!

पाऊस पडायला लागला ना कि पहिली मला वाफाळलेल्या चहा सारखी वाटायची. चहा जसा खूप वेळ गरम पाणी पोटात घेतो, मग कुठे त्यात चहा पावडर विरघळते, साखर रमते आणि मग वरून बरसलेला दुधाचा पाऊस त्या चहाला पूर्णत्व देतो, ही तशीच होती. एवढी वर्ष खूप काही गोष्टी सहन करून पोटात ठेवून सगळ्यांना गुंतवत आणि स्वतः सान्यांमध्ये विरघळत ती आयुष्याचं रिंगण पूर्ण करत होती. याउलट होती दुसरी. खरं सांगायचं तर हवीहवीशी वाटणारी. अर्थात ती जितकी गोड दिसायची तितकीच नेखरेलसुद्धा होती.

दोघी त्यांच्या जागी योग्य होत्या पण त्याचं नातं काय हे मात्र मला कळालं नाही. दोघी एकाच ठिकाणी राहायच्या, एकत्र निघायच्या, एकाच ठिकाणी पोहोचायच्या पण त्या एकमेकींच्या बहिणी आहेत कि मैत्रिणी आहेत कि त्यांचं नातं सासू सुनेचं आहे, नणंद भावजयीचं आहे कि अजून काही याचा शोध मात्र मला अजून लावता आला नाही. त्या एकमेकींशी कधी बोलल्या नाहीत, बोलणं तर दूरच, भेटल्या पण नाही !!!

ज्याला ती पहिली आवडली असती त्याला दुसरी मिळाली नसती, कधीच! कारण एकाच वेळेला आपण दोन ट्रेन मधून तर प्रवास नाही करू शकत ना ! पहिली कल्याण वरून सुटणारी 7.57 ची छशीमट स्लो होती तर दुसरी तिथूनच सुटणारी 7.57 ची छशीमट फास्ट!!

- Mrunal Saple



Trains and Music



We're in the city of dreams, the city of movies; the birthplace of Bollywood melodies, we're in Mumbai. Mumbai is evidently unique, mostly due to the pace of life it offers, a pace that is often stifling for some and a miracle for others. This pace is aptly personified by what is regarded widely as the lifeline of the city-The Mumbai Locals.

Amidst the chaos, at last, going home after a long day, she finds herself sitting still by the window. A new song starts blasting in her earplugs which is in complete sync with the view and the mood. She can't help but act like she's in a music video, with her face mirroring the emotions from the song.

Most of us have been in that place and more often than not, enjoyed every bit of it. Trains always demand us to spend the

travel time without getting bored. Some utilize the free time while traveling on the train for reading, writing, chatting or watching videos, but I think listening to music is the most loved one.

One thing is that listening to music just makes traveling smooth. Music once admitted to the soul, becomes a sort of spirit, and never dies. It's heartbreaking when one accidentally forgets to carry earphones while traveling. Music is like a painting on silence. And my painting looks exactly like the city of dreams, the city of Mumbai.

- Mithila Kudalkar

WHEN TRAINS BECOME MORE THAN THE JOURNEY.

The "Spirit Of Mumbai" is known nationwide and so is our ever-ready-to-help attitude, and this young boy strumming famous Bollywood numbers on his guitar is the perfect example of how one's simple act of kindness affects other people's lives. This young man, Saurabh Nimbkar, is using music for a mission to collect funds for the treatment of cancer patients.

Having spent a lot of time in the cancer ward of a hospital in Mumbai when his mother was undergoing treatment there, his heart made the charity of helping patients through his office. His office is located in Ambarnath - he travels from Ambarnath to Dadar, and from there he takes a train back to his place in Dombivli. It is on these routes that he plays his guitar to collect funds, four times a week and belts out popular Bollywood numbers for an appreciative audience that usually drops some money generously in his donation box.

Staying with his mother at KEM for months, Saurabh noticed that most of the patients admitted along with his mother, and their families, had come

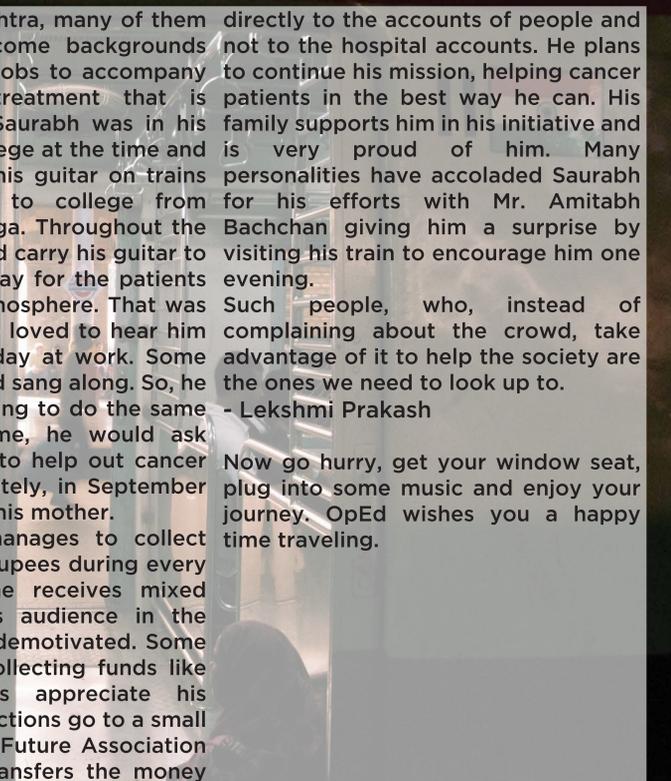
from rural Maharashtra, many of them were from low-income backgrounds and had left their jobs to accompany relatives for a treatment that is extremely costly. Saurabh was in his second year of college at the time and used to also play his guitar on trains while commuting to college from Dombivli to Matunga. Throughout the treatment, he would carry his guitar to the hospital and play for the patients and lighten the atmosphere. That was just for fun. People loved to hear him play after a long day at work. Some even joined in and sang along. So, he thought of continuing to do the same thing, just this time, he would ask people for money to help out cancer patients. Unfortunately, in September 2014, Saurabh lost his mother. Today, Saurabh manages to collect about a thousand rupees during every trip. And while he receives mixed reactions from his audience in the trains, he is never demotivated. Some criticize him for collecting funds like this, while others appreciate his efforts. All his collections go to a small NGO called Bright Future Association in Thane, which transfers the money

directly to the accounts of people and not to the hospital accounts. He plans to continue his mission, helping cancer patients in the best way he can. His family supports him in his initiative and is very proud of him. Many personalities have accoladed Saurabh for his efforts with Mr. Amitabh Bachchan giving him a surprise by inviting his train to encourage him one evening.

