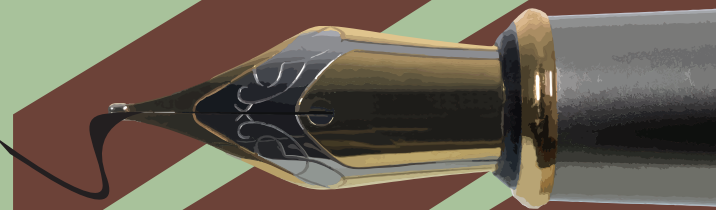


QOARKS

Fundamentally unique, Fundamentally different



From the *Dean*



It is with great pleasure that I present to you the sixth volume of “QUARKS”, the annual magazine of the undergraduate students of the Indian Institute of Science.

The Undergraduate Program of IISc started in 2011 as a distinctive 4-year course designed to attract highly talented Indian youth to explore the frontiers of science. The primary objective of initiating the program was to provide bright and motivated students with inquiry-based learning experience in an environment

in which high-quality research is practiced and valued. The Program has attracted very good students since its inception and has reached a steady state with the passing out of 6 batches of students. The academic pursuits of the outgoing students in world-renowned institutes of higher learning confirms the success of our Undergraduate Program.

I am happy to share that apart from their scholarly dispositions, our students are also involved in several extra-curricular activities and excel in them. One such activity is working towards the publication, Quarks. The compilation of stories, anecdotes, poems and art is indeed impressive and very enjoyable to peruse. I congratulate all those who have contributed to the magazine and take this opportunity to wish all our Undergraduates a happy, fruitful and a successful stay in IISc. Happy reading!



Anjali A Karande
Dean, Undergraduate Program, IISc.

Editor's Note

With the advent of a new academic year come new people, new challenges, and the latest issue of Quarks. Having been a part of the editorial team of Quarks for the past two years, I have learnt two things: one, that the literary, artistic and creative potential of the UG community in IISc is largely untapped, and two, that attempting to tap this latent potential is no mean feat!

In the span of a year, from collecting articles to editing, designing and digitizing them, we as a team happened to meet several talented writers, artists, designers and even photographers, who were not officially part of the Quarks team. To the future editors and coordinators, I'd like to say this: a small effort in convincing people who do not initially volunteer to participate goes a long way in collecting good content and bringing forth a wholesome annual issue of Quarks. Convincing need not mean coercion, as a lot of people do not volunteer not because they don't want to, and some of them would be glad to participate if requested.

Moving on, this issue is a melting pot of the various elements that constitute an IISc undergraduate student. The veil of anonymity is sometimes a powerful way to express oneself, and we received some interesting articles from anonymous authors this time.

The section titled Contemplations is a blend of articles on various, seemingly unrelated subjects, a reflection of the varied interests of the UG community. The section on UG-centric issues contains several articles that promise to be both interesting and informative.

This issue also contains an extensive Photography feature that aims to collate photographs into coherent categories. And as always, a vibrant fix of art, poetry and stories is assured.

Bringing out Volume 6 of Quarks would not have been possible without the support of Professor Anurag Kumar, the Director, Professor Anjali Karande, Dean of the Undergraduate Programme, the administrative section, the ever-helpful Archives and Publications Cell and the various people who contributed in both small and large ways to the completion of this issue.

Yours sincerely,
Pooja Nathan
Editorial Coordinator



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Acknowledgments: Some of the vector graphics used and modified are “Designed by Freepik”.

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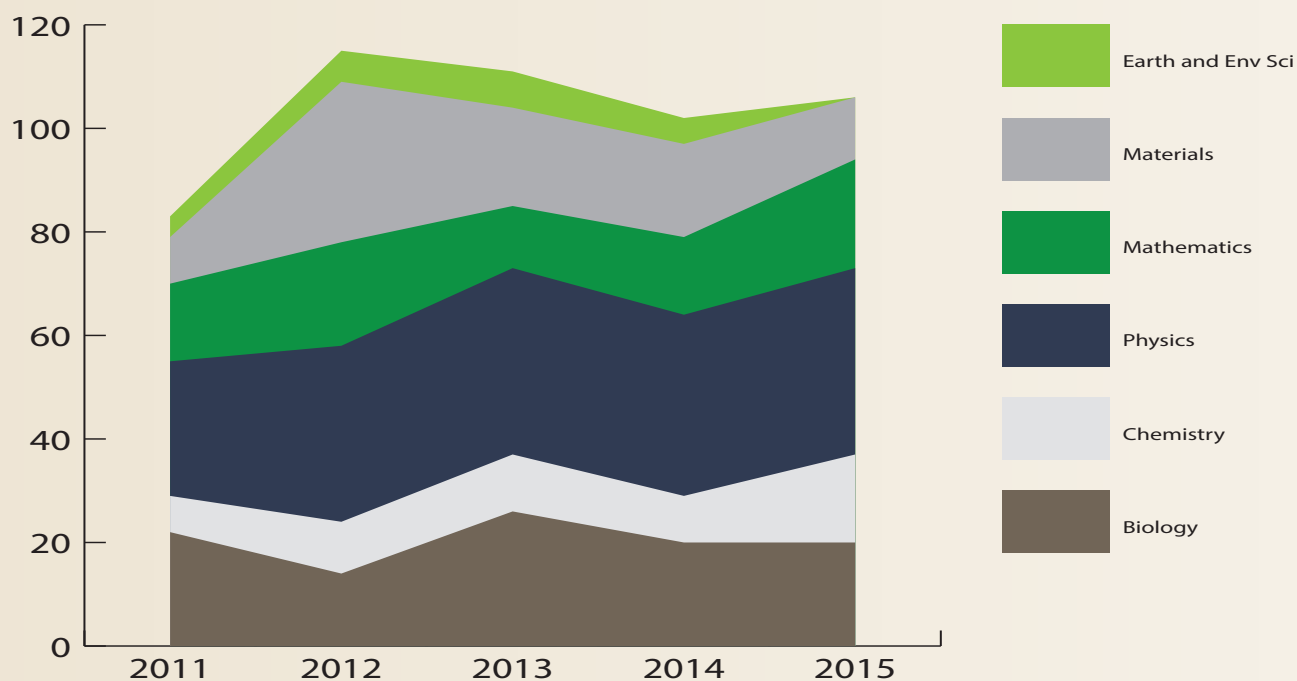
A Major Decision

Julian D'Costa
UG 2016

Every December, IISc UG sees its second year students confronting their first big decision of undergraduate life – What major do I pick to study?

The undergraduate program offers six choices: Physics, Biology, Mathematics, Chemistry, Materials Science, and Earth & Environmental Science.

We have data on the majors chosen by undergraduates from the beginning of the program onward, and quite a few patterns emerge.



Physics is clearly the most popular major, followed by Biology. Materials and Mathematics vary in demand, tailed by Chemistry and Earth & Environmental Science. Earth Science has always been a niche choice, more so in recent years, with none of the 2015 batch choosing it. Materials Science, on the other hand, has become more popular with time.

Quarks spoke to several members of the graduating class of 2013 and some others to find out why they chose the majors they did.

*** **



Rohin Biswas '13

The Chemistry major in IISc broadly focuses on Physical, Inorganic, Organic and Analytical Chemistry. Semesters after the 4th deal with special topics in more detail. Unlike most other majors, the number of required courses is quite a lot. Almost all of the credits are fixed. Since the course structure is planned well, I felt that was an advantage because often a student might go on to take a more advanced course without fulfilling a pre-requisite, obviously sometimes without understanding. So, here, there was no scope for that.

I took Chemistry because I liked the subject since class 7, so I was fixed on majoring in it. I wanted to work in a field which is a blend of Inorganic and Materials Chemistry. The wider field which interests me is Supramolecular Chemistry and its applications. So, I went on to take some courses from Materials Research Center. However, after completing my major, I felt that the theoretical background with which I graduated is quite strong which would ultimately help me in my future research career to a good extent!

*** **

I chose physics because I liked the subject the most, the only other option was math and I realised I didn't really have a passion for more abstract parts of math.

The great thing about this major is you can do anything from biology to high energy physics merging into math with this foundation. The labs are generally excellent and make the learning process much more comprehensive. Finally the abundance of seminars and talks in the department and in other institutes like ICTS and RRI give fantastic exposure to research and offer a lot of project opportunities.

I think the major drawbacks are repetition of syllabus in certain courses, and since there are lots of students there is much more demand for a limited number of professors. Also the first three semesters in physics are slightly underwhelming.

Naren Manjunath '13



Fourth and fifth semesters are mostly compulsory courses covering the same topics at a higher level and introducing new things like quantum mechanics and statistical mechanics.

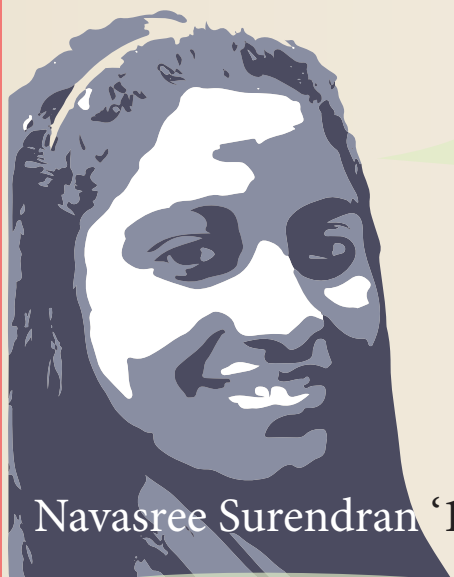
Special mention to all the second year labs which go through a lot of historically crucial experiments. Expect a hectic schedule especially till semester 5 with labs, but afterwards there's a lot of free time and you forget how it was to wake up for 8 am classes!

On balance if you want to get exposed to interdisciplinary subjects and also have a strong technical base, this is a very good major.

*** **

I was interested in biology, but I switched to Materials Science mainly because at that point I wasn't sure that I wanted to pursue a PhD. I was a little more inclined towards atleast having the option of taking up a job after my bachelors, and Materials Science is so interdisciplinary that I could have both options open.

It was nice and chill. The entire department was friendly and supportive.



Navasree Surendran '13

*** **

The math major at IISc is quite good. Unlike other majors, we have no labs. But that does not mean that we get more time, since we need to put in more effort for the courses. We do the basic courses in the fourth and fifth semester. The sixth semester courses are intermediate level courses. There are also quite a few advanced electives that are offered at the department. There is a final semester project, which many people start working on at the beginning of the year.



Sanal S Prasad '13

I chose math because... I guess I like the idea of abstraction, of studying structures and looking for connections in different topics. For example, a lot of mathematical formulations have come about from deep insights in Physics



Agniva Dasgupta '13

(and other sciences), for instance Calculus (Analysis to be more precise). It's fascinating to know how vague ideas based on intuitions were given so much structure by making precise definitions and arguments.

I like studying different structures. Algebra for instance involves a lot of such things. You take objects with a relatively simple setup, and then keep adding more and more structure to it and study how various properties evolve.

My current interest, Number Theory (and Algebraic Geometry also) uses ideas from both Analysis and Algebra, each complementing the other. Also lovely is how a lot of the problems in Number Theory are remarkably simple to understand, the solutions not so much!

I originally chose Physics because I had a bias towards it since I had taken PCM in school, also the thought that I had at that time was that taking physics will let you choose any other field in the future, which is what physicists do -- they encroach upon many fields like economics, biology...

So I thought let's take Physics for now I can think about what field to work in for PhD later...

I came to IISc with an open mind.. I realised many people have a very strong bias towards subjects they have experience in. I didn't want to do that.

I got into Biology after coming here, problems in biology really interested me and I also saw that there was a lot of computational and theoretical biology going on near me which was really cool... I liked transcription and translation-- the fancy stuff of biology.

I took physics in 4th sem ... but then I got extremely involved with iGEM (the International Genetically Engineered Machine competition) because of my interest in synthetic biology at that time. Working for iGEM took up all my time ... but I really enjoyed the experience.

In the 4th sem I had come to know that Samriddhi Thakur had changed her major, so one day I asked her and she told me how she had planned to do it - which didn't sound very insane - and then I thought that I could also do that - and the moment that thought struck me ... I somehow knew that this is the right thing to do... I anyways spent the whole semester doing biology, I am spending the vacation in biology and to be true .. the reason I chose physics was to use it as a tool... (yes I used you physics).

So I talked to Narmada and Srinath, Arunavo and Prabaha --all of them encouraged me immensely. In June after 4th sem I started the procedure to change my major to Biology and within two working days it was done. I was pretty happy and relieved.

I sure have enjoyed my semesters and the topics I study about when I am not working for course or project related stuff. By the way don't think that now I might stick to biology a lot.

My current project is not biology or science as I used to know it.

My interests are dynamic and I hope that doesn't take a toll on my future but at the moment I am enjoying what I do and that's all I actually care about.

Abhijeet Krishna '14

On Depression

Introduction

In this section of Quarks 2017, Raj Magesh and Julian D’Costa embark on a mission to understand depression – what it is, how to identify it, and how it can be treated. This series of articles begins with a number of riveting case studies and segues into the currently-accepted scientific explanation of depression, based on an interview with a practicing psychiatrist. An article about depression in IISc UG – a rising concern for students, parents and the administration alike – concludes the series, discussing specific UG-centric risk factors, empirical data from current students, and counseling facilities available on.

An Invisible Menace?

He woke up to the insistent beeping of his alarm clock. The air was muggy, stifling hot. Groaning silently, he turned on his side, eyes flicking over the clock face. 11:42 a.m. Another day without breakfast. Oddly enough, he wasn’t hungry anymore. He hadn’t been hungry for quite a few weeks now. He’d missed morning classes too, of course. His attendance would drop, but he had accounted for that: missing morning classes every day still kept his attendance over the mandatory minimum of 70%.

Classes in the morning are a pain, he thought to himself. He’d bothered attending them once, as a freshman, excited by the prospect of learning from the greatest minds in the nation. After all, he’d slogged during high school, sweating blood and tears to get into (t)his institute, one of the finest colleges for the brightest students in the nation. After that (What now)? The dream had shattered. Unlike high school, where he had excelled far beyond his peers, breezing through exam after exam, college was a minefield. Attendance, tests, quizzes, projects, assignments, deadlines, late nights. Stress. Stress. Stress. The best way to survive the minefield was to simply stop moving entirely. He looked again at the clock. 12:06 p.m. Mustering an effort of will, he rose up onto his own two feet, grabbing a towel from his clothesline. Same old, same old. No one bothered to wake me up. The thought popped into his mind unexpectedly, and he mulled over the notion. When he had first started skipping classes, his friends had come to ask him why, some even resolving to be his personal alarm clocks. A quick smile flickered over his face at the memory. Now, though, no one cared anymore. He sighed quietly, fingers idly playing with the towel in his hands.

When he looked down, it had become a noose...



<p>Apr 28, 2014</p> <p><i>PG student hangs self in IISc hostel</i></p> <p>http://timesofindia.indiatimes.com/city/bengaluru/PG-student-hangs-self-in-IISc-hostel/articleshow/34304745.cms</p>	<p>The decomposed body of a postgraduate student was found in his hostel room at the Indian Institute of Science here on Sunday morning. Police said the body of Prabhakaran JK, 26, was noticed atleast two days after he had committed suicide.</p> <p>Although police couldn't find any suicide note from the room, they quoted some of his friends as saying that a broken relationship with his girlfriend might have driven him to take the extreme step. Prabhakaran, from Chennai, was doing Master of Engineering in aerospace, aeronautical and astronautical engineering. Prabhakaran, who was to complete his course in June, was offered a job by a big company through campus selection.</p>
<p>Jan 21, 2012</p> <p><i>IISc professor, Engg. student end life</i></p> <p>http://timesofindia.indiatimes.com/city/bengaluru/IISc-professor-engg-student-end-life/articleshow/11573270.cms</p>	<p>Unable to come to terms with his loneliness, an Indian Institute of Science (IISc) professor on Sunday allegedly committed suicide here on Friday morning, sending shockwaves in the city's scientific establishment.</p> <p>Forty-six-year old Parag Sadhale, a professor from the department of microbiology and cell biology, was found hanging from the ceiling fan of his Sanjaynagar flat in the morning.</p> <p>A research scholar with him told police that the professor was very co-operative and cheerful always. She also said that he was in the department laboratory till 8:30 pm on Thursday.</p> <p>"Sadhale was deeply interested in music and was a very good harmonium player. He would spend lot of time listening to music. I can't think of any reason that could have pushed him into committing suicide," a close colleague, who did not want to be named, told TOI.</p>
<p>Nov 21, 2007</p> <p><i>One more PhD scholar of IISc commits suicide</i></p> <p>http://www.thehindu.com/todays-paper/One-more-Ph.D.-scholar-of-IISc.-commits-suicide/article14879677.ece</p>	<p>Indian Institute of Science saw its second suicide this year with Chitra R. (32), a doctorate student, consuming poison on Monday-night.</p> <p>She was one of the 14 researchers working on Non-Equilibrium Processing of Nanomaterial at IISc's Materials Engineering Department. The news came as a shock to Chitra's relatives, classmates and professors. At the Victoria Hospital mortuary where they congregated, most of them were too distraught to talk. "It's a shock. We don't know why she took her life," said one of them, wishing to remain anonymous. "She was cool... we never felt she was stressed in any way," he said.</p> <p>Associate Professor Ashok Raichur said Chitra had secured good grades in both M.Sc. and during her doctoral course. "She was diligent and was friendly with everyone," he said. To a question, he said there appeared to be no form of academic pressure on Chitra.</p>

The Science of Depression

An interview with Dr. Doreen Dias, practicing psychiatrist

What is depression?

Depression is a clinical condition wherein the core symptom is sadness of mood. This is accompanied by cognitive, behavioral, physical and social changes. This is different from normal mood changes or sadness experienced by most people as it is pervasive in nature and affects one's functioning in various spheres of life – work, relationships, social functioning, productivity, and quality of life. To term it “depression” as a clinical entity, it must be present for more than two weeks... There are criteria which must be satisfied to make a diagnosis of depression set by DSM5 (American Psychiatric Association) or the WHO ICD 10.

INFO PANEL: DSM-V (Symptoms of Major Depressive Disorder)

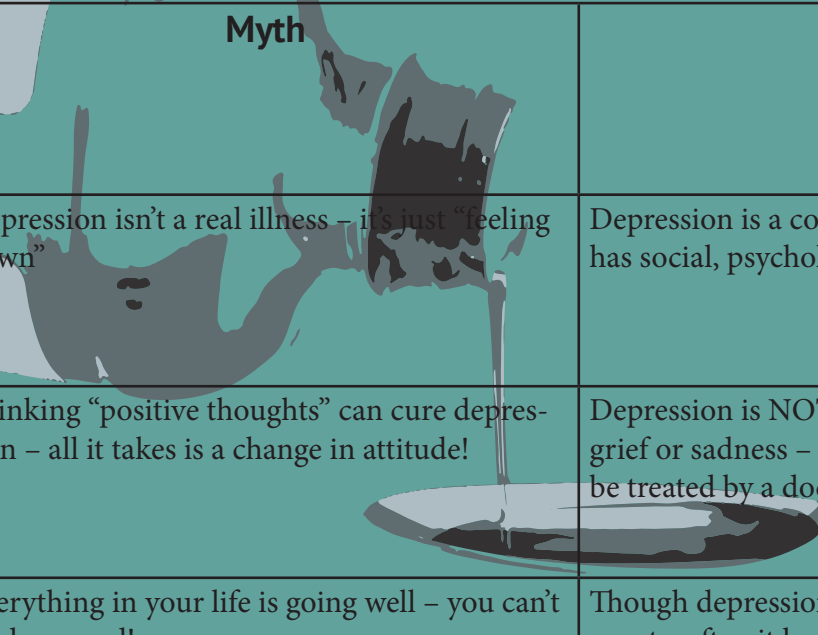
Five (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.

1. Depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad, empty, hopeless) or observation made by others (e.g., appears tearful). (Note: In children and adolescents, can be irritable mood.)
2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation.)
3. Significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day. (Note: In children, consider failure to make expected weight gain.)
4. Insomnia or hypersomnia nearly every day.
5. Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down).
6. Fatigue or loss of energy nearly every day.
7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).
8. Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others).
9. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.



How do you tell if someone is depressed?

Although in most cases a diagnosis is made after a formal interview of the person, with corroborative/collateral history from a close person who knows the patient well, there are several pointers to identifying people who might be currently experiencing depression. Change in behavior is the first indication. Withdrawal, avoiding social contacts, decline from the previous level of performance (academic/work), decline in self-care/grooming, looking sad, no engagement in usual interests. Sometimes people may express feeling low, “down,” low energy levels, feeling weak... If these symptoms are persistent and occupy much of the person’s day (including negative thoughts) “most of the day, every day,” then one must think of depression. Other prominent complaints are sleep problems, appetite and bowel changes – these are most often the first symptoms (biological changes) experienced by a patient.



Myth	Fact
Depression isn’t a real illness – it’s just “feeling down”	Depression is a complex mental health disorder that has social, psychological and biological origins.
Thinking “positive thoughts” can cure depression – all it takes is a change in attitude!	Depression is NOT simply someone wallowing in grief or sadness – it is a medical illness that needs to be treated by a doctor.
Everything in your life is going well – you can’t be depressed!	Though depression can be triggered by traumatic events, often it has no clear-cut cause and can happen to the happiest of people.
Antidepressant drugs are bad for you – they’ll change your personality!	Antidepressants do alter neurotransmitter levels in your brain but many patients report that they “feel like themselves” after taking them!
Talking about depression makes things worse – just avoid thinking about it at all!	Often, patients require psychotherapy with mental health professionals to treat their condition.



What are the causes of depression?

The bio-psycho-social model works until today... Recent advances have given more insight into the pathogenesis of the condition... The biological theories are now focused on neurotransmitter theories, neuroplasticity, and hormonal causes. The most prominent neurotransmitters involved are serotonin, norepinephrine and dopamine. All antidepressants work through the neurotransmitter system. The theory is that these neurotransmitters get depleted in depression. Serotonin gets released into the synapse and some goes to the postsynaptic receptor and the rest gets picked up again by the sender. Some antidepressants work by inhibiting the reuptake thereby increasing the synaptic serotonin... This somehow causes the lifting of depression. Others inhibit reuptake of norepinephrine or dopamine. Other antidepressants work on more than one neurotransmitter.

Actually, it's not as simple as increase and decrease of neurotransmitters. Why and how does depletion occur? Spontaneously, or in response to an internal or external stimulus? We are still not sure. Depression is the result of a complex interplay of various factors - it could be a chain of events - for example an external stressor on a genetically vulnerable individual and the gene manifests by way of neurochemicals and/or the neuroplasticity paths.

There is more and more evidence of the neuroplasticity of the brain and how the brain changes structurally to accommodate or cope with stress. The hypothalamus can also be involved; other hormones such as cortisol, estrogens, thyroid hormones affect mood and behavior. Genetic transmission is known - it could be multiple genes but what exactly is transmitted is not known. Depression, like all mental disorders, is multifactorial in origin. Psychological and social factors also play important contributory roles - triggering, maintaining, and perpetuating depression.

At what point should depression be treated psychiatrically?

