

UM-DAE CENTRE FOR EXCELLENCE IN BASIC SCIENCES |2 |0 |2 |1 **GET YOUR** ANNUAL STUDENT MAGAZINE VACCINE \otimes VACCINES WORK **GET SHOT** 7,7 7.7 7.7 7th Issue

Acknowledgements

We express our gratitude to CEBS for the continued support of our endeavor even amidst the pandemic. We are grateful to Dr. V.L Sirisha, who has supported the club and has been an integral cog in the publication process of this magazine. We also extend our heartfelt gratitude to the faculty, students, and administrative staff for taking their time to submit wonderful contributions amidst the existing difficult situation.

~Team Novellus





Director's Message

I am delighted to learn that the Literature and Science Club of UM-DAE CEBS is bringing out the 7th Issue of Novellus- a students' magazine, for the academic year 2020-2021. The magazine is a fine collection of different activities and expressions of literary side of our students.

It has been a tough year for all of us due to COVID-19 pandemic caused by an invisible SARS-CoV-2 virus. Its ease of transmission and severity of infection has posed unexpected and unprecedented challenges hampering normal functioning of our life. Education sector was no exception. We could, like any other educational organization, carry out teaching in an on-line mode. As the Center was physically closed as per the Government guidelines, extra-curricular activities of different clubs of students took a back seat. It is a matter of great pride that despite so many odds Literature and Science Club are able to bring out this issue of Novellus. I am confident that your indomitable spirit and courage will prevail in life and the adage— 'when going gets tough, the tough get going' will be applicable to you.

I take this opportunity to convey my best wishes and compliments to the Team Novellus for publishing the 7th Issue of the magazine.

V.K. Jain Director UM-DAE CEBS, Mumbai

1



Chairman's Message

During the Covid-19 pandemic period, over the past turbulent months when the educational institutions had to switch to online learning, and training the students on best possible practices, it is very admirable and encouraging to note that the Team Novellus and the students of CEBS maintained the tradition of publishing Novellus. I congratulate them for their dedication and courageous efforts in these times of stress, anxiety, and restricted outdoor activities.

The articles chosen reflect the balanced emotional and intellectual approach of our students who have also given due recognition to the overwhelming physical and psychological toll that challenged the Frontline Workers. We can not ignore and fail to provide them with due human rights, social protection, and proper recognition.

I would also like to applaud the creative prowess and multifaceted interests of all our students, staff, faculty, and research workers of CEBS. Team Novellus has done an excellent job.

Wishing all the students of CEBS a very rewarding and exciting career in understanding the concepts of Basic Science and the application of Science for societal benefits.

Prof. (Dr.) JAI PAL MITTAL Chairman, Academic Board UM-DAE-CEBS

EDITORIAL

Another academic year came and went by, but unlike the past this one was special. If we were asked for one word to describe the past academic year, we would pick the word "adapting". The global COVID-19 pandemic that plagued the entire world last year is still prevalent and we are adapting to the changes which were introduced in our lifestyle. While the students can't wait to go back to college, the professors also can't wait to meet the students and have in-person classes. The various COVID-19 vaccines gave us a glimmer of hope. But it will take some time till "normalcy" is returned. Till then, we have to stay vigilant and safe, not just for our sake but also for our families and other members of society.

This year we were unfortunate to hear the sad demise of Prof. S.M Chitre, who was not only one of the founding figures of the institute but also served as an influential model to a lot of students as well as faculty. The corridors of CEBS will no longer be the same without him. As an honor to him, CEBS has decided to preserve his office in a pristine form and renamed Ag-14 to S.M Chitre hall.

Despite the unfortunate times, CEBS hasn't been stagnant in its activities. It welcomed the new, young, naive, excited, and eager students of the Quanta 14. Prof. H.M. Antia joined the physics department. The last academic year also bore witness to some innovative ideas regarding lab courses. Instead of postponing the lab courses to some uncertain future, the professors tried their best to convey the process online.

The student life in CEBS has always been moving and changing: lilting at times, and yet whizzing past our collective ears. We find ourselves looking at this picture of an institute walking with its head held high as its age progresses into the double digits. Our institute has spent one more year as a teenager, building its own identity. It is a feeling of delightful awe that grips us, as the excellence of CEBS spills into realms outside academics. Without backing down to the pandemic, the clubs continued to function and conduct events online; Rendezvous and talks from around the world from the Science Club, Crescendo —a perplexing treasure hunt, and inter-college cultural and e-sport events brought forth the talents of the students during these difficult times.

Novellus has always tried to capture the difficulties as well as wondrous moments of student life in something more permanent than memories. In light of recent events, this is one tradition worth cultivating. Since the magazine curates your experience at CEBS, we would request you to come forth and contribute more to the future editions of Novellus.

Without revealing any further details, we invite you to turn the pages and witness glimpses of the details of the student life at CEBS in the last academic year. If you look closely, you can almost find details of the year that was, and probably a hint of the promises the next year holds!

Here is hoping that we all return to CEBS soon, together, as a family. We hope that you have a great time reading the fruits of our labor. We would love to receive feedback from your side.

Team Novellus (novellus@cbs.ac.in)

In loving memory of

Prof. S.M. Chitre

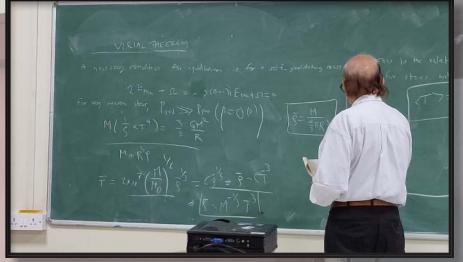
Awards and recognitions -FNA, FASc, FNASc, FRAS, FTWAS Padma Bhushan - 2012 Professor A. C. Banerjee Memorial Lecture Award - 1992 INSA Vainu Bappu Memorial Medal - 1995 M. P. Birla Award - 1999







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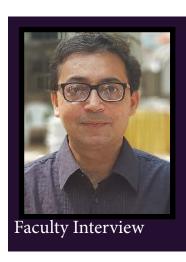


You'll бе missed

CONTENTS



Prof. S M Chitre Memorial



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23
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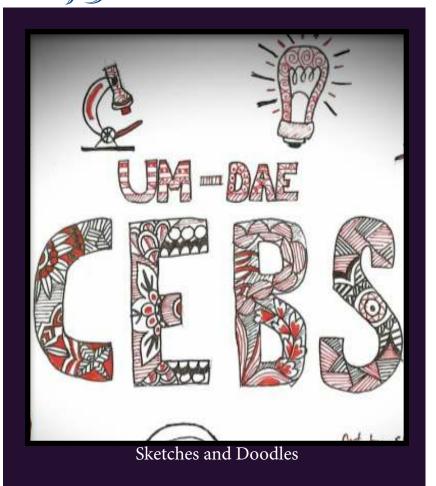
Acknowledgements 00
Director's message 01
Chairman's message 02
Editorial 03
Table Of Contents 06
Foundation Day 08
Prof. S M Chitre Memorial 09
Feria del Libro 12
Crescendo 13
Science Club 14
E-game Club 17
Revival 18
Inventa 19
Tenacity 21

Dialogue in the Dark 22
Faculty Interview 23
Oh Sacred Sacrament Adorned with Leather 29
Is She the Bud of Kalpavriksha 30
तालाबंदी 3
When Students Make You Feel Wanted 32
For My Irreplaceable Beloved 33
To Kill a Whale with a Tractor 35
The Lament of Mandodari 40

What the heart echoes 42
Vicissitude 42
An Eight Month Year 43
Autumn Fantasies 44
Eternal Churning 4

Cages of Gold 48
Bioshock 49
A Letter to Readers 51
ेये जिंदगी है 52
Journey in the End 53
In and Out 54
Ink of Tears 57
Musketeers 58
The Buffalo and The Brat 59
Just Try 61
Muse 62
Pride the Peril 63
Movie Club Reviews 64
Smile 67
Unalienable Rights 68
A Phone Call 71
The Fifth Problem 72
Women 73
Terribly Tiny Tales 74
One Day Trek to Chirsal Lake 75
A Motion towards Judgement 77
Sailors 78

Sketches and Doodles	79
Surveys	80
Shot at Sight	85
Festivals at Home	88
Apple of the Eye	91
Memes	93
The Year That Was	96
Team Novellus	97



Samridhi Singh, Q14

Foundation Day

Every year, on 17th September, CEBS celebrates its Foundation day. It was on this day CEBS started as a humble yet confident idea to revolutionize the basic sciences teaching in India. This day in 2020 marked the 13th year of success and hard work of the founders of CEBS. Due to the pandemic and the cognate norms, the program was held on the Zoom platform, keeping in mind the health and safety of all the members and invitees. Despite the virtual mode being unable to match the impact of physical presence, it did not outdo the enthusiasm and motivation of the members of CEBS for making the day a memorable one.

The session started at 2:30 PM and was hosted by Dr. Manu Lopus. He commenced the program with welcoming remarks and then invited Dr. V. K. Jain, the Director, to share his thoughts on the day. Dr. Jain talked how CEBS started as a modest experiment but soon grew to be a renowned institution and how the students and faculty are striving day and night to take its name to new heights. Following him, Prof. S.M. Chitre, one of the founding members and Dr. J.P. Mittal, Chairman of the Academic Board, shared their memories about the tireless efforts, planning, discussions, cooperation and dedication of the founding members and other people who envisaged an institution for Basic Science - an institution, which unlike contemporary institutes at that time, focused on sparking curiosity and interest in students to learn science.

Subsequently, the chief guest for the day, Dr. Anil K. Singh, former professor of Chemistry in IIT Bombay and former Vice- Chancellor of Bundelkhand and Allahabad Universities, was invited to give a lecture, titled "New Imperatives for Designing and Developing Chemicals and Chemical products". The talk was very informative and detailed yet well structured. He talked about the common chemicals and fossil fuels we consume on a daily basis and how they are popularly produced. Further, he talked about the challenges we will be facing in the near future and came up with alternatives and solutions. He also threw light on the flaws and drawbacks of the current education system and pointed out a huge gap between academic and real worlds. He put forward the idea of an "interconnected learning ecosystem", where the government, academia, and the industries work together in a fruitful manner to bring out quality and relevance in our system. He finally concluded his lecture by explaining how not just interdisciplinary but multidimensional education and research is what the future demands.

The session concluded with a vote of thanks by Dr. Bhooshan Paradkar to the speaker and the members of CEBS who attended- both offline and online.

Prof. S.M. Chitre Memorial Symposium



Prof.Shashikumar Madhusudan Chitre (07.05.1936 - 11.01.2021)

To live in hearts we leave behind is not to die... - Thomas Campbell

As a tribute to Prof. Shashikumar Madhusudan Chitre's memory, UM-DAE CEBS organized a three-day online symposium from 6-8th May, 2021 on Frontiers of Astrophysics and Fluid Dynamics, which were topics close to his heart.

Distinguished physicists from across the globe delivered plenary and invited lectures during the symposium. Through the website Chitre Memorial Symposium set up by the organizing committee, about 2000 registrations to attend the symposium were made by physics enthusiasts within a few days. The patrons of the symposium were Prof. J.P.Mittal, Prof. J.V. Narlikar and Prof. M.S. Raghunathan. The symposium was divided into 11 sessions consisting of 3 or 4 lectures each, chaired by various professors from different research institutions.

The plenary speakers from prestigious institutions across the world were-

Prof. Sir Roger Penrose, Nobel Laureate (Oxford, UK)

Prof. Kip Thorne, Nobel Laureate (Caltech, USA)

Prof. Martin Rees (Cambridge, UK)

Prof. Douglas Gough (Cambridge, UK)

Prof. Christopher Tout (Cambridge, UK)

Prof. Ramesh Narayan (Harvard, USA)

Prof. Abhay Ashtekar (Penn State, USA)

Prof. K. R. Sreenivasan (NYU, USA)

The 24 invited talks were delivered by-Prof. Srubabati Goswami (PRL, Ahmedabad) Prof. Ajit Kembhavi (IUCAA, Pune) Prof. Abhijit Sen (IPR, Gandhinagar) Dr. Bhooshan Paradkar (CEBS, Mumbai) Dr. Ananda Hota (CEBS, Mumbai) Prof. Gopal Krishna (NCRA, Pune/CEBS, Mumbai) Prof. Patrick Das Gupta (Delhi University) Prof. D. Narasimha (IIT, Dharwad) Prof. Subir Sarkar (University of Oxford, UK) Prof. Shravan Hanasoge (TIFR, Mumbai) Prof. Sarbani Basu (Yale University, USA) Prof. Srinivas Kulkarni (Caltech, USA) Prof. Sanjeev Dhurandhar (IUCAA, Pune) Prof. D. Saikia (NCRA, Pune) Prof. Somak Raychoudhury (IUCAA, Pune) Prof. Rahul Pandit (IISc Bangalore) Prof. Sudhir Jain (BARC, Mumbai) Prof. Vinod Krishan (IIA, Bangalore) Prof. S. Kandaswamy (IUCAA, Pune) Prof. Dhrubaditya Mitra (NORDITA, Sweden)

Three of ex-CEBS students also delivered invited lectures on some of the latest topics in physics research-

Dr. Amit Seta (ANU, Canberra) (Ex-CEBS Student)

Dr. Rohit Sharma Fachhochschule Nordwestschweiz Institute fur Data Science, Switzerland (Ex-CEBS Student)

Dr. Aklant Bhowmick (University of Florida, USA) (Ex-CEBS Student)

Nobel Laureates - Prof. Sir Roger Penrose delivered a lecture on 'Gravitational lensing, singularities, and the conformal structure of the universe'; and Prof. Kip Thorne delivered a lecture on the topic 'Will Geometrodynamics become a branch of Astrophysics?' The intriguing topics for lectures in the symposium ranged from 'The refulgent Sun' to 'Gravitational memory and quantum entanglement'. A constant exchange of ideas and information over topics in Astrophysics and Fluid Dynamics created an intellectually sparkling ambiance during the lectures, which the participants would reminisce about. It was no less than a 'feast' for minds that love physics, and science in general. Around 100-200 people attended each lecture through Zoom and Youtube Live. Students and physicists asked interesting questions throughout the sessions and proved to be an enthusiastic audience. Even learners from other disciplines, be it biology, mathematics, or chemistry attended the lectures, and surely, it was a great experience for everybody.

On 7th May, the second day of the symposium, which is the birthday of our beloved Prof. Chitre, a remembrance session was organised wherein people who have been closely associated with him shared some of their best moments, personal and professional experiences, and 'conversations over coffee' with him. Few moments of remembrance and silence for the beautiful soul he was, made everybody recall their good times with him. His students spoke of how he was not just a subject teacher, but a Guru and loving mentor in the truest sense of the word.

His colleagues and friends spoke of him with love and brightness in their eyes as if he was still somewhere around, which he is and shall be forever. The premises of CEBS shall always remain warm with the energy that he has endowed us with.

The symposium was concluded on the evening of 8th May, by Prof. V.K. Jain, Director, CEBS and Prof. Swapan Ghosh, convener of the symposium. Other dignitaries also said a few words to appreciate the speakers, thank the organizing committee for doing a splendid job, and acknowledge every individual's effort to bring this together.

More than 25 student volunteers from CEBS did a commendable job at making the smooth functioning of the sessions possible. They were actively working throughout the event collecting questions across media, sharing links/information and moderating other activities during each lecture. Their dedicated contribution is appreciated and valued.

Last but not the least, the lively audience that attended the symposium and participated zealously is what made it successful. CEBS is grateful to them for their enthusiastic involvement.

batches

FERADELLIBRO Literary ffline Define

On 21st March 2021, Team Novellus organized an online literary event, Feria del Libro, in lieu of the offline event Stylus that is organized every semester. It consisted of exciting literary games under two categories: 'What the *effyis* this?' and 'Raconteur'. While the former category included games like 'Guess-the-Gibberish', 'Rebus', and 'Define my word' (uncommon and unusual sounding words hilariously defined by the participants); the latter was a team competition, where the teams qualified for the game through a Rebus round, and then competed against each other to produce the best story based on their prompts

ned

nared

against each other to produce the best story based on their prompts using quotations only from literary sources. The event attracted participants from all the batches, especially the freshmen, and extremely entertaining responses were shared by the participants in each game. Samridhi Singh (Q14), Hitesh S. (Q14), Ridima Srivastava (Q14), Saket Kumar (Q13), and Swarnava Mitra (Q12) were among the most active participants and entertained everyone thoroughly with their intelligent answers. The event was concluded with the announcement of a tie between two teams in Raconteur - Team 1 (Saket Kumar (Q13), Shivam Baishya (Q14) and Samridhi Singh (Q14)) and Team 2 (Jay Phadke (Q12), Prem Sai (Q13), and Hitesh S. (Q14)).



CRESCENDO 2K20

On 5th and 6th September 2020, an online quiz cum treasure hunt, Crescendo, was held to ward off the pandemic gloom and monotony by the efforts of a few alumni and students of CEBS. It included 12 questions - 3 from each of the Sciences and Mathematics. The participation was possible individually or in teams of 2 to 3 players. 37 students from the college registered for the event, and a total of 13 teams took part in the hunt. The fictional character, Bob, was hated for adding an additional level of complexity to the questions with his riddles and encryptions. The top three teams were awarded cash prizes, and all the participants got a consolation prize in the form of a drive folder containing interesting audiobooks.

The Organizing team: Rishabh Nain (Q9) Vibhu Vaibhav (Q9) Indranil Das (Q10) V.S. Gayathri (Q12) Rakshitha Madamakki (Q12)

The Winner teams were:

1st: Powerpuff girls - Arindam (Q9), Amrita (Q9), C. Chanderpal (Q9) 2nd: CCJ - John (Q11), Chayansudha (Q11), Chandrashekhar (Q11) 3rd: We want free treat - Prithwitosh (Q11), Kevin (Q11), Sanskruti (Q11)

CEBS Science Club



Rendezvous is a fun yet informative event conducted by the Science Club by inviting scientists to give a talk to the students in their field of research. These talks help the students to attain a deeper understanding of the different fields in science and also interact with the scientists to know more about science and the scientific community. Due to the pandemic all the sessions were conducted online on Zoom and were live streamed on Youtube. The online mode allowed the club members to invite scientists from different parts of the world, which was not possible previously in the offline rendezvous sessions.