Such people, who, instead of complaining about the crowd, take advantage of it to help the society are the ones we need to look up to.

- Lekshmi Prakash

Now go hurry, get your window seat, plug into some music and enjoy your journey. OpEd wishes you a happy time traveling.





OPEN FORUM

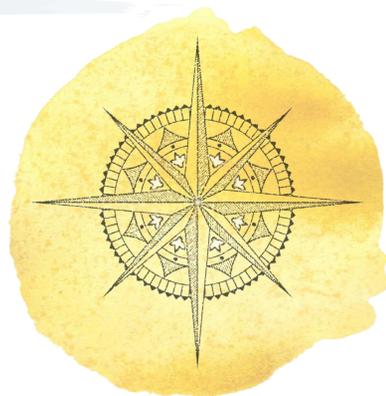
Urbana on the Move

-Aditya Negi

If you're reading this, odds are that you're a denizen of the big, bold, and beautiful Mumbai Metropolitan Region. You're also conscious that you share each square kilometer of space with about 5000 other Indians - that, or you believe I'm throwing out a conservative estimate. As India's richest urban center, the MMR commands a citizenry numbering twenty million plus. And as India continues to urbanize, expect that number to balloon further. But surprisingly enough, it doesn't even make the list of the "top ten most populated urban areas". Greater Tokyo, a legacy of the postwar Japanese economic boom, is home to 37 million people. And all the other cities on the list are Asian, from Shanghai to Manila to Seoul to Delhi, underscoring the rise of Asia in both economic and political power in the late-twentieth century. This article will examine the most important cities from ancient times right up to the Second World War.

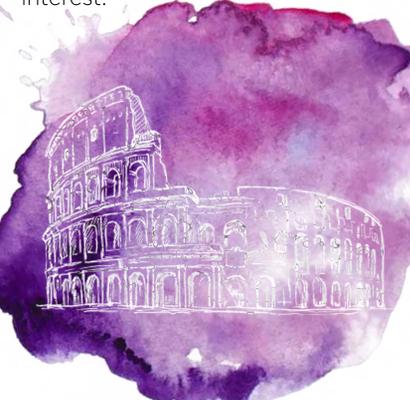
1. Ancient World (Antiquity to 2000 BC): URUK

The first stone towers and walls rose around 7000 BC in West Asia. Though there are many cities of note even this far back - Beidha in Jordan, Tell Brak in Syria, Mohenjo-daro in modern-day Pakistan - by far the most prominent settlement was the Sumerian city of Uruk in south Mesopotamia, now Iraq. The story of Uruk's rise (circa 4000 BC) is a simple one: it was located in a fabulously fertile region near the Euphrates river. If you want a lot of people in a relatively small area, you better make sure you have enough food to feed them. Uruk checked that box, and soon enough other occupations rose - traders, craftsmen, scribes. Eventually, it grew large enough to have its own army and bureaucracy, and it was sending colonists and traders to control the surrounding areas. Uruk hosted a population of 75,000 at its peak. It went into decline around 150 BC and by 700 AD it was completely abandoned. Today, this once-mighty city is of purely historical interest.



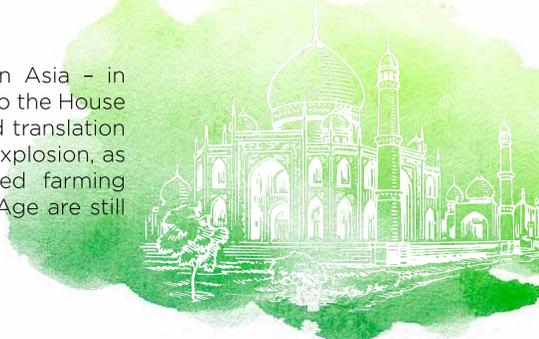
2. Pax Romana (2000 BC to AD 400): ROME

The urban centers that rose in this era were large even by today's standards - Babylon, Alexandria, Pataliputra, Carthage and Chang'an would all be classified as Tier 1 cities in India today. But the largest of all was Ancient Rome, whose population peaked at a million people. No city in the West would ever be as populated till the nineteenth century. Rome could sustain such an enormous population in part because it was the center of the mighty Roman Empire. It imported hundreds of thousands of tons of grains, wine, and olive oil from all over the world. Of course, their own agricultural technology was very advanced as well. People lived in apartment buildings which could be several stories high. Naturally, overcrowding was common and disease was rampant. Of course, eventually the Roman Empire fell. Without the resources needed to sustain it, Rome began to decay; by AD 537, it had merely 30,000 inhabitants. Of course, Rome was eventually reborn as the center of the Catholic Church, and it's one of the world's great cities even today.



3. "Dark Ages" to Renaissance (AD 400 to 1300): BAGHDAD

After the fall of the Western Roman Empire, new regional powers rose in Asia - in particular, Islam. At its center was the Arabian Nights city of Baghdad. Home to the House of Wisdom, where scholars convened and the Barmaks embarked on a grand translation project. "This free exchange of ideas is probably what led to the population explosion, as traders from around the known world came to the city and exchanged farming techniques." The agricultural methods pioneered during this Islamic Golden Age are still used today.



4. China's Cities (1000-1800): BEIJING

For much of the previous millennium, China led the world in wealth, technology, and population. The centers of population of the Middle Kingdom were the cities of Chang'an, Hangzhou, and most prominently Beijing. In the mid-1400s, the Jingtong warehouses were constructed to feed Beijing's growing population - surprise, surprise, they only led to an increase in the population. Beijing was the most populous city in the world until London outpaced it in 1825.



5. Post-Industrial Revolution (1800-1945): LONDON

London became the world's biggest city in 1825 - but it looked very different from the images of paradise we have in mind today. London didn't have its own police force till 1829! Crime was rampant, poverty was ubiquitous, and most lived in slums. What drove the population growth in London was not increased agriculture but migration, increased fertility, and better healthcare practices. The Industrial Revolution certainly didn't hurt either. London's population, at 1 million at the start of the nineteenth century, exploded to 7 million by the turn of the twentieth. London was eventually outpaced by New York City in the early twentieth century, and both were left in the dust by the rise of modern Asian megacities. Today the world's largest metropolitan regions support tens of millions of people - as we can all bear testimony too!