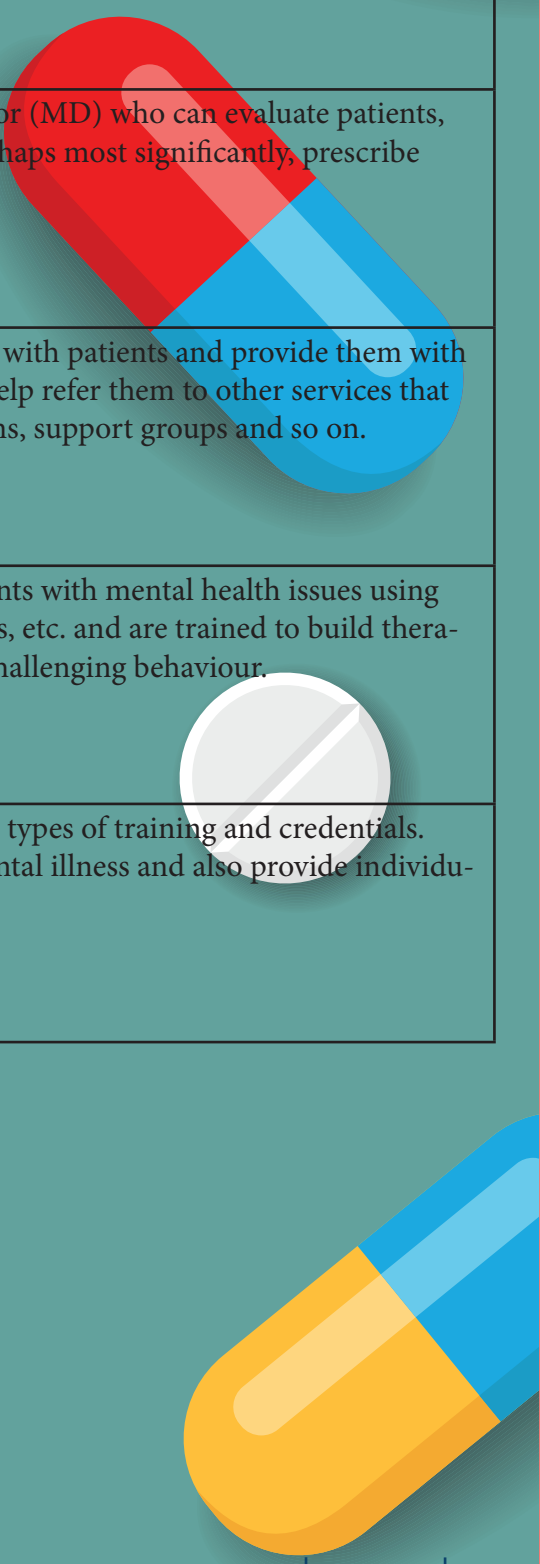
A diagnosis of depression means the person requires treatment; the form of treatment would depend on the severity of the symptoms. Mild to moderate depression can often be managed with psychotherapy, which means they need not see a psychiatrist for their condition but can get this therapy from other Mental Health Professionals.

Most cases of moderate depression benefit from pharmacological therapy – and in fact I see many need this to get faster relief of symptoms as “talking therapy” may take time, and also requires a lot of understanding and cooperation from the client to carry out tasks assigned as homework. Most biological symptoms definitely need medication. Changing thought processes happens by psychological therapy and the effect is enduring in long term. Moderate or severe depression requires drug therapy, hospitalization and maybe even electrical treatment. All cases require a combination of pharmacotherapy and psychotherapy: this takes time to work but is enduring in the long term.



Whom do I ask?

Clinical psychologist	Psychologists have doctoral degrees (PhDs) in clinical psychology and are licensed to diagnose patients, create treatment plans and conduct therapy sessions.
Psychiatrist	A psychiatrist is a medical doctor (MD) who can evaluate patients, diagnose mental illness and perhaps most significantly, prescribe medications.
Psychiatric social worker	Psychiatric social workers meet with patients and provide them with individual/group therapy and help refer them to other services that can help: rehabilitation programs, support groups and so on.
Psychiatric nurses	Mental health nurses help patients with mental health issues using therapy, administration of drugs, etc. and are trained to build therapeutic alliances and deal with challenging behaviour.
Counselor	Counselors vary significantly in types of training and credentials. They engage in diagnosis of mental illness and also provide individual and group counselling.



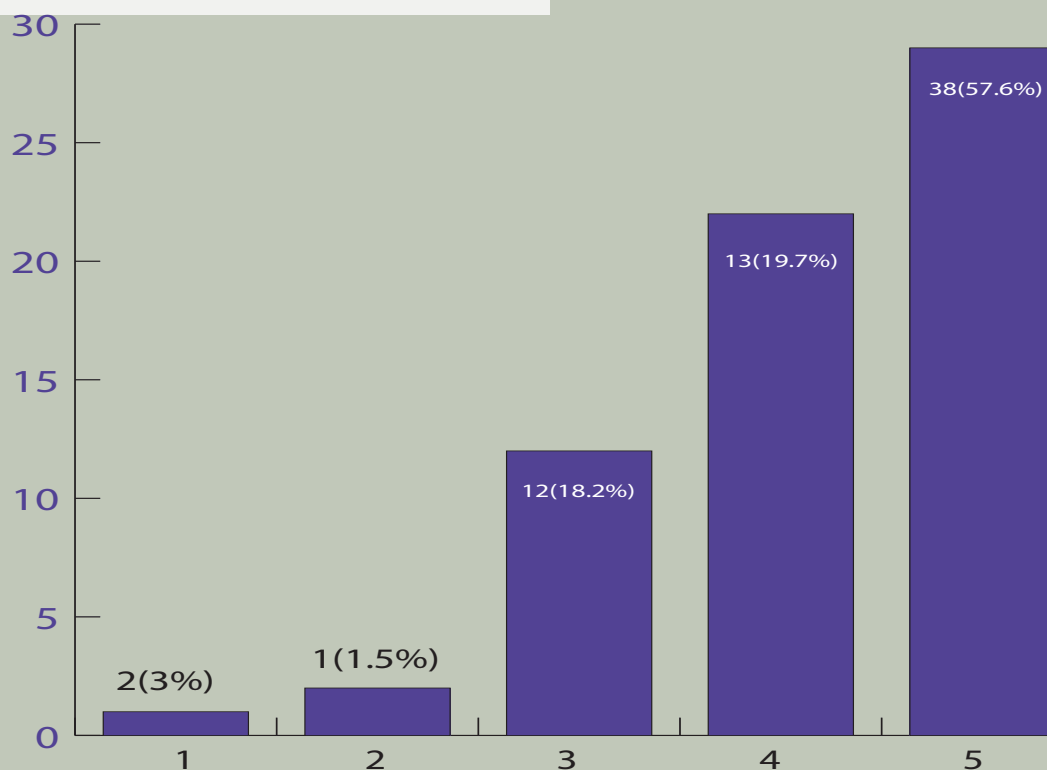
IISc UG: Depression on Campus

A friend becomes quieter, more reserved and withdrawn. Another disappears entirely, spending all day playing video games. Sad poetry – about loneliness, distant relationships, homesickness, even suicide – flourishes on IISc UG Confessional. Stress mounts. Grades drop. Parents call. Exams ensue. Panic follows. Is it any wonder at all that here, within India's premier research institute, the menace of depression is creeping up on the undergraduate community?

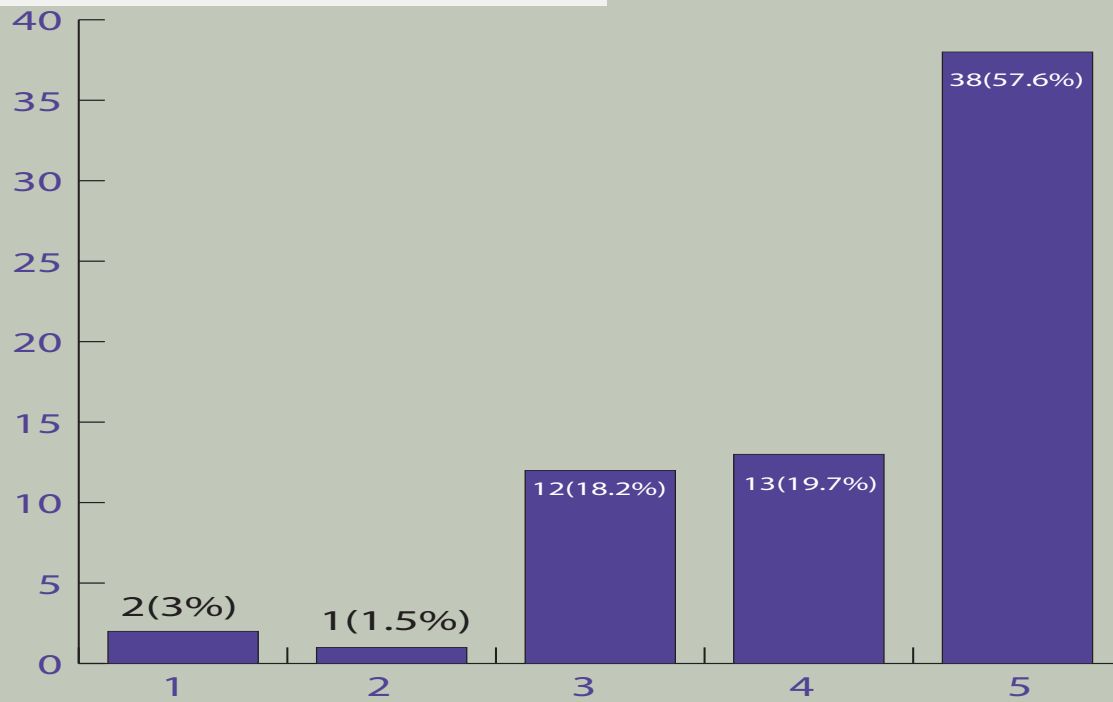
Unlike many other colleges, IISc's Undergraduate Bachelor of Science (Research) course is highly rigorous and demanding. With a minimum attendance requirement of 70%, six subjects for the first three semesters, classes the entire morning, labs the entire afternoon, numerous tests, quizzes, assignments and exams, the stress on any individual student is monumental! Compounded with this academic pressure is the feeling of homesickness – especially for freshmen who've travelled across the country to study here. The traditional support network of family and teachers doesn't quite hold up on campus: after all, the people we interact with most often are our friends.

Students burn out. It's easy to say that students often lose motivation, or give up too easily, but the UG community at IISc is the cream of the crop! UGs here are academically brilliant, and are passionate about science, learning and research. Why, then, are students losing the spark of interest that they arrived with? What is going wrong? To answer these questions, let's turn to an anonymous survey of students in their third semester (conducted by Rajas Poorna and Pranav Minasandra) that included questions about their workload, stress levels and general attitude towards classes. The responses – at the risk of sounding like clickbait – will shock you!

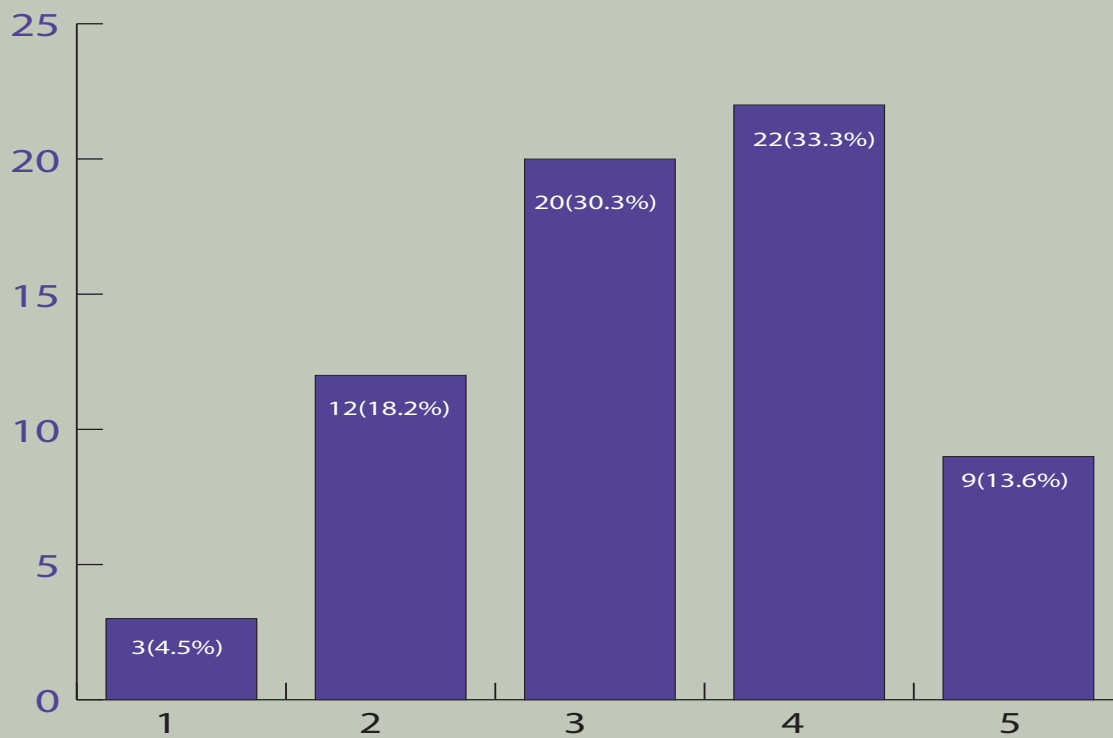
Rank the amount of semester workload



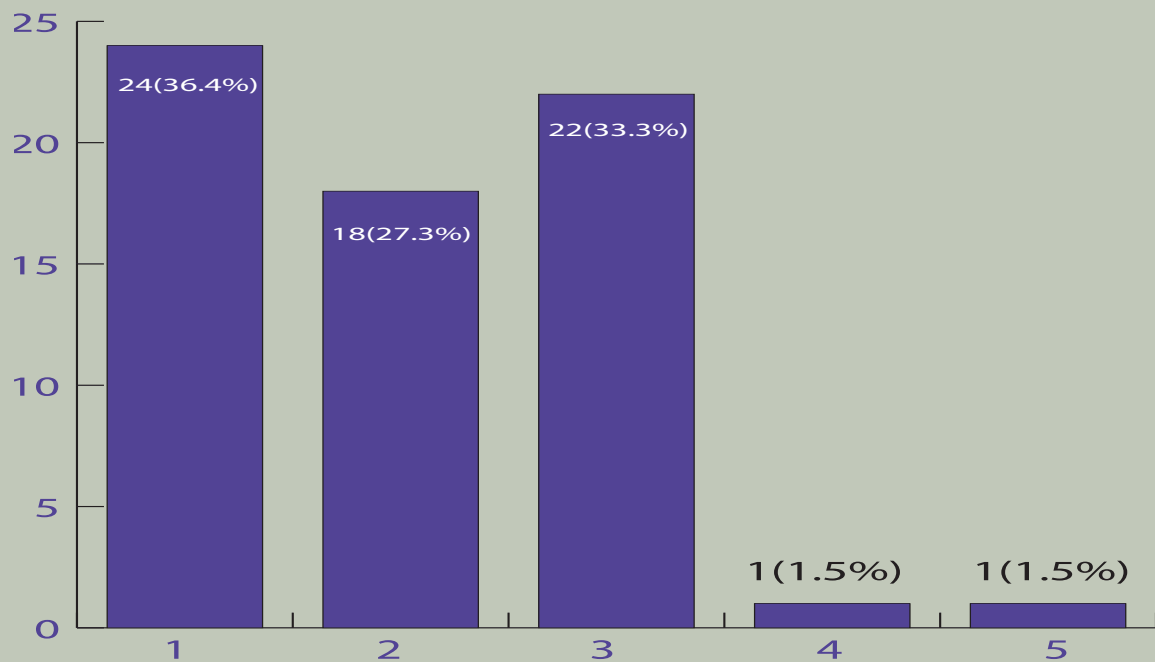
How burnt out do you feel?



How often do you sleep in class?



Without sacrificing grades, how much do you feel you can afford to be interested in all the topics taught in class?



When asked if their outlook had changed from second to third semester, several students responded:

- “Yeah. Now I just want to be done with it.”
- “Started to develop symptoms of depression.”
- “Yes, I think I’m questioning my choice of pursuing pure science”
- “I used to like all branches of science before the 3rd semester. All that happens in this semester is that instructors throw tasks and students are expected to complete them much like a computer does whatever you ask it to do without thinking even once. I do not like a few subjects now.”
- “I’ve stopped caring about trying to appreciate each and every course. I’m okay with copying the assignments now. As far as [chemistry] lab is concerned, I don’t want to make the best possible use of it, like I used to - I just want to run away.”
- “My indifference and lack of motivation has only grown.”

When asked for additional comments, these came up, along with more sad poetry...

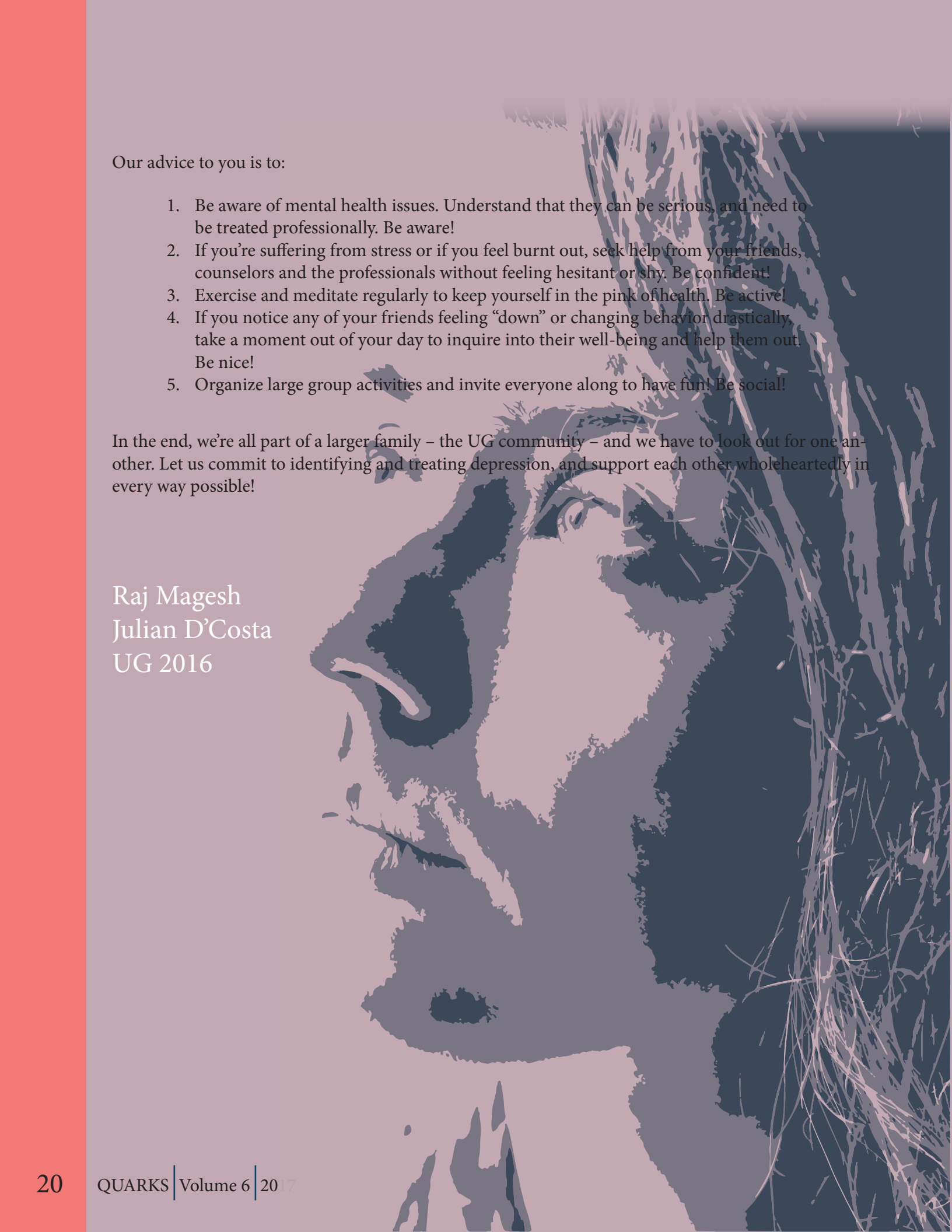
- “We are grown up. Please don’t treat us like kids. Stop telling us what to attend, what to read, what to think. It’s enough. We are aspiring to be good scientists, we need to [be] free thinkers. We should have courage to ‘go out [of the] box’, no matter if we fail. Please provide us some room to fail.”
- “A little reduction in academic course load might help some of the students.”
- “Students have started dealing with issues horribly. Do not take mental health, particularly major depression, lightly. I don’t think they know what it feels to be suicidal, and people have loads of other issues to deal with that are not academic, it’s only natural and you cannot ask people to keep their heads free of such distractions.”
- “If this continues, suicide will become a plausible option.”

“All around me are familiar faces,
Worn out faces, worn out faces.
Bright and ready for their daily races,
going nowhere, going nowhere.
I find it kind of funny, I find it kind of sad.
The dreams in which I’m dying are the best I’ve ever had.
I find it hard to tell you, I find it hard to say,
When you make us run in circles it’s a very very
MAD SEMESTER.”

What kind of help is available on campus?

The IISc UG peer support group – called Misfit Elves – is an initiative started by students to provide a support platform for their peers. Often, a major contributor to the onset of depression is loneliness and social anxiety. By providing an outlet for emotions and someone to talk to, Misfit Elves hopes to forestall this onset and instead provide supportive hands and shoulders to cry on. Misfit Elves can be contacted (anonymously, if desired) via email (iiscug.help@gmail.com) and Facebook (www.facebook.com/MisfitElvesIISc/). They also have a blog (misfitelves.wordpress.com) and a Google Group (groups.google.com/forum/#!forum/misfitelves). For more helpful information, check out their brochure!

Of course, Misfit Elves is focused on preventing depression, promoting awareness and providing support and help, not treating it. Diagnosis and treatment of any psychiatric condition – including depression – is best left to the professionals. Currently, IISc offers the services of a counsellor from the Centre for Counselling and Support (counsellor@admin.iisc.ernet.in) in addition to medical professionals at the Health Centre, including a clinical psychologist and a psychiatrist who can be contacted by appointment.



Our advice to you is to:

1. Be aware of mental health issues. Understand that they can be serious, and need to be treated professionally. Be aware!
2. If you're suffering from stress or if you feel burnt out, seek help from your friends, counselors and the professionals without feeling hesitant or shy. Be confident!
3. Exercise and meditate regularly to keep yourself in the pink of health. Be active!
4. If you notice any of your friends feeling "down" or changing behavior drastically, take a moment out of your day to inquire into their well-being and help them out. Be nice!
5. Organize large group activities and invite everyone along to have fun! Be social!

In the end, we're all part of a larger family – the UG community – and we have to look out for one another. Let us commit to identifying and treating depression, and support each other wholeheartedly in every way possible!

Raj Magesh
Julian D'Costa
UG 2016



IISc's Avian Denizens:

^a *Photofeature*

David Thomson
UG 2013

A leisurely walk through the lush campus of IISc, especially in the morning and the evening, guarantees some bird sightings. Apart from the pigeons and crows that flock the hostels and most buildings, IISc is also home to several other birds, some residents, some migrants. Here is a glimpse at some of the winged wonders that adorn our campus.

1 *Scaly breasted munia*



Description: Reddish brown plumage with distinct scale-like feathers on breast. Often seen in groups, which can sometimes consist of up to 20 birds.

Size: sparrow

Location: Found in the rocky outcrops near Jubilee garden.

2 *Asian Paradise Flycatcher(F)*



Description: Males and females have iridescent blue-black heads with a crest, but are starkly different in appearance. Males are white in colour with two conspicuous streamer-like tail feathers. Females are rufous, with short tails. A rufous morph of the male may also be seen.

Size: Sparrow+

Location: Found during the winter in and around Jubilee Garden.

3 Oriental White Eye



Description: Yellow-green in colour with a white belly, yellow throat and a distinct white ring around the eyes. Forage in small groups and feed on insects.

Size: Sparrow-

Location: Found in the rocky outcrops near Jubilee garden.

4 Cattle egret



Description: White in colour with a long neck that can be drawn in, with long , greyish -yellow legs and a yellow bill. During breeding season, adults sport buff coloured feathers on their head, neck and back.