Autumn 2020

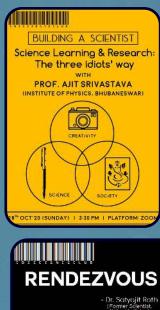
1. Jyotishman Dasgupta (4 Oct) The Chemical "Reaction" Clock

2. Ajit Srivastava (18 Oct) Science Learning and Research: The 3 Idiots' Way

3. Ananthnarayan Hariharan (8 Nov) How does one prove something cannot be done?

4. Satyajit Rath (6 Dec) Science of COVID-19

5. Subir Sarkar (27 Dec) The cruel fate of an indigenous mega-science project



SCIENCE OF

COVID-19

6" Dec | 3:30 PM

SOLVABILITY BY RADICALS Here Daes One Prove Something Cannot be Done

RENDEZVOUS

And the provide of the set of the second term of the second set of

INTERACTION



Spring 2021

1. Rama Govindarajan (7 Mar) The dynamics of small particles in flow: interesting or boring?

2. Manindra Agrawal (14 Mar) The Power of Abstraction in Mathematics

3. Harry B Gray (11 Apr) Metal Oxos in Bioinorganic Chemistry

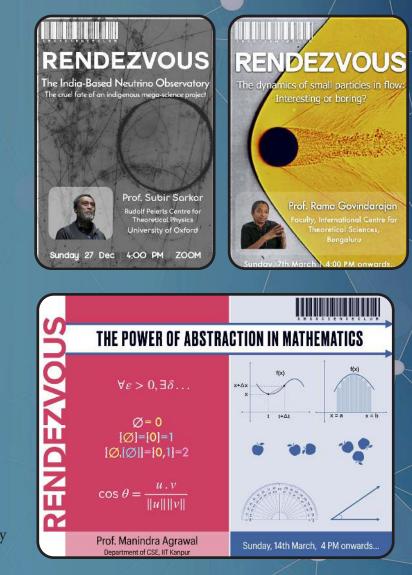
4. Siddhartha Mishra (18 Apr) How mathematics impacts the real world through computer simulations?

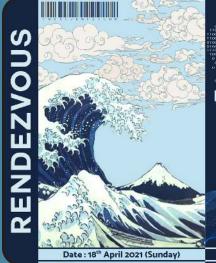
Informal interaction

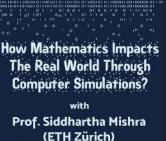
1. Satyajit Rath (6 Dec 2020) Science in COVID times...

2. Sushanta Duttagupta (28 Feb 2021) Can graphene be used to teach quantum mechanics?

3. Kurush Dalal (17 Jun 2021) Science in the field of history and archaeology







Time : 5:00 pm

RENDEZVOUS Metal Oxos in Biginorganic Chemistry



Sunday | 11th April '21 | 7:30 PM

15

Panel Discussion

Kalina Chronicles (11 Oct)

The Science club organized a panel discussion session titled "Kalina Chronicles" on October 11 2020, inviting some of the alumni of CEBS with the aim of providing guidance to all the current students of CEBS. There were five panelists selected for the session from various Quantas and working in different fields. A few other alumni were also invited to speak and share their knowledge and experience of academic and non-academic life with the students. It was a fun interaction session with a lot of information to take home and ponder upon.

The panelists were:

1. Dr. Amit Seta (Physics, Quanta 3):

Dr. Amit did his Ph.D. from the School of Mathematics, Statistics and Physics, Newcastle University, UK. Currently, he is a postdoctoral fellow at the Research School of Astronomy and Astrophysics, Australian National University. His current interest lies in cosmic rays, interstellar and intergalactic magnetic waves, dynamo theory, radio astronomy and high-performance computing.

2. Dr. Shilpi Singh (Physics, Quanta 3):

Dr. Shilpi completed her Ph.D. from the Department of Applied Physics, Aalto University, Finland. She is now working as a quantum engineer at Microsoft Quantum Lab, Delft, Netherlands.

3. Dr. Mritunjay Verma (Physics, Quanta 1):

Dr. Mritunjay got his Ph.D. from Harish-Chandra Research Institute, Allahabad. He then did his first postdoctoral from INFN, Italy. Currently, he is pursuing postdoctoral studies at the University of Southampton, UK. His interest lies in string field theory, pure spinor formalism and string perturbation theory.

4. Ms. Nivin Mothi (Chemistry, Quanta 4):

Ms. Nivin is currently doing her Ph.D. at University of California Merced, USA. She is working on resolving (un)folding transition paths of fast-folding proteins using high-resolution single molecule fluorescence spectroscopy.

5. Mr. Krishna Chaitanya Kasuba (Biology, Quanta 5):

Mr. Krishna is currently pursuing Ph.D. in the Biophysics Group, Department of Biosystems Science and Engineering, ETH Zürich, Switzerland. He has worked on neuromechanics and superresolution microscopy.

CC PANEL DISCUSSION



11th OCT 2020 · 12 PM IST · Zoom

The e-game club organised the third edition of CS:GO Premier League from January to March 2020. It was a tournament of the game Counter Strike:Global Offensive (CSGO). CSGO is a first-person shooter online game where a team of terrorists try to plant a bomb in a city and a team of counter-strike soldiers try to apprehend them. It is a game of strategy and the game is won by either fulfilling the goal or being able to kill all the members in the opposite team.

The event was conducted in a fashion similar to the IPL tournament. The students were intimated by an email about the event and the interested players were asked to fill a Google form for registration. Interested students could also become managers, who had to auction for the interested players. There were rules and limits as to the points a manager could spend to form a five-membered team among the players, and each player was worth different points depending on their rank.

The auction happened on 27 January 2020 in the mess of the Takshashila building at 10 P.M.There were five managers:

- 1. Sourav Kumar (Quanta 09)
- 2. Sharmistha Shilpi Das (Quanta 10)
- 3. Pushpendra Yadav (Quanta 09)
- 4. Apurv Singh (Quanta 09)
- 5. Ananya Singhal (Quanta 12)

The teams played each other over the three months. On the basis of points won, Pushpendra's and Sharmistha's teams entered the finals. Unfortunately, the final match could not be conducted due to the pandemic closure of the college, and both the teams were declared as tied.

Pushpendra's team members were Muhseen Musthafa (quanta 12), Yash Raj (quanta 11), Remulla Sujith (quanta 09), Tharun Chand (quanta 12), and Kumar Priyank (quanta 11).

Sharmistha's team members were Dipesh Pradhan (quanta 10), Abhilash Kumar (quanta 10), Dwiti Krushna Das (quanta 08), Fawaz Abdul Lahteef (quanta 09), and Vishal Kaleeswaran (quanta 13), with Arnab Chowhan (quanta 13) as the extra player.

CS:GO

Premier League

REVIVAL

Every year during December, one among the 7 Indian Institute of Science Education and Research (IISERs) organizes a cultural fest known as the Inter IISER Cultural Meet (IICM), where students from all the IISERs, NISER, CEBS, and IISc participate in various competitions and events. Unfortunately, it could not be held last year due to the pandemic. But, even the pandemic could not stop the enthusiasm and energy of students as Dakshesh Vasan from IISER Kolkata, came up with the idea and vision of Revival , an online Inter IISER cultural fest.

Revival was the result of combined effort and meticulous thinking of IISER Kolkata Cultural Committee under the Student Affairs Council (SAC) in resonance with representatives & event organizers from all the 7 IISERs, NISER, IISc & CEBS. Each institute hosted an online event based on fine arts, literature, music, drama, and dance with cash prizes for winners and runner-ups. As its contribution, CEBS hosted Pandemonium, an online solo dance event organized by Tanveer Habib Tadavi (Quanta 11) and Naman Mishra (Quanta 13). Though IICM is usually a 4-day long event that is scheduled during the winter breaks, Revival was spanned between 5th March- 4th April 2021 receiving heavy participation from students of the above-mentioned institutes from all over India with ongoing semesters, exams, and the pandemic. Judgment was also done online by experts in respective fields. The updates of various events were continuously available on the Revival website, and the social media handles comprising Instagram, Twitter and Youtube. All the performances were uploaded and received high appreciation on Instagram and Youtube.

Winners of these events were announced in a grand combined closing ceremony for both Revival and Tenacity, the online Inter IISER sports fest. The ceremony was scheduled for 5:30 p.m. IST on 4th April 2021 and was live-streamed on Youtube and Revival website. It started with a talk by Shrey Kadian, a proactive athlete leader from Special Olympics Bharat followed by a welcome dance performance by Shrishti Shah from NISER and a welcome speech by Dr. Sourav Pal, Director of IISER Kolkata. Various arts, dance, drama, fashion, and music performances were streamed with the declaration of results from time to time. Finally, the ceremony ended with a vote of thanks and a group screenshot with all the event organizers, representatives, and members of SAC for both Revival and Tenacity.

It is a matter of pride that CEBS, even with a fewer number of students, proved to be a good competition for others and also took active participation in all the events. CEBScients were also able to secure positions in two events:

Aditi Singh-2019 batch- Second place in Trashion: Fashion Out of Trash. Rajashree Mitra- 2020 batch- Second Place in Picomix.

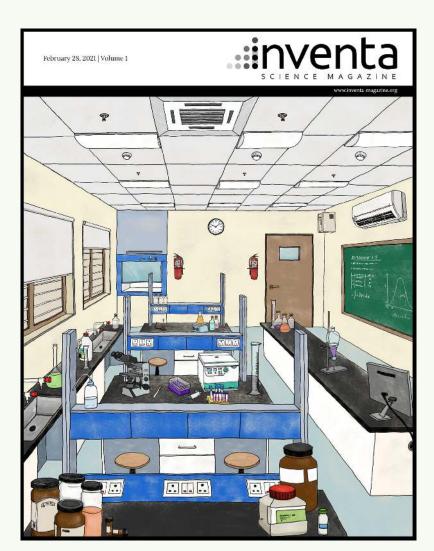
Inventa

<u>Inventa Science magazine</u> is an inter-college annual magazine which was jointly published by the 7 IISERs, IISc, NISER and CEBS this year for the first time. Their aim is to communicate the relevance of science in all spheres of life and its niche disciplines to the public. Inventa serves as a platform for the scientific community to present their ideas and thoughts in the form of academic, literary and artistic skills. Their vision was to look for writers in India's premier science institutes who would write on topics related to science, and publish a magazine that would kindle the spark of curiosity and reason in the minds of people. The magazine clubs of some of the above-mentioned institutes came up with this idea of a magazine jointly published by all the institutes.

They sent emails as the calls for the submissions of pitches on the ideas for the articles that the writers were interested in writing. The theme of the first magazine was '**Science**, **society and advancements in 2020**'. The writers were asked to write a pitch in less than 200 words including the type of content they

wanted to submit, how the content was relevant to the theme and a basic outline of the content. The suggestions made for the type of content to be submitted were: interviews of people from the scientific community, opinion pieces about a scientific topic or any scenario in the scientific community, reviews of any mass media of sci-fi genre or thoughts on being in a research field or any news related to the scientific proceedings. They were also taking photographs, or scitoons, or sci-comics, themed crosswords or puzzles as submissions. The pitches were to be reviewed by the main editorial board. Once the pitches were selected, the writers were given time to write their content for the magazine.

There was a board of managing editors who were chosen from each institute. Jay Phadke from Quanta 12 was the managing editor this year for the Inventa magazine. The managing editors were told to form a team of internal editors from their respective institutes who would edit articles from their institutes for the magazine. The internal editors'

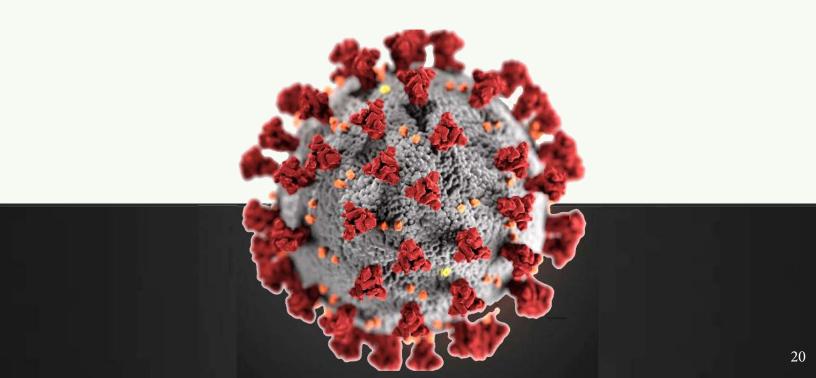


team from CEBS consisted of Indranil Das (Q10), Pratyush Bhatnagar (Q10), Tharun Chand (Q12), V.S. Gayathri (Q12), Manila Boipai (Q13) and Naman Mishra (Q13). The team had to verify references, edit and check for the originality in the thought for each article. After the edits, the designers worked into making the magazine a visual delight. Rakshitha Madamakki (q12) was one of the designers in the designing team. After the designing process, the articles were divided into sections and the magazine was finally released on National Science Day this year.

The articles that were published from our institute were:

- **Pandemic vs Infodemic.... tackling the devil and the deep sea** by Dr. Subhojit Sen (Ramalingaswami Fellow, Professor)
- Peeking Into a Cell: Fast and Slow by Upanishad Sharma (Alumni)
- Fungi: Food to Fashion by Anoushka Sachdeva (Q12)
- **Rewriting the Book of Life with CRISPR** by Tharun Chand P (Q12) with M Nithyassree from IISER Tirupati
- Entering the Introspective Mind by Ananya Sachdev and Naman Mishra (Q13)

On the day of the inaugural of the magazine, there was a virtual talk by Prof. Sandhya S. Visweswariah. Students from all the 7 IISERS, NISER, IISC and CEBS were invited to attend the talk which was also streamed on the Youtube channel of Inventa magazine. They also have an Instagram account for their outreach programs along with their Youtube account. Their future plans include publishing this magazine for the high school students and for the local community and to release and publish more editions to promote science communication.



TENACITY

"Tenacity" means the quality of persevering or to be determined. It was an online e-game event organised in lieu of the annual Inter-IISER Sports Meet (IISM), with the same aim of spreading sportsmanship and to encourage students to communicate with students from other institutes. Tenacity was the brainchild of Ankit Raj from IISER Kolkata and some members of the student associations of IISERs, who saw it as an opportunity to stay connected indoors during the pandemic lockdown, when physical sports were not possible. This event was organised from 1st to 4th April.

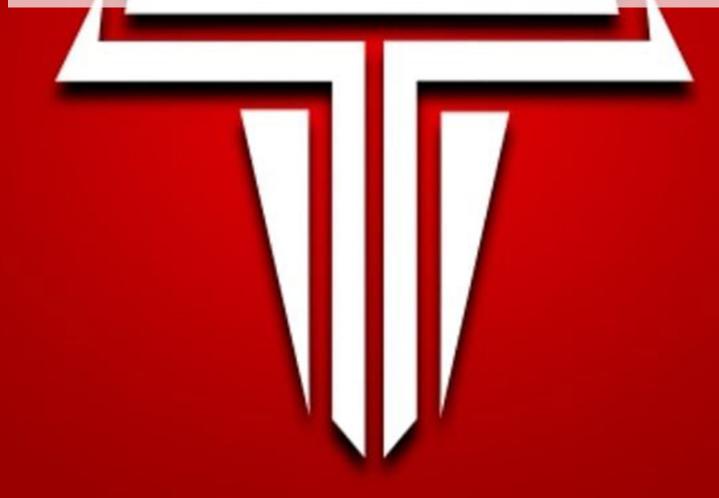
The games played were Chess, Valorant, Call Of Duty : Mobile (CODM), Pro Evolution Soccer (mobile version), famously called PES, Counterstrike: Global Offensive (CSGO), Cubing and a showcase game. CEBS students participated in Chess, Valorant, CSGO, PES, and CODM.

8 players were first selected by the e-game club of our institute in a qualifying round to represent us in chess. Chess was played at Lichess, an online chess playing platform. It was a round robin tournament, where the players from all the institutes played against each other.

In PES, four players represented us from across the batches.

Valorant is a first person shooter e-game. It was played in teams with one team from each institute. Each team consisted of 5 members plus a substitute member, representing an institute.

In CSGO, our team reached the semi-finals. The team members were: Abhinav Vats (Quanta 12), Kumar Priyank (Quanta 11), Manan Rawat (Quanta 14), Raheel Hammad (Quanta 10), Mohammed Nisham (Quanta 09) with Vibhu Vaibhav (Quanta 09) and Muhseen Musthafa (Quanta 12) as extra players.



People go on a vacation to relax, enjoy nature, or engage in adventure sports. Some trips do not fall within these usual touristy categories but leave an everlasting impression on one's mind. A trip to Dialogue in the Dark is one such experience.

In August 2014, my son and I went on a trip to Hyderabad. Our trip

included the usual places that are on a tourist's itinerary like Ramoji Studio, Golconda Fort, and the like. A trip was also planned to visit the exhibition in Dialogue in the Dark. It is a place where the sighted is blind and the blind is sighted. A media report describes it as "*Seeing alone isn't believing*".

It is night outside ... You are wearing dark glasses... Then the power goes off...

Dialogue in the DARK An exhibition you cannot see

- Kishore Menon

Located in a bustling mall in the city of Hyderabad, this place offers a unique experience into the world of the visually handicapped.