Over the Moon



I was five when I first realized that the moon was going along with our car. Rubbing tired eyes wide with astonishment, I excitedly announced my new finding to the whole car. Peeking out from between the clouds, the white ball soon mesmerized me enough to have me sitting on the rooftop every night, watching and wondering how exactly I could reach there. The first night of the new moon, I searched for it for hours, even asked my dad to take me for a drive in the car because it was supposed to go along with us. It couldn't just vanish. When my dad taught me about the phases of the moon, the waxing, and the waning, I was somewhat consoled that it wasn't gone forever. It would come back

when the time was right. Till then, I had the stars for company. I was ten when I understood clearly how the moon revolves around the earth. And that was why I realized, it would disappear some nights and make me long to see it. My love for the moon hadn't waned. In fact, I began to love the nights when the moon was nowhere to be seen, as that meant more excitement when it finally appeared again. I loved even the crescent moon, the perfect C of it. I was 15 when I saw the moon rise out of the mountains for the first time. I witnessed the commencement of its journey from between the two mountains and was awed by how quickly

it moved across the sky towards the sea. I fell asleep that night gazing at the moon and rose when it was about to dip into the deep blue sea. I was 20 when I realized for the first time how apt the poets, the singers were when they said that the moon appears just a little bigger, just a little brighter, when you fall in love. The moon did indeed seem bigger, the cold winter evening a little sweeter, and the stars twinkled as if they all knew my secret, knew my feelings for the boy I was talking to. I walked home that evening but the moon was still there, still walking along with me.

-Sayli Mayekar

Musically Inclined

Musical theatre is a form of theatrical performance that combines songs, spoken dialogue, acting, and dance. The story and emotional content of a musical - humor, pathos, love, anger - are communicated through the words, music, movement and technical aspects of the entertainment as an integrated whole. Although musical theatre overlaps with other theatrical forms like opera and dance, it may be distinguished by the equal importance given to the music as compared with the dialogue, movement, and other elements. Since the early 20th century, musical theatre stage works have generally been called, simply, musicals. Somehow, when we weren't paying attention, this beautiful art began garnering attention again and suddenly found itself occupying the spotlight over the last 4 years or so. With the release of Into The Woods and Les Misérables, musicals reached the forefront of the entertainment industry and seem to have entered a second golden age. Live broadcast musicals for the small screen or even musical TV shows like Nashville and Empire have gone over exceedingly well with audiences. Even Disney's animated musical division underwent a resurgence with the overwhelming

response to Frozen and its soundtrack. There are so many wonderful musical shows out there, but for a novice, it could be confusing to decide where to begin! Here are some of the most popular musicals in recent times - if you want to join the Broadway wagon, starting with one of these is the best way to go! Hamilton: Perhaps easily the best known musical of the decade, Hamilton: An American Musical is a sung- and rapped-through musical about the life of American Founding Father Alexander Hamilton, with music and lyrics by Lin-Manuel Miranda, inspired by the 2004 biography Alexander Hamilton by historian Ron Chernow. Incorporating hip-hop, R&B, pop, soul, traditional-style show tunes, and color-conscious casting of non-white actors as the Founding Fathers and other historical figures, the musical achieved both critical acclaim and box office success. It quickly gained notoriety for using music genres that usually stayed away from the Broadway stage. Mamma Mia! Mamma Mia! The Movie is a 2008 jukebox musical romantic comedy film directed by Phyllida Lloyd and written by Catherine Johnson based on the 1999 musical of the same name, also written by Johnson, which itself is based



on the songs of pop group ABBA, including the title song, with additional music composed by ABBA member Benny Andersson. Mamma Mia is the lucky horror film or a B action movie or a stoner comedy. It's ridiculous, but it knows it's ridiculous. This musical partially pioneered and wildly popularized the "jukebox musical" genre, in which pre-existing pop songs are retrofitted into a narrative storyline. (There are also jukebox musicals like Jersey Boys, which tell a biographical story about musicians and present their songs as in-world performances.) Funny how it's once again okay to be unabashedly silly and earnest—or to love unabashedly silly and earnest things!

-Natasha Desai, Shwetal Funde

TECH-TRICKED

Are you ready to face the consequences of technology?

Think about a fictional app that lets you swap your face onto anyone else's face in the world. Just the thought of this excites everyone's minds as you could take your favorite movie scenes and just place your face onto them and live the dream of being a star. Well, it seems like the future has arrived a lot quicker than one could imagine and we already have this app available to the normal public which can be used to produce Hollywood grade CGI within days on a spare laptop lying around in the backyard.



But it turns out that instead of recreating sweet movie scenes, this app is being used to create fake non-consensual porn of celebrities. All you need for this is a fast computer and no sense of empathy and the best place to find such people was Reddit, and that's where it all started. An anonymous user by the name DeepFakes, started a subreddit releasing the 2.6 gigabytes of code to the general public and that spread like wildfire and obviously the first use that people could think for the app was to create celebrity porn!

The working of the software is quite simple, you just need a few 100 pictures of the two subjects (the more the better) in different expressions, or you could just pick up a video clip and the app would do the extraction for you. Once the neural network has finished learning the facial features of the subjects, it would then begin "dreaming" what the people would look like in poses it has never seen before.

Besides the use of pornography, the app has been used for funnier purposes as well, such as swapping the face of Nicholas Cage with other celebrities. While some people even pushed the ethical boundaries a step further by morphing their faces over other people's faces in a live stream thereby posing themselves to be a completely different person.

However, all these incidents aside, this software poses some real threats to people's privacy. As everyone draws the moral line of what's acceptable just slightly below what they're actually doing, this leads to such a situation where you can no longer trust a video of someone unless you also trust its source. So for instance, if you want to create a certain alleged Donald Trump tape then all you need is a body double, a few days of computer time and no conscience. But it could be used to do some serious damage as well because someone could just write a script to pull out selfies from Instagram accounts

and train up an algorithm to create plausible fake porn as if from a hidden or hacked webcam and then send out blackmail threats anonymously and even if only a few people fall for it that could still be enough to cause emotional trauma to a huge number of people and the worst part is that no

legal action can be taken against the creator of the videos because these fake videos could be defended as parodies and the first amendment would protect them. The best the victim could do is file for a defamation case and even if they win it, the punishment would be nothing

compared to the emotional trauma that they would have to go through. All this begs just one question, 'Are we as humans really ready for all the technological advancements that are happening around us in the world today?'