Size: Crow++

Location: Found near nursery and Jubilee Garden lake. Often seen on lawns foraging on insects.

5 Green bee eater



Description: Bright green with tinges of blue near the chin and neck, and brown on the head and back. A distinct needle-like tuft of feathers is present at the centre of the tail. Notable for their tendency to make sudden dives from their perches to catch insects.

Size: Sparrow+

Location: Found perched on the cables in Jubilee Garden.



6 House sparrow(M)

Description: The plumage of house sparrow is mostly different with shades of grey and brown. The underside is grey in colour and the throat is black. It is a gregarious feeder in all seasons, often forming flocks with other types of birds.

Location: Found near Krithika hostel and CAD lab.

7 Jungle Babbler

Description: Grey-brown in colour with yellow bill. Commonly found foraging on the ground, usually in groups. Are quite gregarious in their behaviour and are not easily intimidated.

Size: Sparrow++

Location: Found in and around Jubilee garden and in front of CeNSE.



8 *Little cormorant*



Description: Shiny black plumage with patches of white on the front, with a long and narrow beak. Often found foraging alone, occasionally diving into water while swimming, to catch prey.

Size: Crow+

Location: Found swimming in or perched near the Jubilee Garden lake.

9 *Oriental magpie robin*



Description: Black head and neck and black-and-white body and wings, quite conspicuous. Females are greyer than males. Have a very melodious call, and call early in the morning. The tail is sometimes held up at an angle to the body.

Size: Sparrow+

Location: Found all across the campus.

10 *White cheeked barbet*



Description: Green in colour with a brown neck and a prominent white streak across the cheek. Their deep, ringing calls are heard all through the day.

Size: Pigeon-

Location: Widespread on trees throughout the campus, and in Jubilee garden.



Thomson's
PHOTOGRAPHY

Red whiskered Bulbul



Common mynah



Asian koel (female)



Ashy Drongo



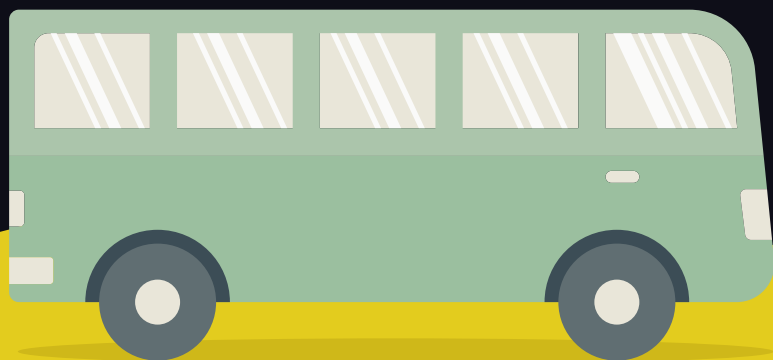
Tickell's blue flycatcher

ICTS: An unexplored destination for stargazing

What do you get when you take a bunch of students deprived of fun in the middle of the semester and put them in close proximity to a bunch of holidays and a meteor shower? You get a hodgepodge of ideas for stargazing from dark and light pollution-free places which are not very accessible in the middle of the night. However, we have a very nice facility on the outskirts of Bangalore that goes by the name of International Center for Theoretical Sciences (ICTS), a sister-institute of IISc.

It was a cold, dark night in October when this lucky and rare coincidence of free time and the Orionid meteor shower came about. All of us were quite clueless when somehow the consensus arose that we should do something outside the daily drudgeries of coursework. It was about eleven in the night when a group of about ten people hopped on a bus to ICTS still doubting whether it was a good idea (knowing that was the last bus for the night). Within about half an hour, after driving through farms and forests and talking about school life, we reached ICTS with no idea of how to proceed. The first thing we did after reaching the place was show the guards our ID cards and tell them why we were there.

An excursion of this kind to ICTS was undoubtedly an unforeseen event for them. One thing many people notice about institutes like TIFR is the staff, and how well they behave with people. The guards gracefully allowed us to “camp” in one of the places quite close to the library and even told us the way to the pantry in case we wanted to eat something (more on that later). After about half an hour of waiting for the clouds to recede, the sky was sufficiently clear to make out Orion (even the faint nebula, to my surprise). Then we just had to pay close attention, very close attention. As standing and sitting slowly descended into lying down and sleeping on the cold concrete floor, we started noticing streaks that were quite surely meteors entering the atmosphere of the planet at mind boggling speeds. While it was supposed to be the orionids, the streaks seemed to be originating from everywhere in the sky. That was when we involuntarily started



counting the meteors, only to realize that your eyes needed to be at the right spot at the right time to actually see something. Though it's of no use discussing the actual counts, you might be surprised to know that they varied from two to somewhere in the mid twenties. While that might not sound like a lot, it was still really satisfying to know that dragging ourselves out of our beds was not useless.

After an hour or so of staring at the sky, the hunger pangs started to hit us. The pantry was the place where this urge to eat was satisfied. Some of us boiled and ate sausages of questionable origin (mainly because they were not listed in the stock list and also because they lay near a package titled "For the director" in the refrigerator). Sugar cubes were free (technically) and we almost fully emptied a box of them.

The night was quite chilly and the warmth required for survival was gained by using all kinds of implements to cover us while others went to the warm and cozy pantry to relax. Just outside the pantry hung a blackboard which was elegantly vandalized by writing,

$$\begin{array}{l} P = NP \\ \rightarrow N = 1 \text{ if } P \neq 0 \end{array}$$

Others still decided to cuddle with each other under the blankets while their fellow mates watched and took objectionable images. By six in the morning, very few of us had actually slept. After a furious discussion on whether to have breakfast there or catch the earliest bus, we decided on the latter and left at about 7:30 am to our hostels.

The day was obviously wasted in compensating for the lack of sleep the previous night (and eating). While unexpected, mildly wild and mildly fascinating, this was an experience of a kind you wouldn't expect people like us to have (at least we didn't expect it from ourselves).

One Year Down The Lane with NBD

Last year, I sat brooding as my school life came to an end with the culmination of 12th Board exams and other entrance exams. One night I had a dream in which I was teaching children in a Government school. But then, I had no means of realizing this dream. During the introduction of the different clubs in IISc to the UG freshers, what caught my attention was Note Book Drive (NBD). Joined right away that evening! My first experience with NBD was teaching English to the students of Tamil School near D Gate. The smiles that welcome you despite being a total stranger were priceless. Let me not shy from reality, some of the students there weren't even familiar with the English Alphabet. However, there was no dearth of enthusiasm. I then shifted to teaching Computer Science to students of Malleswaram School. One thing common to students of all schools is that they are very eager to learn from the volunteers than their teachers! MS Word, PowerPoint and LOGO were covered for the 10th standard students. Students were quick to grasp the lessons taught despite the language barrier. Every weekend was anticipated as I too had something to learn.

Children's Day celebration at Chikkabannavara was a joyous occasion with fun filled activities like origami, drawing, dance etc. It also was a great chance to widen my social circle as I interacted with many volunteers. It would be great if more UGs volunteer for NBD classes, there are very few. One year later, now, I'm happy and content that I am teaching children and contributing to society in some way.

K.G. Indresh
UG 2016



ON LEARNING THE ROPES AND MAKING THE RIGHT DECISIONS..



What is the most comforting, most reassuring aspect of being a first year undergraduate student? It's the one thought, the one cheering thought: 'I am not alone'. In the first few semesters of most undergraduate programs, everybody around you is (more or less) in the same boat. You all have the same unreasonable teachers, the same senseless lab-reports to write, the same traumatic exams; same distractions, same attractions, same chances of success in a fraction of the same subjects. And... the same amount of time.

This situation will never recur.

As your UG courses progress, the first elation (in most cases) of being independent will wane. The first shockwaves of finding out that you are probably not the bee's knees will subside. You will start waking up, bathing, eating meals and studying without being coaxed (or, just some wishful thinking from my side). Gradually, each one of you will find your footing. Then, at some point, thoughts of choosing an eventual path will start niggling at you, and you will start looking around for tools to aid you in doing that. Your co-passengers will start preparing to leave that one big boat and to move away... in motorboats, rafts, kayaks...lifeboats. Some will even prepare to swim. Some will have to swim.

How does one prepare for the life ahead?

How do you decide if life in science/life in research is what you want? Your college will try to prepare you... often by burying you under relevant and irrelevant information. Some teachers might encourage you to acquaint yourself with life in this field by reading about it. It's a fact that once you go beyond the glamour, research, like anything else, can be tedious. It can be days and days of hard work, long hours in the lab, culminating in a so-called dead-end. It requires you to pick up the pieces, retrace your steps, and find a different approach to the same problem. Along the way, you keep collecting pieces of the jigsaw puzzle that you are trying to complete. This, my friends, is very fulfilling at some level, and I can't imagine anything more exciting than looking for those pieces of the puzzle. But... you must find out if you want to play this game, and without a doubt the only way to do it is to give it a try. Take small trips into various fields of science. Fortunately, as an undergraduate student of science at IISc today, you have at least 3 summers (and as many winters) for such small explorations.



INTERNING IN A RESEARCH LAB

Summer-internships may be a requirement for many of you for the continuation of your scholarships. For some, they are impressive additions to their CVs, or opportunities to meet big-shot scientists and get them on-board as later recommenders. These are all good and valid reasons to do a summer project. Remember though, that these are also opportunities for you to figure out your mettle as well as your preferences. After all, doing research, doing a PhD...it's a life-style choice you'd be making.

It is important to do a summer project in a research lab. You may think, 'Nah! I worked so hard for my 11th and 12th. Now I've already got admitted to this fabulous institute, and I'm going to be here for the next 4 years. I deserve a real vacation this summer'. Fair enough. Places like IISc give you 3 long months in summer. You can vacation as well as work. It's time to start lifting your own weight in the world. So, start early, check out web pages of researchers in the vicinity and start short listing.

To get an internship it is usually a good idea to first write to the 'primary investigator' (PI) of a lab. Try to talk to this person, meet him/her to discuss the possible opening in his/her lab. It may happen in a jiffy, or it may not.... be prepared.


Here are some common statements/complaints based on the stories I've heard over the years, and my commentary/suggestions on those:

I wrote to this professor, but she didn't respond. I guess she doesn't want to take me.

Now here is a reality check. IISc is one... just one...of more than a hundred undergraduate institutes in the country that send students for summer projects. All the IISER, IITs and many universities and colleges are full of enthusiastic students who are looking for summer projects. If a professor doesn't respond to your email, she doesn't not want to take you...she is probably just facing a deluge of applications. So, write again. And write well. And if you are really keen, then write once more, reminding him of your earlier emails. Most experienced professors will not respond unless you show real intent by writing a couple of times. If they still don't respond, move on. There are more labs and more professors in the sea.

How can I write to Prof B when I am waiting for Prof A to give me her decision?

Easily. You don't know if Prof A's decision will be positive, and you can't keep waiting for it. She may not even remember to respond to you. Write to many, and you will hear back from a fraction. It is always better to have options.



There are two professors who have asked me to come and meet them.... What if they both offer me a position? I should NEVER have written to both!

Calm down. And congratulations! If they both offer you a place, choose the one that suits you the best. You may like one person's work more, like one's personality more, live closer to one lab. Any reason is a valid reason. Just: once you have made the decision, DO NOT forget to politely thank and inform the other. There is no need to worry that you have somehow insulted one of them. After all it was the professor who was doing you a favor, not you her. And as the corollary goes, there are also many students in the sea.

I met this professor but he said, "It's January, talk to me in April".

Do it. Maybe, while you wait for April, ask him for a few papers to read. Read the papers, may be write to him if you have any questions. Come April he may have forgotten this conversation, but remind him. If in between you have found a better option, take it up. Do not stop looking for other options till you have received a clear and positive reply for a researcher.


I am going to do a summer project on my own, and it's going to be a reading project.

Sure, why not? That is, if you are not doing this out of laziness. If you really do them sincerely, reading projects can be very useful. Do go ahead and read, think, write and

even talk. Working on an idea by yourself can also be very useful, depending on what questions you are asking. The only warning I'd like to give here is this: scientific thinking improves with discussions. It is important that you sound your ideas off someone knowledgeable. Do not work in a vacuum. Always find curious, well-read, thinking and smart people to talk to about what you are doing. Make sure your work is moving... in some direction, and is not stagnated. Another point to remember: summer internships in research institutes bring you in contact with many people who are known in the scientific community. These people may later vouch for you. Interacting with such people is useful later in life for the practical aspects, like for getting recommendation letters.

Ma'am, can't I do a project with you in our UG lab?

Of course you can, and you are most welcome. It might even be a lot of fun, as we offer a lot of freedom in our undergraduate teaching labs in IISc. HOWEVER, again I'd like to warn you not to do it out of laziness, or because you are unwilling to leave your comfort zone. Another point to think about: while you will get a recommendation letter from me if I feel your time on the project was well-spent, the letter you may get from working in a research lab from a professor well-known in the community will hold more water. The UG lab is yours, and you can come and work



here any time you want, even during the academic year. You can even do a side project while working elsewhere, as many of my students do every year.


IMPORTANCE OF CURRICULUM VITAE AND RECOMMENDATION LETTERS

Some days ago, while going through some old drawer I came upon a bunch of papers. There I found a yellowing sheet titled “BI-ODATA” in a font called Courier. Written in double space and a very large font size, this document tells of my achievements from secondary school certificate (SSC) all the way to Master’s degree. It talks about my extracurricular interests with as much enthusiasm as the one publication that resulted from my summer internship. All this, my life till the age of 23, barely fills two A4-sized sheets. Pinned to the biodata are papers with ominous titles like ‘character certificate’, ‘academic transcripts’ and ‘recommendation letters’.

There is one more document, a copy of the report of my summer-project. I remember writing it, on a computer mind you, using the then popular word processor application called WordStar. I had done rounds of three different libraries: JNU, NII and AIIMS, to collect all the references required for this report. Spiral bound, graphs made using some very basic software, not-so-crisp images taken using a manual camera, and it is still a piece of work to be proud of. Why am I going on about this here? Most

of these documents, save a couple, won’t fetch me even a second glance today. The writing is casual, formatting is all wrong, the software used is outdated. All in all, the content may even be considered sparse. But, here are a few things that make it different: One: My biodata (or CV) shows that I have a publication from my summer internship, albeit in a journal of veterinary sciences with a funny name that nobody has heard of. A paper represents a complete piece of work. Having a publication in one’s CV is in itself often enough to ensure being shortlisted for various interviews.

And second: The recommendation letters. A good summer internship will provide you with atleast one researcher vouching for your scientific capabilities. I have many good examples of people with low marks in college and GRE, getting into very good labs and universities for PhDs purely on the strength of the recommendation letters. I believe that often, skills required for scoring well in a conventional exam don’t totally overlap with those essential for chasing a scientific problem into a corner. It is pretty obvious that not every topper makes a good scientist. S/he may not like to work in a lab. S/he may not like to put in hours researching / debating a concept that is not in the text books. S/he may have limited range of interests in other sciences. S/he may not find it fun to spend time thinking about hen’s teeth and horse’s toes. This also means that not all persons with a good head for research are going to have fabulous CVs.



How then, can their abilities be assessed? That has to happen through the letters written by those who have worked with them. Reliable sources, who are able to give their unbiased judgment. Today, competition is tough, and a good word about you from a reliable, respectable source may make a tremendous difference to your career.

I'd like to end by saying that my sole intention in writing this article was to convey this: There will be many choices as you

move ahead. You will make good and bad decisions... and that's part of the game. All paths will have their green pastures and their demons. It is easy to sit back and drift, or to let someone else navigate... or to blame another if you miss a turn.

Taking control of the steering wheel may be harder, but more satisfying. So, see if you can guide yourself towards the life you want. I wish you all the best.

Narmada Khare
(Senior Instructor, Biology,
UG Programme, IISc)

Finding Home

Sabyasachi Basu
UG 2015

It rained today. Like it often does in this god-forsaken city. In fact, it rains so much that I've come to associate this place with incessant rain. You mention Bangalore, and the first image that comes to my mind is of incessant rain; not heavy, but unrelenting in its monotonicity. Calcutta used to be home. In comparison, the first thing that pops up when someone brings that up is a lazy neighbourhood and cream coloured houses with the paint worn out to the extent that red, green, cream have all become shades of grey. Had I been a few years older, I'd have added political unrest, but honestly, they'd become very infrequent by the time I'd left the city.

In Calcutta, the rain is very different. Maybe that's why I didn't like the rain there. It is almost inevitably confined to a few months of the year, with a few lates showers making it till December. And once it begins, God does it pour! And the city has amazing drainage; consequently, it turns into one large swimming pool, if you don't count the floating canine excreta while you're wading through knee deep diluted sludge.

I suppose the primary thing I always hated about the rain was that back 'home', rains would mean

everything coming to a standstill, and every tropical thunderstorm would leave trees uprooted, power lines down, roads flooded, and the entire city in disarray. The city lived and breathed as one, spurt-ing back into life just as suddenly it had slipped into a slumber. In retrospection, it was amazingly synchronised. To me, who had always been prone to catching colds and falling ill at the slightest, the rains were a reminder of how frail I was when I was younger. The one time I got drenched, I ended up with a high fever that lasted the better part of a week. To me, the rumbling of thunder was ominous; it meant confinement (not that I had places to be, I had very few friends and lived nowhere near a park for the first 10 years of my life), frequent powercuts, and the prospect of facing sludge when I finally went out; the last one was exciting when I was very young, but then I realised what it was composed of. By the time I was 13 or so, the rain never failed to get on my nerves. The one thing I did like was the wind, but it was usually shortlived and would inevitably give way to unremarkable pouring rain. The rain, and the city's extreme humidity in general meant that everything would need fresh coats of paint often, and since this almost never happened, buildings, bridges and everything else made of concrete looked like they'd been standing for ages, unattended and dying. This made it more of a dying city (to me) than the failing economy ever did, probably because I hadn't seen the city at its lowest. The rains made the city grey; its parks would be greener than ever, but Calcutta does not have many parks, and the large ones are, for some reason, all



gathered around the central part of the city, leaving most of the remainder with little green.

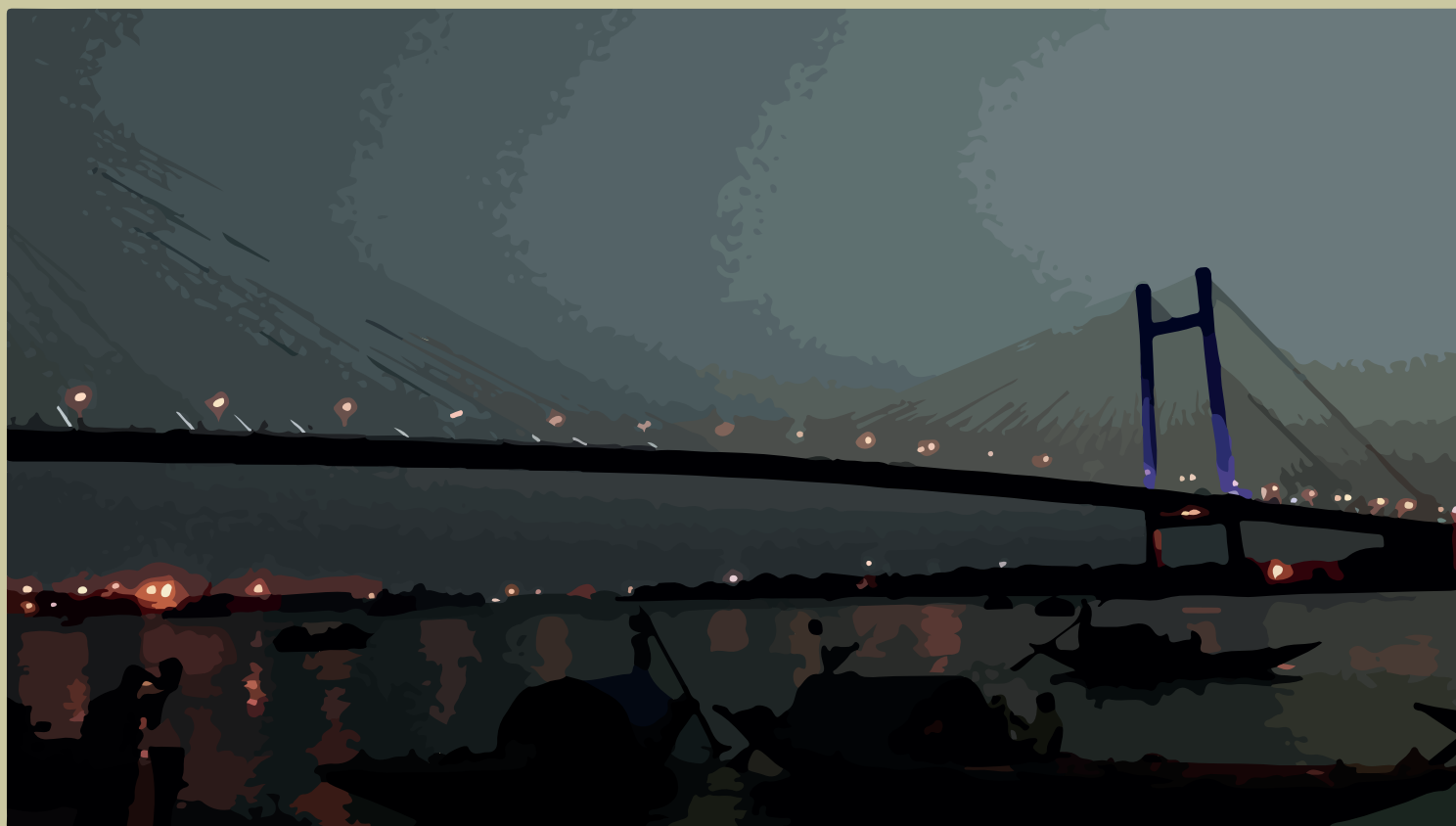
The things I associate Calcutta with are also what I associated its rains with. It is a dying city, as someone once said, much to the ire of proud Bengalis. While it might not be dying just yet, it is in a state of decay. I think someone (probably Shashi Tharoor) wrote somewhere that Calcutta (after the turn of the century) taught him that cities aren't inevitably destined to either grow or die; moving just fast enough to not be dying. However, in a country that aspires #Superpower2020, this, followed by decades of actual decay, would imply being left behind no matter how much of an improvement it is. Delhi and Bombay, in contrast, bring very different images to my mind. To me, Bombay is the city Calcutta could have been (standing on the shoulders of Khaled Hosseini for this one); it has most of the things I like about my hometown, and has successfully dealt with many of the myriad of things the ailing Calcutta struggles with every day. And it has the sea, which never fails to charm me. Delhi, in contrast, felt very soulless every time I went there. That is something I find unforgivable in a city. Bangalore too struck me as a soulless town, at first glance. It was so cosmopolitan that it failed to have a unique identity of its own. Most of these modern metropolises end up being very similar versions of each other, the original probably being New York City. Bangalore seemed to have lost its identity in the race to becoming a megalopolis. It is often in the news for all the wrong reasons. City being engulfed by toxic foam: check. City set to become unlivea-

ble in some time: check. City being devastated by Godzilla as aliens descend from the sky for the first time anywhere outside the US... yeah that one hasn't happened yet. A lot of Bangalore features innumerable tiny apartments crammed into a twenty-storied building that is anything but sleek, which in turn is in a forest of its brethren that tried very hard to be skyscrapers but failed miserably. Thankfully, IISc is not in one of those parts. In fact, one can easily draw parallels with South Calcutta, which is where I grew up. Malleshwaram would be Jodhpur Park, Sadashivnagar would be the posh localities of Ballygunge, and Yeshwantpur and Gariahat seems to have been made for each other. Yet this city is so different. For the most part, it lacks the squalor and the perpetual cacophony of noises that define Calcutta; there is a constant hum as one would expect in a city, but it's not quite the same.