We bought our tickets and waited for our turn. The exhibition allows only 6 people in a batch to enter their area. We were requested to deposit all objects that reflect or emit light, like mobile phones, wrist watches, and spectacles. When our turn came, our batch was guided to a narrow corridor that became progressively darker as we walked along. A volunteer gave each one of us a white cane – the type that the visually handicapped people use to negotiate the streets when walking. We were also told how the cane was to be used. It was for the first time I realized that the cane is to be used only to scan nearby surroundings and is to be swept from side to side to check for obstacles nearby. "Scan the nearby area with the cane, take a step, and then again scan the area before taking the next step," the volunteer advised us.

As we proceeded along the corridor, it became increasingly dark. Pitch dark. A person whom we could only hear greeted us in complete darkness and advised that we should walk in a straight line, keeping our hand on the should der of the person immediately in front of us. He also asked each one of us to introduce ourselves.

The first part of the exhibition was to feel the wall on the left side and guess what it was made of. It was easy and all of us guessed it correctly as a bamboo wall. Next, in complete darkness, the voice advised us to move ahead, one at a time. Then we were told to feel the objects on either side and guess what the object was. We were informed that these are statues of famous people. That was a difficult one for me. What was surprising was that he addressed each one of us by our name! How could he see us? What was the trick? Did he have some special instrument? Were our canes embedded with some secret device?

Walking in complete darkness is a totally different experience. In our everyday life, we have encountered darkness on several occasions. But complete darkness is a very different and unreal experience. I felt disoriented and saw apparitions before my eyes. Sometimes a floating curtain, sometimes ghostly figures...

Other events in the exhibition included sniffing common spices to guess what it was, crossing a rumbling bridge that rattled with each step, sitting on a rocking boat, and even playing cricket! Each one of us got an opportunity to bat while the voice threw a beaded ball. Once again, the voice addressed each one of us by name. A few of us were actually able to hit the ball. Again, I wondered how he could see us and throw the ball in the correct direction.

The visit ended with us in a restaurant – again in complete darkness. We could purchase a popular brand of soft drink that came in tetra packs, each costing $\gtrless 10/$ -. When I handed over the currency of $\gtrless 20/$ - to the person at the counter, he took some time to feel it, and informed me that it was a $\gtrless 10$ note!

After the visit was over, we were guided to the exit, and this time he came with us. Finally, when we reached th exit, I could see him. He was blind - completely blind, and had no secret device with him. I had read somewhere that the brain rewires itself in blind persons causing heightened abilities such as smell, memory, and hearing. During a brief chat, we learned that he had lost his vision to a progressively debilitating disease of the eyes.

It is a moving insight into the world of the blind and is a life-changing experience. Imagine a world completely devoid of light, colour, images, and people. Imagine a world where you can see nothing – absolutely nothing.

I visited this place six years ago but still have vivid memories of it. Next time you are in Hyderabad, do visit this place.

Through the Eyes of a Theoretical Physicist...

Prof. Jain was interviewed by Ananya Sachdev from team Novellus on 11th July, 2021 regarding various aspects of his life, career, his opinions regarding science, teaching, CEBS, and the pandemic. Many other members of the team attended the interview and Naman Mishra participated by asking a few questions towards the end.



About:

Education:

- PhD (Applied Mathematics), University of Mumbai (1994)
- M.Sc. in Physics, Indian Institute of Technology, Delhi (1985)
- B.Sc.(Hons) Physics, Hindu College, University of Delhi (1983)

Positions held:

- Head, Theoretical Nuclear Physics and Quantum Computing Section, Nuclear Physics Division, Bhabha Atomic Research Centre, Mumbai
- Professor, Homi Bhabha National Institute, Department of Atomic Energy

- Adjunct Professor, UM-DAE Centre for Excellence in Basic Sciences, Kalina, Mumbai
- Visiting Professor at various Institutions and Universities in India and abroad
- Postdoctoral fellow, Centre for Nonlinear Phenomena and Complex Systems, Université Libre de Bruxelles, Brussels, Belgium (1995-1996)

Research Interests:

- Nonlinear dynamics, Quantum chaos, and connections with non-equilibrium statistical mechanics
- Semiclassical Physics
- Random matrix theory
- Exactly solvable models
- Nuclear theory structure and reactions
- Quantum computation and quantum information science

Books and Reviews:

- Mechanics, Waves, and Thermodynamics: an example-based approach, Sudhir R. Jain (Cambridge University Press, 2016).
- Invited review articles in the Reviews of Modern Physics (2017), Fortschritte der Physik (2013), Proc. Indian National Science Academy (1995)
- Awards:
- INSA medal for Young Scientists (1994)
- INSA Anil Kumar Bose Memorial Award (1999)

1. What made you join CEBS?

I was close to Professor Chitre much before the Centre started (I was associated with him in 1984 as a VSRP student). He wished to involve me in establishing the teaching, curriculum and the syllabus of this Centre. I was busy with other things, but then when it came to teaching his own Course, he wrote to me from Cambridge a very nice email, as always, saying – 'Well, now, you have to help me. We are going to start a course in fluid mechanics.' I said, '...but you know everything about it. How can I add anything of significance ?' He said, '... for example, I don't know superfluid mechanics, you could teach superfluidity.' and I said, 'although I don't believe what you're saying but, if you want, okay, let me do this.'

I have great respect for the profession of teaching and I would like to be a good teacher. I have not succeeded yet, but I think that it assists research in a very profound way, for me. If you know something, you should be able to tell it clearly to anyone, and if you can tell it clearly to anyone, then you should be able to teach. You can't do research if you don't understand very well, but if you understand very well, there's no reason why you can't share it with younger people.

2. How has your experience of teaching along with doing research been?

I was extremely fortunate to have good students - not only in the large classes in CEBS, but also in my personal interaction. It started in a small way very long ago when I was a postdoctoral fellow at ULB Belgium. There were many times when people came to my office to just hang around and discuss all kinds of things. They would explain to me things that I did not completely understand, but I tried to understand, offered my critique, and that process somehow made them discover something new, sometimes. Since 2007, when undergraduates came to me as research interns, I suggested to them problems that I could not solve but had spent time on. I did not try to suggest to anybody a problem to which I knew the answer. For me, that was not so meaningful, and I believe that undergraduates should be exposed to research. Young people, because they're extremely energetic and unbiased, are creative and original. They expressed new ideas which, at times, were not very well-formed but then because I had more years on my side, I helped give those ideas a shape and then reformulate them. It has given me great satisfaction. There are some important problems which we solved this way. I always tell my younger colleagues that I think they are better than me. I absolutely believe that and with time, they prove me right.

3. What has your recent work been about?

I have been working on some problems connected to nonlinear phenomena and quantum chaos – physical and mathematical questions. Intimately connected to this and much broader in scope, I am trying to develop an initiative on quantum computing technology. I am coordinating a project of the Department of Atomic Energy, called Indigenous Scalable Quantum Computing Technology. We have been thinking about a lot of new concepts, and teaching each other. A lot of it involves thinking about quantum devices – small and big – which operate at unusual conditions (like 20 mK temperature etc.). There are details people won't tell you about, so you have to somehow read between lines. So, I'm doing a lot of reading between lines, reading a lot of patent documents, papers, and trying to understand and coordinate everyone who work in widely different domains, dealing with sophisticated electronics, resonator design, cryo-systems, and so on. We are also working on quantum algorithms, cryptography, so I'm learning a nontrivial amount of computer science and what would be called in years, "Quantum discrete mathematics".

4. It's refreshing that you really still enjoy learning. It really motivates us to stick with the field of science, no matter the challenges we face.

It's the other way round, I always find that younger people motivate me, and I really think that I will be able to function as long as younger people will allow me to "dance" with them, and if I have to be able to "dance with them and sing songs with them" or work with them, I have to be physically and mentally fit to be learning their styles and not imposing my style of doing things. I am always learning from younger people.

5. Experimental instruments and technology have been improving and exploding in number. In spite of that, what made you choose to become a theoretical physicist?

I was always fascinated by experiments since I was a child; when I was doing my Bachelors, I used to study a column called "Amateur Scientist" in the Scientific American. It suggested experiments which could be done with very simple instruments, assembled using inexpensive material easily available or accessible at home. My experience with any experimentation led to a lot of fundamental questions which I had to answer for myself which took me very long. It took me almost all my life. I have involved myself in experiments since then, from time to time, and presently more so, but I have been largely a theoretical physicist. When I tried to understand theoretical physics, I was thrown into problems and areas in pure mathematics. Then I had to learn mathematics and there were few to none around me for detailed discussions, so I had to do a lot of it myself, I said to myself - let's do whatever is to be done.

There are no contradictions, they are all connected, and it's the same thing. You have to understand and it doesn't matter if it happens by experimentation or by theory, or simulations, in the end it's a very personal exercise.

6. How would you say learning physics might change a person's perspective about their life and how did it change yours?

If you understand anything, it means that you have changed. It's automatic and undeniable. So, it is very important that you try to understand important things so that the change in you is for good and of significance, rather than bad. It's simple - you have to be careful of what you want to understand and where you spend your time and energy carefully trying to understand something.

7. What lesson have you always tried to make sure your students take away from your courses?

This is for the students to answer. I am struggling and I am very weak in understanding. Every year, I make one more attempt to understand and make you understand what I have understood and if you work on it, perhaps you will go farther than me and if that happens, then that means the plan succeeded.

8. You've been practising music for a very long time. Would you say that it has helped your life and your career in any way?

I was always interested in music - from the time I was maybe 10 or 12 years old. But then I did not have any way to formally learn music. Then eventually my wife and I learned music together. We didn't know that we were interested in classical music when we got married, and when she first came to our home in Bombay and she found out that the collection of music was the same as that at her home, she was so very surprised.

Music is rigorous. It's a performing art. So it helps in making fewer mistakes in general. Music is the template on which I do my science for many years. Every student must train in at least one performing art. It's not a question of being interested and doing it, one has to find one to train in.

9. How was your experience of teaching during the pandemic?

I taught a Course on Quantum computing and quantum information science. I didn't have the right kind of devices to be used and I was using my notes and showing pictures to students. I was pointing, reading and explaining. From the students' point of view, it was not good. I am sure it was not a good Course, it was disappointing, even though the students were extremely kind and didn't say this. It was hard for everyone; I did not conduct exams, but had presentations.

For P201, which is a modern physics course, I actually modified the syllabus somewhat because I believe it was better for students. I taught the course for the first time and I think in terms of ideas we have done very important discussions. We have done Quantum physics, special theory of relativity, general theory of relativity, from micro- to macro-physics. It's important to see faces, twinkling eyes... see if something is exciting a student. It's a relationship, not just teaching. It's a relationship of a lifetime if you do it right. If you do it badly, it's a very bad memory for a lifetime. But the pandemic took a lot of it away from us.

10. What are your comments about exams and the current grading system?

Ideally, I don't think there should be exams. I don't think people should be examining or judging other people. Practically, they have to be there. Performance at exams is your performance on that day. It is serious for you because you knew that there was an exam on that day and you were supposed to prepare and understand and come for the exam. So, either you have done it or you have not done it wholeheartedly. If you have not done it wholeheartedly, then grades do not mean anything because you anyway did not prepare wholeheartedly. This is what one may like to correct. So, there is an element of duty and responsibility with which one has to approach an exam or a class for that matter.

11. Do you have any advice for students who are finding the online mode of teaching unsuitable for them?

I think there would be at least 25 to 30% of students who will suffer very seriously because of this, since it's just not possible for them to listen and look at the screen. Sometimes, there is also stress at home for some of these students. So, I think some people would require attention later on. They should be identified and given that attention.

Students must not hesitate. They should ask their questions and say whatever they have in their minds. Since you're not present there, there is no way the teacher is going to figure out what is wrong without looking at you or from the way you're saying something, etc.

There can also be a very important role played by their own classmates. Class fellows have a duty towards each other to inspire, to help, and to talk to each-other. People should cooperate and work together.

12. Do you have any advice for students who are looking for projects or are not getting it or are not interested in projects online?

There are major institutions in Europe, like the Max-Planck-Institute, whose PhD programs currently don't require lab experience for this reason. If you have respectable grades and did some original work in the past, you can get selected.

Not being able to perform experiments is a very great source of difficulty but maybe one can try to do some numerical work, projects on computational aspects, and try to understand experiments which have already been done but are not understood. In that case, you will lack skills because you have not performed experiments, but you would have understood experiments and their results. So people should try to find that, they should try

to approach experienced teachers, who can point out such papers or results which are not yet understood. Moreover, thought experiments can be done.

There are a lot of apps, blogs and websites of very experienced experimental physicists who have tried to help in this regard, so they should explore that but it is impossible to replace experimentation. I think this set of people should be given a greater chance and treated with leniency.

13. How do you think CEBS can better help students get PhD placements?

The Master's thesis that people write should be well-structured. I had suggested long ago to have our own "style file" for this. It should be rigorously done. Moreover, it should be available on the web after it is completed, and a copy should be available in the library. Further, there could be a small Bachelor's thesis at the end of three years. If these two things are put in place and implemented well, I think it will help.

Students should read and work out more articles and papers, and they should discuss them among themselves. Overall, they should have more active scientific lives.

14. Do you feel that there is a gap between the CGPA that CEBS students score versus the students of other institutes?

OK. So frankly, I don't know the grades given at IISERs and NISER etc. I've been very close to the research assessments, I've been at the researcher assessment committees of IISERs, but not the undergraduate courses, the gradings, etc. They can't be very different. It's just that it's a much larger system. There are more people. Their social scientific life is slightly different from ours, but ours is equally good because we are surrounded by leading institutions like TIFR, BARC, IIT etc. There is nothing that stops you to meet whoever you want and learn. Nobody will say no to you.

15. Is there anything you want to share with the people or CEBS through Novellus?

First, I want to compliment Novellus. This is a very nice initiative, a cultural signature of the Centre, it started some years ago and each volume has been commendable and enjoyable.

A thought I would like to share is that while being in CEBS or anywhere, one must have a sense of belonging. Students should work on improving this sense of belonging to their Institutions, to their homes, to their countries, seriously.

16. Chitre sir was the founding father, mentor and the leading light for CEBS and he has done a lot for the institute for many years but now with him gone, how do you think things in CEBS will change?

We have not stopped teaching P101 or P201, I've not stopped writing my book which I started with Professor Chitre. We have not shown any less passion in speaking to each other. So, things will continue. We will miss him, of course. For me, it's very very difficult personally. I will certainly break down entering AG-14, now named after him, but things move on and we must carry on in the best possible way that would have made him happy.

17. Some people think it would have been better if CEBS had campus placements and other such systems, whereas the original motive of CEBS was learning without restrictions, but due to overthinking and short-sightedness of thought, people are going away from the original motto. How do we stick to it?

The answer to this question is very easy but understanding that answer is very difficult. The answer is that you have to be optimistic in life, you've to have faith and confidence in yourself that you came to do something. If you do it right then there is a future waiting for you. Do something creative, as I said life is very precious. This day that you have, not everyone has this day. You have it, so make the best of it.

When asked about how to deal with the ups and downs of life, Prof. Jain suggested that one should have someone in their life who they can openly talk to about anything. He added that there should also be someone to whom one is answerable, be it their parent, teacher, or someone else.

The Team thanks Prof Jain for sharing his words of wisdom, experiences and opinion with the students of the Centre. We thoroughly enjoyed the experience of interacting with him.



Oh Sacred Sacrament Adorned with leather

Oh sacred sacrament adorned with leather Well-knitted Matted locks of hair The house of a rising moon Who else have we praised to this tune ?

So what is it to the world that we are flowers of foul garden or a bouquet full of flaws Are you not the shelter for outlaws ?

Our spirit is but vehement To think no other thought than that Of your valor and form Come to us the rage of sea or storm.

Thevaram – 7th Century Poet : Thirugnana Sambandar

Translated by Maharajan Thevar

Is She the Bud of Kalpavriksha

> Is she the bud of Kalpavriksha Or is she the very life of the god of desire Is she the sacrosanct amongst all virutes This woman whose soft hair bears the storms Whose body is like bow, whose lips are flowers Whose eyes are like wine, how do I embrace This ecstatic flag, This miracle this Shiva's grace.