-Rishabh Vishwakarma

Do You Really Own All The Tech You Have?

We live in the age of machines. Machines that have made our life easier and are continuing to do so day by day. We have come to a point where machines have started to learn by themselves and are becoming more efficient in every way possible. The era of SMART-machines if one would like to say it out loud. Everything around us is becoming smarter: our phones, televisions, cars even refrigerators and washing machines. The key behind making technology smart is in inducing a tremendous amount of well-functioning software in it. Software has come a long way, from

has happened in the past that Apple has locked all the devices with local display repairs after a software update and consumers were forced to get it fixed by visiting an Apple store. Another example of such enforced technical trickery is that some Hewlett Packard (HP) printers have stopped working when consumers tried to print with an ink cartridge which was not manufactured by HP themselves.

Two of the leading tractor making companies in the US namely John Deere and Case have developed tractors that come with software licensing. In one instance it was found that a Case tractor sounded an alarm every 10 minutes and the consumer couldn't get it fixed for about a year because of the software licensing on it. Another known example of misuse of software licensing is that Keurig coffee makers shut down themselves if one tries to use any other coffee pods than the ones made by Keurig. It has also

writing numerous lines of codes for each task to writing code so that the machines learn to accept and do new tasks. It has been quite the journey. As a consumer, we have definitely benefited from all these advancements. We have also grown way too dependent on technology and these days most of the manufacturers take advantage of this situation of the consumer.

Whenever you buy a tech product and start it while booting it up you always accept a bunch of user agreements that most of the people don't even like to read completely. While not reading

been seen that when farmers in Nebraska championed a right to repair law, all the big tech companies like Apple came together and the result was is in their favor. It is actually frustrating to know how tech companies abuse their licensing agreements about customization and repairs to the point where they can add all the apps you want but also charge you more money for it or they can actually force you to throw a completely fixable device just because they want you to. These companies can also hide how their products are actually dangerous to us. A few years ago Volkswagen had actually tried to hide their cars' deadly emissions by tweaking their software that government regulators couldn't access. This actually resulted in 59 premature deaths in the US alone.

It is a reality that tech manufacturers want us to live in a world where they have more access to our devices than

the user agreement completely shows nothing but ignorance of the user while accepting them the consumer actually affirms to the fact that they don't own all the tech they have just bought. Yes, the hardware of the tech can completely be the consumer's property but the software is not.

Companies have set up their devices in such a way that you will always rely on them in some way or the other. For example, if you own an Apple iPhone and you somehow break your screen, it is mandatory for you to get it fixed from a nearby Apple store instead of a local screen repairing shop. Because it

we do. Still, there is a silver lining to this dark cloud. There are a number of federations working in our favor, who have had legal victories on behalf of consumers.

There is still a long way to go to repair using third parties and trusting in all of our devices. But a day is expected to come when the consumer will be the real king of the hill.

-Suvini Mayekar



Organoids

For a long time, researchers have been fascinated by understanding the mysteries of the human brain. This knowledge about the brain has significantly improved in the last century. Although, unraveling deeper mysteries about the functioning of the human brain is still a big challenge. Recently, scientists working on the technology involved in stem cells and organoid research have made it slightly possible to understand more about the human brain and related diseases. Organoids are culture models which enable many stem cells to maintain key structural, developmental and functional similarities to that of organs. One of the features of these organoids is that they are developed in vitro, that is, in a test tube or any medium outside a living organism. This means that these researches would probably have far-reaching implications than the previous in vivo models, implying that successful researches in stem cell

technologies and organoids could be hope for understanding the basic activities in the human brain to the causes of numerous brain-related diseases.

Paola Arlotta, Professor of Stem Cell and Regenerative Biology at Harvard University believes that organoids will pave the way for answering questions like things that are wrong inside the brain in the context of psychiatric illness. She hopes that researches in this field will allow us to solve problems related to human neurological diseases like autism, bipolar disorder, and schizophrenia in a completely new way. Currently, Paola Arlotta along with Jeff Lichtman is working on this research and trying to model neural connections by taking high-resolution images of thin brain slices. Lichtman says, "If getting to a full understanding of the brain is a mile, we have walked at least six inches." Their research would address many questions: developing

treatments for specific cell types for diseases related to psychiatric illness, the molecular target for new drugs and to dive into abnormalities involved in schizophrenia. Related researches from scientists may get to know cells inside the brain getting affected by genetic modifications and could be able to build a fairly accurate model of neurological diseases.

While developing organoids, highly advanced biomaterials and microtechnology from engineers will be crucial to achieving robust and reproducible organoid cultures, which is an insurmountable challenge now. Improvements in bioreactor technology and related tools will help the development of organoids. An engineering-based methodology compounded with the advances in research will be imperative for success in turning organoid hype into hope for resolving neurological diseases.

-Smeeta Poladia



SCIENCE OF EVERYTHING

A very happy new year folks ! This new year we have decided to treat you all with some very positive discoveries ! Because Science is all about making life easy ! Read on to find out more about it !

Alzheimer's Blood Test

Alzheimer's disease is one of the most dreaded and mysterious diseases of modern times. For the most part, clinical trials in Alzheimer's disease have been woefully disappointing—failed drug after failed drug. One of the major issues that hamper Alzheimer's research is that the disease is always caught at a relatively late stage. This is because symptoms develop slowly over a number of years; they become obvious long after the condition has made changes in the brain. Scientists in Japan and Australia have developed a blood test that can identify people who have high levels of a protein associated with Alzheimer's disease. This long-sought test could help in the increasingly desperate search for therapies that halt the progression of dementia, which affects tens of millions

of people worldwide. One of the hallmarks of Alzheimer's disease is an abnormal buildup of a protein called amyloid-beta in the brain. Amyloid-beta is present in the healthy brain, but, in individuals with Alzheimer's, the protein is folded incorrectly and accumulates in the form of plaques. In its misfolded, sheet-like form, it is toxic to nerve cells.



The test measures blood plasma levels of this sticky protein. This protein can start building up in the brains of

Alzheimer's patients decades before there's any outward signs of the disease. Typically, it takes a brain scan or spinal tap to discover these A-beta clumps, or plaques, in the brain. But evidence is growing that A-beta levels in the blood can be used to predict whether or not a person has these brain plaques. The researchers used mass spectrometry, a more sensitive measuring technique than used in most previous tests, which allowed the detection of smaller amounts of the protein. And instead of looking at the total level of the protein in the blood, the team calculated the ratios between different types of A-beta. This blood test could help researchers more easily identify people who might be good candidates for clinical trials of early interventions.