I don't find Bangalore to be like most other Indian cities I've been to. For one, I cannot immediately associate something with it; even if I do have an unfair advantage with Calcutta. Bombay, Delhi, Chennai, Hyderabad, Ahmedabad... each has something to its name that others cannot claim, be it a place of historical importance, or other attraction. For Bangalore, that is probably the IT industry. To the slightly more enlightened or erudite, perhaps HAL, and to some it's the weather. It doesn't even have decent street food, can you imagine!

I couldn't quite come to terms with this for a






long time. I do not know why it bothered me, but it did. Perhaps it was because of how I looked at a city. It was Bangalore's rains that helped me find peace. Ironical, considering the fact that rain is something I've almost inevitably failed to find anything but depressing. Despite my initial aversion to anything related to rain to the extent that I was probably the exact opposite of a pluviophile, I find Bangalore's rains soothing and comforting. I wouldn't call them romance-inducing or anything of that sort, but they give me solace, in some weird, indescribable way. Somehow, I would like to believe that the rains helped me find the Bangalore I had been looking for, for some time. Unlike Calcutta, the rains seldom make Bangalore come to a standstill. Perhaps because they're not torrential downpours. But that is immaterial; this city defied what I expected, it showed me that the rain was not something to be dreaded. Even if some things do come to a standstill, the others keep the cogs turning. The city that I found soulless did not bow into submission. By not interacting, its fragments also weren't affected by its neighbours who might have given in. Even at its grayest, the rains had a tinge of blue. I was looking for a Bangalore that exists as one. I

never found it, because Bangalore does not exist as one. It is an agglomeration. Of techies who spend their nights in swanky offices, lonely in the midst of a sea of employees. Of disgruntled natives made to feel like outsiders in a city they feel has been over-run by... outsiders. Of executives who made it big, and yet feel incomplete. Of people who yearn to go home with all their heart, and yet cannot afford to. Of teens in their rooms, thinking of how unrequited love has ruined their lives for the years to come. And of people who are happy, even though things might not go their way, because what good will the alternative do? All these seem to fall in place; maybe this is how a modern city is supposed to work; and the city lumbers on, often staggering under the weight of a burgeoning population, coupled with the scourges of unprecedented urbanisation, but on the whole, seemingly undaunted. Calcutta stopped being home some time ago. Two years in, I think I finally found home again. I won't say that it's perfect, but yeah, I can live with this without hating the city every waking moment.

The journey

that was





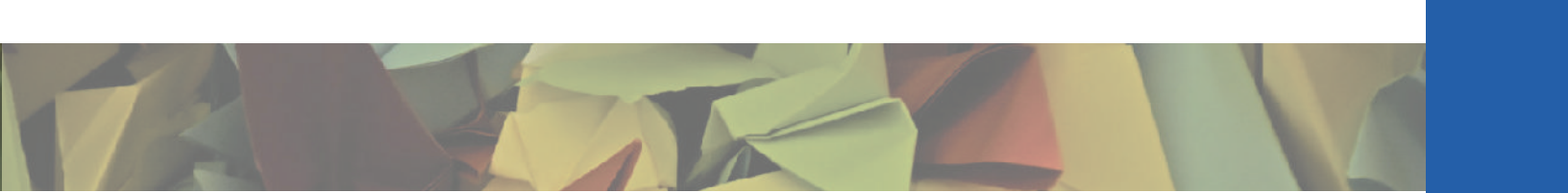
Pravega. Just the word would elicit a range of reactions: excitement and thrill, anger and hatred, disinterest and impassivity. To me, it was another hue which would add to the undergraduate life's color palette. To me, it was a chance to explore the avenues which do not strictly fall into the category of academics, but feed from it. The details behind each Pravega have always changed with their respective teams, but the overall idea has remained the same – that of sharing the thrills of doing science with the common masses of our age. It is an ambitious claim, and is certainly not easy to fulfill, but organising a college fest for the sake of it didn't make sense either, at least to me. Because a fest, in the most literal sense of the word, is a festival which celebrates the uniqueness of the community celebrating it, and our uniqueness lies in doing pure science, perhaps we're also the best at it. And so, it had to be a 'science fest'.

Somehow, still partly ignorant, I assumed the post of Chief Coordinator (unanimously, I must add. No one wanted to do it!) which, even without a written rule, gave me the authority to give the fest the shape I saw fit. And, if you believe me, I had a beautiful image in my head where everything fell into place. When I glanced over all the fests most people know about, I realized they are now just a caricature of what a fest should be, they were more a gala and show of

money than an exhibition of uniqueness. Hence, I was proud that ours would be 'one of a kind'. That's pride, not vanity, if I may remark, but there is only a fine line separating the two and it's better to be aware.

I wanted Pravega to exhibit the thrills in a form that common masses could understand and appreciate. Another hurdle. So, you needed a *mélange* of events which could attract crowds from across disciplines. Then, you needed to expose the crowd to the thrills through events which most people could understand and hopefully take something back from, events which picked common things and revisited them in the light of science. Importantly, it being a science fest, it had to have events which appealed to the 'nerds of science'. (Do realize that nerd can have positive context, though not popularly used that way). Given this idea, all you needed was a team which believed in it and some publicity to promote the fest to people. Simple?

Slowly, you realized that you couldn't solve such a problem with equations of the ideal kind. Rather they would need more of the virial kind! That's where reality set in. Such a task needed people driven by the idea and results and not by the rewards, and I tried my best to follow that and choose a team which had similar ideas. I managed to do that to a fair extent. I would remark here that I was lucky to get such a team.




So, a gross plan with a wide outline was made for each team and the details were laid out by the respective teams. Consequently, the progress was to be constantly monitored and deadlines updated accordingly. So many plans remain 'just ideas' with each missed deadline. I, in my capacity, needed to stay informed of what each team did to have the wider perspective of the fest and keep in touch with the overall shape of the same. Plans, deadlines, reshaping, planning again, resetting the deadlines...it was a vicious cycle. Alas, we all procrastinate and sometimes I hoped I had a team made of my clones but then I realized that I'd be disappointed with myself in the end, and who wants to blame themselves for a mistake, right?

For all the autonomous structure, the implementation depended heavily on external factors. Then, you needed those strips of paper/cloth called money to run the show. It's frustrating how difficult it is to try and explain an idea of a slightly different nature to corporate minds. And you can never trust them when they say 'yes' to a proposal. The talks go on for days to no avail. Most promising nods don't become reality. But luckily, we did manage to get a good sum of money, spend it as judiciously as possible, design decent events, make incredible designs for

online and offline illustrations, and publicize on various platforms. Told you, I had a great team. Given that we had a decent sum, we realized that we could get decent performing artists who were sufficiently attention grabbing and could potentially lead to better visibility. Sadly, a 'science fest' isn't a well cheered tagline. So, it had to be modified to give it the best shape which could draw people in and then reveal the true, subtle agenda of the fest.

It may not seem necessary, but paperwork of fair detail is needed to organize any event, and we know how paper trail moves in government organizations. I'm not going to crib, but it can always be improved. Permissions had to be taken for the smallest of things. Given that the scale of the fest isn't that tiny, we could always do with a larger number of people pitching in, but somehow, that has always been a difficult thing to manage. It's actually amazing how a small number of people have been managing to do it each year, since its inception.

Every microscopic detail needs attention and may not contribute too much in the overall structure of the event, but the lack thereof, can have a far-reaching and cascading effect. Despite careful planning, things did go wrong, even dire, but were salvaged in the nick of time... well almost.



In the end, a lot of things just got done. A lot of people, towards the end, put their hands up and took responsibility which was good to witness. The result was a Pravega which was satisfactory in more aspects than it was not, although not as pretty or complete as it was in my head ... but I'll take it.

There were a few things I learnt. My perspective on the need of money and the

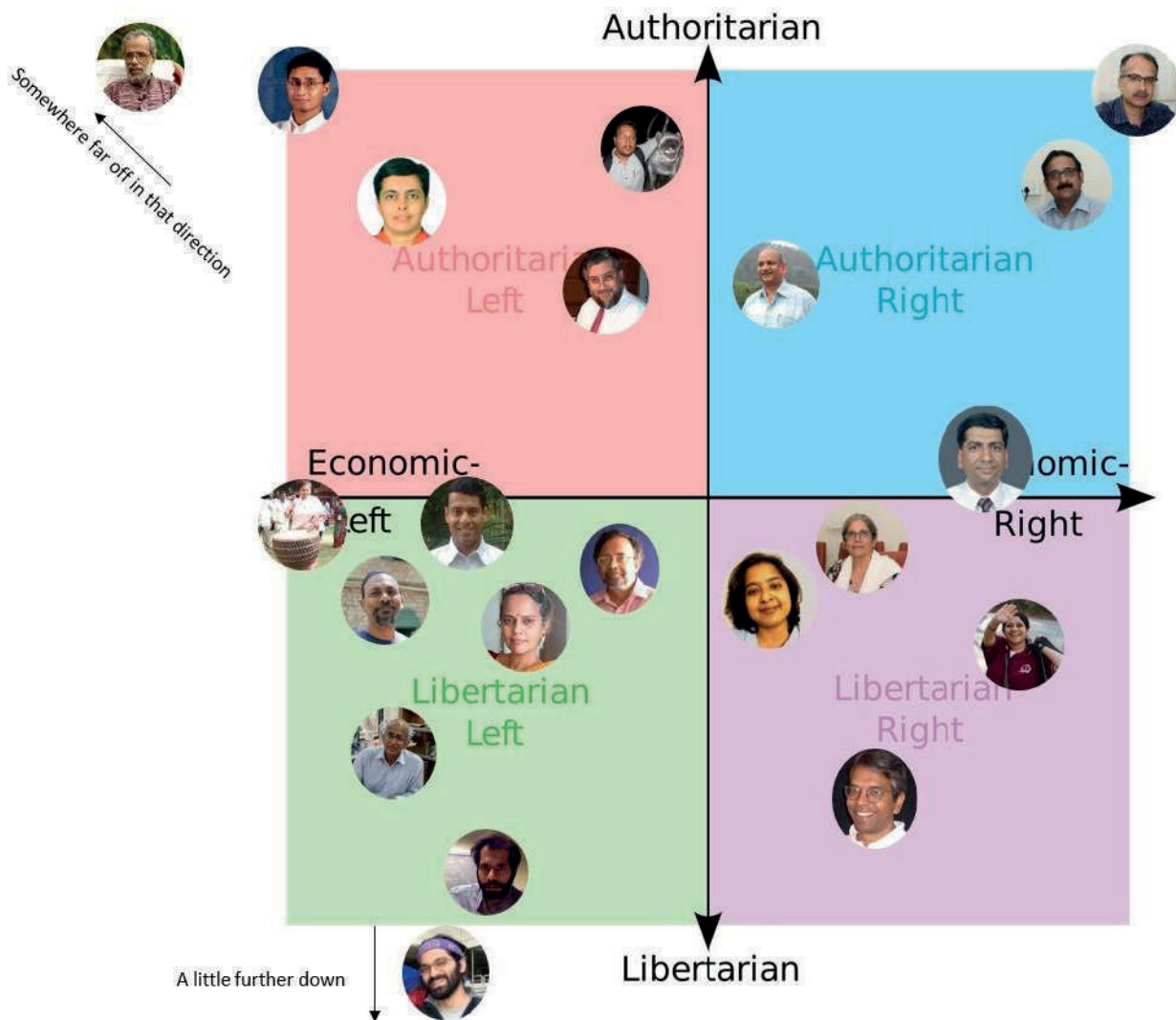
extent of trust you can have on someone underwent a sizeable overhaul. There were sleepless nights, quite a few of them actually, and the uncertainty of what could happen; an urge to shout at the top of my lungs' capacity. I did end up spending more time on Pravega than I would have liked, but I loved every bit of it. Now, even with the hindsight of what happened, I'd do it all over again.

For you, a thousand times over.

Pulkit Aditya
UG 2014



Meme relief



IISc UG Clichè number 9: Summer Projects

P. Vasanth
UG 2016

As part of KVPY, most students enrolled in UG at IISc have to carry out a summer project. In general, everyone is encouraged to carry out a summer project, not just to renew the scholarship, but for the great learning experience that it is. In this spirit, over the years, many students have applied for internships abroad from USA to Germany to many more. It is not possible (rather it is too tedious) to provide an exhaustive list of all possible programs. So here is a list of 5 programs that you should consider applying to.

01

DAAD-WISE

DAAD-WISE

or Deutscher Akademischer

Austauschdienst Working Intern-

ships in Science and Engineering (DAAD: German Academic Exchange Service) is an internship program offered by the German agency DAAD. It provides funding for research internships for Indian nationals in public or state-recognized higher education institution or non-university research institute in Germany.

Students from all majors can be given funding under DAAD-WISE. The selection criterion is usually academic performance and usually goes to 7 or 8 people with the highest CGPA in the batch. The minimum requirement for applying is Aggregate marks of 85% and above or CGPA 8.5 /10 and above. Those interested must first write to a professor at a University in Germany under whom they would like to work, and then submit the invitation from the professor along with the application form on the DAAD-WISE website. In addition, one reference is required from an Indian university professor. The deadline for application is usually in the first week of November. So, those interested should apply in their fifth semester. Also you must have a valid passport at the time of the application. In addition, you cannot avail any other scholarships from any German organization at the same time. The program offers a monthly scholarship as well as a travel subsidy. This is given for two to three months in the May to July period (minimum duration is two months). In general, the money is not a lot, but it is sufficient if expenses are managed well.

02

S. N. Bose Scholars Program

S. N. Bose Scholarship Program, organized by Science & Engineering Board (SERB), Department of Science and Technology (DST), Govt. of India, the Indo-U.S. Science and Technology Forum (IUSSTF) and WINStep Forward is a scholarship program aimed at Indian students doing summer internships in USA. It is named in honour of Satyendra Nath Bose, an Indian physicist known for his work in quantum mechanics. The students who are interested in applying for the program must be enrolled in a degree in Atmospheric and Earth Sciences, Chemical Sciences, Engineering, Mathematical and Computational Sciences or Physical Sciences. Generally, the top two students in each stream are nominated by the institution and only they can apply for this program. Normally, third years at IISc UG apply for this program.

The student is free to get in touch with a professor in US. However, this is not necessary as each student is given a mentor based upon his/her interests. The program is 10-12 weeks long and is scheduled in the period from May to July. The scholarship includes a stipend of \$2000, roundtrip airfare and health insurance. The application must be filled and submitted along with two letters of recommendations usually by the end of October.

03

Khorana Program for Scholars

The Khorana Program for Scholars is an internship program organized and funded jointly by The Department of Biotechnology (DBT), Govt. of India, Indo-US Science and Technology Forum (IUSSTF) and WINStep Forward. Named after the biologist and Nobel laureate Dr. Har Gobind Khorana, the program offers scholarships for Indian students applying to Universities in USA for internships in the field of biotechnology, and is open for pre-final year students (third years in IISc UG).

Khorana Program for Scholars is similar to the S. N. Bose program and is also conducted by IUSSTF and WINStep Forward. Those interested in biology can apply for the Khorana program instead of S. N. Bose.

To avail the program one needs to have a CGPA of 8.0/10 and higher, or a percentage of 80% and higher. In addition, two letters of recommendation are required. The program runs for a period of 10 weeks during which scholarship money is given for living expenses. The program also funds the tickets. Generally, the top one or two students in the batch (studying biology) can apply for this program.

04

Charpak Research Internship Program

Charpak Research Internship Program is a scholarship program managed by Campus-France India, a French national agency for promoting higher education. It is named after Nobel laureate and physicist Georges Charpak. It is aimed at Indian students doing a summer internship in France. The criteria for selection for the program are the academic performance of the individual and his /her statement of purpose as part of the application procedure.

The program offers a student visa waiver, a monthly stipend for between two and three months (in the May-July period), and medical insurance. The student is required to write to a professor in France in his/her field of interest and attach the letter of invitation along with the application. The deadline for the program is usually in March.

05

Amgen Scholars: Japan Program

Amgen Scholars Program is a program, organized by the Amgen Foundation, to help undergraduate students from across the globe participate in cutting edge research in biology. The Amgen Japan Program is a subsidiary, open to students across the world enrolled in a bachelors program, which gives scholarships and internship opportunities at University of Tokyo and Kyoto University, two of the most prestigious universities in Japan. The eligibility criteria include good academic performance, a good knowledge of English, and an interest in pursuing a PhD. Second years and third at IISc UG are eligible to apply for the program. It is most relevant to Biology and Chemistry majors.

The program has a separate application procedure to each of the two universities, but a student who wishes can apply to both. Both institutions provide accommodation and a stipend to cover airfare, and food and other living expenses. The program runs for a fixed period of 8-10 weeks in June and July with a flexibility of a week either way. The application process requires a CV, a statement of purpose and two letters of recommendations. While CGPA is not a big problem, good recommendations are necessary to have a good chance of getting selected. The deadline for application is generally in early February.

What an Internship abroad taught me about going abroad for higher education

Well, I know that there are people with whose thoughts this piece of writing will resonate, but there will be many others with varying opinions. That doesn't stop me from projecting my thoughts to the general public...

1) Sometimes, seeing the crowds surrounding you, or maybe out of peer pressure, you might not be very honest about your actual thoughts. Maybe, deep down within you, you are in a dilemma as to whether you want to devote yourself to something for five long years, but it is the above-mentioned factors which prevent you from deciding for yourself.

2) It is perfectly fine for you to feel tired after a four-year-long intensive undergraduate course. That's perfectly normal. It can even happen to the best of students. So, it makes me feel that you can try out something very different between your UG and PhD. There are so many options. For example, being a lab technician, going for a Masters programme, doing an independent internship for a year, or maybe just relaxing and preparing for something else.

3) However easy it may sound, leaving your zone of comfort and landing up in a different environment, settling down in that place, adjusting to the 'culture shock', people, places, and everything else takes up a lot of time, sometimes so long it might lead to a nervous breakdown. The most important thing to remember is that you are devoting yourself to an important task for five long years, and that too in a different environment. This is no joke!

4) I think, before one even considers going abroad, one must realize how independent one needs to be. You will need to be able to do every little chore yourself. You should probably never even have the idea of anyone helping you with anything. Yes, when you are a beginner, you will be given demonstrations, but that's it. Everyone will expect you to learn things very quickly.

5) Well, apart from the above four points, it's not as bad as it sounds. The work environment abroad is excellent, you will be more than satisfied with the resources available to you. But one needs to

realize that work and lifestyle are two very different things. You maybe very enthusiastic about your work, but you may not be able to accomplish things well, because you might be having a hard life and because of the environment which you are in.

6) Finally, one needs to realize that one is on his/her own. You are your own emotional support. I emphasise again that leaving behind everyone you know and going away for five years to an alien land is not as easy as it seems. Time will definitely not stop and making a healthy decision for oneself takes time. There will be many dilemmas. But in all circumstances, ensure that it's you at the reins, making the decisions, and not getting driven by others' thoughts.

Rohin Biswas
UG 2013

Highlights



On music: The maestro speaks



Coffee with Mokashi



Indian experience



Interview

On music: The maestro speaks — — Pg 50

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Indian experience — — Pg 60



On music: The maestro speaks



Sambit Banerjee
UG 2015

Dhrupad is one of the most ancient sub-genres of Hindustani classical music, dating back to the 1400s or even earlier, and is the root of most of the varieties of Hindustani music still in practice today. It is an art form known for its intricate technicalities and the astounding skill displayed by its practitioners. The tales of the magnificent and awe-inspiring dhrupadiyas of yester-years are stuff of legend today, what with famous Bollywood movies featuring famous dhrupadiyas like Tansen and Baiju Bawra, and tales of Tansen's daughter bringing down the rain with her miyan-ki-malhar being included in children's books. However, dhrupad is almost an extinct art-form nowadays. It was indeed amazing that we got to witness the performance of one of the doyens of the four main dhrupad "vanis" (or styles) in the opening ceremony of Pravega'17.

Ustad Bahauddin Dagar plays the Rudra Veena, the most regal instrument I have ever seen. "The Indian bass", as it is often called, it is an instrument whose tone can captivate any listener, even seasoned ones, in its charm for hours. Unlike the western bass, it is a "lead" instrument in itself, that is, a Rudra Veena performance is a performance on its own and it is not used as a support instrument. It has stood witness to the centuries of glory that dhrupad has gone through, and despite the handful of musicians choosing to (or being capable enough to) take up the instrument, it definitely has a seat of honour among all the Indian instruments.

Ustad Bahauddin Dagar is the prime torchbearer of the Rudra Veena tradition of the Dagar vani, and is the disciple of Utd. Zia Mohiuddin Dagar, his father, a legend whose name is taken in the same breath as

those of Pt. Shamsuddin Faridi Desai, Utd. Asad Ali Khan etc., musicians who have remained the faces of the Rudra Veena tradition since the latter half of the last century. Ustad Bahauddin Dagar is a recipient of several very prestigious awards including the Sangeet Natak Akademi Award, the highest recognition given to any performing artist in India.

The following interview with him was an impromptu one. Yet, his reply to our questions provide a lot of insight into how someone of that stature thinks about music. A lot of what he said is quite relevant to the numerous practitioners and enthusiasts of music among the UGs and in the IISc community.

SB: Undergraduates in IISc are pursuing the Bachelor of Science (Research) course where we major in one of the science subjects and a majority pursues research thereafter. In the midst of all the pressure from coursework, projects, exams, assignments, etc., how and why should one start or continue with the riyaz (practice) in classical music?

UD: It is a matter of choice. You should be the one to choose what not to do. Cut down on movies, Facebook, texting friends and all these things and I'm sure you'll get 2-3 hours very easily. Just sit (down) and do your riyaz. That's enough to refresh you. Riyaz should be regular. One and half hours every day will make you ready for your hectic day. The first thing to do is get up early enough in the morning; the first thing you should do is your riyaz. Then you do everything else. If this is regular, I'm sure it will help out. It will calm your mind and relieve you of all stress.

SB: Given the current scenario, very few people take music seriously, especially classical music, and think of pursuing it in the future. From the standpoint of a student who has been told that studies are everything and has worked very hard to be in a place like IISc, what would be the inspiration to pursue classical music?

UD: Say you love a girl. Do you really look at her caste and such things? If you are brave enough, you just go talk to her straightaway. That's how it is for music. If you have to do music, forget about what you have done till that day. Just cross the line and go to the other side. Don't think about the scenario and all. The scenario will always be worse, worst and even worse than that. You never look at the scenario and do anything in life. If you are thirsty, you will not wait for a glass to drink water. You have a waterfall, you'll drink from there, or you have a lake, you'll drink from there. If you want to do music, from your heart, just cross the bridge. A dog's tail will always be bent, no matter how hard you try to straighten it. That doesn't mean you stop trying to make it straight. "Scenario" is like that. If you try hard enough you can do anything. You need to give it time.



The scenario will always be worse, worst and even worse than that. You never look at the scenario and do anything in life.



I don't understand. People are willing to work for 25 years to get a PhD after their studies, but they are not ready to give 10 years to becoming a musician. What's the logic in this? Maybe after a PhD you have a guarantee that you will get a job for this many lakhs, that is not there in music. If you want to do it from your heart, nothing can stop you from having a good career in music. Education is important. But after a point you should know what to do with your education. A decision has to be made much earlier on in life, but even if that doesn't happen, that's fine.

When I was 16, I decided I would become a musician (Usually, classical musicians start training very hard from below 10 years of age). My father laughed it off. He was like, "How will you become one? You don't do riyaz, nothing; aise nahi hota (you can't do it like this)." But I was determined. "Woh bhi karunga (I will do riyaz as well)."

The day my father passed away, I was in second year BA. I said, "This is it. This much of education is enough for me. I know what I like to read, in what context I like to read, which authors' works I like - I like history, ancient Indian literature, and culture. College life has taught me to keep myself updated about things, how to use my language to talk to people, how to educate myself on my own; now I'm going to do music."