Periya Puranam 12th Century CE Poet : Sekkizzhar

Translated by Maharajan Thevar



- गजेंद्र बलदोदिया

कभी ना सोने वाला शहर आज शांत जो है दोपहर के तवे पर, रात के सन्नाटे में…

सोते हुए शहर की मद्धम हुई सांसें जो सुनाई देती, अट्टहास सी हंसी उस अदृश्य दानव की विचलित करती |

डर जो पनपा है अपनो को खो देने का, रो देने का, क्रंदन सुनाई ना दे जाये खाली सपनों के होने का |

तू कितना सहमा है, भयभीत है, विचिलित है, क्रोधित है, पर संयमित है, सिमेटे हुए आशा की चिंगारी कोई |

होगी सहर फिर से इस शहर में, चंचल सी आभा साँसो की रफ़्तार फिर से लौटाएगी|

दौड़ेगा ये शहर फिर से समानांतर पटरियों पर, ना कभी रुकेगा, ना सोयेगा, ना कभी दिखाई देगी इसकी टूटती हुई सांसे,

दोपहर के तवे पर, रात के सन्नाटे में…





When Students Make You Feel Wanted

For My Irreplaceable Beloved

~Srídhar Rajeswaran

Yesterday was her birthday We did the usual things With a little help from my little sister Who is convinced I am memory-challenged And had ordered the bouquet After conclusive convoluted consultations Roses I had said and as size matters to her They have to be big

She measures the volume of love With the amount of substance red

Ihe day was perfect Spent with students and researchers and colleagues With a good friend dropping in An eclectic lunch Sweets and cakes, Pav Bhajis and Vada Pavs And her disgusting green tea With a generous amount of academic hog wash The bane of every scholarly gathering

My heart-slipped belly, hidden behind The warmth of her aura

Her birthday is no time-marker She is blessed with an unageing intellect Her curiosity even now shames her proverbial kitten Which like her revels in childish antics Her innocence light her eyes Even as the petulant lips highlight pendulous tears of laughter She picks ever-new hobbies Mastering cell phone apps and sisterhood WhatsApps

Newer intellectual media for personal discourses $M_{\rm Y}$ little mind feigns understanding

She sings in distress

As she sees through my poses Condemns my replacing academic pursuits Which she was convinced was my vocation With simple acts of cutting vegetables, cooking And with a vengeance reads extra for me A minimum four hours in bed By osmosis disseminating knowledge To her beloved gently sleeping Or violently tossing and snoring away

We have shared different spaces Adopted different stances Passed through difficult times Played different roles in different stages She is caustic, with tongue truth-infected She is insufferable as a critic As a teacher demanding, as a guide exacting As an intellectual humble

She is unmindful of lesser mortals strutting In the borrowed glory of her received knowledge

As a friend unsuspecting As a companion trustworthy As a comrade frustrating As a human generous As a woman self-respecting As a spouse irritating As a beloved, the question is absurd She is irreplaceable

Of course, only if they are not part of the images and figures From certain printed pages of my bookish women

My Austens, Virginias, Mauds and Constances Mayas, Morrisons, Curies, Jane Goodalls Isadora Duncans, Ingrid Bergmans Katherines, Audreys and Meryl Streeps And, and, and, the list is endless I forgot your Emily, my Sylvia and our Barrett My dearest Catherine, my Ellis Bell

My Beloved, my Loveliest You are my Palimpsestic World

TO KILL A WHALE WITH A TRACTOR: A SURREAL REASON TO LEARN REAL HISTORY

Dr. Ambika Natarajan

{This story is dedicated to Professor William B. Husband}

3rd-January-2011

Café *Starbucks* was crowded that day. Cold people wanted hot-coffee. Perhaps, they thought drinking coffee would make the snow go away. But it stayed. Thick, white and piled up. Slush formed around the corners of each pile and slithered into the road where automobiles and pedestrians skidded. We formed a cluster of six at a booth near the window.

"I'm going back home in August," said Artur, raising the large mug to his lips. "I've never been to Oslo," I said, meeting his gaze.

"None of us have," interjected Terry.

Artur looked at Terry and grinned, "Why don't you guys come with me this time? It'll be fun." "You got it!" Terry said.

Artur laughed mildly, "Quite a pleasure to hang out with you, Terry. As always. Excuse me, I have class." When Artur had left, Rani turned to Terry and asked, "Terry, do you know what *kebab-mein haddi* means?" "No," said Terry, "What's that?"

"It's Hindi for third wheel," Rani responded.

Terry laughed, "I'm just trying to save your bestie's soul from being crushed, kid."

7th-February-2011

"What're you reading?"

I glanced at him, "Something about human sacrifice for the god Thor in Scandinavia. They put up interesting stuff here. Last week there was an article about Victor Hugo." I turned back to the notice board, "So-uh-did you read this-uh-brutal, isn't it?"

"It was normal in many cultures to do stuff like this," replied Artur.

"Really?" I asked, "I can't imagine why people would be so heartless."

Artur shrugged, "Why're you so surprised by this? That's what history is about, isn't it?"

I clutched my notebooks to my chest, "Are you...uh...a worshipper-I mean-a fan of Thor?"

"Who isn't?" Artur asked. Our footsteps echoed in the corridor as we walked towards the exit double-doors. "So, I talked to my folks and they've arranged for accommodations in a hotel nearby," he said.

"That's great!"

"They'll be renovating, you see, and they don't want to have so many guests in the house at the time. It'll be too messy. And, five people will be a lot to handle."

"Oh-of course. No problem."

"I not renovating my section of the house." I looked at him and he met my gaze with a smile.

I smiled back, my heart drumming in my chest, "Uh...I don't...I mean, I already told Rani I'll be rooming with her."

Artur grinned, "Okay."

16th-August-2011

It was quarter past five. Artur had come to take us to his folks' house for dinner. I was the only one waiting in the hotel lobby when Artur arrived at six minutes past five, four minutes before the appointed time. "Where is every-one?" he asked.

"Um...still getting ready, I suppose," I said.

He frowned at his wristwatch for a few seconds then smiled at me, his reddish-blue eyes bright against his pale skin —he looked like a vampire! "I appreciate your punctuality," he said. "I-It's no problem," I said, trying not to gulp,

"Oslo's beautiful! I didn't realize such pristine places were still left in the world."

Artur tilted his head, "Well, Oslo's quite urban compared to some other parts of Norway. If you go further up north, it's simply divine!"

"It must be freezing there!"

"Sometimes of the year, it is. But it's gorgeous," said Artur, "Lots of interesting stuff to do." "What kind of stuff?"

"It's whale-safari season around this time of year near Tysfjord," he said, rubbing his chin, "Hey, would you like to come with me next week?"

"Next week? We're going to Stockholm, aren't we?"

"I'm not so intent on it. I'd rather stay here," Artur shrugged, "So, how about it?"

"I'd like to come with you but I don't think the others would agree to cancel their trip to Sweden," I said.

"That's okay," he replied, "Let the rest of the gang go to Stockholm. We can go to Tysfjord." "I guess. I mean, it would be a pity to come all the way to Norway and miss-er-um..." "Whale-safari," he said, grinning. "Yeah. That."

17th-August-2011

Lunch at Brasserie-Lipp:

Mike said, opening his laptop, "Where did you say you were going?"

"Tisland, I think," I replied.

"Tisland? Never heard of it," he keyed his laptop then, shook his head, "Nope. No place like that. What's so great about that place?"

"Something about whales," I replied.

"Whales?" Rani repeated, frowning, "Oh, wait; maybe he's taking you whaling."

"What's whaling?" I asked, spooning some Crème Brule.

"It's like fishing; only you fish for whales."

I giggled, "Whales are huge, my dear girl. I doubt they would get caught on a fishing pole."

"Obviously, you can't catch a whale with a fishing rod! They probably use specialized equipment and stuff. It's a huge industry here."

"Are you kidding?" I asked, frowning.

"No, she's right," said Terry through mouthfuls of cake, "It's a big deal."

"Hang on a sec. Let me show you," Mike keyed his laptop, then turned the screen towards me, "Here. See?"

I scrolled through the webpage for a few seconds, "Wow, they really do hunt whales. For God sakes, what am I going to do with a dead whale?"

"Eat it, I guess," Ellen said, "Oh, here comes Artur."

"Hey, Artur. What do whales taste like?" asked Rani as he sat down.

"Incredible!" Artur replied, "Especially when they're barbecued."

I looked at him, my gut churning out familiar feelings. This is what it was to be caught between a rock and a hard place—earth-shattering crush and mind-numbing fear. Vampires weren't real, were they? "I think I'm going to throw up," I murmured, pushing away my *Crème Brule*. Artur laughed and I contained my gulp.

18th-August-2011

Knowing Mike, I imagine this is what happened.

Mike waiting at the reception for Ellen:

The concierge raised his eyebrows, "Well, yes, sir. It's whaling season."

"Ah!" Mike said, clucking his tongue, "And what's your opinion on whaling, my good man? You're against this barbaric activity, I'm sure!"

"Sir, there is nothing barbaric about it," the concierge declared, "It's perfectly safe for all people involved." "Humph! And what about the whales? They die such miserable deaths! It's bad for the ecosystem, no doubt. Honestly, can't you people find better things to do?" "I assure you, sir," the concierge replied, eyes narrowed, cheeks bright red, "Whaling is regulated very diligently by the authorities. There's no trouble to the ecosystem." "Oh, pooh! What would the authorities know of how the whales suffer?" "The techniques we use cause little suffering to whales-"

"How would you know?" Mike snapped, "Were you a whale in your past life?"

"No, sir-"

"Ah-hah!" Mike roared, making the concierge jump, "So, you don't know! And you encourage anyone who visits here to participate in this barbaric activity, do you?"

"We certainly don't discourage anyone from experiencing everything our country has to offer," said the other man through barred teeth.

"Ah-ha!"

"I'm ready to go," Ellen said, walking up to Mike.

"Excellent," Mike replied as the concierge excused himself.

"Did you have to wait long?" Ellen asked.

"I used the time to find some fascinating information about whaling, of course," Mike replied, "It seems tourists are forced to participate in whaling if they so much as look at the Norwegian Sea." "Really?" Ellen frowned, "That doesn't sound right."

"The concierge said it, not I. Why would he lie to me about something like this?" "Perhaps, he's misinformed." "No, no. I'm sure he's right," said Mike, "I bet he's an ardent whaler. He was defending the sport rather passionately, I must say."

"Ugh!" Ellen shuddered, "In that case, I'm glad I'm not going with Artur and Ambika next week."

19th-August-2011

Knowing Ellen, I imagine this is what happened.

Ellen sat next to Terry and asked, "What are you reading? Another Graham Brown?" "Yup."

"Why do you read his novels? They're positively gruesome!"

"You know me. I'm obsessed with psychological thrillers," said Terry.

"What's this one about?"

"Some Viking-farmer who kills a horse by driving a tractor over it," he replied.

"Yuck! How can you read something like that?"

"Gives me an adrenaline rush," he murmured, grinning.

"It doesn't even sound right. I mean, Vikings weren't farmers. They were more like seamen, weren't they?" "Who knows," Terry murmured, "Brown's novels are pretty accurate about these things."

She rolled her eyes, "Okay, whatever."

"Where's Mike?" Terry asked, shutting his book.

"Probably chatting-up someone about whaling," Ellen replied, "He's obsessed with the topic ever since Ambika told him about her trip."

"Quite the environmentalist, isn't he?"

"You know Mike. If it isn't this, it'll be something else."

Terry shrugged, "I don't know why he's so concerned. I should think they have pretty well developed technologies here for that sport."

"Hopefully, they have better technologies than tractors!" Ellen said, laughing, "Apparently they force anyone who goes near the whaling areas during the season to participate."

"How odd!" exclaimed Terry, "Who told you that?"

"Mike did. He heard it from the concierge," she said.

"Then, it must be true," he replied, "Those guys know everything there is to know, don't they?"

"I can imagine it, now!" Ellen exclaimed through suppressed laughter, "Ambika, trying to run a tractor over a whale and Artur screaming from behind, 'Do it or I'll use you as bait!""

"Who said anything about a bait?" asked Terry, frowning.

"It's a silly notion, but it just popped into my head," Ellen said, "Sheesh! Your gory imagination is having a bad influence on me, Terry."

20th-August-2011

21st-August-2011

Knowing Terry, I imagine this is what happened.

At the restaurant Oslo Breeze: Rani said, scowling, "I'm sure Ambika isn't going to hunt."

"Don't be too sure about that—anyone who nears the water during whaling season is forced to hunt," Terry said, little pieces of chewed-up bread flying out of his mouth, "You can't just stand by and watch. You have to charge at those whales!"

Rani frowned, "That can't be right. Are you sure?"

"Sure!" Terry said, swallowing his food and stuffing some more bread into his mouth, "What's more, they have these water-tractor-thingies to slaughter through the whales." "That's disgusting!"

"Poor little whales. Bet they never see it comin'! Could you pass the salt, please?" Rani handed him the salt-shaker. "I'm sure many people refuse to participate in such a ritual. It sounds absolutely barbaric!"

Terry shook his head, pointing his butter-slathered knife at her, "It's the law, sweetheart. Go near the sea and you've gotta whale."

"And if we refuse?"

"I reckon they use the disobedient offender as bait."

Rani laughed, "Come on, Terry! Don't joke!"

"I'm serious. We're in Viking land, baby," Terry said, "Who knows what weird pagan stuff they've got going on here! I've heard of the weirdest traditions. Folks sacrificing live-humans to their Norse Gods."

"Are you sure you know the history?"

"Of course! I read Graham Brown!"

"So, what you're saying is if Ambika refuses to run a tractor—A TRACTOR—over a whale, Artur will use her as human bait?"

"Possible," Terry frowned as he took a sip of water, "No wonder Artur's mother is making so many vegetarian dishes for Ambika. They're trying to fatten her up for the sacrifice!"

"You're insane!" Rani cried, "She's just being nice to her!"

"And the poor girl pounces on whatever his mother sends her and hogs it all down!" Terry murmured.

"Ambika has been surviving on raw veggies and bread! Of course, she pounces at it. I would pounce at it if I was in her place!"

"I'm telling you! Something's fishy or should I say whaly?"

"You're absolutely bonkers, Terry!"

"Maybe," he said, chomping loudly, "But, why take the risk, right?"

Rani remained silent.

"Pass the ketchup, will you?"

In the hotel room, getting ready for bed:

"I know this sounds crazy!" Rani said.

"You think?" I exclaimed, "Artur is *not* going to use me as bait if I refuse to run a tractor over a whale! It's absolutely ludicrous!"

"I thought so too. But apparently, it's some kind of law here. We don't know much about Norwegian traditions." "I'm sure whatever the tradition, running tractors over whales is not involved!"

"Still. Better safe than sorry."

I hesitated, "Well, some months ago, I did happen to read an article about Norwegian human sacrifices but that happened thousands of years ago."

"People still practice thousand-year-old rituals, Ambika!" Rani murmured, "It's crazy but true."

"Argh! I can't believe I'm actually frightened by such a ridiculous notion!" I exclaimed.

Rani frowned, "I've been telling you from the beginning that you should opt for a nice Indian boy from our University Desi Club. There's no point crushing after someone like Artur. He scares the living daylights out of you and we now know that he thinks whales are delicious."

"Stop being racist, Rani!" I exclaimed.

"I'm not being racist; I'm being a realist," Rani snapped, "You can barely utter two words when he's around without

getting yourself into a pickle. Meanwhile, he's got you to skip your annual trip to India and come all the way to Oslo. And now, you're all set to take off on a whale-hunting trip with him. He's playing games with you. He's not serious, else he'd have asked you out by now!" Rani's logic is my archenemy.

24th-August-2011

Snow-capped mountains. Blue, blue river twining around the landscape. Trees. Green, green grass. Sun. Glorious sun. Chook-chook-chook of the speeding train. It took my breath away. "Where did you say we were going?" I asked.

"To Tysfjord. We'll get off at Fauske and take a bus," replied Artur.

Chook-chook. Hurtling train. Soon, I would be in *turbofjord*-or whatever *fjord*-running tractors over whales! My palms accumulated sweat.

"I hope you enjoy this. It's really fun."

Chook-chook. Whale-skin splitting. Blood spilling into clear blue waters.

"I-I have a confession," murmured Artur.

I, tied at the end of a big fishing rod. Screaming. Whales jumping to grab a bite.

Artur's voice, "I'm- I'm happy it's just us. I wanted to do this a long time ago."

Why-oh-why did he want to feed me to the whales? What had I done to him?

"The thing is-"

"Listen, Artur, I don't think I can do this," I burst.

Artur looked struck. "Oh! Is there someone--?"

"I-I mean, I...I'm vegetarian, you know. My entire family. Never touched meat. Nor egg. Nor mushrooms. I'm certain whales are completely out of the question! And I definitely cannot kill a whale with a tractor!"

Artur stared at me, his mouth ajar.

"I'm so sorry!" I gasped.

"Wait. Wait. What?"

"Maybe we should just go back. I mean-I mean, I can't go whaling with you!"

"Who said anything about whaling?" exclaimed Artur.

"Isn't that what we're going to do?"

"No!" he exclaimed, "We're going to whale-*watch*. Just look at them. That's all. I thought I told you that. Whale-safari."

"Oh!"

"Besides, you can't just go whaling out of the blue," said Artur, "You need a license. And-and you need to undergo some pretty rigorous training. The regulations are quite strict."

"Oh!"

Silence.

"Then, what were you talking about?" I asked.

"I was trying to ask you out."

"Oh!" I blushed, "I didn't realize. I mean, I'd like that."

Artur smiled, reaching out to squeeze my hand, "Good." I tugged off the onyx ring on his middle finger that I had always suspected was his protection against the sun. Then I held out his hand into the beam of sunlight streaming in through the window. He didn't burn or anything! He wasn't a vampire!

"Ambika?" "Mm-hmm?"

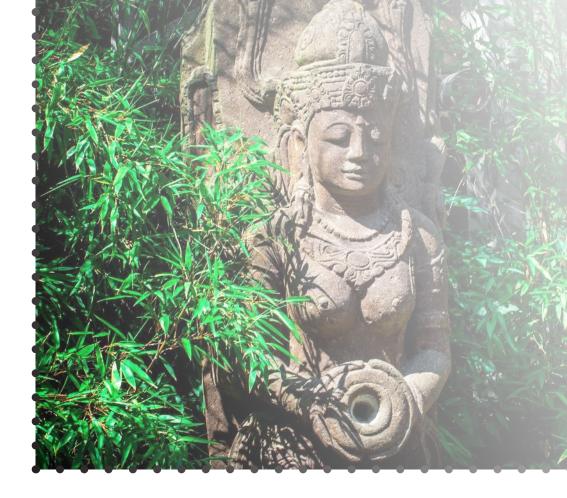
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"What are you doing?" Artur asked.

"Nothing. Nothing," I said, hugging his hand in relief. Sun. Glorious sun!

"What were you saying about tractors?"

"Oh, just...I mean. So, uh—are you a Thor worshipper—er—sorry—a Thor fan?" Artur looked at me, his bluebrown eyes sparkling with amusement, "So, does all your information on Scandinavian history come from Terry or do you actually know something real?" I blushed and held my tongue to save what little dignity I had left.



She wailed like a thunderous cloud Her hair like the fetters of storm untied Here lies silent and lifeless, the once proud Why of all things to death, would you abide

The chest once vast enough for the mountains Cannot now stand a simple sesame seed with this luxury of blood for fountains What deed is it that these arrows feed?

Oh did they fondly caress you, these sharp arrows Did they try to seek the imprisoned memories Of Janaki and left like swift sparrows May Mandodari's lament resonate for centuries.