Magician that turns Sewage into Clean Hydrogen Energy

You have flushed something valuable down the toilet. Yes! You heard it right. The typical household sewage is rich in bioplastics, organic compounds that can be turned into clean energy. But the challenge lies in separating contaminants from valuable organic compounds - the gold from trash. Recently i.e in November 2018 researchers at King Juan Carlos University, Spain designed a biorefinery process that harvest energy from wastewater using a mixture of purple bacteria species.

Purple phototrophic bacteria belong to the biggest & most diverse group of bacteria. All of them are photosynthetic, but unlike plants and algae, they use infrared light as energy source for their metabolism. Hence they have brown, red as well as purple colours. These bacteria have a versatile metabolism. The purple phototrophic bacteria which stores energy from light, when supplied with an electric current can recover near to 100% of carbon from any type of organic waste, while generating clean

hydrogen gas for use as fuel. Hence light based biorefinery process could provide a means to green energy from wastewater with zero carbon footprint. For a medium sized wastewater plant the direct transformation of organic contaminants into hydrogen by purple bacteria could theoretically yield energy for 43-107 houses. These small purple bacteria could help us solve the problem of wastewater as well as problem of increasing energy requirements at the same time. Hence they really are magicians of Nature.

Precursors of An Artificial Brain!

The proper functioning of organ systems is very much crucial for the survival of humans. One of these systems is the, nervous system. Our nervous system is a network of nerves. The signals are transmitted by many complex mechanisms. The neurons, are the fundamental structural and functional unit of our nervous system.

These neurons, however cannot divide! Meaning if a neuron is lost then, it is lost permanently! Research is going on to find a solution for the problem. And finally, in the year 2018 we have got the beginning of that answer. For years memristive cells (cells containing three component circuit) have been ascribed the best chances of

being capable of taking over the function of neurons and synapses. Researchers from Polytechnic University of Turin and RWTH Aachen University in Germany produced a memristive element made from nanowires. These nanowires are made from zinc oxide crystals and are ten times thinner than a normal human hair.

The scientists have claimed that these wires can inherently process and even store information, as well as being extremely small and energy efficient. These wires are capable of receiving multiple signals parallelly, processors that mimic the human brain. These nanowires function similar to a biological nerve cell, an advance that

could pave the way for building Further, a team led by engineers at the University of California, San Diego has developed nanowires that can record the electrical activity of neurons in fine detail. The new nanowire technology could one day serve as a platform to screen drugs for neurological diseases and could enable researchers to better

understand how single cells communicate in large neuronal networks. Currently, these nanowires are used to perform implants in preclinical studies. They are used to treat Parkinson's disease and other neurological diseases. Thus, the nanowires offer promising results in the field of neurosciences.

Scientists have pinpointed a ghost particle's origins

Neutrinos are the lightest among the two dozen or so subatomic particles. They come from all directions in tremendous number. About 100 trillion neutrinos pass through our bodies every second. Neutrinos, as name suggest are neutral in charge and thus don't show any change electric or magnetic force is applied to them. They travel approximately equal to the speed of light without any interaction from other particles. Scientists have theoretically predicted that their mass is almost zero, one millionth of the mass of an electron; but they have never known what could be its origin. They

can travel through Because of these mysterious properties neutrinos are called as ghost particles.



In this artistic rendering, a blazar emits both neutrinos and gamma rays that could be detected by the IceCube Neutrino Observatory as well as by other telescopes on Earth and in space. IceCube/NASA

But recently, on July 12, 2018, scientists released a study outlining how they were able to pinpoint the exact source of a neutrino. The source is known to be a Blazar, the most energetic type of object in the universe. Why are astronomers so excited by this discovery? The scientists at the IceCube Neutrino Observatory in the South Pole believe these particles can help unveil mysteries of the cosmos. The particle's ability to travel through space unscathed makes it easier for scientists to understand phenomena happening billions of light-years from Earth. Ghost particles might also help

to understand phenomena happening billions of light-years from Earth. Ghost particles might also help scientists understand secrets about our universe's past, like why matter won over anti-matter in the Big Bang. Some believe it might even change human's fundamental understanding of physics.

To reset depressed brain ??

In today's world , all of us are constantly under some pressure and this might lead to a mental health disorder characterised by persistently depressed mood or loss of interest in activities, causing significant impairment in daily life. Scientists have shown that magic mushrooms can be used to treat depression .

Magic mushrooms belong to a group of drugs known as psychedelics. The key ingredient in these ,psilocybin when taken , is converted in the body to psilocin, which is the chemical with the psychoactive properties.Psilocybin

binds to a receptor in the brain for serotonin, and that's thought to cause many of its sensory distortions.

Psilocybin affect two key areas of the brain:

- 1)The amygdala - which is heavily involved in how we process emotions such as fear and anxiety - became less active. The greater the reduction, the greater the improvement in reported symptoms.
- 2)The default mode network - a collaboration of different brain regions - became more stable after taking psilocybin.



Do you know ??

Connection between Santa Claus and Magic mushrooms :

According to one theory, the color of Santa Claus dress is similar to those of magic mushrooms as the shamans gave out shrooms as gifts in late December, often entering homes via the roof due to Deep snow.

2. Legal status

Psilocybin was seen as a hallucinogenic drug that was powering the counterculture movement of the time and hence is considered to be illegal.

3. Oregon could become the first state to legalize magic mushrooms if an initiative makes it onto the ballot for the 2020 general election.

Much more research is needed to work through this, but the initial findings suggest that these drugs may offer an opportunity to approach mental health disorders from a new angle.

SAFARNAMA



Where to live or where not to live is the question

Traveler. Wanderer. Explorer. Seeker. Lost. Home is the place where, when you have to go there, they have to take you in. - Robert Frost

What is home for a traveler? Is it a small and shabby motel that one is spending the night in or is it a comfortable locked up apartment miles away that one calls their own? Can home be allocated space in carpet areas and square meters? Does a traveler really have a place that they want to keep going to or a place they permanently live in? These are some questions that I ask myself again and again but who am I kidding, I am not a traveler by a long shot (yet). I have taken one trip where I actually felt I traveled but other than that not so much. However, I don't have a bag tag which says 'Wanderlust'. Guess who is winning at life?