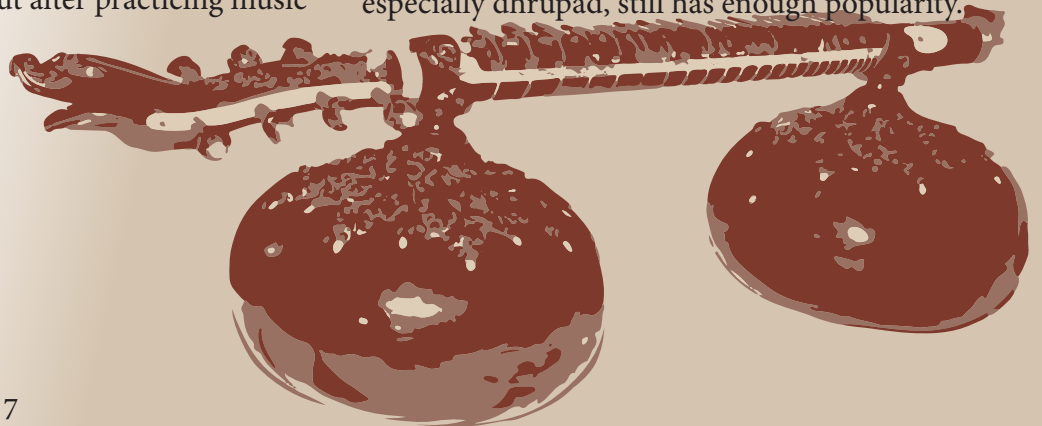
My friends said, "Tu toh bhukha marega." (You will die a hungry man). I said, "Fine. I will die of hunger. I have decided." I stopped my education there. I was scolded quite badly by my mother. But I said, "This is what I'm doing now. The amount of time I'll spend in BA, MA, PhD, I'll spend in music". Panch ghante ka riyaz ke baad dekho kaise nahi hota hai (See how it doesn't work out after practicing music for five hours every day).

Why won't it happen?

SB: Nowadays very few people listen to classical music and even fewer people listen to dhrupad. Why do you think this change is there and how can one popularize classical music?

UD: I think it was always like this. When musicians used to perform in the courts of kings, they had a different level of prestige. Even then, just around 25-30 people used to listen to the music in the Diwan-e-khaas. Even I used to think, "Oh, this is in such a bad condition".

It was always this much (in terms of popularity). How many people can buy a Rolls Royce? It is like that. Classical music has been for the classes, never for the masses. When does art come? Look at Shivaji Maharaj in Maharashtra. Did he have artists? Painters? No. Why not? Because he was fighting all the time. Who had artists? Akbar. Here, there, everything has been conquered, now he is spending his days in luxury and listening to music. There was no point increasing military strength anymore, so he got interested in the arts. Art is a thing of leisure. You should approach music like that. If you want to hurry up and eat it or drink it or even understand it, you can't do that. You have to spend time with it. And today people don't like to spend time. So you might think the popularity of classical music is decreasing. But the population has increased a lot. Whatever is there, that is four times what used to be there during my father's times (in terms of number of people practicing dhrupad). Definitely. Forty percent more people are doing music. Even dhrupad. But the rest of the population is so numerous, and pop-culture is so prevalent, we don't get wind of it. I wouldn't worry about it so much. Classical music, especially dhrupad, still has enough popularity.



Meme *relief*



A non believer spews crap about how the Earth can't be a sphere as a bemused Aristotle looks on (circa 369 BC, colorised)

Dr. Anish Mokashi was our physics instructor in the first and second semesters. He is one of those people who personify the stereotypical scientist, and his fascination with everything in this world is inextinguishable.

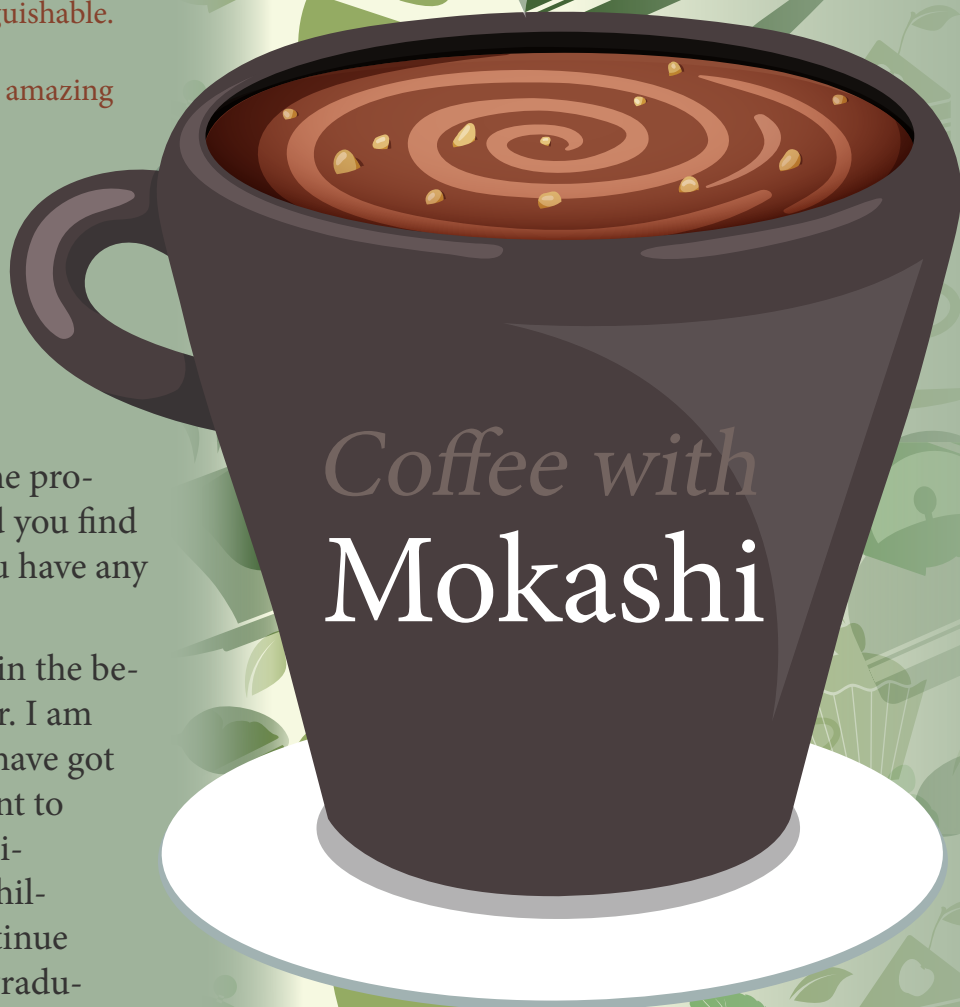
Our first year of physics lab was an amazing experience, made memorable by Dr. Anish. Sadly, he will be leaving this year, so it is high time that we print that long overdue interview with him. And so, presenting,

Q: You will be leaving the program soon right? Did you find another job or do you have any plans?

A: Yeah, I have to leave in the beginning of September. I am meeting people and have got a few offers, but I want to work broadly in the field of science education, with school children, and I am hoping to continue doing something with undergraduates as well. But I have not decided where to go. I am actually looking forward to it because I want to work with school children too.

Q: What do you do in your spare time? Do you have any hobbies?

A: I would like to listen to music, but I don't get the time. I am so outdated about music. I also bought a ukulele and I am trying to learn to play it. I also play the flute. 5 years back I came to Coimbatore – my wife had a job there – and I was at home for 3-4 months, so I learnt to play the Hindustani flute. What else ... I write some haiku.



Q: Do you have any haiku you'd like to share?

A: *Bangalore morning –
dustbins overflow
with fallen flowers*

Q: What do you think about the 80% attendance policy?

A: Yeah, they shouldn't have imposed the minimum attendance. That was really painful actually, especially when the biometric data was not reliable. I know it was not reliable. It doesn't append the data sometimes; it just overwrites the data ... something like this happens. Based on such quality of data, calling the student's parents is too much.

Q: How did you decide to study and teach physics?

A: Maybe I should tell you from the start. When I was an undergraduate in IIT Bombay I did this engineering physics course. After 12th, basically, I was clueless. I don't know why. Many of my friends were very clear about what to do. In my time it was computer science, everyone was taking that. After 12th,

I went to IIT because I thought I would get good professors there. I took physics because I didn't know what engineering was. I thought I liked physics. I got some good professors. And again we had similar timings as you guys. The structure was similar. It was pretty awful to begin with. Almost like a straitjacket. We also had courses similar to your Humanities. I liked sociology. We had many choices, not as much as this place though. I also did summer projects. One summer project I did in IUCAA, the Inter-University Centre for Astronomy and Astrophysics, in Pune. It was wonderful because that place had a wonderful work culture. I was working under this person called Ranjeev Misra. It was very different from my regular routine. I was working on radio jets, these high speed jets that come out of the centre of a galaxy, a black hole, right.




Anyway, it was very nice. I would go to my adviser and I would show him what I tried the previous day. Then he would suggest something, maybe to approach it in a different way. And then I would go to the library. You know, it was very nice. [It was] very different from the usual grind of classes.

Q: So how did you come to like education?

A: Even up until my final year project I really loved the course, but still, at the end of it, I was not sure what to do. Because of the experience of being kind of frustrated in a way with the course structure, I wanted to work on this [education]. So I was kind of interested in education. And, I had this professor, S. H. Patil. I'd show him all the books I read and tell him I was interested in science education and so on. So he suggested that I should study further and maybe go for a PhD. An experience of research might give a different perspective about science itself and science education. I thought at that time that it made sense. So I decided to do a PhD or at least a masters. So I applied to many places. I didn't apply anywhere in the US for some reason, some random reason. Anyway, I applied to Sweden and

Germany and I had gotten into two universities. I was almost sure about going to Sweden. At that time, my friend was in Boston at Northeastern University. He told me to apply there. It was past the deadline, but he spoke to the department and they let me apply. I got in, and I got a stipend, so I went there. And there it was a different atmosphere. It was more democratic in a sense. Since I was no longer an undergraduate, I had a more focused field. The number of courses was less, the lectures were scattered around the week, and the professors were really good. So those one and a half years of course-work were really good. I cherish it, actually. I still have my notebooks. I had then decided to work in Biophysics. I worked with this professor and did some theoretical work and some experiments. Then I began to feel that people from Chemistry would have a better background to do this. The physics was a bit fuzzy in a sense, in my opinion. So I switched to a professor who was working in 'physics' physics – condensed matter physics. Low temperature experiments looking at quantum phase transitions ... in 2D electron systems. Like every PhD, it had its ups and downs and a lot of struggles. But in the end it was a good experience.





Q: How did you end up at IISc then?

A: After my PhD, I was clear I didn't want to do a post-doc. I wanted to work in education. And I wanted to work in India, because it was where my context was. This is what triggered my interest in science education. So I defended my thesis in December 2011 and I came back to Coimbatore where my wife had a job. There I worked in a school. It was a nice experience. Then someone told me about the UG program in IISc, started the previous year. I thought something new was going on here and I came here. And then yeah, I got a job here.

Q: How does IISc compare to IIT in terms of science program?

A: My course was engineering physics. It was mainly physics, and we were doing most of our classes at least in 3rd and 4th year with 1st and 2nd years of integrated PhD. We also had at least one electrical engineering course per semester. And there were other electives. But there was a lot of physics. In IISc, I think, most of the teachers teach you with more interest than in IIT. I had wonderful professors there, but the ratio of good teachers to bad teachers is better here than there. That is what I feel. This is in physics only. Then there is the point of the undeclared minor. Undeclared minor is one of the most attractive things. In a way your seniors have

paved a way for you to explore all possible combinations that are possible and, you know, how you can really pursue your interests. The option of having an informed decision after third semester is also a wonderful idea though I think it's not working out, especially in physics. Some people are not taking physics because it has three labs. I think it's fine though, because there are already so many people. Also, the kind of research ecosystem found here is not found anywhere else in the country. And so many wonderful talks happen here, in faculty hall. So I think you should grab all the opportunities available.

Q: How can one tell if he/she is interested in science education? Myself, I don't know anything about the topic, so how can I find out more about it?


A: If someone wants to understand science education, then there are these beautiful books and there is this whole body of literature. Recently I have been reading about the work of this lady called Eleanor Duckworth. She worked with this very famous psychologist or cognitive scientist, Jean Piaget. He is a very influential person. He is no longer alive, but he worked in the early 20th century. So most people who study education in the conventional way, you know, BEd or MEd, would learn the

work of Jean Piaget. So this lady, Eleanor Duckworth, she worked with Jean Piaget, and then came to USA and worked on the primary school science curriculum. She has a TED talk. It is very interesting. There are many books being written. There is this book called Totto-Chan by Tetsuko Kuroyanagi. Her nickname was Totto-chan. When she was a child, she had to change schools often because she would be distracted, she would be looking out of the window. You know small children, they would be interested in everything in the world, not just what is going on in class. So she had to change schools. And then, finally, her mother put her in a school that was run in an abandoned railway carriage. It was a beautiful experience for her. Then she became a very popular TV actress in Japan. It is a small book about her experience of going to that school. Then there is this 'Summerhill' by A. S. Neill, there is 'School is Dead' by Everett Reimer, and then there is 'Deschooling Society' by Ivan Illich. I don't think anyone can force it upon himself or herself. If someone is interested in these questions, they should pursue them. That is what I feel.

Q: Do you think anything can be improved in the course?

A: I think the course structure is a problem. I have said this before, suppose all the teachers teaching you are the best in the country. Not just the best scientists but even the best teachers. Consider this hypothetical situation. And this you sit in the lectures from 8:30 to 1 o'clock, and then coming to the labs from 2-5. Suppose we also do a great job, the best labs ever designed in the country and so on. Even if everyone does a great job, the very schedule itself defeats everything, I think. It is like this analogy. Say you like mysorepak, rasgulla or some dish. If you have everything that you really like, this platter of great food on the table, but you are forced to eat it all. So the course structure is like that, having to eat all of this rich food. You are not able to digest it, basically. The thing is that, many people who teach you admit that there is a problem, but they fall back on this very flawed argument that this person got 4 out of 50, but this other guy got 49 out of 50. They say if this other guy can do it, why not this guy. If one guy can cope, why can't the other lazy people cope as well? But the whole thing about coping, having this kind of schedule, packed with 6-7 courses every semester, it probably goes against all the research that has been done for the past 20 to 30 years in cognitive science, in understanding how human beings learn. It goes counter to everything. It is like you are trying to teach science, but you are not scientific about it. You know, no one realizes it. Is it lack of empathy? Or they don't just care about it? I don't understand this, the resist-





ance to changing the course structure and getting feedback. That is one thing I would like to work on.

Q: Is there any advice you would like to give to us [students] in general?

A: I see that in your batch and your seniors' batch, the number of psychological issues and pressure etc. has been too much. Part of it could be because of this attendance policy. But once I saw one of your classmates walking down the road with his head down. He is normally very cheerful and trying to do new things. So I asked him what happened. [He said] I didn't do well in the midterm. I think it was the first exam of the first semester, of the first year here, and I feel it is too early to think of these things. I don't think anyone cares whether you got a C or a D or an A. What matters is what stays with you after you finish the course. No, grades do matter, but what matters more is your learning process. Are you evolving as a researcher, are you asking questions? Do you ask, Okay, what if I look at this question in this way? Are your questions getting better? Are you able to brainstorm with your peers or professors? Are you able to ask good questions? These things matter more than a B or an A. And it is unreasonable to expect all 100 of you to go for research. You can also go for a job. But whatever you do, this way of thinking and analyzing will always help you. And you have to nurture it yourself.

Also, you guys should either swim or play or do something. It will really help with the stress. Go with your seniors and play football. You know, some exercise.

Q: How was your experience teaching here, any nice experience you'd like to share?

A: There are so many things that I remember. OK, there is this one incident. That is when this Subhayan Sahu of the 2013 batch made this caricature of me. It was there for the UG talent show. In lab I used to tell people that if you get a result that you are not expecting, you should look at why you got that result. Maybe there is something interesting there. Maybe something silly, but it is a new result. So, he was wearing this shirt, a checked shirt with rolled up sleeves, like I used to wear back then. And then I was standing or something and something happens and someone comes running to me and says, "The lab is on fire! The lab is on fire!" And then I say, "Oh! It's a new result! You should investigate it" or something like that.

P. Vasanth
UG 2016

Note: This is a greatly shortened version of the interview fit for publishing. Those who are interested in the original recording and/or transcript can contact me.

indian experience

Sabyasachi: Hello Mike.

Mike: Hello Basu

S: This is for our annual magazine Quarks, so I'll be asking you a few questions just to know how your stay was. How did your trip to India come to happen, and is this your first trip to this part of the world?

M: Yes. This is my first time in Asia. I always knew that for a part of my cultural experience, I wanted to go abroad for a semester, that's what a lot of American students do. And Brandeis has this unique exchange programme, specifically in India with IISc. I thought this programme would be good for me, and I would be able to see this part of the world that I was always interested in seeing, get some new perspectives, and also get a chance to take some really challenging courses.

S: What exactly did you expect India to be like and what moulded your expectations...like pop culture or something?

M: (Laughs) You know, I tried coming here with no expectations, I wanted a fresh view of India. I have family members who have travelled here, they've been to some tourist spots and have told me things and have tried to give me warnings about how crowded India is, I tried not to listen to them! I feel they were wrong in lot of ways, and for the most part, I didn't find India to be that way at all.



Michael Nagler

S: How different would you say your stay in India was from what you are accustomed to in the US in terms of amenities, weather... must be very different!

M: Yeah, yeah. Almost everything is different in one way or another. In terms of campus life it's different. Student life here is entirely different from student life in the US. In the US, colleges try to give the students the best and most expensive amenities possible, so living in hostels, we call them dorms there, is a luxury. There is WiFi in every room, rooms and halls are cleaned twice a day. It's expensive. But I feel like the student life here is more focussed on studying, kind of like being a student, not living in a resort or something.

S: In general, apart from student life, how would you describe the difference between the countries, which are very different in terms of development, and such things?

M: From my exploration of India, I found that things are done in a very haphazard way here, maybe some structure is lacking. Projects are generally very relaxed here, though, compared to the US, where things are done faster. Things are little bit more relaxed here.

S: How helpful did you find the administration with getting things settled and choosing the courses and everything?

M: I actually found them to be very helpful. I came over here and had an orientation with a resource person from Brandeis, so she was here to help me with getting things done. Prof. Anil Kumar was very approachable and relatively easy to reach at any time I had any issues; I registered for courses through him.

S: I suppose you chose your own courses?

M: Yeah.

S: How did you decide to what courses to choose?

M: One of the courses that I was really looking forward to take here was the 2nd sem undergraduate engineering course in electronics. What motivated me to gravitate towards that class was that there were no engineering courses in Brandeis, so I did want to get a taste of what it is like to be an engineering student. I enjoyed the lab part of that class a lot. While I was in school, I thought about pursuing engineering but I wasn't really interested.

I took cryptography because the class seemed to interesting. When I was a sophomore, as in in my 2nd year, I took a discrete math course and the teacher

talked little bit about RSA and the number theory behind that. It was really interesting, and I was originally going to register for the 4th semester math course on number theory, but after the first couple of weeks I realised that I had already kind of learned most of the things the professor was talking about. So I spoke to the him and he recommended that I take the combinatorics class.

S: In Brandeis, you are majoring in Math and Computer Science. How different is the course structure there in terms of subject taught and availability of choosing courses?

M: It seems that in Brandeis, things are a lot more flexible, and for that reason, the majors are less intense. You need less classes to complete a major, and also, classes here are more thorough. In Brandeis there is a sense of encouraging students to take classes in a wide variety of subjects, not just in sciences but also in history, literature and arts. But here it seems more streamlined and more focussed on specific things.

S: In terms of difficulty, how different would you say the courses are, and how hectic was your schedule overall?

M: My schedule wasn't too hectic 'cause I was only in 3 courses. But the difficulty level here is much higher than what I was used to and it was hard to adjust. Students here are more, like, left to their own devices to learn the material; in Brandeis, assignments were done every week, but here, there was much less of that.

S: How enjoyable did you find the courses in general and was there any course in particular that you liked?

M: I actually enjoyed all my courses, I struggled with them, especially with Cryptography and Combinatorics. They were really challenging, but I enjoyed the classes by the professors I had, especially Prof. Arvind Ayyer for Combinatorics, it was a unique class.

S: What non-academic activities were you able to find time for?

M: On campus, I met with Philip and we both played guitar. Just last week, we were able to actually go to the music room and jam. Looking back, I would have really liked to do more of music with the other students here, perhaps I could have joined Rhythmica. Then, I did a lot of travelling in my spare time.

S: Did you like the IISc campus?

M: I really liked the campus; the size of it, it's incredible. I don't think I have seen every inch of this campus. It was nice to go for a walk, or jogging. Especially now that things are starting to bloom, it's really beautiful.

S: Did you find time to explore the city? How did you find Bangalore in general?

M: Yeah, yeah. I really like Bangalore. I kind of felt like it was merger of Eastern and Western ideas. There are parts of Bangalore that could fit into a European or American city and there were other parts that are definitely Indian.



S: You said that you went to some places during weekends. What places did you visit?

M: I visited Varanasi, Mysore, Pondicherry, Delhi, Agra and Kochi.

S: That's a lot of places! Was there anything that struck you the most about any place that you visited?

M: It's interesting ... when I was in Varanasi, my uncle and I took a tour guide and he explained the history of the city and importance of everything. That seemed like the most unique place to me. Being on the river and with all the different Gods, you could just tell how each part of the city is different from the other. When I explored the other cities, I was left on my own, and they didn't strike me as unique 'cause I didn't know what I was looking for. But I enjoyed everything that I saw.

S: India is commonly portrayed as a country of saints and spirituality. To what extent did you find this to be true?

M: I found this to be very true in Varanasi. The city is religious and it had lot of religious connotations. In Bangalore and on campus I didn't find it to be true.



वाराणसी में अगरा रोचो

S: What do you like the most about your stay?
Would you consider visiting India again any time soon?

M: Yeah, I'll definitely consider visiting India again, I had a really good time. I liked the challenges that I faced here, it was something I wasn't expecting..... I don't know why I wasn't expecting it. I feel like my education in the US is not necessarily of a lesser quality, but there are fewer challenges there and fewer times where I felt like I really needed to step up ... but here, it's really important to do work and work hard in order to succeed. I learned a lot about myself and that I can change to be a better person.

S: You are in your 3rd year of college, you'll be graduating in another year. What are your plans after graduation?

M: After graduation, my plan has been to get a job. When I first started university, I didn't know what I wanted to do, not even what to choose as my major. A majority students at Brandeis get a job after their graduation, most of them don't go on to pursue a Masters or Ph.D, I am surrounded by those people. So that's kind of my idea.

S: You are leaving on May 1st. I hope you had a good time here...!

M: I did.

S: Anything else you'd like to say before we finish?

M: I just want to say Thank you to all people who helped me in any way or talked to me. I found the people to be very friendly, and I'll remember them for a long time. It's hard to be alone and I did feel alone a lot of times, but living in a hostel was helpful in a way and all the students were very kind.

S: That's about it. Thanks Mike.