Kamba Ramayanam – 12th Century CE Poet – Kambar

Translated by Maharajan Thevar

What the heart echoes

Screaming the loudest, The voice isn't clear, My heart wants to say something, And pretend that I am deaf,

Remembering the unforgotten, My eyes flood, But it's now rare, As I pretend to be deaf,

Manipulating the thoughts, I think I will achieve a lot, What a nonsense it has become, To deal with the knot,

Holding the emotions, Not letting them out, Is a kind of curse, That I opt to fight, or that i think is needed to be fought,

Want to let her go, Still want to hold her hand, Want to be a stranger again, But still want friendship with her,

Just not the friendship, Something more I aspire, I desire, But wrong is to impose, I still suppose.

Wanna grow old with her, Wanna die within her arms, These are just daydreams, She rang the alarm,

Fell once , Wanna fall again, This life is too short , To always think I am alone,

The bond is strong I suppose The bond is strong I suppose, Even though not what I thought, Not what it was supposed to be, This will stay for long

Bro or babe, Bro or babe, Now seems similar, My heart is free, Grown up like a tree.

Can see your happiness, You share your pain, That's enough, To feel you more than a friend,

Happy as hell I am, You gonna say mad I am, But believe me, That's beautiful.

- Anonymous

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<u>Vicissitude</u>

- Gaurav Agarwal

Dwell in cages, singing the seven stages. roughly rummage through, silenced dark, screaming light. Rot. Fancy the nigh.

Changes left changes right, always aid your plight! Dismay, diverse delusions, they present quietened illusions! Quandary in hacks, each turn takes you aback.

Brimming with pride, sapped, now scarcely in stride. Explore the far and wide, but the tongue is still tied! Dance the solar waltz, embracing life's assaults, gallantly glee.

Siren wails like the banshee, you end up deceased in a menagerie. It may seem like a tragedy, but changes bring brutality.

CAn eight-month year

-Avni Sejwal

The first academic year of my college life is reaching an end. I scribble down this article on a mellow July evening at home, which was once a luxury, now it is different for different people. I am in the process of grasping and absorbing the ideas of the theories of relativity, the epsilon-delta representations in real analysis, and what annotating exactly means.

When I look back to the time when we started, in December, it feels like a lot yet nothing much has taken place, simultaneously. Back then, we were a bunch of 54 excited-nervous novices in this world of questions, answers, and wisdom, hoping for 2020 to end on a good note at last. It did, partially. There was a whole series of online meets happening, people trying to get to know each other, which we did, partially, and trying to follow what seniors told, partially. I hoped that by the time the first semester ends, we would be on the college campus. "Things would be great", I exclaimed in my tiny head, looking at some previous years' Holi celebration

pictures from the campus. But, then as if a contagious-notorious microbe (partially living?) read my mind. The second wave of Covid-19 broke out. Those two months were tough, with complete turmoil and havoc. I am sorry about it more than anything in my entire life so far (the rest of which I don't want to spend at home). We, even as a batch, hopelessly and helplessly stopped counting on any possibilities of things getting better anytime soon (not even partially).

Thankfully, things started to get much better in June; many of us got vaccinated. Strangely, by this time, not many (virtual) gatherings and conversations happened among us. We mostly talked about assignments, and some people played online games to get rid of boredom and to forget about the looming uncertainty for a while. Perhaps, we got fed up with our miserable inability to accurately predict the future.

Although nothing can fill the gap of actual laboratories, I have enjoyed the courses quite a lot. In the last seven and a half months, I have come across so many different (some easy, some complicated) and fascinating experiments done by various people across centuries. There has been a lot to learn, understand and grasp. I have started asking more questions than ever before, actually, I have come to realise the importance of doing so.

Ironically, it was a shorter academic year than usual, as we started 3 months late due to 'You-Know-Who'. Nevertheless, I feel, the sense of time has been somewhat distorted in the past year. There have been days that seemed like forever. In retrospect, it feels quite long now. We would contact the officials at the college asking about when the college reopens and they would sometimes say 'We don't know', which is understandable. Still, "We don't know" has become one of my least favourite terms in the last year (except for when researchers say it regarding a question, that is exciting).

So here I am, in this eighth month of a year full of highs and lows (lows>>highs), with a big, grumpy 'We don't know' still hanging over my head.

One thing that I have learned and actually experienced in this 'not so great' year is that no matter how bad it seems, this too shall pass. It shall. We just have to wait and survive some more days which feel like forever. It has been tough but it has taught us the value of social contact, labs (surely), exposure to open air, and our lives, on some level.

With hope, that the circumstances get better soon.

AUTUMN FANTASIES

~ Jay Phadke and Ashwini Babu

Colourless eyes gaze around as everything fades to brown.

The dry scent of senescence creeping around in the air.

The eyes, however, seem to know the inevitability of discolour.

The harsh breeze ringing in the arrival of a time that seldom turns.

The shades now lost shall never prime, the sweet scent shall not linger.

The gentle spring has finally gone now as the eternal white shroud of winter awaits impatiently.

The eyes soon realise, a bitter change is here to stay.



-Naman Mishra

This article is inspired by Indian television series, 'Devlok with Devdutt Pattanaik', 'Enterprise' by Nissim Ezekiel, and my interpretations of both of them. I have tried my best not to make it a parable.

Once Durvasa, a short-tempered sage, concentrated all his powers in a garland of flowers and gifted it to Indra, the king of gods (devas). Indra, laden with gold and diamonds, thought a garland of flowers would not be any good to him so he in turn, gave it to Airavata, his multi-headed elephant. Airavata, as egoistic as his master, simply crushed the garland under his enormous feet. This made Durvasa a laughing stock among devas. Infuriated, he cursed not just Indra, but all of them. The curse made them mortal, and forced Shri Lakshmi (the Goddess of Wealth and Prosperity) to descend in the Ksheer Sagar (the ocean of milk). Absence of Lakshmi made the gods weak and vulnerable. They ran to their grandfather Brahma, the Creator, and begged him for a solution. Brahma asked them to seek the Preserver, Vishnu. He advised devas to churn the ocean with all their might and regain all that was lost and more.

This was the mythological part of the article from the episode of Samudra Manthan from Vishnu Puran and Srimad Bhagavad Geeta. The article henceforth will focus on how we interpret this very famous story we have been listening to since ages, in today's context.

Why churning? Why not just use your powers and force things out of the ocean?

The *devas* were confused, but nobody dared to ask *Vishnu*. Maybe there was a secret waiting for humankind to unravel.

The devas accepted the idea and started looking for material to make this cosmic churning possible. Mount Mandara, the central axis of the universe, also became the axis of this churning machine. King of Nagas, Vasuki, who is wound around the neck of Shiva, served as the rope to churn. But there was a major problem. Who would be the counterforce for churning? Devas, divided into halves, were not mighty enough to even move Mount Mandara. Brahma advised devas to seek help from his other grandsons, the asuras, who were also the sworn enemy of devas. Devas reluctantly agreed, and convinced their half-brothers to take part in the process, with a promise of sharing the Elixir of Immortality or Amruta. The Cosmic churn commenced and had to be continued for another 1000 human years before it started yielding its products.

Why churning? This question has a very simple answer. The Indian economy was greatly influenced by dairy farming. Thus, for a major fraction of the population, churning of milk which yielded butter, cream, and buttermilk, were their sources of *Lakshmi*.

Hereon, we will consider a case of a person who wants to start a new endeavour or an enterprise and try to connect it with this story:

Churning also signifies coordination. Unlike tug of war, churning has to be coordinated, and force on one side should not cancel the other. An ambitious person always churns the situation well, and works with other people that help them proliferate their knowledge, so that they have more material to churn. Mount *Mandara* represents consistency and stability of thought. A patient yet educated move is all it takes to keep up the motivation. There must be a clarity of thought and purpose before any new beginning. The snake represents time, when one invests, learns, waits, observes the trend, makes plans, and most importantly, works without expectations. It is these times that decide the fate of the endeavour. Finally, working with the foes. Who would want to work on their most important project with a person they hate the most? But sometimes, we need to forget about vying and work cooperatively for our larger interests.

The intensity of the churning was so immense that Mount Mandara started sinking, but Vishnu took the form of a huge turtle (Kurma) and supported the mountain on his back like an island. After years of non-stop churning, Ksheer Sagar finally started releasing rewards which were to be divided among devas and the asuras. A total of 14 ratnas or rewards emerged from the depths of the ocean; they are given in an order below.

1. Chandra- The Moon God, sided with devas and lit the night sky; also adorned Shiva's matted hair.

- 2. Parijat and Kalpatar<mark>u</mark>- Ever blossoming and wish-fulfilling trees, kept by devas in Indra's abode, Amravati.
- 3. Airavata- Indra's multi-headed gigantic elephant, as dark as water-laden clouds.
- 4. Uchaishravas- Warhorse of Indra.
- 5. Kamadhenu- The wish-fulfilling cow, given to Saptarishis.
- 6. Panchajanya- Vishnu's victory conch.
- 7. Kaumodaki- Vishnu's mace.
- 8. Saranga- Vishnu's bow.
- 9. Kaustubh- Most valuable jewel, adorned Vishnu.

The fumes released during the forest fires on Mount Mandara caused by friction of churning, and poison from Vasuki's mouth due to constant pulling, mixed to form the deadliest of poisons Halahal, that could destroy all life including the mortal asuras and devas. Everyone ran for their lives, but Shiva came forward to drink it to save all creation.

10. Alakshmi- Elder to Lakshmi, Goddess of Misfortune; nobody demanded her, but she was treated respectfully by both devas and asuras.

<mark>11. Lakshmi-</mark> Goddess of Wealth and Prosperity, both <mark>devas</mark> and <mark>asuras</mark> fought for her; when Lakshmi was asked to choose, she chose Vishnu as her celestial spouse.

- 12. Rambha- Apsara or nymph, fled to Indra's court as the lead dancer.
- 13. Nidra and Mada- The Goddess of Slumber and Alcohol respectively, for asuras.
- 14. Dhanvantari and Amruta: The God of Medicine carrying the immortality elixir.

By now, asuras felt cheated enough as they had got nothing from all the hard work. Every good thing was claimed by devas. They ran behind Dhanvantari to snatch all the Amruta from him, but were finally settled by Mohini, Vishnu's feminine and seductive form.

This brought an end to the cosmic churning and everyone was happy but asuras. As always.

When one starts an enterprise, they are not sure about the steps and whether the idea would land them somewhere good. But still, sometimes following the hunch helps a lot. This story of cosmic churning tells the same. Vishnu and Shiva were the CEO and SEO who looked after the enterprise's proper functioning while *devas* and *asuras* worked laboriously to make it possible, while *Brahma* was the manager and HR.

Any new venture should be taken as a learning opportunity, and dedicated effort must be put into it without worrying about the immediate results. The sinking of Mount Mandara resembled the sinking hopes of

Source: https://www.templepurohit.com/wp-content/uploads/2015/05/Samudra-Manthan-The-Churning-of-the-Ocean-of-Milk.jpg

people who put in their efforts but didn't get much in return. This shall be dealt with, by a turtle that resembles patience. Constant efforts, hard work, and patience are the key ingredients to achieve success in absolutely anything and it surely yields rewards.

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The rewards carry a message too. Moon resembles calmness and hope which one finds when their venture finally settles and starts well. *Parijat* resembles the blossoms and joy of the first profits or first success that always remains fresh. *Airavata* and *Uchaishravas* resemble the status and power one gets with a flourishing venture. *Kamadhenu* and *Kalpataru* resemble the expectations and vision that the people have from their pursuit. Sinking hopes suddenly become an assurance of fulfilling fantasies. *Panchajanya* conch resembles the authority of success, the reputation of the venture that upholds its name in the market. The mace resembles strength or in other terms, reliability.

But, with great power comes great responsibility. *Saranga* bow resembles balance. A bow too tight would break and too loose would not be any good. It needs to be perfect. This can be understood in a lot of aspects such as work-life balance, hierarchy balance, workplace ethics, relations with employees and customers, and eventually, the words and promises.

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If everything is going fine, then there is something wrong. No enterprise can escape Halahal, be it failed promises, personal tensions, losses, work politics, or reduced quality. All these contaminate the venture. A good leader like Shiva, does not run away from them, but accepts them as another reward and deals with them. Following Halahal, comes Alakshmi who is also seen as failures, breakdowns, or setbacks. No one wants them but they do come and thus, must be equally respected. Once one fights through these atrocities, there awaits dazzling Lakshmi. With Sarang, Panchjanya, Kaumodaki, and vision or Sudarshan in hands and Lakshmi by their side, one becomes Vishnu, adorned with Kaustubh or the title of the ideal leader.

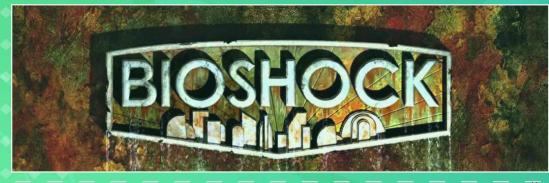
The proficiency of a leader is the key feature that makes a small venture, a legendary one. When people look up to their leaders and find an ideal person, they get motivated and strive past all the challenges. But there are distractions. *Rambha* resembles desires, *Nidra* resembles laziness and *Mada* resembles addictions. A leader who succumbs to these three, slips back to the darkness in no time. This is another time when *Saranga* needs to be invoked. Only then will a pursuit get *Amruta*, the success which is remembered in times that follow.

Vishnu Puran has been written and edited for over 1300 years (400 BCE-900 CE) and Mahabharata over 800 years around the same time. These were the times when trade was becoming more popular, and the society and lifestyle were changing. So, former cowherds were now becoming traders and businessmen. This episode of churning milk to get divine rewards and subtly explaining the tips and notches of ideal pursuit served as a bridge to facilitate this transition. Still, there is a lot to take away from these stories, if looked at from a metaphorical perspective and an open mind.

Cages of Gold

Guilt do I reap, rage is all I pet In the pot of my heart, Let it simmer, come to boil On the flames of regret. Splash! in the blood of 'free' passerines, Competing with that riotous hue of red. Those who lived 'And' died in cages of gold, Bowed in surrender, all dreams sold. Have this hollow treasure, stinky shallow pleasure; Won't count those coins and bills. For freedom's lost 'And' youth's faded, Grime's worth more than well kept wills.

~Anonymous



- Manasmit Jena

Bioshock is a timeless masterpiece that tells the story of men and women who were in search of utopia and created one for themselves, and how it changed them forever. A story where the experience is always a personal one - a quest for discovery, and a search for identity. It tells a grim and horrifying tale of an utopia where all ideals are twisted and all truths turned into lies, every dream destroyed, and where freedom shackles the people for eternity. The game is filled with stories about its past which you can learn about through audio logs. The stories make the player think about the rights and wrongs. In this world where altruism is looked down upon, and ideals are twisted to justify one's actions as righteous, one finds themselves in a moral dilemma.

This game is very meticulously created by narrating the tale of a city built away from the predatory eyes of the government. This is the story of a man named Andrew Ryan and the tale of a city named Rapture built at the bottom of the Atlantic Ocean. He was known as a criminal mastermind in the above world, and he yearned for true freedom, a world without boundaries. He rounded up some of the world's brilliant minds to help him in his venture.

We get introduced to many people from different fields and walks of life, who have different ideals but one thing binds them all together — their desire to break free from the chains that restrict them and prevent them from spreading their wings. Some of the characters are: Andrew Ryan, Frank Fontaine, Brigid Tenenbaum, J.S. Steinman, Julie Langford, Peach Wilkins, Sander Cohen, and Yi Suchong.

The game follows a man named Jack, the protagonist for this story, whose plane bursts in midair, and he swims to the nearest lighthouse where he discovers the route to reach Rapture. There, at the entrance to the great city of Rapture, we get a glimpse of who Andrew Ryan is, and what the purpose of Rapture was.

"Is a man not entitled to the sweat of his brow? 'No!' says the man in Washington, 'It belongs to the poor.' 'No!' says the man in the Vatican, 'It belongs to God.' 'No!' says the man in Moscow, 'It belongs to everyone.' I rejected those answers; instead I chose something different. I chose... Rapture, a city where the artist would not fear the censor, where the scientist would not be bound by petty morality, where the great would not be constrained by the small! And with the sweat of your brow, Rapture can become your city as well."

"It was not impossible to build Rapture at the bottom of the sea, it was impossible to build it anywhere else."

Here we meet the genetically altered girls called Little Sisters, who are the hosts of a parasitic slug that produces a chemical called Adam. Adam can be engineered into tonics that on injection can alter a person's genes to give them superpowers. Tonics are like appliances that

49

can do wonders but require an energy which is in the form of another chemical called Eve. The slugs are planted onto the Little Sisters' livers and then are harvested and processed.

The Little Sisters are protected by inmates who have been turned into mindless killing machines called Big Daddy, whose sole job is to protect them from people who want to kill them to get Adam for free.

The game gives you a variety of ways to take down splicers. What are splicers you may ask? They are the people who overdosed on Adam and have lost all cognitive abilities and are after more Adam. You can go berserk and kill everyone in your way using guns and special tonics that you get throughout the game. As you progress, you get new weapons, bullet types, and tonics that change the way you play. You can also set up traps for your enemies, and lure them into the traps, hack bots and turrets to assist you in taking them down and use tonics specially developed that makes for some unique playstyle, or use a combination of both.

Along with the diverse gunplay, combat, and strategies, the game hosts a variety of other game elements like hacking vending machines, bots, and turrets. Along with some relatively robust RPG-style character development. Special skills (everything from tougher armor to quieter footsteps) and upgraded plasmids can be purchased using Adam.

The game's graphics were stunning for its time and recently it got a makeover in the form of a remastered version, making it much more beautiful. It will give you the... 'chills'.