But jokes apart, I would really like to spend a large chunk of my life going around and traveling but when confronted with the question of where I would like to live I have always reached a dead end. Till a few months ago, I couldn't imagine living anywhere except

Mumbai. I used to take month long vacations at my grandparents' who lived in smaller cities but I yearned to come back to my city. The rhythm of the local trains and the taste of a spicy vada pav, the sight of the mighty oceans and imperial structures standing boldly for decades, I loved every bit of it. But as a friend of mine correctly pointed out that one loves Mumbai not only for its different sceneries but also for the open culture and freedom that it allows one to have. I was rather hesitant as to where will I find this openness that I grew up amidst. Then I went through the second phase where I didn't think I would want to settle anywhere. With all my belongings on my back and a passport in my hand, I decided that I will live my life in different locations with different people. This idea seemed extremely exciting until I realized how broke one day of eating outside leaves me in Mumbai. Accepting defeat, I hoped that as I grow up I will find a place that I would like to live in.

Why is thinking of a place to live in so difficult in the first place? The idea of traveling in itself means breaking the monotony and going out there and trying new things. Settling down, having a home

to come back to is in some way contradictory to the beauty of traveling. Traveling in itself means crossing borders and trying to hold on to freedom that doesn't come from staying in one place. To have a home or not have a home is the question and I had no answer. Should I spin an oversized globe and place a finger to find myself a place to live or settle down or throw darts at a map? Having gotten myself in this philosophical mess, I realized that a huge part of my association with places came with the people. I can hate a place but the people there are what really matters to me. Two months ago, I went to a volunteer camp in Pondicherry. I faintly remember the place but the faces of people and the time I spent with them is unforgettable. Hence, I could be living in the heart of a metropolitan city or in isolation somewhere on a beach in Tamil Nadu- if I am with people who I love, I think I will be fine. So to end this article with an overused line (because come on, what is a travel article without a line from an Instagram post), Home is where the heart is and my heart is with dogs, a wall filled with books and my friends/family who cheer me on.

- Priyanka Tibrewal

TRIPPER



The fact that I am writing this article in a faraway resort, in what seems like an abandoned garden, says it all. Says, how much I hate being in one place.

I've read it in this book 'Brida'- it says loneliness is man's worst enemy. And according to them, you'll be a loner if you never find your soulmate. But isn't your own soul your best mate?! I have myself to travel with always. I've heard it somewhere, people always run back to where it feels like home. I don't have to run to places to be at home, my soul is my home. I am always at home in this world.

So why be in one place, when there are sights that I haven't seen and places I haven't been to.

When I travel I discover how resourceful I can be when I am exposed to new places, people and experiences. Maybe it's finding my way around a busy city, or ordering a meal when I don't speak the language.

Travel makes me yearn for something exciting and different, crave new experiences and new challenges. Moreover, conquering fresh territory is exhilarating. It's the ideal place where I test myself. These experiences help me open my mind, hear my thoughts and allow me to discover and consider fresh ideas I hadn't thought of before. Getting away gives me the opportunity to reflect on my life.

I travel for that moment when you look

above at the sky and there's this whole new universe speaking to you. You just have to relax and be present in the moment. Let sensations like the lapping water and the warmth of the sun, along with the sound of waves, recharge your batteries.

With time and traveling, I've realized that there's no one way to live life and there's no one place to be at. You can't imagine how different life is in another place until you see for yourself and that's the reason why I can never be in one place.

- Rashi Gulati

A Life of a Traveller

"Man cannot discover new oceans unless he has the courage to lose sight of the shore." - Andre Gide

Looking out of the window and being able to enjoy the serene sight of the ocean whenever you want, now that's a dream! A beach house will be the dream house for all those ocean and sea admirers. But imagine being able to witness a new horizon, a new scenery, a new marine line and the land of a different country every few days. Admittedly, this is a level up to the beach house plan.

A life of endless sailing and traveling is now possible through the many residential cruises that have been built and the upcoming ones with top-notch plans. 'The World' and 'Utopia' are the leading residential cruises, with many others not far behind in rank. These cruises provide all possible amenities one could need while spending their life on a ship, without compromising on luxury and hospitality.

Here, the residents not only own their individual residences but in a way, they own the ship. They have a say in

the making of the itinerary for all the expeditions. These expeditions take them around half the globe in a year, letting the residents visit all important port regions.

The cruise dwellers are promised an all-round travel experience and that is exactly what they get. Their endless thirst for knowledge, adventure and travel are fulfilled. 'The World', for example, has an enrichment program which brings in expert guides and lecturers in various fields of expertise (diving, wine tasting, and world cultures) which prepares you for the next port visit. It is ensured that the residents get a proper local experience of the visited destination i.e. exploring the art, cuisine, heritage, culture, etc. of the place.

These residential cruises are the perfect examples of multicultural settlements. On one side you may have Spanish neighbors while on the other you may have Brazilian neighbors. Going ahead, these people will become your best friends and your support system. You may learn more about different parts of the world from

them than you may learn from lectures and excursions.

You can spend your days lounging by the railing and reading a good book or stepping down to the marina platform and go kayaking. You could sleep under the open starry sky or dance your night away, probably even spend your night away in the casino. You could have one hell of a roller-coaster life in this few hundred meters square space.

My bucket list definitely includes spending a year or two on one of these cruise ships. But the person that I am, I also know that I can never spend more than a couple of years sailing on the ocean or the sea, regardless of how exciting the ship may be. Spending life on a ship is definitely not for everyone. It is important to keep in mind that even though traveling is about pushing limits, it is definitely not about getting yourself sick. A pinch of wisdom is necessary along with a carefree attitude for selecting a life of travel for you.

- Disha Gala

AUG 14

INDIA
1947

FICTIONALLY YOURS

1947
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BLOSSOMING ETERNITIES



An autumn wind blew into a dry street of northwestern India. It made the dead leaves bump into each other and then hide in corners. The street was lined with small shops and hard-working artisans on both sides. The eyes of the people looked deprived of hope and happiness. Their faces were hollow, wrinkled and solemn.

At the end of the street were huge gardens that were starved of care and attention. Wildflowers dried and died. Vines entangled and clung to each other. In the middle of it all stood the Raj Mahal of the royal family. Stripped of its glory, it stood as the ugly reminder of the British Raj period. Maharani Gayatri Devi remained the only heir to this huge estate. The people still respected her and sought her opinion on every matter. Her heart broke to see her people, the sons, and

daughters of the land, in such turmoil and distress.