Interviewed by -
Sabyasachi Basu
UG 2015



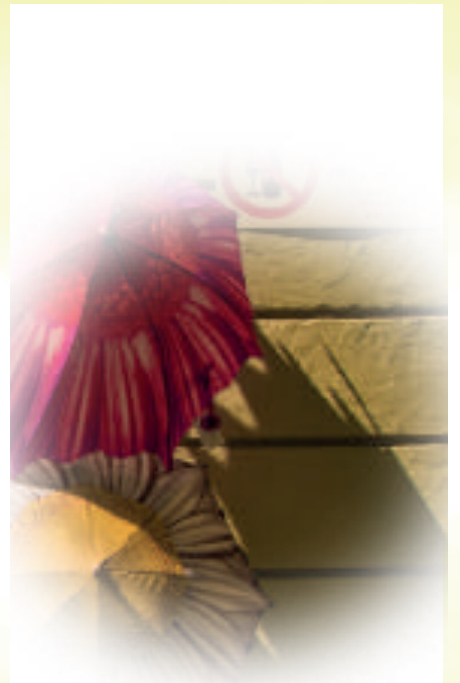
Highlights



Creatures



Globetrotter



Laetus



Photography



Minimalia



Peeping into the
world of
photography — — Pg 66

Creatures big
and small — — Pg 69

Globetrotter — — Pg 82

Laetus — — Pg 88

Minimalia — — Pg 94

Peeping into the *World of Photography*

-Abhiruk Lahiri (PhD, CSA)
Edited by Manuj Mukherjee
(PhD, ECE)

Photography is one of the processes that depicts our three-dimensional world on a two-dimensional plane, which could be a piece of paper or a canvas or an illuminated screen. One of the unique features of this process is that the representation is realistic to an extent that is beyond the reach of other handmade pictures¹. This is the primary reason behind its widespread use in evidential purposes. However, a viewer of a photograph should keep in mind that every photograph is an incomplete reality, not the whole truth.

A photograph deviates from reality primarily in two ways. Firstly, photographs are inevitably coloured by the bias of both the photographer and the audience, and often this leads to an incorrect inference of the partial spatial information the photograph carries. To cite an example, recently, a photograph by the celebrated Indian photographer Kishore Parekh taken during the Bangladesh War of 1971 had garnered a lot of attention. Numerous viewers believed that the photograph depicted the torture of Bangladeshi civilians by the Indian Army. However, this proved to be a fallacious interpretation of the photograph, and someone rightly pointed out based on

Kishore's original caption that the Bangladeshis depicted in the photographs were involved in espionage. There have been numerous such incidents. Also, on several occasions, these photographs have been used to invoke some propaganda by exploiting their immediacy and realism. Secondly, photographs often falsify colours and distort spatial relationships. These distortions are inherent to the photographic process itself and the way the photographer envisages the finished product. A common misconception is that many of these only came in recent times, during the digital age, which unfortunately is not true. A lot of these manipulations date back to the dark room era, and a significant part of the modern day digital editing toolbox are but algorithms simulating the effects of the chemical processes undertaken in the dark room. Films are also known to be biased towards certain colour ranges. To be precise, the colour reproduced by the film is an approximation of reality. For example, photographing a white flower under low light conditions will often add a blue

¹Other examples of handmade images used for their ability to represent the truth include police sketches and scientific drawings like William Harvey's diagram of blood vessels.

tinge to the image produced². Another common misconception is that a straight image from a digital camera is un-manipulated. The embedded software inside a digital camera is capable of performing a significant number of the editing tasks which one usually reserves for the computer. Therefore, a photograph is not significantly more authoritative than a written record, even though we have our biases towards the photographic medium. While there is no dearth of articles on the limitation and the scope of the photographic medium by eminent critics like Susan Sontag and John Berger, these texts are scarcely read. Also, these are not included in our basic educational curriculum. As a result, exposure to such literature and the art of viewing photographs remains limited to a niche of our society.

The reality and the photographer's interpretation are thus not necessarily in congruence. So how should a photograph be viewed? Should importance be given to how accurately it depicts the reality, or how it narrates an interpretation of a possible reality³? The answer lies in the purpose of the photograph. As an example, the purpose of a photograph in an advertisement is to attract viewers' attention. We are not bothered about the truthfulness of those images. Nobody questions a billboard showing a view from the window of a yet to be established high rise apartment. But a constructed image is completely unacceptable in the case of newspaper reporting.

In the field of documentary photography where truth is of utmost importance, the correct representation of information is a necessity for a good photograph. The amount of information conveyed is the measure of the value of such photographs, irrespective of lapses in aesthetics. For example, the photographs of Mahatma Gandhi

taken by Kanu Gandhi are not well captured, as many of them are blurred or affected by shakes. Yet those photographs are of immense value as Kanu Gandhi was the only person who had the authority to shoot Mahatma in his private space. No other documentation is available on Gandhi which describes him so intimately. The value of information conveyed in a photograph is not temporally invariant, but rather decays over time. So, while the portrait of Jannu (a mountain peak in Sikkim) by Vittoria Sella, or the series of photographs tracking the movement of a horse by Eadweard Muybridge are treasured in the archives of photography, a similar shot taken today will bear no such value. Similarly, if somebody can reproduce the recent work by photographer Alan McFadyen, where he was finally able to capture a kingfisher making a perfect dive into the water, that won't create so much buzz anymore. Apart from the content, photographer's conscious adaptation of a visual style brings meaning to the photograph. A photograph created solely on aesthetics can also be acclaimed. The development of photographic aesthetics took a different route than painting aesthetics. While paintings developed under the patronage of courts or other centres of power, and hence closely adhering to certain stylistic templates, the photographic practice came into being in a mechanical and mindless way. In the early days, most of the photographers shared no common tradition and training and practised the medium in their own way. Often, they were unaware of each other's work. The inventors of photography were mostly scientists and painters, but practitioners came from a wide array of professions. As a result, their subjects of interest were all different along with their styles.

²A more detailed read on this matter and controversies arising from it can be found in the article titled Colour film was built for white people: Here's what it did to dark skin by Estelle Caswell appeared in Vox on September 18, 2015.

³A good example of how the same reality can be narrated and represented in different ways is found in Akira Kurosawa's film *Rashomon* (1950).

So, it was not an easy task to recognise a universal photographic language. The earliest attempts at formalizing the vocabulary of photographic aesthetics came from curators and art historians like John Szarkowski and were later further refined by photographers like Stephen Shore. Historically, the development of photography and the realism art movement in painting happened in similar time periods. Many aesthetical similarities can be observed among them. However, there is always an inherent difference, as the photograph requires actual objects to be framed whereas the painting doesn't. Still, the end product can be equally realistic in both the mediums. American painter Chuck Close's famous self-portrait is one of the greatest examples of hyper-realistic painting, which even exhibits the small blemishes that are typically caused by a camera. Later, photographers also started adopting visual styles which blur the boundary between a painting and a photograph. Visual artist Man Ray was one of the early pioneers who mastered surreal photography. Notably, in the recent past, photographers like Gregory Colbert and Nick Brandt have adopted and mastered surrealism in the field of wildlife photography, through which they created tremendous awareness worldwide about the disappearing wildlife and the loss of natural habitats.

The formalization of aesthetics, as well as a gradual move towards creation and reinterpretation (as opposed to representation) of reality, has shaped the modern-day practitioners. The technological advancement leading to smarter devices has also played its hand in influencing the modern-day photographer. The photographic process which was a chemical process in the beginning nowadays relies mostly upon semiconductor devices. The democratization of the medium which was there from the beginning is now in its second wave. The change in shooting style drastically changed the craft of the photographer. The technicality of the process gradually

lost its importance. Many of the techniques have now been automated, and are taken care of by the camera itself. Long and tedious pre and post production processes have now been reduced to few simple clicks of buttons on the camera or the computer. These simplifications opened up newer avenues for the photographer to explore. The modern photographer is thus expected to have a more nuanced understanding of the subject of documentation, or develop a distinct and refined visual style to narrate or to reinterpret reality. They are often good explorers or researchers of the stories and are able to articulate it through images. The craft of depicting a story through a single image has now changed into multiple frame based photo-stories in order to emphasise the photographer's interpretation. A mere collection of images is no longer considered enough for the purpose of storytelling. The photographer is expected to narrate and articulate his views through a sequence of images. In today's world, a photographer is a person who can create images; explore, analyse and interpret the world around us in order to articulate a particular view of the world.

Further Reading

1. *A History of Photography. From 1839 to the present* by Steven Heller
2. *Camera Lucida* by Roland Barthes
3. *How to Read a Photograph* by Ian Jeffrey
4. *On Photography* by Susan Sontag
5. *The Nature of Photographs* by Stephen Shore
6. *The Photographer's Eye* by John Szarkowski
7. *Ways of Seeing* by John Berger

Creatures

big and small



Pooja Nathan
UG 2015



Samriddhi Thakur
UG 2014



Pooja Nathan
UG 2015



Sabyasachi Basu
UG 2015



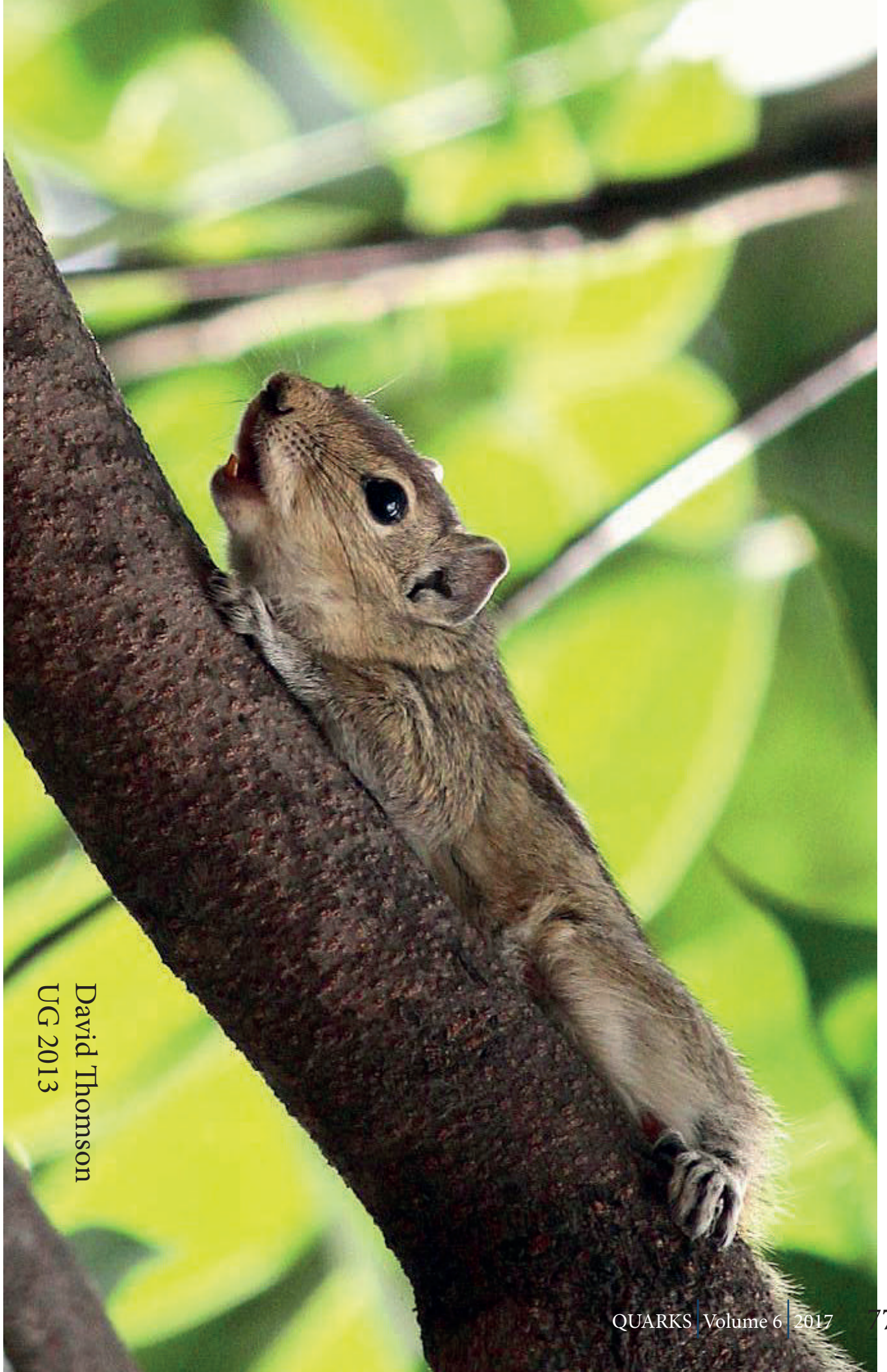
Sabyasachi Basu
UG 2015



David Thomson
UG 2013



David Thomson
UG 2013



David Thomson
UG 2013



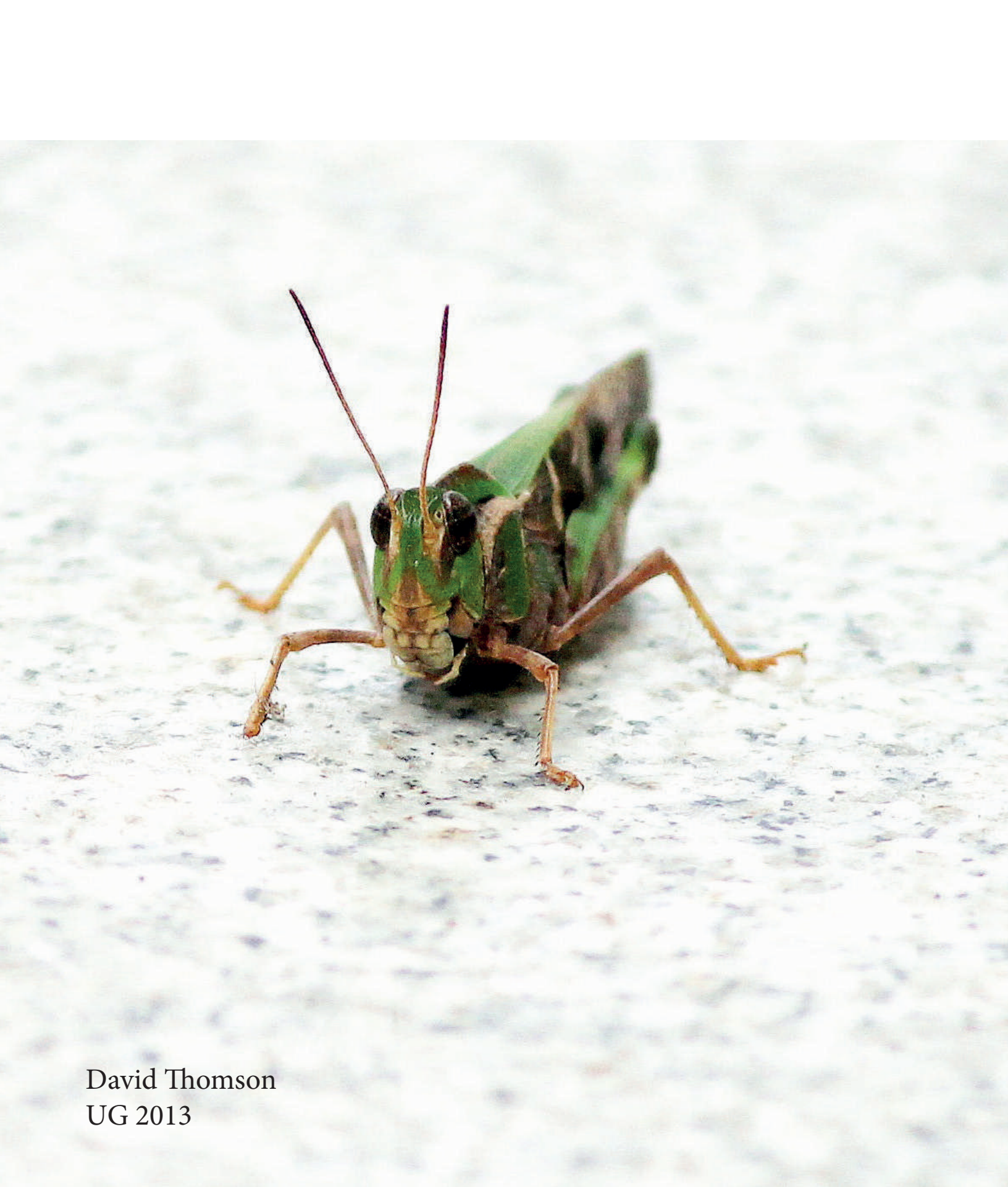
David Thomson
UG 2013



David Thomson
UG 2013



David Thomson
UG 2013



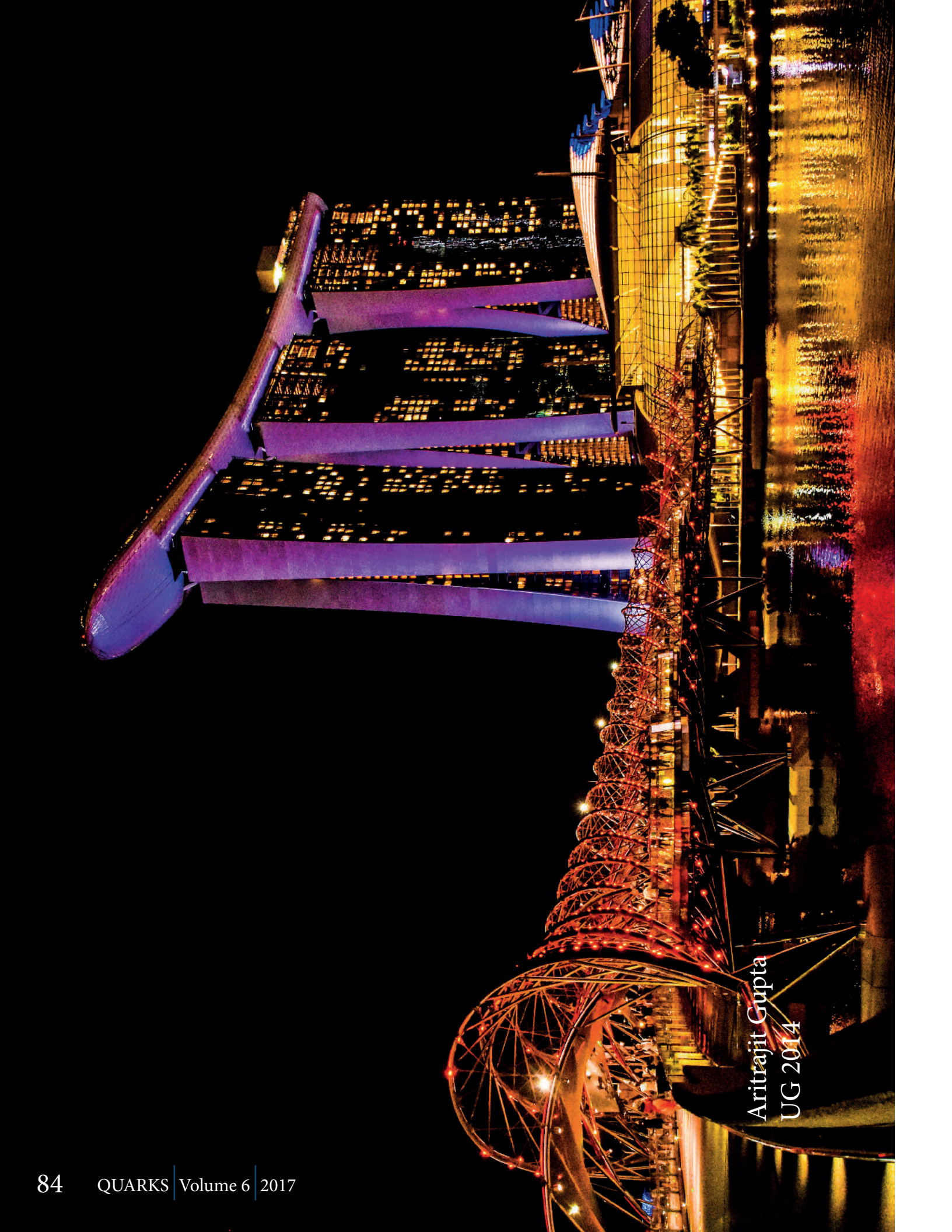
David Thomson
UG 2013

Globetrotter

here and there



Sagnik Dasgupta
UG 2014



Aritrajit Gupta
UG 2014



Bikramjit Karmakar
UG 2015



Bikramjit Karmakar
UG 2015



Aritrajit Gupta
UG 2014

Laetus

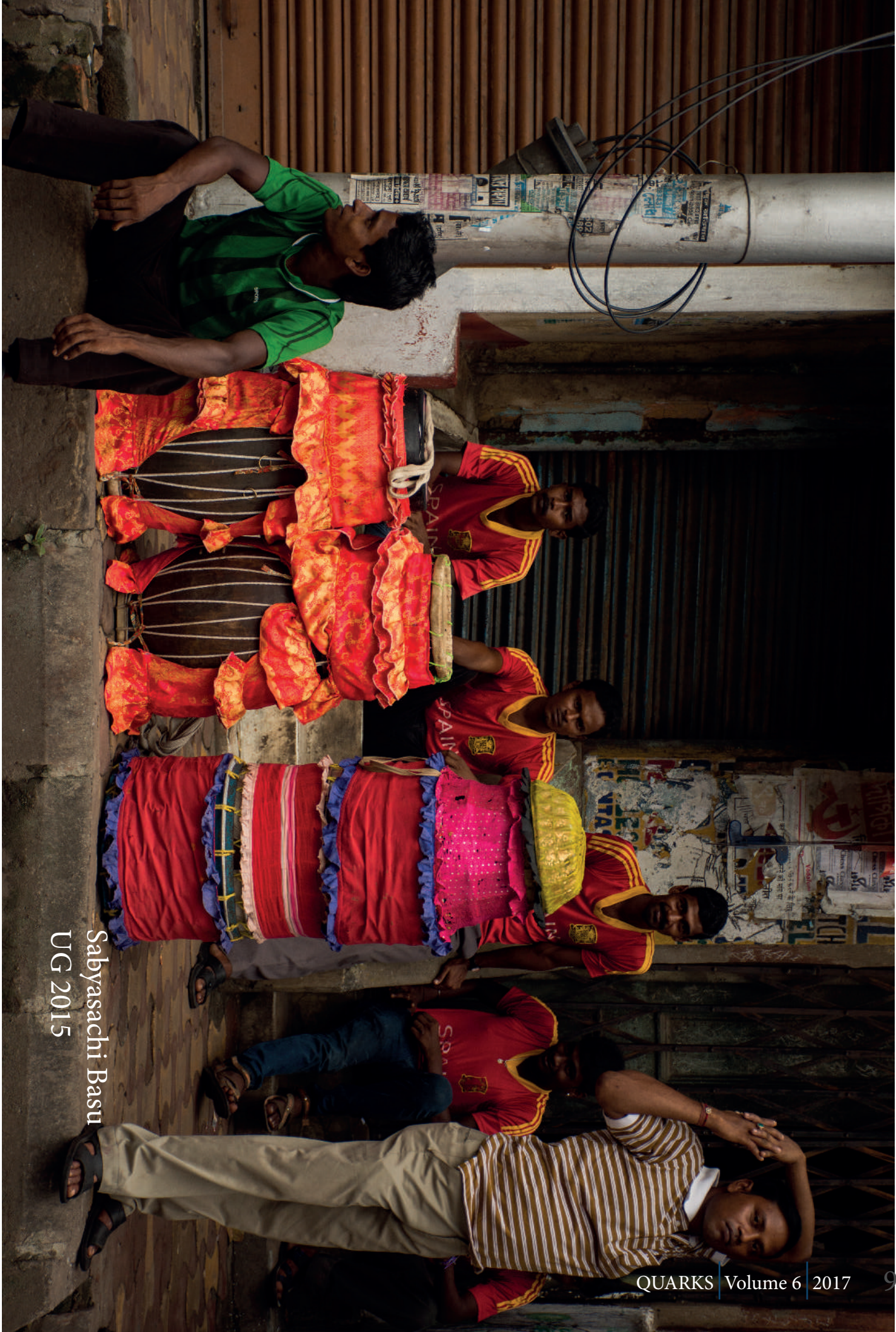


Pranshu Gaba

The background of the page is a photograph of the Allianz Arena's exterior at night. The facade is composed of a grid of red, diamond-shaped panels that are illuminated from within, creating a glowing effect. The name "Allianz Arena" is written in large, white, three-dimensional letters across the upper portion of the facade. The letters are slightly tilted to follow the curve of the building.