The dystopian underwater city, stripped of all its glory, overrun with splicers and Big Daddies, mutilated corpses lying around everywhere, and splicers jumping at you out of nowhere will surely make you skip a beat. But there is something more sinister and horrifying present throughout the game, and the seeping fear in Bioshock is of the psychological kind. You travel through buildings and houses, and other places where you see normal people lying still like a mannequin. You start to wonder what might have happened to them. You discover an entire family slumped dead around their flickering TV set. The wife still rests her unmoving head on her deceased husband's shoulder. The children's legs dangle lifelessly, too short to reach the floor. Who are these people? How did they die? The answers your imagination provides are far more frightening than anything a lurching zombie could produce.

When you kill a certain someone, the player is asked this question -"In the end what separates a man from a slave? Money? Power? No. A man chooses. A slave obeys... Was a man sent to kill? Or a slave?"

Apart from all this, the story doesn't follow a linear storyline, your choices will lead to one of the two different endings. To get Adam, you will have to either drain the Little Sisters by killing them, or harvest the Little Sisters, where they don't die, but you end up getting less Adam overall. It's your choice, and in the words of Andrew Ryan, "We all make choices, but in the end our choices make us."

A Letter to Readers

- Indranil Das

Dear Readers,

The movement for women empowerment and gender equality at large started decades before you and I were even born, and it has made much progress too. But it would not be wrong to say that it has remained at a standstill for many years now.

Before you make up your mind, dearest readers, I wish neither to portray the female population as 'damsels in distress' nor as 'warrior princesses' but as exactly what they are —or at least should be— equal members of the society, equally benefited from the good, and equally responsible for the bad.

Society is hypocritical, as it always has been and perhaps always will be. It talks of freeing women from their rusty cages, all the while putting them into shiny new ones.

Do you not find it sad that we live in an age and society where the length of a girl's skirt judges her character?

Do not think of me as partial, dear readers, if you are well-meaning males. For, I know all the false accusations you continue to face for crimes you've not even committed. I know how society takes anyone's word before yours. I know how it treats you with unjustified suspicion. And I know how some misguided 'pseudo-feminist' constantly makes passionate but baseless jabs at you.

I know all this, but I also know that the prospect at stake is much greater than any of these petty hindrances.

We shall reach nowhere if we take into account every nasty remark, every angry rant which was more to blow off steam than for the cause of feminism, and use it as an argument against women empowerment.

Don't feel for a second that I'm justifying the actions of these unenlightened few. But I rather feel that you should see them as what is wrong with the world and not the world itself.

Do not think yourself completely free of blame, my dear female readers, for some of you must have found yourself being vile towards fellow women, feeling the societal hypocrisy and being as much of an obstruction to women empowerment and gender equality as any other being.

"An error does not become a mistake until you refuse to correct it" – John F. Kennedy

If, to err is human, then let, to correct, define it now.

Yours sincerely, A GENDER EGALITARIAN

ये जिंदगी है

-अनुष्का सचदेवा

ये जिंदगी है खुलकर जीने का मन करता है सुबह चाय की चुस्की घर में चिक-चिक उसकी पलटते परांठो का शोर पसंदीदा गाना बजाने की होड़ अखबार से मुस्कुराहट का झांकना छिप -छिप के इक दूजे को ताकना ट्रैफिक में टाइम पास की बातें कभी ऑफिस बंक कर वो मुलाकातें टिफिन में छुपी चिट्ठी उसकी उसमें गपशप मीठी खट्टी, ओवरटाइम के बाद धीरे दरवाजा खोलना उसका "आ गए आप" ये बोलना बस यूँ ही सुबह से हो जाती रात, बैठे हम हाथों में लिए हाथ यूँ ही इक दिन छोड़ गई वो साथ दिल उसका कमजोर था, अब मेरी रूह हो गई मीठी वो चाय अब फीकी हो गई न्। शोर है ना गाने वो उसके प्यारे-प्यारे ताने अब वो खत भी डिब्बे में आता नहीं दरवाज़ा भी किसी को मेरे आने का बताता नहीं बस यूँ ही सुबह से हो जाती रात, उसकी तस्वीरों से मैं करता हूँ बात हाँ ये भी है तो जिंदगी ही पर इसे जीने का मन करता नहीं..,









Journey in the end?

- Prabhu Prasad Swain

Acts of happiness and smiles in life In those winter mornings strife Just like dew drops on leaves. Due? Discrete, distinct yet counts a few.

Walking alone down the country road In potholes and rains, write the ode All these acts and the display. Worth? Dreams, hopes, promise the birth.

Live, Laugh, Fight just to be prepared Subtly, slowly no one cared. Scared? Each passing day, increases passers-by No matter what they leave, still you try.

Return home, sitting by the fireplace In search, to ponder over in some solace No wood to light fire, all but the shelf? Some answers are questioned to self.

Am I, where I should actually be? If not, Help! Take me away from me For I have dived in my scars too deep Even these nights want to get some sleep.



IN and OUT: Understanding social groups

- V S Tharun Krishna

"What fraternities and sororities are about is to be there to give people that helping hand, especially the youth" - Alexandreena Dixon

"The Packers are like your children. You don't love them because they're good. You love them because they're yours" - A Packers (American football team) fan

The world around us is complicated, chaotic and divided. To even remotely make sense of this world, we try to find our place in it by forming groups. We tend to form or become a part of groups that conform more with our own personal identity out of which we create a social identity, which is a person's sense of who they are based on their group membership(s). That group can be anything, from lingual and religious groups to fraternities and fan clubs for sports teams.

The theory that studies the interplay between personal and social identities is called social identity theory. This was proposed by a British social psychologist Henri Tajfel and his colleagues in the early 1970s. There are a lot of theories in sociology that explain intergroup dynamics in social settings, like Realistic conflict theory (RCT) which says that intergroup conflicts arise due to conflicting goals or competition over limited resources.

In contrast to this, social identity theory is an integrative theory that attempts to understand the role of an individual's psychology in group behaviours and also the other way around i.e by looking at how group dynamics affect individual identities. Social identity theory originated from a series of experiments that Tejfal did in the 1970s. These experiments were important in categorizing social group formation into three different cognitive processes of an individual. They are social categorization, social identification and social comparison.

"I prefer to stay with my group, even though the other groups are are better at doing the task" - Humans

The experiment consisted of a group of randomly chosen 48 boys of 14-15 years. The boys were split into groups of 16 and then were shown some paintings without any details (including their names) about the painters. One half of the paintings were by Wassily Kandinsky and the other half were painted by Paul Klee. After this, their preferences were taken in a survey.

Then, they were randomly split into two groups, but the groups were named Kandisky and Klee giving them the false impression that this grouping was based on their preferences in paintings. Each boy was assigned a number for identification, and each was asked to give scores to two boys - one that belonged to their group and the other of the other group - with the subject being given no information about the two boys except their group's name and ID number. Tajfel employed two systems for this. In the first one they were given score sets such that both their scores added up to 15. In the second one Tajfel manipulated the grids so that the more points the boys gave to boys of their own group the more the boys of the other group automatically got. Examples of these score sets are given below.

Scoreset-1

KLEE - 12	1	5	7	10
KANDINSKY-3	14	10	8	5

Scoreset-2

KLEE - 12	19	13	17	7
KANDINSKY-3	21	13	25	1

In the first system of point awarding, the boys generally awarded more points to the members of their own group showing in-group favouritism. In the second system of point awarding, the boys generally opted to maximize the difference between the profits of the two groups favouring their own group. For instance, a lot of Klee members chose to give the final score set of (7,1), instead of giving (19,21) where they would bet the maximum number of points but at the same time the other member would get more.

We see here that the mere grouping of people made them discriminate between the two groups. These groups had nothing in common, people didn't know each other and if we really look at it, they really didn't have the art taste in common as the grouping was random. Despite meaningless groupings, the students were able to identify with their groups and create a positive social identity around them. Tajfel names the group which one belongs to and has a positive identity around it as an in-group, while the other group(s) are called out-group(s).

As said before there are three cognitive processes that are central to the in-group, out-group dynamics. First is social categorization, the tendency of an individual to divide and categorize people into in-groups and out-groups. This exaggerates the differences between oneself and members of out-groups whilst highlighting the similarities of in-group members with oneself. In the experiment it was the formation of groups. Second is social identity, it refers to the tendency of people to adopt an identity that is compatible with the views of that person's in-groups. In the experiment it was the apparent preference of painting in one's in-group. This need for forming a social identity is directly linked to our innate need for increase in our self esteem, a sense of belonging and self worth.

"Close your eyes. Picture a convict. What's he wearing? Nothing special. Baseball cap on backward, baggy pants. He says something ordinary like, 'yo that's shizzle'. Okay, now slowly open your eyes again. Who are you picturing? A black man? Wrong. That was a white woman. Surprised? Well shame on you!" - Michael Scott, Regional Manager, Dunder Mifflin.

As one seeks multiple positive social identities, these identities lead to a generation of comparative analysis between one's in-groups and out-groups. This is called social comparison. Social groups are important in one's life. All of us need to belong to some groups to identify ourselves with whilst establishing a self identity. But this leads to a lot of social behaviour which causes friction between different social groups. As we have seen in the experiment, one tends to favour in-group members which leads to discrimination and stereotypes against out-groups. It is based on oversimplified images and we tend to homogenize out-groups. This in its extreme has led to some of the worst things humanity has ever done. We have always had comparisons with other groups and these comparisons are usually biased due to various reasons such as historical conflicts, competition over resources etc. We always try to establish moral, economic, authoritative superiority over outgroups. This, combined with homogenization of the out-group eventually leads to dehumanisation of out-groups and history has numerous examples of genocide, racism and discrimination over different social groups.

"This criminal race has the two million dead of the (First) World War on their conscience, and now hundreds of thousands. Let no one say to me: we cannot send them into the mire. Who concerns themselves about our men?" — Adolf Hitler, referring to Jewish People as a 'criminal race' and using existing stereotypes to blame them for Germany's loss in WW1.

This isn't to say groups are bad. From an evolutionary perspective, tribes of humans ensured better survival of the species. This has carried onto current times, albeit in different ways. We have grown past our need to be protected from animals, but we continue to face material, social and emotional problems. Bonds formed through groups have always been a way by which we cope with these problems. Understanding social identities and group dynamics can help us form healthier social identities and groups by constantly evaluating the biases that we form towards those around us.

' Man is by nature a social animal; an individual who is unsocial naturally and not accidentally is either beneath our notice or more than human. Society is something that precedes the individual. Anyone who either cannot lead the common life or is so self-sufficient as not to need to, and therefore does not partake of society, is either a beast or a god. " - Aristotle



Ink Of Jears

- Waseem Yousef

I anticipated dawn with the spirits high, I turned the dying page over, again and again.

Couldn't grouch out a word as it was the Lord's will, And grinned all the time with a heart gone.

And swayed in the yard being stuck to the shadow, Whilst sobbing, shrieking, and roaring for the fall.

Then was held by, the Divine will, That whole nine yards will perish so why to brood.



MUSKETEERS

Swordsmanship, Comradery at its peak, Melancholy flows as they speak, Poses for Milady, Change bathos, Who knows where stands Athos?

Relayed into the mystery, fops unfazed by the serious drops Rides for the true calling, animi's well, Did storm through Aramis?

Deposits of self-importance, brags futile courage too often drags Lacks even the common ethos, ego filled hollow, waddles Porthos.

Problems for all, creates does he, maybe, However, loves all but thee, Sadist purely, a glass broken? but a lunatic was he, D'Artagnan.

Raw emotions, Doubled confusion, Strangled lines, Pushed equation, Regrets never mind, Doubts to free, Started as four, Pains end with three.

- Anonymous



The Buffalo and the Brat

- Chayansudha Biswas and Prithwitosh Dey

The dust clears, the gossips stop, The hubbub is all but dead; A drunken man approaches the bar, His eyes bloodshot and red. Smiling away peacefully at some Hallucination he sees, He opens his mouth and what comes out Is no summer breeze.

"Brother Rosie," his voice croaks, "You're doing very well, Serving beer to half dead men, Who all are going to hell."

Rolling his eyes, Rosie says "You hideous buffoon, I'm on the opposite side of the Whole goddamn room." Irritably he makes his way to where The man is bumbling; "How does one become a were-buffalo?" Asks the drunkard, fumbling.

Rosie heaves a great old sigh That makes his moustache flutter; Steel himself he must for now The story he has to utter.

"Twenty or so years ago," Rosie Starts his story, tiredly, "There was a young lad, who roamed about, And who people did not take kindly.

He was dumb as a goat and stubborn as a rat, Would try to steal, and get caught at that, Get drunk in the cabin and roam around, Sneak up on chicks without making a sound.

So sick of him were the villagers then, They'd plead and beg and cry, If he could please very considerately Just drop dead and die. But that man had a guardian angel Made with supreme power; He still managed to survive the fall when we Pushed him off a tower.

We tried to push him off a cliff We tried to paralyse him stiff We brought a man to get him biffed But all he got was half a sniff. And then one day it finally happened, After a long, long time; A giant beast entered the village A buffalo covered in grime. As we stood and stared in awe, The buffalo kicked a cat; The cat went flying and ended up dying, And out came running the brat.

Picking up his dead cat, At the bull he glares; Chomping on a mouthful of grass, The bull just calmly stares. Bets are made and coins are passed, Everyone is excited; Will the brat now kick the bull and Be dumb enough to fight it? But as I had always known Seeds of dumbness had been sown The fateful day he took his birth And plopped head first onto the dirt.

The brat then strides towards the buffalo, Trying to look menacing, His nostrils flared and his yellow teeth bared, His shorts get caught in the fencing. The bull meanwhile has left the grass and is Munching on the leaves, Of my precious golden tree I'd sown From magic seeds.

The boy is now back on his feet He tries to roar, manages a bleat,



But that catches the bull's attention And it turns in the boy's direction.

Standing there with bated breath, The villagers are all staring; While the boy rolls up his sleeves, The buffalo's hardly caring. The boy now lifts his right foot high, Preparing to land a kick, Aiming for the buffalo's head but All he does is slip.

He lands face first onto the dirt, "Please don't kick me," out he blurts; The buffalo opens its mouth so wide, From the boy's knee it takes a bite.

Gasps of shock and amazement Proceed from the villagers' side; We hadn't really expected, you see, for The thing to end in a bite. Stumbling up on to his feet, the brat Is limping away, In the future, we all knew Away from bulls he'd stay.

The rest of the day goes without events, But story isn't over, my ladies and gents; I'll cut to midnight, where the full moon is high; From the brat's house, we hear a loud cry.

> Now when I refer to a loud cry, Let me be very clear, It isn't anything human that we Are referring to here. An unmistakable moo it was, There was no doubt about that; A big and hairy creature appears, But wait, it's the brat!

The scrawny boy looks big and fat, He's on all fours, like his late cat; But this isn't the funniest part, my friend For a tail appears at his rear end.

Just when we thought he was hideous enough, Some improvements were seen; I'll try to explain what we saw And I'll try to not be mean. A bull's head appeared where used to be His scrawny, ugly face; We thought he died, but apparently not He had been just replaced.

He wreaked havoc all through the night Just looking for an excuse to start a fight Trampling on our houses and our yards Breaking glass windows into shards.

> Taking its sweet old time, The sun finally came up, After a night of terrorising, The buffalo finally shut up. Nowhere could the bull be seen But the boy was surely found, Snoring away peacefully on Top of a huge dung mound.

Pinching our noses tight, We shook him roughly left and right; Wearily he opens his eyes, Evidently he has not died.

A few more fortnights pass like this And we start to realise The boy turns into a buffalo When the full moon starts to rise. But when the sun comes shining up The thieving brat is back, Not that it improves his morals though; He still deserves a whack.

And this is how it all had started, The Reign of Buffalo Terror; Ironically, we started to pray that he Get a little bit better.

Thieving apparently is easier when you Have two horns on your skull; We were all so deeply ashamed to be Robbed by a man so dull. Years and years we suffered hence Until the bull-man died; For that story, I would suggest You come another time."

Just Try...

- Pramya Ranjan Chanda

Just try. But I'm not gonna lie... It's a real situation, so you need to get high... Get high with aspirations... It's a competition... The sky's the limitation... There is no place for a reason.

> lf you want to fly high, Then get rid of fears... Drain only sweat, There is no place for tears...

You will have a great fall... This moment comes for all... It's gonna hurt a lot... Remind yourself not to stop... Never feel shy, Curve your emotions... Dare to face the world, Have faith in your notions...

It's a ceaseless race... The time you have is less... Better not to waste... There's no place for rest... If you want to win the race, I'm not going to lie, Hold your head high and never stop trying...



I've got nothing left to say. It's like the words have run away. And I'm trapped between these walls Just because I lost it all. What am I supposed to do When my muse was you? Now between these pages I'm stuck, Simply waiting for luck.

Muse

- Anonymous

PRIDE THE PERIL

-Waseem Yousef

The delight you taste, The thrill you make, The charm you have, Kills Humane!

Felt your being? The chunk of dirt, with a stand-in soul. The transient being, with a murky crave. All in vain, with an end as grave.

Have some mercy, on your fate. Be your suitor and a premier mate. Bow your nape and kill your rage. Just be noble and a selfless sage.

Leave this trap, beat your tyrant. Love your life and a solace grave. Movie Club presents...

WHAT WE OWE TO EACH OTHER A spoiler free review of The Good Place

When we think of sitcoms, we usually think of a group of friends or a workplace comedy, but we would never think of a sitcom which has a fantasy world where there exists an afterlife and places ethics and moral philosophy as its core theme. This is the premise of *The Good Place*, one of the most ambitious sitcoms in recent times. While it is from the creators behind The Office, Parks and Recreation and Brooklyn Nine-Nine, which are workplace sitcoms, The Good Place separates itself from these usual sitcom tropes. The show starts off with Eleanor Shellstrop finding herself, after her death in "The Good Place", a highly selective Heaven-like utopia designed and run by afterlife "architect" Michael and his assistant Janet, as a reward for her righteous life. But Eleanor knows that she has been sent there by



mistake as she didn't live "a righteous life" like others in "The Good Place". So, she has to hide her morally imperfect behaviour whilst trying to become a better person by learning ethics from a Moral Philosophy professor Chidi Anagonye, who is also in "The Good Place". Eleanor also has to confront her past behaviour by her interactions with two other people in "The Good Place", Tahani al Jamil, a philanthropist who has donated billions to charity, and Jiyanu, a silent Taiwanese monk.