Once upon a time, her princely state was the face of prosperity, wealth and happiness. Now, it had turned into a parched land of discontent, torn in the wake of the partition. The year was 1947 and the British had already sucked Hindostan dry of its wealth. Now that the parasites seemed to be leaving, the princely states were in the arena of political instability. Turbulent times rode the Chariot of Death as the Hindu Muslim war of discontent began. The people of the country were divided by their choices. Gayatri Devi was now the only hope to the majority of terrified people trying to find a peaceful life. Yet again, little did anyone know she herself was in bigger trouble, and even more so on the radar of the people who craved her destruction. This small kingdom of Vijaygarh was on the borders of India and the newly formed Pakistan. The Government had left a choice for the princely states to join either of the countries, but the continuous terrorist attacks in the kingdom and the assassination attempts on the Maharani had made the deal even more difficult to crack.

Gayatri Devi was sitting in a lonely courtroom on the throne that was soon to be reduced to a decorated chair. "The kingdom is no longer

strong enough to run on its own. We have no choice but to be the part of either one. I wish we could peacefully join India but the constant riots and the threats to my people are forcibly bending me towards Pakistan. I don't know what I should do, Bahadur Shah."

"Maharani-sa," said her minister, "Don't strain yourself. As for the people, it is best you leave the decision to them—"

"And leave them to die in hands of some blind bloodthirsty terrorists?"

An unknown voice sounded from the other end of the courtroom. A young man appeared, his structure was as strong as his words. The devotion of a united nation reflected on his handsome face. The spirit of unity burned in his brown eyes. Dressed in proper tailcoat entered a man with a mission. "Pardon me, Maharani-sa. I am Vikramdev, a son of this kingdom's soil, wired with the Congress from the time of my childhood. I am pleased to make your acquaintance." He bowed respectfully, as any man before the Queen would.

"As for what I have heard of you — the warrior queen of Vijaygarh, ideal to her subjects and Queen in every sense of the word —

I remind you that you pledged the people's welfare. Your fame travels far and wide...never had I thought I would be disappointed."

"How dare you talk to Maharani-sa like this!" barked the minister. "You—"

"There is no time to sulk on what is pushing you down. Take a look into the eyes of your people. They still believe in you. Lead them to freedom from this nightmare. I have come here to ask you to join the very nation we dreamed of. India is our identity; take this chance, for it may be your only hope. I am here to help."

His words hit a cord in her heart. She felt her spirits rising, but most of all, she found hope. She started working towards her goal. Her people wholeheartedly supported her. They began to fight against those who were forcing them to join Pakistan. Their decision was made — India would soon become their homeland.

Things changed and so did their heart. Gayatri Devi started to feel for someone other than her people. The small meetings, the open lectures, the moments when Vikramdev saved her in the riots. The time when they had their own private discussions which usually ended in eye-locks for short periods of infinity.

The flowers bloomed in the awakening to their dream turning into a reality. He knew that his feelings were true. He would soon tell his love, his Queen, at the very stroke of midnight — when India would be a free nation, and hearts wouldn't be restricted to courtrooms and battleplans.

14th August, the day of liberation, the day of ascent, the day of security, the day of identity. Gayatri Devi started from Vijaygarh to the Redfort to sign her agreement. The papers were ready. She gracefully walked the passage leaving behind her burdened mind. She walked towards her freedom and a normal life. The papers were the same quality, perhaps teak if special, but it would not compare to the place it held in her heart. She thought of her people, her late parents, and Vikram. Blushing slightly in silence, she signed her happiness in the moonlight.

14th August; the day of bloodshed, the day of the deadliest riots, the day of loss; the day Death won, the day sacrifice weighed heavier than goodbyes. While Maharani Gayatri Devi sat in the quiet, Vijaygarh sat in flames, screaming protest and violence.

Vikramdev was satisfied, blushing towards the sky, remembering his Maharani-sa.

It is time to confess, he smiled ruefully to himself, pain spreading across his torso. The sword piercing through him was forcing more blood to shed.

He was satisfied by ensuring everyone's safety during the big riot and now it was time to be free.

"I saw her in the palace during my childhood," he whispered to no one. His blood pooled on the royal carpet beneath him. "She was lonely yet beautiful. She was younger than me yet she wanted to fight on her own against the British. I have admired her since then. When Raja-sa died, her eyes were burning. On the terrace, she screamed her sorrow..."

He could feel the life fading from his chest. His vision tunneled and darkened, the stars turning into tiny, blurred dots of white.

"Don't cry, Maharani-sa. I don't want you to cry. I am always here to help you...I love you, Gayatri. Now..." he coughed to himself, "You are free."

He smiled at her beautiful face in the sky as he felt his soul liberating.

-Shubhangi Pingulkar (SYBA) & Vaishali Kanekar (FYBA)

An India-Pakistan partition is an unforgettable event in Modern Indian history. As the political ambitions bore fruit, the country lamented the loss of an integral part of itself. The division ran deep, for it wasn't just the land that was divided, but also the hearts of people. Suspicions ran rampant, friends turned into foes, the delicate bridge of brotherhood that was established between the religions, fostered over 200 years of fighting the colonial enemies was shattered. What ensued was terrible bloodshed. Riots and rapes were commonplace, those celebrating Eid and Diwali together wanted each other's blood. The Partition Literature, both fiction and non-fiction written during those times and the ones after that bear testimony to horrors of Partition. But no other book touches your heart the way *Train to Pakistan* does. You would expect nothing less from Kushwant Singh, a master storyteller, and an eminent journalist.

Train to Pakistan is set in Mano Majra, a village off river Sutlej. It is a remote place that is hardly frequented by any visitors, where the villagers are simple folk, Sikh landowners and Muslim tenants who live in relative harmony. Their daily routine revolves around train-sounds, (there's an early morning one that wakes them up, another one in the night that signals them to sleep and so on) until a ghost train arrives from Pakistan, filled with

PARTITION FICTION: TRAIN TO PAKISTAN BY KUSHWANT SINGH



corpses of Sikhs from the other side of the border. It is the author's picaresque description that takes the reader back to 1947, to Mano Majra, and compels them to view the story through the eyes of onlookers, not just cold detached readers.

The characters are multi-faceted, laced with shades of grey, they are both protagonists as well as antagonists in their own right. Juggut Singh is a goon who is in love with the local mullah's daughter, Hukum Singh, a magistrate for whom age doesn't matter when it comes to desire, Iqbal Singh, who hides his Sikh identity to look city-bred and modern. All watch helplessly as the massacre around them lengthens, until a series of events when everything changes, never to go back to the way it earlier was.