Allianz Arena

Sagnik Dasgupta
UG 2014



Sabyasachi Basu
UG 2015



Bikramjit Karmakar
UG 2015



Aritrajit Gupta
UG 2014

Minimalia

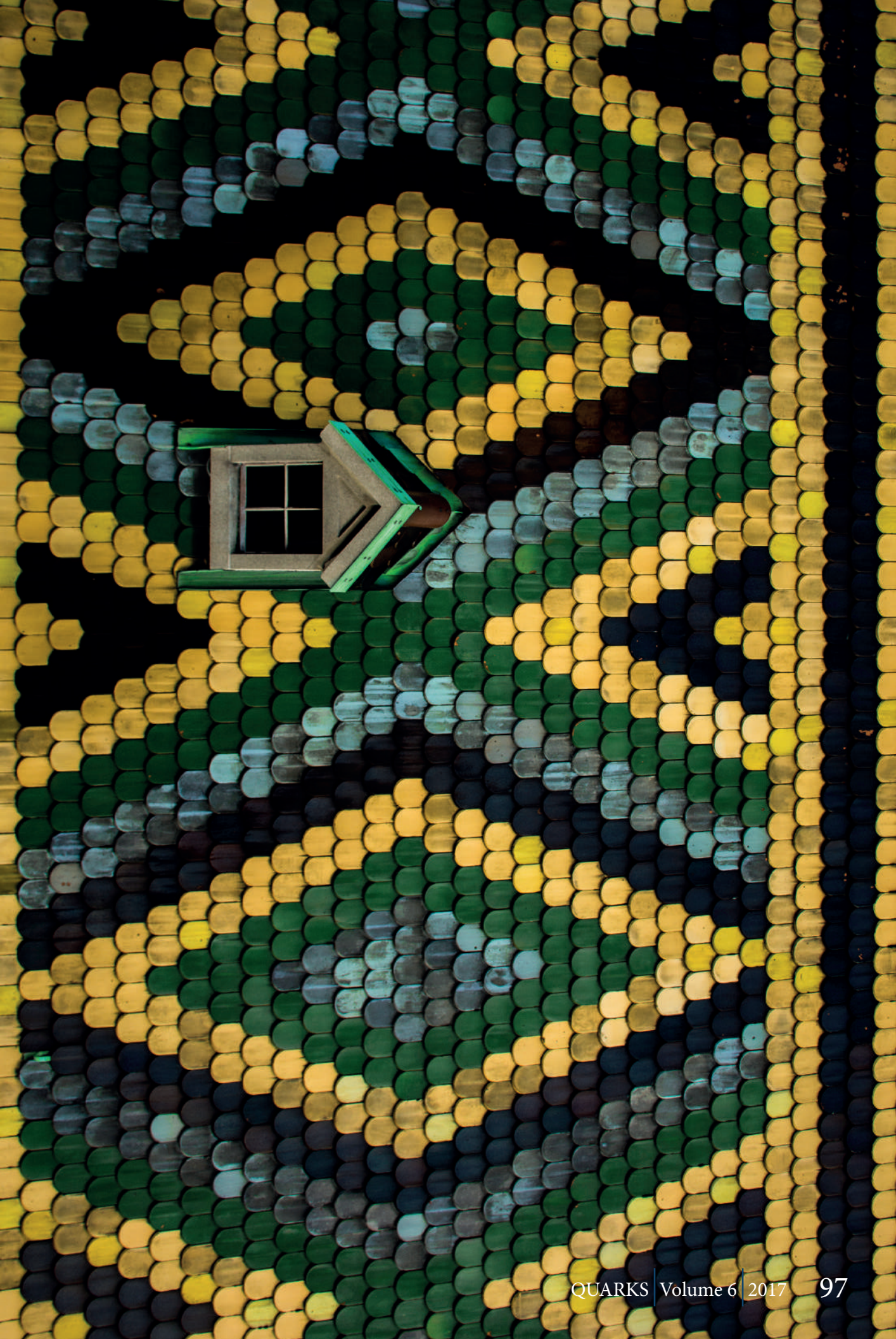
beauty & simplicity



Sagnik Dasgupta
UG 2014

Durjay Pramanik
UG 2015





Sabyasachi Basu
UG 2015

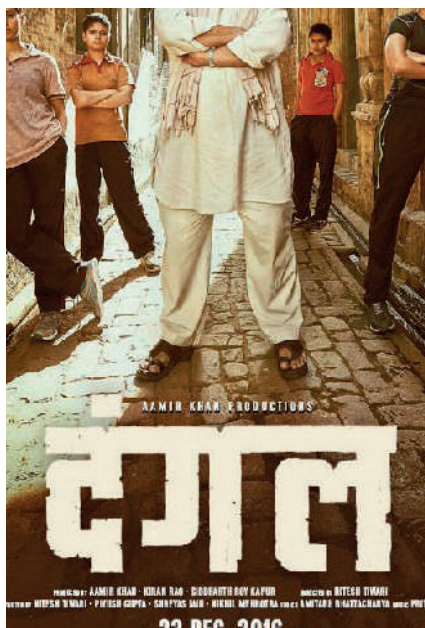
A photograph showing a hand holding a rusty metal spear against a clear blue sky. The hand is positioned in the center, gripping the handle of the spear. The spear is made of dark, weathered metal with a pointed tip. The background is a solid, vibrant blue sky. The image is oriented vertically on the page.

Durjay Pramanik
UG 2015



Sabyasachi Basu
UG 2015

Highlights



Dangal



Forgotten
Indian gems



Two short reads

Reviews

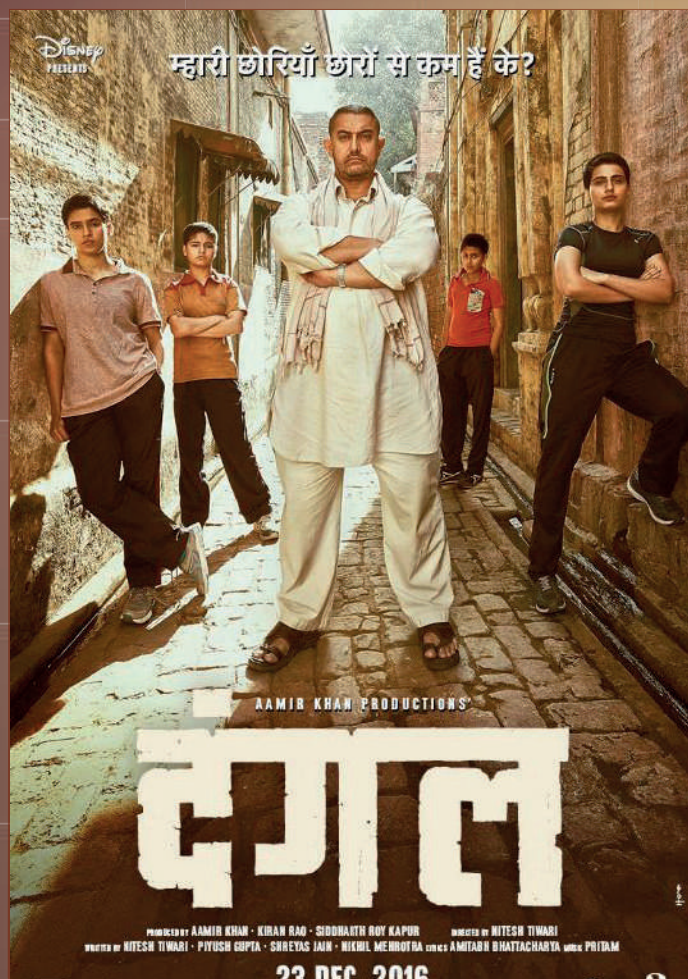
Dangal — — Pg 102

Reviewing some
forgotten gems — — Pg 104
from Indian
cinema

Two short reads for — — Pg 106
the semester

LAGAAN TO DANGAL

– A TRYST WITH SPORTS, PATRIOTISM AND AAMIR KHAN



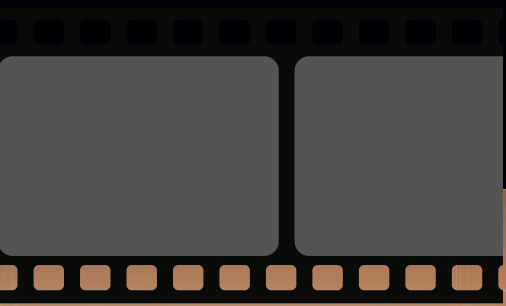
I watched my first cricket match way back in 2001. Not on TV, not even in a stadium but in a movie theatre playing Aamir Khan's 'Lagaan'. I do not have the entire recollection of the events but my mother describes how her barely three-year old son did not budge from her lap for the entire duration of the movie, clapping and cheering for Team Chamber as they played against the mighty British.

Coming back to the winter of 2016. Cinema halls across the country turned into wrestling akhadas as a girl from a Haryana village fought her way against the odds into the hall-of-fame of wrestling.

Both these movies bring a flood of emotions from the people – from despair to jubilation. Where they both strike a chord with the audience, is the fact they make you feel proud as an Indian. This pride comes so naturally and spontaneously, even more than when you stand for the customary rendition of the national anthem before the start of the movie, with the tricolour waving on the screen.

Aamir plays Mahavir Singh Phogat, a national wrestling champion who wants his dream of winning an international medal for India to be fulfilled by the son he doesn't have. Despite his and his wife's best efforts, they are unable to have a son, and become the parents of three daughters. But an incident where his older daughters, Geeta and Babita beat up their neighbour's son black and blue rekindles Mahavir's hopes once again. He springs into action with one mission – that of making them world champions.

But for a society steeped in patriarchal prejudices which deems the kitchen to be the perfect-



place for girls, this is easier said than done. Moreover, their mother refuses to cook meat for them. However, despite all these setbacks and the daughters' secret hatred of their disciplinarian father because of the strict regimen he was enforcing, Mahavir remains firm. Only when Geeta starts defeating older boys at *dangals* does she realise that her perception of her father as '*sehat ke liye hanikarak*' is so wrong. As success in the Junior Nationals and the Nationals come by, Geeta literally becomes the poster-girl of her village. People who had opposed her becoming a wrestler are won over. But a bigger challenge awaits her at the National Sports Academy in Patiala.

Her coach tells her to unlearn everything Mahavir had taught her and focus more on technique. Geeta not only abandons her father's style but also most of his principles about discipline – junk food was no longer a no-no and movies and nights out become a regular affair. But disastrous performances in one international tournament after the other put her feet firmly on the ground and make her turn to her father for succour. Setting aside all distractions, she returns to her track that propels the film to the final act.

Aamir is again at his very best, reaffirming the truth of his title of 'Mr. Perfectionist'. He never fails to surprise us, metamorphosing into every role with ease. He acquired a thick Haryanvi accent and put on 22 kg weight in a few months to play the older Mahavir. The new-comers – Zaira Wasim and Suhani Bhatnagar as the younger Geeta and Babita respectively, were groomed for several months by Mr. Khan himself, and no wonder they put up such a stupendous performance. Fatima Sheikh and Sanya Malhotra who played the older versions of the sisters were equally brilliant. The character of the 'close cousin' provides the necessary comic relief and is enacted by Aparshakti Khurana, Ayushmann Khurana's brother.

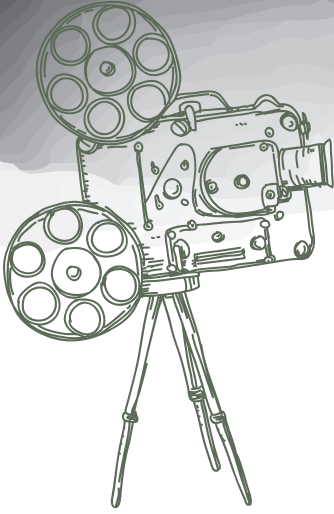
A recurrent theme in the movie is the ever-important issue of women empowerment. The movie stirs the conscience of the male chauvinist and forces him to think differently. All this is achieved without being remotely preachy at any point. The father-daughter relationship has also been portrayed beautifully. The movie also underscores the administrative apathy for women's sports and the vindictive politics at the highest levels.

At the finishing stages of the movie, many had expected Geeta's coach to get a bashing at the hands of Aamir Khan, but his predicament was worse – shamed in front of the whole crowd at the stadium he hung his head low, while the world discovered Mahavir Singh Phogat once again.

The national anthem plays for the second time in the movie when Geeta is presented the gold medal on the podium. And it is the second time you stand the tallest and feel the proudest. Lagaan didn't, but *Dangal* could very well be the first Indian movie to win the Oscars.

CREDITS

Aishik Panja
UG 2016



Reviewing some forgotten gems from Indian cinema

When you think of Indian films, one first recalls Bollywood. We often tend to forget the regional movies. The biggest problem that we face while watching a regional movie is the language. Therefore, several good movies are left unnoticed until we are later served with a Hindi remake with Bollywood stars. This way, we miss the original and the applause goes to the banal Bollywood remake. Here, I shall name some masterful works that I consider to be among the finest movies in India. There is no particular order to the list:

Pesum Padam(1987, silent) :

The meaning of the Tamil word, Pesum Padam is 'the picture that talks'. This silent, dark comedy set in the pre-liberalization era depicts a colourful story on dreams and ambitions. The most notable feature of the movie is the non-verbal communication through expressions and body language. This movie is an apt example of the brilliance of Kamal Hassan.

పుష్పర పమానం

এগারো

Egaro(2011, Bengali) :

Based on a true story, Egaro is a classic mix of football and nationalism. Debutant director Arun Roy recreates the scenes of 1911 IFA shield win of Mohun Bagan over East Yorkshire Regiment and spirit of the Indian struggle within football grounds. On one hand, it depicts the tyranny of the British and on the other, it shows the resistance of Indian players. There is a point when a young journalist also points out to his boss that printing news about Mohun Bagan reaching the finals of the IFA Shield is not just 'binodon' (entertainment).

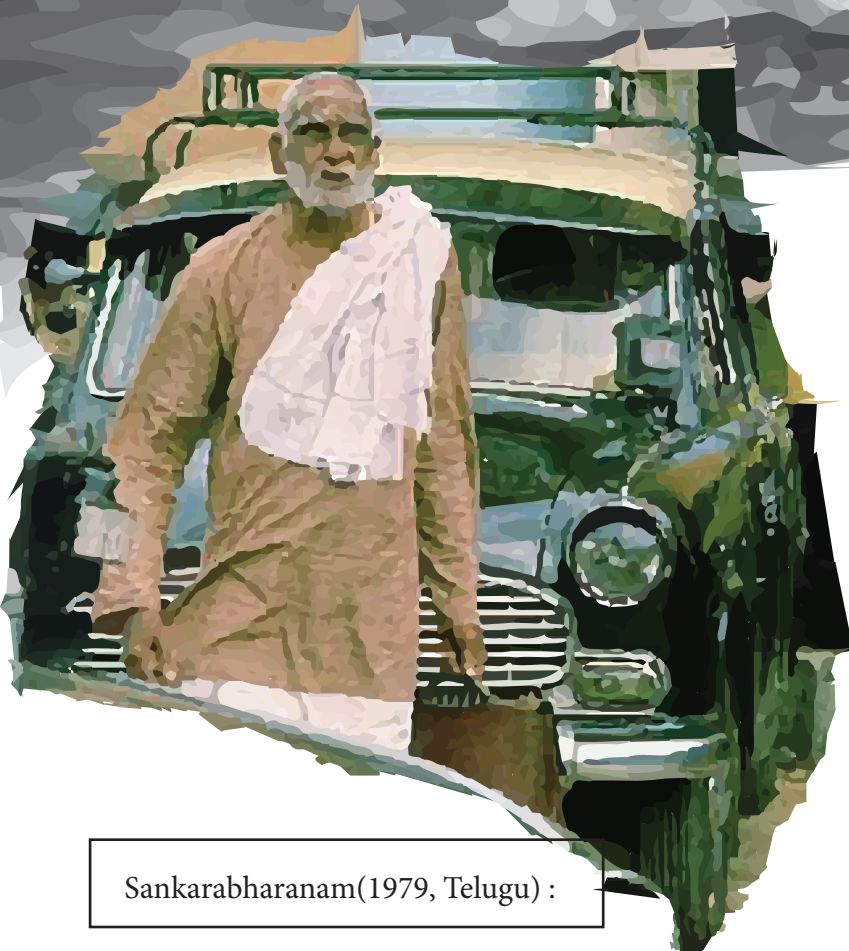
The director, Arun Roy has rightly captured a game which truly embodies the statement "Sob khelar shera Bangalir tumi football"

Piravi(1989, Malayalam) :

Piravi is a politically disturbing film which raises the problem of helplessness against an oppressive system. The movie was directed by Shaji N. Karun. This film portrays a surreal mix of human relationships. In today's world of political corruption and barbarity, Piravi raises questions against them.

Piravi

नटसम्राट



Natsamrat(2016, Marathi) :

If you are a theatre-loving person, then this is the movie you are looking for. Based on a play 'Natsamrat' written by V.V.Shirwadkar, this film showcases a celebrated actor's life which turns miserable after his retirement from the theatre, and getting disowned by his ungrateful children. The monologues, although cleverly used by the writer, are a little dense in some places. However Nana Patekar and Vikram Gokhale have brought the film to life with their stellar performances.

Sankarabharanam(1979, Telugu) :

A 1979 telugu movie directed by K. Viswanath, Sankarabharanam is a musical drama film that depicts the forbidden bonding between a master of classical music and a girl from a prostitute family. The essence of music in this movie is peerless.



Anhey Ghorey Da Daan(2011, Punjabi) :

Produced by National Film Development Corporation of India, Anhey Ghorey Da Daan is based upon the social conflicts between landlords and villagers. It showcases different parts of Punjab and presents a view that is vastly different from Bollywood-y projections. It captures life so realistically that you can literally feel the frustration and helplessness of the protagonists seep into your mind and engulf you like the morning fog over mustard fields. Most actors in the film are not professionals, but villagers picked by the director to play their parts. Anhe Ghore Da Daan is not a movie for the general crowd. Like meditation, one needs to immerse oneself in it.

Sannibha Das



1. We Have Always Lived in the Castle

SHIRLEY JACKSON
INTRODUCTION BY JONATHAN LETHBRIDGE

WE HAVE ALWAYS
LIVED IN THE CASTLE

PERGON
CLASSICS
DELUXE
EDITION

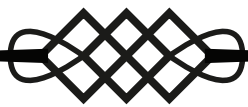
It takes a great deal of skill for the writer of a story to induce a fear of the latter sort in the reader. But Shirley Jackson masterfully manages to pull it off in *We Have Always Lived in the Castle*. Set in a small town in New England, it follows the narrator Merricat Blackwood, who lives with her sister Constance, and an invalid uncle in a manor on the outskirts of the town. The people of the village treat Merricat like an outcast, and through the memoirs

A stylized, grayscale illustration of three mushrooms. The central mushroom is the largest, with a broad, slightly domed cap and a thick, textured stem. To its left is a smaller, more rounded mushroom, and to its right is another medium-sized mushroom with a similar shape. The mushrooms are rendered with various shades of gray to create depth and texture. They are positioned on a dark, irregular base that suggests soil or rocks, with some small, dark, leaf-like shapes scattered around them. The background is plain white.

The story deals with many themes, and social ostracization is just one of them, but the most prominent theme is in the subtext. It is the aura of ever growing madness you perceive from Merricat, and to some extent, from Constance. The kind of madness that comes from isolation, and how that brews into resentment, and anger. And at some point, a dread takes over you; you're not quite sure what it is, but you know that every page you read, you inch closer to finding out what you're afraid is true. And once you've finished the book, the fear stays with you. And therein lies the beauty of the book. And to conclude, consider the opening sentence of the novel; it is the hook by which Shirley Jackson pulls you into the novel.

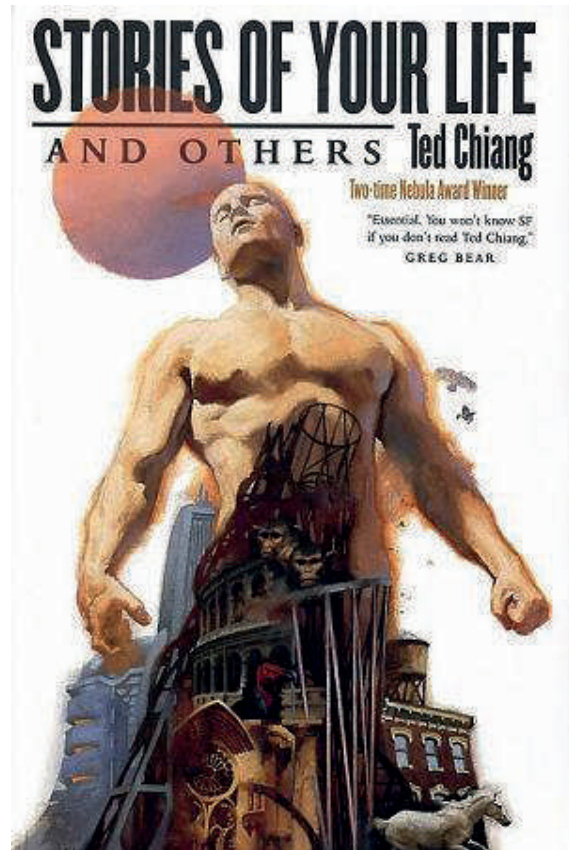
My name is Mary Katherine Blackwood. I am eighteen years old, and I live with my sister Constance. I have often thought that with any luck at all, I could have been born a werewolf, because the two middle fingers on both my hands are the same length, but I have had to be content with what I had. I dislike washing myself, and dogs, and noise.

I like my sister Constance, and Richard Plantagenet, and Amanita phalloides, the death-cup mushroom. Everyone else in our family is dead.




2. Stories of Your Life and Others

– Ted Chiang



The mistake most novice (and even some veteran) science fiction authors make is to write stories that blatantly scream out to the reader that this is science fiction. There is long winded exposition, fancy name dropping, and plenty of “futuristic” technology abound. Almost invariably, they are set in the future, where the author is not bound by current limitations on the understanding of science. Michael Crichton is one of the worst offenders in that regard, especially so because of the long winding and patronizing expositions in almost all his novels. Coming from there, Ted Chiang is a welcome change. Al-



though he has gained recent attention after the release of *Arrival*, a movie based on the short story *The Story of Your Life*, he has churned a small number of stories over the years he has been active. And most of them have equally good, or better than the titular story.

Ted Chiang's stories have varied settings, ranging from biblical Babylon (Tower of Babylon), to a world which has a real Old Testament style god and angels (Hell Is the Absence of God), to a Victorian era England, but equipped with Golems (clay statues which can be animated by a piece of paper), based on Jewish folklore (Seventy-Two Letters). The stories are quite inviting, and work very well without the aforementioned exposition. And in most of the stories, Ted Chiang shows a competent understanding of science at work. Some of the stories to read in particular are the following (starting from the ones I liked the most):

-
- Hell Is the Absence of God – Set in a world where a vengeful Old Testament style god exists, along with visitations from angels, and people go to hell or heaven when they die, one of the protagonists, Niel suffers a existential crisis when his religious wife dies during an angel's visitation, and ascends to heaven. Niel, who had never been religious himself, and had been sure he'd go to hell after he dies, now realizes that if he does go to hell, he'd forever be separated from his wife. Thus begins his quest to love god, and ensure that he goes to heaven. But the para-

dox that befuddles him is that how can one love someone if one is forced to love that someone.