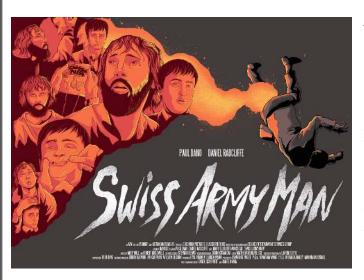
The Good Place introduces characters that exemplify the best and the worst in us, thereby making us examine ourselves . Most good sitcom characters have arcs and the writers do this by introducing challenges in their life. But what The Good Place does differently is make this change in its characters as its central premise. It asks the question to its main characters and indirectly asks us 'How can someone get better?'. The show doesn't give us any one particular answer to that question due to the complexity of problems each one of us faces but chooses to introduce us to various moral philosophies as possible answers. From mentions of Emmanuel Kant and John Locke to hilarious jokes about Nihilism and Utilitarianism, The Good Place has a very funny yet simple way of explaining complicated moral dilemmas to us. It goes as far as to create an experimental version of the famous trolley problem. But if there is one book that one could argue is the backbone of this show is What We Owe to *Each Other* by T.M. Scanlon. The author argues that thinking about right and wrong is thinking about what we do in terms that could be justified to others and that they could not reasonably reject; basically telling us that we are not in this alone and we have nothing to lose by being good to others.

- V S Tharun Krishna

The show and the philosophy it's based on is deep but it's not subtle about it. It manages to incorporate extremely funny gags and moral philosophy into its four season story arcs. The show also has its fair share of tear jerkers but mostly maintains a lighthearted humorous tone. Most sitcoms start off without having a big roadplan ahead. But *The Good Place* is an extremely well structured show that had everything mapped out ahead. Because of this, *The Good Place* managed to deliver one of the best and one of the most satisfying endings ever put to TV. The show is very cheerily optimistic about humanity, which is reflected in its character arcs, in its philosophical inspirations and in its entire storyline(might seem a little spoiler-ish but it only scratches the surface of what the show has to offer). During these desperate times for humanity, *The Good Place* and its messages are what we owe to each other.

FART JOKES AND DELUSIONS, AN UNORTHODOX MIX.

A brief review of the Swiss Army Man



A24 has been known for odd films, with the likes of *The Lobster, The Killing of a Sacred Deer* or even *Tusk.* This time is no different. The camera work is excellent, their usual dryness substantial, and the acting impeccable. People following Daniel Radcliffe know that he has dived deep into the avant-garde after fighting You-Know-Who. The directors, who go by 'the

- Gaurav Agarwal

Daniels' and usually shoot music videos (responsible for the pop hit *Turn Down for What* by DJ Snake), have done a great job. The film won the best directing award at Sundance. Talking about the film, it is quite absurd. Absurd to the point of touching the philosophy of absurdism. Let's start from the beginning:

The opening shot is of a lost-at-sea glass bottle. Hank (Paul Dano) gets introduced at the exact centre of the screen (not at usual 2/3rds) as if it's a testament to his loneliness, a showcase of the character being the only one throughout the movie and none other. In the scene, he is committing suicide and in the process, discovers a body that wound up on the seashore. Well, excitement in what it does, pushes him to do what he meant to do, only unwillingly. The rope he hangs himself with, breaks only to give his eye a fleeting glimmer, as he discovers that the suit-wrapped body (Daniel Radcliffe) is a corpse. All these emotional upheavals happen in the first 3 minutes of the film, where one has not even connected with the character yet. This established detachment continues throughout the movie. Not to give up the whole plot, the corpse imaginatively lives up to the name "Swiss Army Man", idiotically used in the form of a jet-ski, a hand-pump, a compass, a grappling hook launcher, a shotgun, and of course a man child going through puberty. The musical score is Hank and the corpse - now full of life and named Manny - humming and repeating the same patterns of words, naturally reflecting the loneliness and temperament of their minds. Together they form a bond, as Hank guides Manny through the complexities of life, and Manny guides Frank through the wilderness. Throughout the bulk of the time, the viewer tries to gain insight into their lives as they conjure it up magically.

This movie somehow managed to turn a psychological drama into an unsophisticated comedy and bizarre imagery, while retaining the psychological drama. This is a movie where one distances themselves from the character; they can't relate to Hank. The movie is juvenile at times and profound at others. It is not constantly paced and has bouts of attention drought, which may mirror the lack of entertainment present for the character itself. The movie is neither a cinematic masterpiece nor is meant to have a good plot. To be precise, it is the sewing of uncanny corpse ideas and delusions of a stranded man (and was probably written under influence). Again, it's not what one expects a movie to be, it may even lead the viewer to question the reason to watch it, but it definitely teaches to play pretend, and if looked at just so closely enough, it surfaces a well-suited meaning to take away. It's worth a watch.

Smíle - Indranil Das

And there I stared and stood Wondering how someone can look so good? You stood there smiling And I started my rhyming. So pure was your smile That I got lost in it for a while. You turned towards me suddenly And dear God! You looked so lovely. Your eyes were as deep as the ocean Carrying much more than a single emotion. And then reality hit me hard And put me back on guard. What was 1 thinking? Whom was 1 fooling? 1 was the darkness and you, the light You were the day and 1, the night. Different were our worlds Yours was of flowers and mine of swords. 1 never believed in parallel universes before Till the day I saw the soul in you pure. Hopefully in some universe we are together As in this universe together we will be never. But alas! I had already fallen for that smile And I realised I am an imbecile. Now I must wait and brace for the impact For when you leave my heart will be wracked. For such is the nature of my curse You will be in my mind through this verse. Even after you are gone long They will continue to sing this song. And that my dear is the tragedy of this writer He will immortalise others but himself will never burn brighter.



- Saket Kumar

The book *Sapiens* by Yuval Noah Harari makes a really interesting claim. It mainly talks about the 'imagined social orders' created by the human brain; that the norms of the society are not objectively real, and that we humans have 'imagined' them to be true. The author argues that human society is not based on truths but myths, created by humans themselves to form an order.

Harari tries to elucidate by giving the following example, the difference between the Code of Hammurabi, written by an ancient Babylonian king which displays the norms of the Babylonian society around 1776 BCE and the Declaration of Independence, written by the Founding Fathers of America in 1776 CE. The contrast is sharp between these two documents, yet the argument is on the same plane. The



Code of Hammurabi distinguishes between equal and unequal, master and servant, and the punishment to be received by the offender differentiates between their social status and gender:

If a man put out the eye of another man, his eye shall be put out, If he put out the eye of a man's slave, or break the bone of a man's slave, he shall pay one-half of its value; If a woman of the free class lose her child by a blow, he shall pay five shekels in money, If he strike the maid-servant of a man, and she lose her child, he shall pay two shekels in money.

whereas the Declaration of Independence says different:

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness.

It says that all are equal and indistinguishable and that all have access to fundamental human rights such as freedom and equality. Both of these texts claim to have divine origin, that these rules are the correct rules as accorded by the God(s). Harari claims this to be a testimony for the imagined order by the humans living in two starkly different times and places, that if such rules have any credibility in objective reality, these differences should not be present. "The two texts present us with an obvious dilemma. Both the Code of Hammurabi and the American Declaration of Independence claim to outline universal and eternal principles of justice, but, according to the Americans all people are equal, whereas according to the Babylonians people are decidedly unequal. The Americans would, of course, say that they are right, and that Hammurabi is wrong. Hammurabi, naturally, would retort that he is right, and that the Americans are wrong. In fact, they are both wrong. Hammurabi and the American Founding Fathers alike imagined a reality governed by universal and immutable principles of justice, such as equality or hierarchy. Yet the only place where such universal principles exist is in the fertile imagination of Sapiens, and in the myths they invent and tell one another. These principles have no objective validity."

The two documents are conflicting and they cannot aim for the same thing, or can they? Is it true that human rights are not objective and imagined? That in ancient societies, humans had no right to liberty? I mean, obviously there were no international organisations for such causes (religion?) as we have today, but the very thought seems wrong. If that is true, how did humans arrive from the Code of Hammurabi to the Declaration of Independence?



If one looks closely enough, they will observe that they are not incompatible at all. The Code of Hammurabi divides humans into social classes, stating that the rich are

above the middle class, and the middle class is superior to the poor, but the Declaration of Independence does not refer to social classes, it maintains its silence on it. It talks about humans biologically (and this is something that Harari observed, but like many other parts in the book, fails to present even a feasible scientific argument) being equal but the Hammurabi doesn't rely on the biological origin of humans.

A similar question was raised by Stephen Douglas, the senator of the state of Illinois when he was contesting against Abraham Lincoln in 1858. He said that the founding fathers had said that all men are created equal and that all Americans are equal, and by the virtue of the fact that black and white men were not equal, it could only mean that blacks could not be Americans and hence, they were not men but properties, that could be purchased and sold as slaves. Therefore, slavery should remain as an option for the newly formed states in the west.

"the signers of the Declaration of Independence had no reference to n*****s at all when they declared all men to be created equal... They were speaking of white men... I hold that this government was established... for the benefit of white men and their posterity forever, and should be administered by white men, and none others."

To this Lincoln replied, which is also the answer to the above question, that what did he mean by 'equal'? It was true that blacks and whites were not equal nor could they be, but so are Lincoln and Stephen.

"There is no reason in the world why the n^{*****} is not entitled to all the natural rights enumerated in the Declaration of Independence... I agree with Judge Douglas he is not my equal in many respects-certainly not color, perhaps not in moral and intellectual endowment. But the right to eat the bread, without leave of anybody else, which his own hand earns, he is my equal and the equal of Judge Douglas, and the equal of every living man."

They were not equal based on appearance, not in wealth and perhaps in a million other things, nor could they ever be truly 'equal' as Douglas or Harari were claiming to be. But the Declaration of Independence does not talk about all that. They are equal in the sense of opportunity and rights, the opportunity to rise up in the society, and the right to do so, and within these rights that are granted to everyone that makes them equal, they become unequal in other respects similar to as described by the Code of Hammurabi, and this makes the two documents mutually compatible and they are not imagined, but a part of our objective reality.

We humans are animals, driven by evolution, the struggle to exist and to reproduce. Our primordial instincts still remain, and we have chosen how we act along with it. Like above examples, racism: the tendency to favour genetically related kin above others and social inequality: social hierarchy were formed in greater apes, and these are the parts of our objective reality but so is the right to equality and freedom: territorial behaviour displayed by even the smallest organisms, but it is only us humans that have the free will to do something about it, to resist or favour, and this is what makes us different from all other animals, and if such ability was bestowed upon us by nature, then who is anyone to say, they aren't objective?

A Phone Call

- Pramya Ranjan Chanda

A call that brought you tears... Some of joy, some of fears. Those rings on the cell... That reminds you every day, Of someone in the world for you, Who never forgets to pray...

The words MOM and DAD, That flash every morning... Never forget to thank them, The time is still running...

You stay so far... Yet still too close... Just a reply, That makes everything go... Choose your words with wisdom... Let them feel welcomed. The moments you share with them... Take it home as your prize.

Ring those numbers... If you had a fight. End that anger... and make things right.

Be grateful to God, For the calls you get... Some just have names, From which they will never get... It is never too late... So do not wait, Reach out to them... And promise you will never forget.



The Fifth Problem

-Arun Karuppiah K

The day started as usual for Neil. He woke up, brushed his teeth, and attended an online physics class to which he felt obligated but not interested. To his surprise, the lecture was intriguing and new, unlike the usual ones that dealt with the other topics taught in school. The lecture was about the theory of relativity and the four-dimensional space-time model. The professor gave five problems as homework. Each problem was more impregnable than the previous one. With a lot of effort and help from reference sources he was able to do the first four problems. But he could not solve the last problem no matter how much he tried. Then he decided to sleep and try solving the same problem again in the morning.

After some time, his alarm rang but it sounded different from his usual ringtone on his cell phone. He woke up to turn off the alarm but was shocked to see an antique alarm clock. He then looked around the room. Everything in the room was from the late nineteenth century. Then at the corner of the room, he found a man sleeping with his head on the table and a stack of papers present to his right side. He seemed like a middle-aged man with dark black hair and was wearing a sweater. These were the only features Neil could make out as the rest were hidden from his view yet. Three papers were lying on the floor. They contained advanced mathematical expressions that he could not comprehend. He slowly walked towards the table without disturbing the sleeping man. He took a look at the bunch of papers that were kept on the table. The papers lying on the table were research papers about the theory of relativity and had Albert Einstein as the author. He deduced that this sleeping man was Albert Einstein! and he has somehow travelled back to the time when Einstein had written his first paper on relativity. Then he took the paper and started reading it. Everything in the paper was related to his fifth problem, and the moment he found the solution, he fainted.

After some time he woke up again, he found himself on his bed once again. He even checked the date; it was the current date in 2021. Then, everyone in his family woke up, and they too had a similar experience of time travelling as Neil. But unlike him, they didn't travel to 1916, but they travelled to the time where their pressing questions would be answered. For example, a detective who had been trying to figure out an unsolved crime for years travelled to the time when the crime had happened and found the murderer out.

Later that day, the scientists released a statement at LIGO that they recorded a strong gravitational wave caused by the collision of four neutron stars in the Milky Way Galaxy the day before. The wave was strong enough to disturb the space-time continuum across light-years from the site of the collision. This ripple disturbed the space-time of Earth and should have transported people back in time. But still, this doesn't explain why different people travelled to different times. Three months later, a group of theoretical physicists and neurobiologists proposed a hypothesis to explain the phenomenon. It states that the brain's quantum state changes while sleeping, and it tries to solve the pressing questions present in its memory. While the brain is trying to solve the question, it should have found a way to absorb the energy from the ripple and change its time coordinates accordingly, to the correct time where that question could be answered. The brain should have also found a way to get back to the present time coordinates after it solved the question. This hypothesis still requires experimental evidence, and it may or may not be correct, but scientists could not come up with any other better explanation for this weird event.



- Rajrishi Kumar

Women then were prisoned behind damp curtains of prestige and shame, With sacrifice running through their veins. As if it had replaced the presence of Iron in haemoglobin, Making them somehow forget The language of valour and the courage that lies Hidden, afraid of the Bars of uncultured culture, Rolled up in their smooth stranded hair tied up into a bun. Exactly the way their wings are. Chained feather by feather ignoring the blood dripping down her eyes.

Women then were slaves of vicious walls Carrying on their round little shoulders the burden of

Peace, love and well being of the universe Barred from committing a mistake In the name of being called next to the Goddess, But denied the cardinal human "privileges". Their lives lied in the plates of their red saree Which would be turned to white post the decease of their

Ticket to existence bought by their fathers by selling their pride

By bowed heads and lowered eyes.

Without ever asking them their choice,

Choice in the first place to the themselves in the bondages of vermilion.

Women then were fighting battles On grounds, supposed to be their homes, Because they were taught they didn't have one of their own, They'd be surpassed to their "house of rules and regulations" And that people whom they'd have to serve, with all their Soul and heart, Wouldn't consider her among their own, But here's a relief for them, One day they'll be birthing the honour of that house Which by now would be theirs And when the cycle of life rotates They'll have a younger version Of themselves to flicker their plight upon.

Women then were members of society filled with venom in their mouths, That they spat every minute in the name of "Sacraments " For I haven't seen any of this stop till date... Amendments kept aside. And I wonder standing on the edge of fitting in the dutiful world and hammering my chains With every drop of blood, They shed, I hear a loud unheard scream, Thrilling my eardrums, Reciting to me, The Story through their bleeding eyes Of the free bird in them that couldn't fly.

Terribly Tiny Tales

वो बदसूरत ही होंगे जो दिल से दिल लगाते है,

आजकल तोह लोग चेहरा देखकर बाते बढ़ाते है।

My silence speaks of hurt, mortification and shyness. His of ignorance, complete lack of affection and nonchalance. Complete silence. Yes. Silence does speak a thousand words.

इन आंसुओं को खुदगर्जों पर ज़ाया नहीं करते, जो छोड़ गए वो लौट के आया नहीं करते। सब्र कर उसकी यादों से इकरोज़ तू आज़ाद होगा, पिंजरे से एकदम परिंदे उड़ जाया नहीं करते।

इक तेरा साथ कमाने दे, फ़िर लहरों का हो जाऊंगा, मात भला क्या दरिया में, तेरे इश्क में जब शय हो जाऊंगा।

एक खंजर से गुन्हेदारो को साफ करता रहा,

वो खुद गुन्हेदार निकला जो इंसाफ करता रहा।

Dear future self, Did we graduate online? Like the stars flood the black sky, Your smile excites my dim eye, How can you influence me so much? Getting deep into my heart before I could feel the touch!!!

छुपा के अपनी हथेली के छाले, मेरी खरोच पर मरहम लगा देती है, जब भी मैं आग कहता हूं, वो आंखों से पानी छलका देती है। शोलों पर खड़ी है फिर भी मेरा दुख रुई सा उठा लेती है, भगवान से जन्नत मांगते हैं सब, माँ जीवन को जन्नत बना देती है।

> वो परखती रही हमें और हम फैल होते रहे, हम इश्क़ समझते थे, यहां खेल होते रहे।

बहुत सहसा था जब तुम्हारी याद दफनाने आया था,

एक पल तक प्रेम था, अगले पल तुमने ठुकराया था।

धो गंगाजल में उस प्याले को उसने यू साफ किया,

भर मदिरा उस प्याले में, खुद को फिर उसने पाक किया।

I confessed to him, he rejected me. Final. Our story ends there. But that is what I don't want; for us to end. I don't want us to end, pathetically knowing that we were not even us.