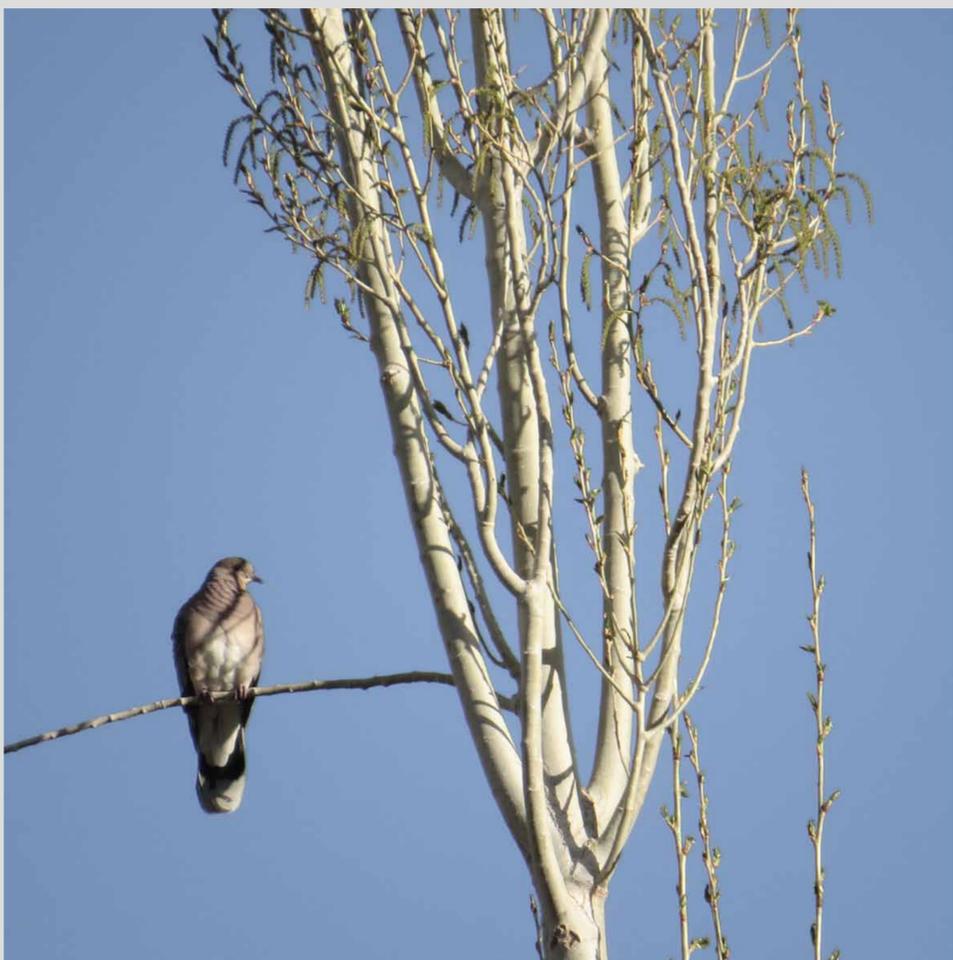
Enter the refugees and the conflicting emotions rise, should the Muslim villagers be

punished for what their brethren have done to Sikhs? Or should they, their neighbors for generations be protected from the angry refugees? The answer comes in form of official summons, the village Muslims are being rounded up and sent to a refugee camp. Teary goodbyes ensue, but it all changes when a rioter comes into a Sikh gathering in a Guru Dwara, the public opinion is turned, the ones who cried teary goodbyes now volunteer to destroy the train that carries Muslim-refugees to Pakistan. The climax of the story hooks one on to its pages, the novel becomes fast-paced and the readers are left holding their breath to know the fate of the *Train to Pakistan*.

The novel, with just under 200 pages, has much to tell. The transformation of Mano Majra, how it went from a village not bothering whether it belonged to British India or the independent, to the one that thirsted for revenge is heart-wrenching. It isn't the characters that the reader roots for in this novel, but the entire village. Mano Majra seems like a living entity, whose fate is changed irrevocably. It isn't the characters as much as the setting which is complex and daunting. Kushwant Singh has awed the reader time and again with his literary genius. *Train to Pakistan* is one of his best works, and readers of historical fiction should not give this one a miss.

-Aditi Patil (TYBA)

ROAMING AROUND THE CITY



Colors of Mumbai

What different things come to your mind when you hear the word "ART"? Have you ever thought what Art nature wants to present to you? By just looking around you can catch the essence of art in the nature. The different shades of orange, red, blue, yellow in the sky from the dawn till the dusk. The beautiful colourful birds chirping around the city. A wide splash of colors out in the greys, browns and the greens of the city can be spotted easily which many of us are unaware.

The pointed black beak, long black legs and white feathered body of a Little Egret can be easily spotted in the lavish green surroundings. The blend of blue, brown, white colours looks spectacular on the body of a white

throated kingfisher with its sharp red coloured beak. The Purple Rumped Sunbirds oftenly mistaken as Hummingbirds holds the power to grab our attention with its beautiful body colours of lime green, white, maroon, emerald green and purple. It's a magnificent site as the bird shines when sunrays fall on its body. Pink colour never fails to bring a huge smile on our faces of the migratory birds called flamingoes with their orange tint. A red coloured vent gives a characteristic name to the Red-Vented Bulbul. The large grey beak with white body and grey feathers and tail of Grey Hornbills is worth viewing. The Asian Koel looks beautiful with its prominent red and black concentric eye color. The whole black body but when the Greater Coucal opens its wings for a flight the vermillion red coloured wings looks spectacular. A Coppersmith Barbet is one of its own kind with different blend of green shades, red, blue and black colours. The green feathered, long tailed red beaked Parakeets looks absolutely beautiful from the busy streets of Mumbai. The pink and black tint on the whole white body of a Painted Stork looks amazing in flocks. The majestic Black Kites are in abundance due to their scavenging abilities.

Birds like Little Egret, Pond Herons, Grey Herons, Flamingoes, Lesser Sandpipers, Common Hoopoe, Red-Vented Bulbuls, Common Myna, Black Kites, Asian Koel etc are found in the bird watching spots of Mumbai like Maharashtra Nature Park at Sion, Sanjay Gandhi National park, Airoli Flamingo Sanctuary and also few can be spotted right outside your windows. What requires is a little patience and a keen eye! Undoubtedly it will make your life more colorful.

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