One day Trek to the Chirsar Lake

- Syed Wajahat



I made the Chirsar Lake journey on 4th July 2021. The trip began from Nand Marg (District Kulgam) and covered a distance of nearly 30 kms, which involved climbing high peaks of around 4000 meters above the sea level, and is classified as a moderately difficult trek by J.K. Trek. I undertook this trip with 9 other travellers and a local guide.

A trek is often seen as an extreme adventure sport. It makes you leave your comfort zone and explore the possibilities outside it. Nothing comes free on a trek.

In order to enjoy the excellence of beautiful meadows and mountains, one must invest the energy to reach there. It challenges one's physical and mental capabilities. After having a sluggish week, it was the possibility of breaking out of the stagnation and spending some time surrounded by nature that prompted me towards this trek.

When we started the journey at 7 AM, everybody was extremely excited for the trek. The sky was clear and the mood was enthusiastic as we started our journey. The weather was truly decent, and breezy as we took our first step along the town track.

After walking for a few minutes from our starting point, we entered a pine forest. The track was steep and we had to stop regularly to catch our breath. We hiked for about thirty minutes, and stopped to have a cup of tea which was brought by one of the travellers. While we were drinking the tea, we got the opportunity to see a couple of birds and plants, which are rare and only found in the mountains of the Kashmir Valley.

After reaching the top of the first mountain, we halted briefly and began to descend the slope. As we reached the bottom, we strolled through a rich green glade and could hear the gushing sounds of the stream just beside the glade. The glade gave us an awesome perspective of the mountains.

After we crossed the glade, we went over another mountain, albeit not as steep as the first one. While strolling through this mountain, we came across a group of shepherds with more than 100 goats and a gathering of little young ladies with a couple of grown-ups with them going on a journey. They were singing Gujjar (a tribe) melodies while heading towards a spring that was on a similar track. When we crossed this mountain, we arrived at the Chirbal river. The water of this waterway was clear sky-blue in colour, and it was sloshing with such savagery that we were unable to hear each other over it. We crossed the stream over a decrepit wooden bridge. A climb through a steep section of the next mountain was waiting for us on the other side of this stream, and we had to take breaks all the more. However, we could enjoy a reprieve for only 10 minutes, as we needed to travel significantly further. From that point, we journeyed for an hour until we could see the Brama Sakli peak from afar.

Although we couldn't help thinking that it would require just thirty minutes to arrive at the lake, the guide still alerted us not to get deceived as it would take us over 1.5 hours to reach our destination. Furthermore, his prediction ended up being valid. As we were slipping along the slope towards the waterway, we had to walk cautiously as rocks were tumbling from above steadily with some speed and could injure an individual.



I was fortunate to have escaped a stone that tumbled from above and nearly hit me. From the waterway, it felt that we just needed to cross one of all the little rough slopes prior to arriving at the lake, however, as we continued ascending this slope, the distance appeared to increase further as a few more slopes came into sight. At this point, I had nearly abandoned the idea of seeing the lake as I felt depleted. The guide propelled me not to surrender as we were nearly there. Yet, to arrive at the lake, we needed to cross a few glacial masses on an inline (with a slope of around 50 degrees). At high

elevations, crossing mountains with huge icy masses is a perilous undertaking. I followed the guide as he crossed the icy mass effortlessly. However, as I arrived at the center of the glacial mass, I couldn't discover the grip and slipped. I had to withdraw, or else I would have wound up in the crevasse with frigid water or would have collided with enormous rocks. I crossed the glacial mass with the assistance of my cousin, who was carrying a stick, and we both held onto it while getting across. At last, we arrived at the Chirsar Lake. Phew!!!

It is said that the milky water of the Chirsar Lake resembles that of Chir (sheep in Gujjar). The lake tends the Chirsar meadow, which is a hotbed for shepherds. At its door, the milky water from the lake forms a beautiful waterfall. Hidden in between snow-clad peaks with rough terrain these lakes test the patience of a trekker.

This journey caused me to understand that you should move forward. You advise your body and brain to propel yourself some more and to attempt and not to surrender in defeat. In the process, you discover that your body and brain can do considerably more than you initially suspected. And, that is the best lesson that I learned on this journey.



A Motion towards Judgement

- Prabhu Prasad Swain

Walking down the landscape. Harsh sunlight on stretches of sand, Dead grasses, Withered tracks Nowhere, no bail to escape Journey through to Wonderland?

Winding dunes, Sandstone, Prickly pear, Blooms cactus, Screech the eagles up in the sky Distant creek, dry to the bone Ever think of giving up practice?

Freezing nights, Worn canyon, Crumbling rock and tumbleweeds Appeals to have some rest Sits to hit, the king Scorpion Enough feed to survive the needs?

The trail proceeds, pain splits, Outlawing the stringy wild game. With the hunger and the will to succeed All this way up to such fame and name The tough saltiness of hardtack quits.

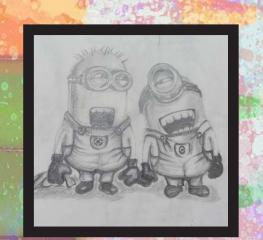
Sailors

These friendships, So beautiful, so peaceful, Just like the ocean, Calm and resourceful to all And at times, wreak havoc on you. The tsunami that washes away all traces of existence of human bonds, And yet, we sail across the ocean everyday, In search of better hunting grounds, Some succeed, some perish, Because everyone's a sailor, after all.

- Anonymous



Rakshitha M











Lokendra Meena

Doodles



Aniruddha



Samridhi Singh





Anju Cyriac

Survey 1

Describe your class Whats App group in one sentence!

 Kainchi ki tarah zabaan chalwa lo bas inse, kaam ek nahi kar pate hain.

 Kainchi ki tarah zabaan chalwa lo bas inse, kaam ek nahi kar pate hain.

 Heaven when you don't get messages and hell when you do.

 It was that covid patient who didn't get oxygen and remdesivir till now, but is somehow still existing (now in a coma nevertheless).

 It wish I could unsubscribe to some unwanted aroun mess

I wish I could unsubscribe to some unwanted group messages without exiting the group.



It would be fun they said, but nope.

Daily dose of "gyaan".



What did you discover about your family/friends (or even yourself) during this one year break?



Survey 3 I miss college... FOLLO FOU What did you never expect to miss, but did during the pandemic? It could be with respect to college or your pre-college years. 0 O H MIN I never expected to miss Mumbai and my room in the hostel; I was 1 EDE homesick before returning home. I also miss travelling alone and H3 ms discovering new and old places on my own. I miss face-to-face 0 interactions with people, even though I am an introvert. Never expected to miss something like this. Missing those days! Touching! I mean public objects in public places, or articles in malls without having to be cautious or sanitizing afterwards. I swear. What am I supposed to miss about college? I haven't even 國目目前 (100 0D seen it before. The File of the 000 a) I miss all the dinosaurs that I projected into my mind while procrastinating. PLAN There's no rock-bottom for stupidity (not a covid specific statement. It's as general as you can imagine)

The happiness of ignoring people I guess...

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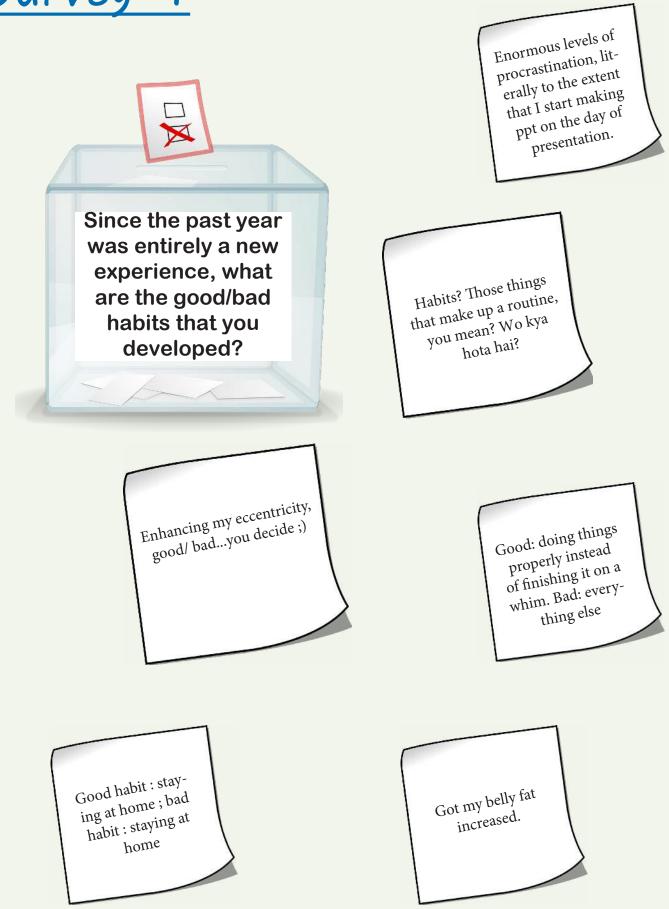
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Your most embarrassing pastime/ guilty pleasure during the pandemic?

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Inserting a dirty plate when someone is doing the dishes and pretending you're in class to avoid getting scolded.

Watching Youtube at 2x speed so that I can procrastinate less by procrastinating more (watching more videos at the same time).

Painted my foot. All of it.

Sleeping when you are supposed to be awake and awake when you are supposed to be asleep.

•

There are literally days for which: I just sleepwake up to eat-watch like an hour of some already overwatched sitcom-go to sleep again... *Sigh* Maybe I should get help.

 Binge-watching K-dramas and C-dramas and Reading something that I was not expected to read ;) And Extreme Procrastination by sleeping and missing out on online classes:)

SHOT AT SIGHT

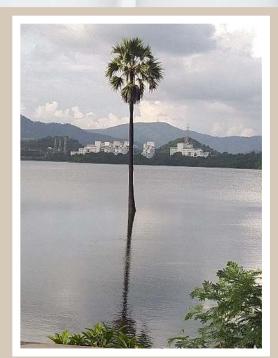












Adityamani Nagar, Q14



Ananya Sachdev, Q13



Greeshma Anil Kumar, Q14



Satrujeet Sahoo, Q14



Shashank Suman, Q12

Ananya Sachdev, Q13





Aryadeep Paul, Q12



Muskaan Mangat, Q14



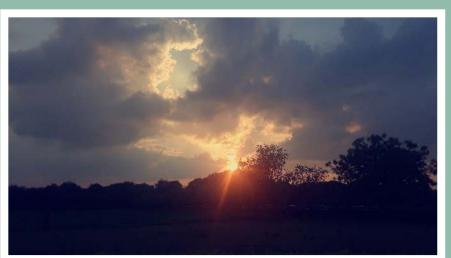
Naman Mishra, Q13



Phruv Yadav, Q13



Kavya Sri Gamini, Q14



Phruv Yadav, Q13



Shashank Suman, Q12



Satrujeet Sahoo, Q14



Greeshma Anil Kumar, Q14



Tanvi Mahajan, Q12



Ashwini Babu, Q13

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Mugdhaa Pradhan



Satrujeet Sahoo





Mugdhaa Pradhan



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Mugdhaa Pradhan



Satrujeet Sahoo





V S Gayathri

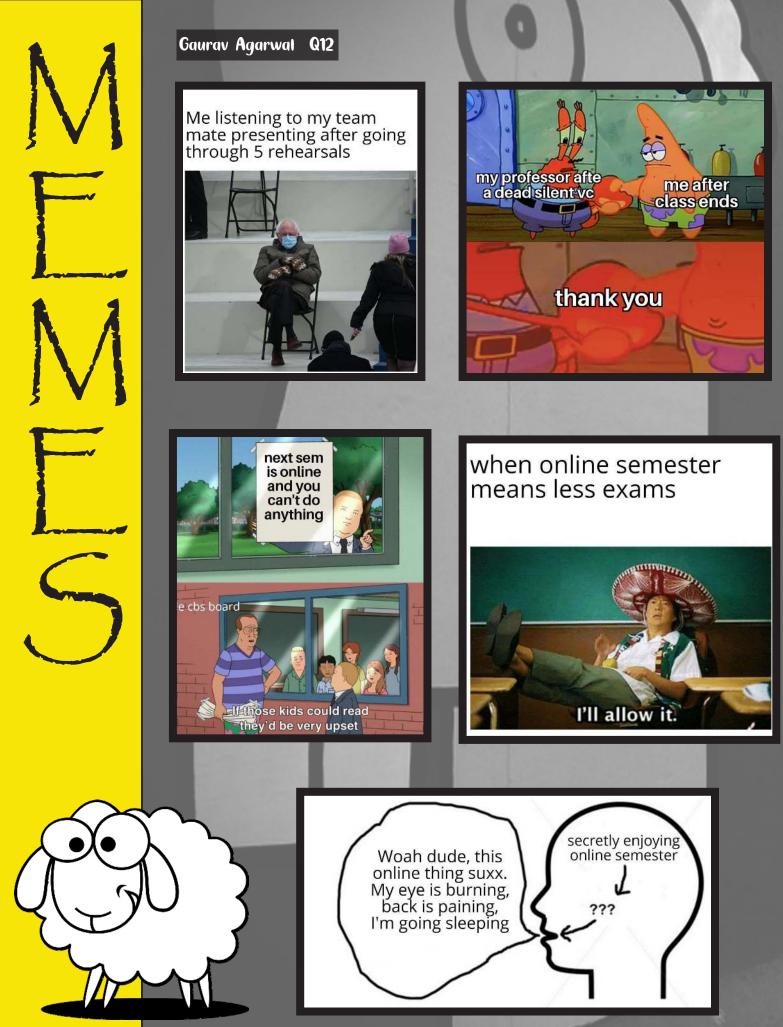
Mugdhaa Pradhan



Muskaan Mangat



Mugdhaa Pradhan);



Me after finishing my undergrad in my bedroom on a random Wednesday at 4pm



Aditya Deshmukh Q11



Me at 11 pm : " I will wake up tomorrow at 5am to study with fresh mind "

Me at 10 am the next day :







PCM leke engineering kare ya PCB leke Medical ka try kare.

Phir socha hatao yaar, PCMB leke dono options open rakhte hai l



Me in school : Aaj Science ka 8th chapter khatam kar leta hoon, phir kal maths ka agla chapter bhi start kar dunga

Me in college : Aaj Breamking bad ka last season khatam kar lunga phir kalse Peamky blinders bhi toh dekhna hai huehuehue







Me to that friend who gives me complete class notes before exams



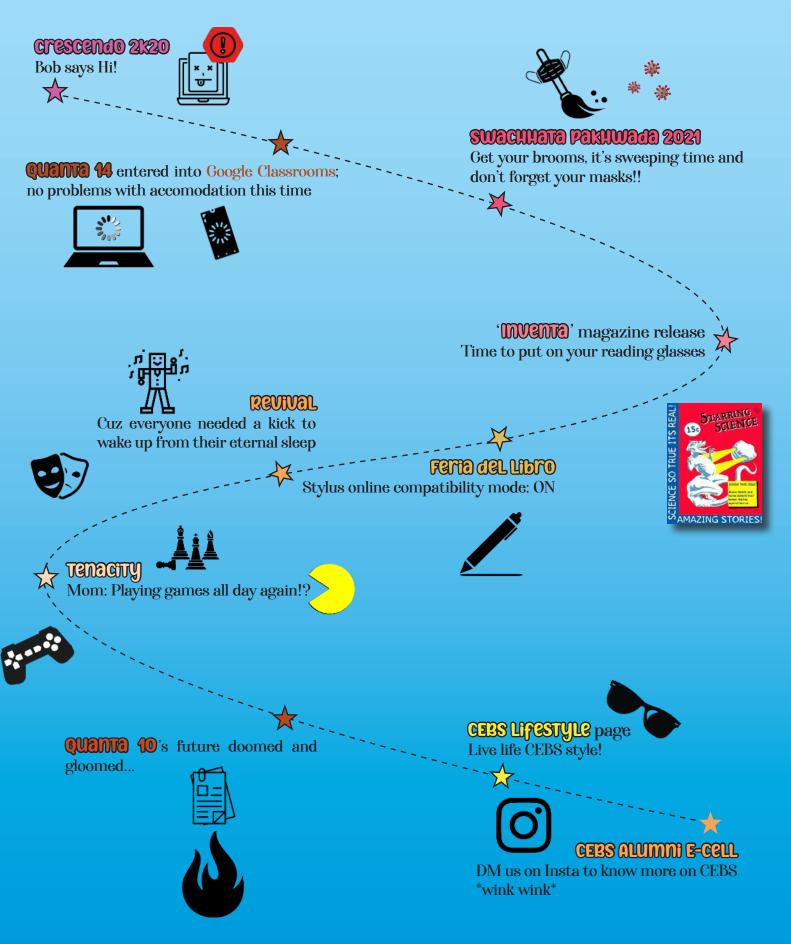
" This chapter seems easy. I will study it a day before the exam "

When you read that chapter a day before exam :





THE YEAR THAT WAS



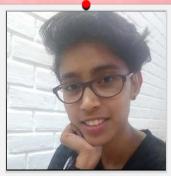
Team Novellus



Adityamani Nagar, Q14



Avni Sejwal, Q14



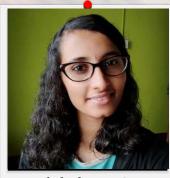
Ashwini Babu, Q13



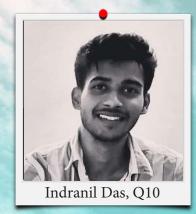








Rakshitha M, Q12







University of Mumbai - Department of Atomic Energy

Centre for Excellence in Basic Sciences

University of Mumbai, Kalina Campus Santacruz (E), Mumbai - 400098

Website: <u>www.cbs.ac.in</u> Team Novellus: <u>novellus@cbs.ac.in</u>