- Exhalation – Set in a world inhabited by people who constantly (seemingly) need to consume air as a source of energy, this story describes the experiences of one of them, a surgeon/scientist who investigates what really powers these people's brains and bodies, and links it to the apparent slowing down of time in various parts of their world. The most intriguing part of this story is that it applies just as well to humans in real life, although at a much slower rate.
-

- Tower of Babylon – This story follows starts almost at the end of the mythical construction of the Tower of Babylon, when the tower has almost reached the ceiling of the world. The story follows a worker from Egypt, who is hired to dig through the roof of the earth to see what's beyond. The story has a nice twist near the end, and is quite consistently told
-

- Seventy-Two Letters – Golems are creatures from Jewish folklore: clay statues which can be animated to do certain job upon inserting a piece of paper with instructions upon it, somewhat like an 11th century imagining of what robots would be like. Set in Victorian era England, where the science of Golem programming and design is at its zenith, and humans are only employed as Golem makers and designers, the protagonist faces resistance as he designs a Golem to create Golems. This ties up later in the story with the seeming extinction of mankind, but eventually is satisfactorily resolved.

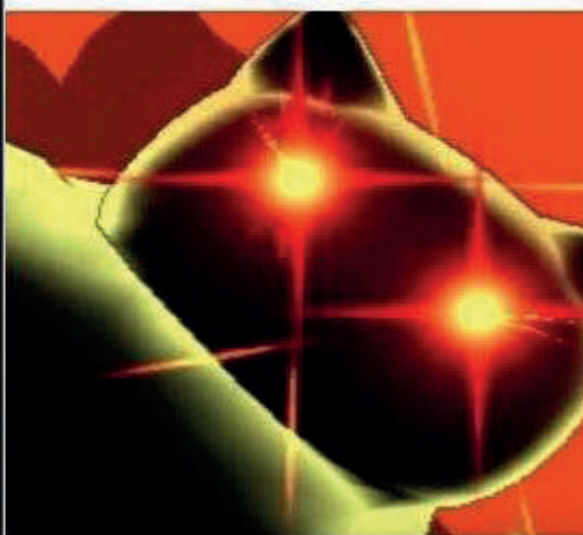
Meme *relief*



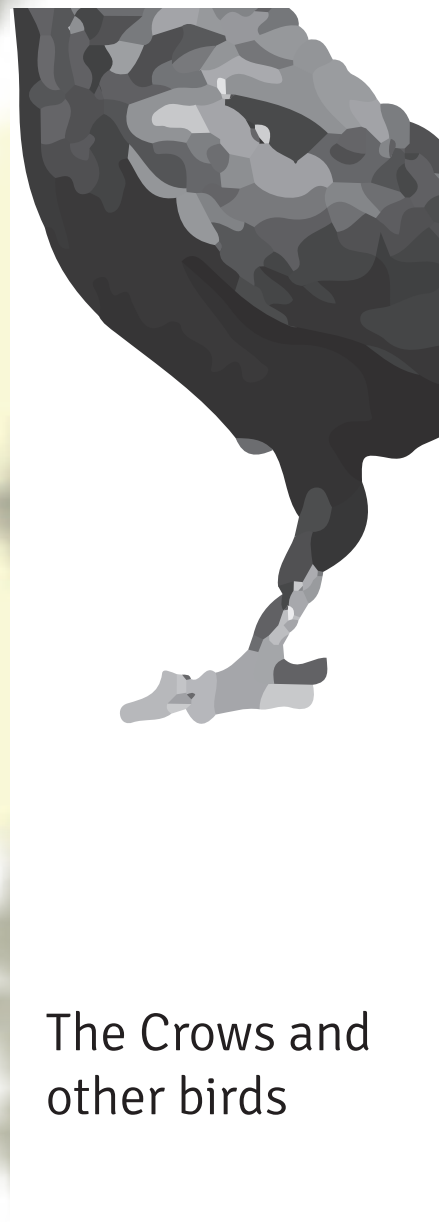
Me:



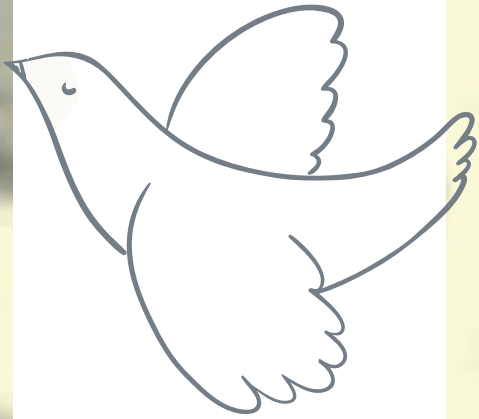
Me:



Highlights



Poetry



We



Country lane — — Pg 112

Dear Dad — — Pg 113

প্রাক্তন — — Pg 114

ঋতুরঙ্গ — — Pg 115

Frustrations of a
Mother — — Pg 116

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other birds — — Pg 118

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Down Below — — Pg 122

This is not a love
song — — Pg 124

Country Lane

- P. Vasanth
UG 2016

An empty can fell at the side of the road
And a tired cloud sighed as it faded away,
People sped past, each weighed down by his load,
Too busy to care for this grey display.

A puff of black smoke from a factory on the side,
Arrived to replace the martyr, fallen cloud,
As the factory churned on on both timber and hide,
Churning up new scenes to sate the crowd.

A young tree fell in the silent old forest,
With people to listen to its fall, final sound,
But no one would care, would show any interest
With the wail of saws, blaring all around.

And just as it seemed that it won't survive,
The black curtain parted revealing the sky,
Nature seemed to safely have made it out alive
As another empty can just came tumbling by.

DEAR DAD

-Jake Sully

Dear Dad,
I have been depressed,
I have been stressed,
I have been to a doc,
I doesn't seem to have helped.
I took the meds,
Stopped alcohol,
But it didn't help much.
Now, panic and anxiety,
Aren't things that visit me rarely.
But now I can scrape through them
alive barely.

Every time you get into
One of my memory strings
I want to tell you this.
Everytime I see you,
I want to break open,
But every time you speak
I die a little.
Dear Dad,
I will tell you one day
Of the storm in my mind
That I survived.
Seeded by the world,
Making me what I am.
Breaking me from what I was.
I will tell you a tale if I survive.

‘প্রাক্তন’

‘প্রাক্তন’

কত সাধারণ এক শব্দ
কিন্তু ততটাই গভীর এক আবেগ।

‘প্রাক্তন’

লুকিয়ে থাকে অগুপ্তি স্মৃতি, ভালোলাগা,
কাছে আসা, ভালোবাসা।

‘প্রাক্তন’

হয় বিচ্ছেদ, আসে দূরত্ব,
চলে যায় বিস্মৃতির গর্ভে।

‘প্রাক্তন’

তবুও তোমায় মনে পড়ে
কোনো এক নিদ্রাহীন রাতে।

‘প্রাক্তন’

তুমি ভালো থেকে
তোমার আমিহীন জীবনে।

-দূর্জয় প্রামানিক

ঋতুরঙা

— মনোনীত গুহ

সহে শরৎ ছিল নরিরবিদী,
কথা বলতো না বশী, কনিতু —
উচ্ছ্বল পুলক ছিল তার চলার ছন্দে;
স্বপ্নরোও ছিল ঘরোয়া, আসতো যত্নে,
আর বাসতব-অবাস্তবের সীমায় থলেতো
এককা-দোককা।

তারপর একদিন তার ইচ্ছা হ'ল শীত হ'তে —
আলভোলা ধানরে খেতে অঘরাণের ঘরাণ, —
পোষালো না আর, ভুললো সশীতরে স্বাধীন
ধুলোঝাড়ে।
হ'ল সশীত, একটা একটা ক'রে সুখের পাতা
ঝরঝরে —
কনিতু খুঁজে পেলো না সে আদুর রোম্যান্টিকিতা
নজি শরীরের রন্ধর-রন্ধর, যমেনটা সে
ভবেছিল।
স্বপ্নরোও আজকাল দরাদর ক'রে আসছিল,
বড়ো চড়া সে দাম, কখনও বা তা একটা রাতের
ঘুম।
বচিলতি হ'ল না সে, মনে নেলি কুছুরসাধনরে
মূল্য ধ'রে, —
কনিতু সহে স্বপ্ননে যে পুরনো মৃত দনিরে
ভজোল মশিছে ছিল,
কটে জানতো না সে কথা, এমনকি সিনেজিও
নয়।

আজকাল সে বসে থাকে, শুকনো এক গাছের
গুঁড়তি হেলান দিয়ে —
মরষকামী বকিলে গুলোতে তার আর বসন্ত হ'তে
ইচ্ছা করে না।

Frustrations of a Mother

She labours for us day and night,
While I watch TV till late at night.
She never asks for help, only now and
then,
To be unable to hear, I pretend.
Family is her happiness,
Family is her burden,
She loves her little kids,
But we only add more things,
That she can't tolerate,
From her role of mother, she cannot
abdicate.

Angry and frustrated, she vents out,
But nobody pays attention to what
she's shouting loud.
Headaches and tiredness,
Are her common illness.
Miserable is how she feels.
Mistakes she made in her past are
what she thinks,
Led to her present condition.
She just wants to run away to her free-
dom.

love
burden
kids
family



Me and myself

Now I've been in this place for many years,
yet I don't feel close to anyone
and sometimes I fear that people
talk behind my back,
or is it just my imagination.

Do they think I'm crazy, do
they think I'm mad?
I don't talk too much,
or make sense enough.

I talk with myself now and then,
do they find all that strange?
Sometimes I feel that they think
I'm stupid,
and that I'm socially, irreparably
retarded;
or is it just my imagination.

What do they think of me?
What do I think of me?

The crows and other birds

There was once a land of birds.
So beautiful, that even words
Would fail to describe completely
The land's glory minutely.

So once it happened that the King
Was from an illness suffering.
All birds from 'far came to see
Their Eagle King who would be
In a few days perhaps lying dead.
Well, that's what the doctor said.

A lowly crow did himself bring
To check on the Mighty king.
"Shoo!" the royal doctor said,
"You piece of filth! Stay out instead!
Don't you know that all kind of dirt
Must the king now avert?"

The poor crow soon went away.
The king asked, "Oh doctor, say-
Which disease is killing me.
Oh I want to healthy be."

The doctor said, and the King heard
"My Lord, it is because of dirt.
They spread it, just so you know,
The dirty Crows like him." So
The King consulted the wise Owl
And planned to cleanse the land now foul.

The day next all crows were brought
To court and they were boldly taught


"Your eggs,
friends, fam'ly
unclean
You beings of filth,
on dirt you glean.
Look, the Cuckoos
can sweetly sing,
The Peacocks' shades
joy do bring.
Sparrows can fly like
an arrow,
The Cocks herald
every morrow.
The Penguins withstand
extreme cold,
But you folk do no virtues
hold.
The water you drink, the air
you breathe
You pollute them, them with dirt you
wreathe.
You dirty folk, disgusting, black,
All qualities do you fools lack.
Therefore it is the King's order
To bring back health by all Crows'
murder."

In a week all crows were in prison,
Subjected to insult, and without reason
Many were taken, their wings were chopped
Despite prayers. They finally stopped
When they had bled all the Crows,
And killed them all, I suppose.

Once a Sparrow dared to speak:
"My Lord, it has been a week
The Crows are gone and yet we stand
Among the dirt and dead of the land."

"So clean the dirt, you Sparrows now,
And get rid of the dead somehow."
That was the order of the State
But Sparrows accepted it with
hate.

A few weeks had passed
by,
The king was alive,
he didn't die.
Yet the doctor
couldn't
find a
cure



The King asked, "Doctor, are you sure
That dirt had indeed worsened my health?
O find me cure, I promise you wealth."

"It hasn't gone, my Lord, the dirt,
For recently, I have heard
That the Sparrows are cleaning the land
And thus on filthy dirt they stand."

Thus after the Crows, for their social state
The Sparrows met with the same fate.
Then came the Cuckoos and the Cocks
Then the Peacocks, orthodox.
Thus every level of the society
Was washed off by the Noble and Mighty.
Finally the doctor of the king
Took the dirty disease's sting.
Everywhere was death and death
And foul fragrance in every breath.
Everywhere birds lay dead
And hence did the disease spread.

The royal family was taken ill,
The disease did everyone kill.
The Eagle King on his deathbed laid
"Perhaps I was dirty," to himself he said.
He realized that it was too late,
To get out of his moribund state.
Weak and pale, he murmured, "The Crows..."
Regret perhaps, who knows?
But th' illness was on a killing spree
And it set his soul from his body free.

Ratul Biswas
UG 2015

The last rhyme

Tick-tock, tick-tock,
Life seconds go by,
Floating down the
stream.

Snip-snap, snip-snap,
Loose threads cut off,
From the hanging
fringe.

Squeak-scratch,
squeak-scratch,
Old desk drags on,
Upon the wooden
floors.

Twist-tie, twist-tie,
Bent rope noosed by,
Tightening up the knot.

Tip-tap, tip-tap,
Unheard, unseen,
Footsteps pass by.

Tick-tock, tick-tock,
Life seconds no more,
Tick-tock, tick-tock,
Yet the clock chimes on.

-Jadeera
UG 2013



We

We
Might stay or not Tomorrow, anymore.

Memories,
Which were drenched in a well of Love.

Fly,
Like we did Together, yesterday.

Sunset,
Embrace the tempting warmth of its Colors.

Vibrance,
Frame the Life with abundance of it.

Grief,
Hinder it from manhandling You.

Delight,
Is to dance together in the Rain.

Pain,
Was felt, when We fell apart.

Tomorrow,
Would reminisce about Memories, for sure.

Love,
It's like the freedom of a Flying dove.

Together,
Let's kiss the enchanting Sunset, being gay.

Colors,
Ensure the Vibrance in our slumber.

Life,
Is short; so, try to abjure Grief.

You,
Grab a seed of Delight, to sow.

Rain,
In it, shed off all your Pain.

We,
Should begin afresh, with a new Start.

Pragyadeep Roy
UG 2015

The man

from

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b

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o

W

1

One day, while lying on the bed
I heard a sound emanating from the floor.

Knock ! Knock ! Knock ! it followed
like an uninvited guest on a lonely door.

In the midst of the night,
it indeed scared me.

Yet,

outside the window, the moon
shone brightly and was quite a sight to see.

Knock !

Quite a commotion
in a night devoid of motion.

And still,

my curious mind could not recall
why I decided to remove the floorboard
and welcome that guest
out of my bedroom into the des-
olate hall.

Quite normal for a ghost of night

Yet

Quite strange by human standards.
But he was biologically human alright.

With a gait that made me recall, the
troglodyte on "The Descent of Man" illustration.

It was quite a challenge to find a seat for him
in my unfinished sleep,
and hence the frustration.

2

At this point the reader may remark
where were my host's manners.
'Cause I stopped him, before he moved
and told him to sleep right there,
on the cold floor.

The reply to this inhumanely request was,
strangely quite human

for
while he spoke
no language, his
sign language was not a
thing to miss.
He gestured me to go and
sleep
and I was quite startled by
this realization
that he had more humanity,
than any human could wish to
keep.
For hours he slept,
eight hours- no less, no more
on the wooden floor.
It was a Sunday and so I felt
a part of me still in the bed
waiting with my body under the sun,
to melt
away from the room toward the guest
only to be blocked by the floorboard
displaced from its place
between the aforementioned floor.

3

As tulips in a steady wind
on a carpet of black grass

under my legs

stretched infinities of
space and time
in an infinitely tangled mess.

But it was no dream
just a void where the floor
was present before.

Stars filled my horizon
from shore to shore.

I blinked, swept my eyes away
toward the roof and gently
placed the floorboard on its
universe in a hole.

As neurons in my brain fired
and my consciousness aptly inquired
whether this was an old friend
taking a joke to lengths
where boundaries of mental stability end.

Or whether,
it was something I have consumed
the night before and
so my senses were still doomed.

Yes, it was real, it was true
The guest was not from below my
feet

but from a place far away
where winds of plasma and hydrogen
blew.

Bhaskar Kumawat
UG 2016

This is not a *love song*

-Naga Teja

UG 2013

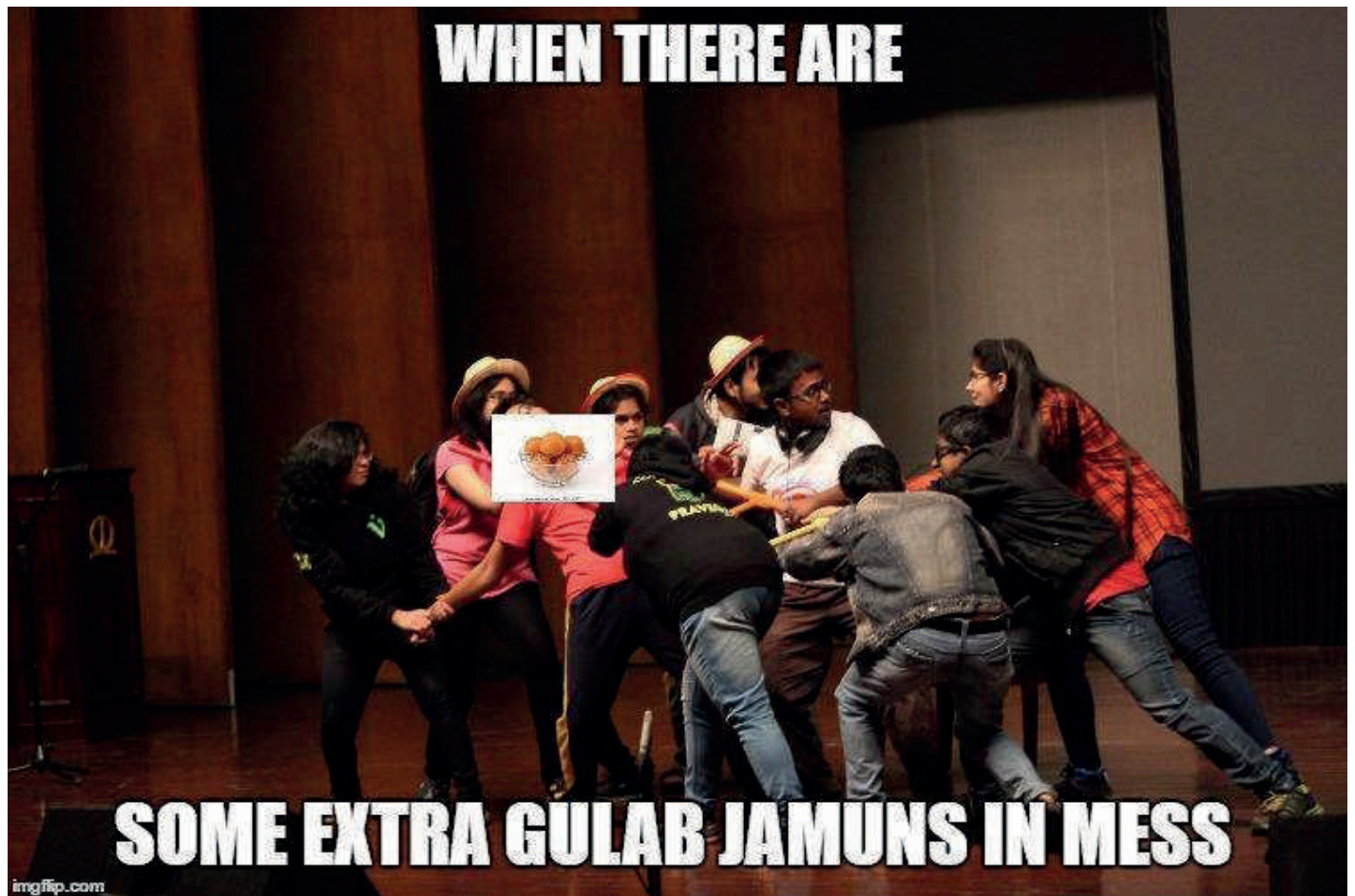
I didn't meet her in a story or a tale
But in my heart she resides.
Now, I have to decide to kill her or to make her mine.
To face His wrath or to let love lose to fear.
Now I wonder why? She's special
Even after many I have taken to Him.
Why had love hit me now
When I'm under a vow.

Note: to minimize misinterpretations and reinterpretations I have put across what this poem(if it is.) is about. I am a Grim Reaper and He refers to "death".

One fact is that I can't write poems on my own. I need intense emotions or inspiration which in this case is the below.

And this is a poemification of this moving short film I came across. <https://www.youtube.com/watch?v=of-nCdC8P70g>

Meme *relief*



Highlights



Native

প্রেমের কাহিনী _ _ Pg 128

স্বপ্নের নাভিশ্বাস _ _ Pg 131

ঝড়ের কথা _ _ Pg 132

আপত্তী
শিক্ষাপ্রাচ্যবস্থা _ _ Pg 134



স্বপ্নের নাভিশ্বাস



প্রেমের কাহিনী

ওই যে এদিকেই আসছে। লাল জামা, নীল জিনস, মুখে চুইংগাম চিবোতে চিবোতে। ছেলেটির নাম দীপক বিশ্বাস। সল্টলেকের মানুষ। স্বাভাবিক ভাবেই কলকাতার অন্যতম ব্যস্ত নাগরিক। তাও এই প্রচণ্ড ব্যস্ততার মধ্যে ঠিক সময়ে ঠিক কাজটি ম্যানেজ করতে পারে বলে বেশ সুখ্যাতি ওর। নিজের হাতে তৈরি করা একটি রুটিন অস্কের মত ফলো করে সে। সেটি আবার নাকি একটি গোপন ড্রয়ারে সুরক্ষিত। ওর একটি কপি অবশ্য মেমোরি কার্ডে সেভ করে রাখা। দুর্ভাগ্য বশত আজকে কার্ডটিতে কিছু সমস্যা থাকায় সেটিকে ফরম্যাট করতে বাধ্য হয়েছে সে। সাইকেলটি নিয়ে মলের সামনে এসে দাঁড়ালো। মেয়েটি আগে থেকেই অপেক্ষা করছিল। হাসি মুখে রেস্টুরেন্টের ভেতরে ঢুকল দুজনে।

ঠিক এই মুহূর্তেই তার খেয়াল হল ওই ‘সাতরাজার ধন এক মানিক’ রুটিনটি কিছুতেই মনে আসছে না যে। ঘেঁটে ঘ হয়ে গিয়েছে। ফলে সামনে বসে থাকা মেয়েটির নাম কিছুতেই মাথায় আসছে না আর। আরে মঙ্গলবার বিকেলে কার সঙ্গে দেখা করার কথা যেন? সায়নি না দিপাঞ্জনা? না না মনে হয় বর্ষা। ইতি ও হতে পারে। কী ঝামেলা! মেমোরি কার্ডটা থাকলে কি আর এতো বিপদ হয়! ওই রুটিনে স্পষ্ট লেখা ছিল কোন সময় কার সাথে দেখা করার কথা। ইস কার্ডটা আজকেই ফরম্যাট করতে হল।

এদিকে দিপকের ছটপটানি দেখে মেয়েটি মৃদুস্বরে জিগ্যেস করল “এনি প্রবলেম?”

হ্যাঁ, প্রবলেমতো বড়ই গভীর! কিন্তু মুখে কি আর বলা যায়। কলেঙ্কারির একশেষ হবে তাহলে। তাই মুখে একটা বেশ বড় হাসি টেনে ঘাড়টি বেশ সুন্দর করে নাড়িয়ে দীপক বলল “না না, নো প্রবলেম”। মুখোমুখি দুটো চেয়ার টেনে বসল ওরা।

দীপক ভাবল একবার মেসেঞ্জারটা চেক করলেই তো হয়। দেখি সার্চ করে “দেখা করবি?”। রেজাল্ট এল ৯৯টি। না না কোন কাজ হবে না। আচ্ছা দেখি তো “আজকে দেখা করবি?”. রেজাল্ট ৬৯টি। মনে হয় ফোন এসেছিল। উফ, নাম দিয়েও তো নাম্বারটা সেভ করা নেই। না, আর কোন আশা নেই আজ।

কিন্তু নামটি জানতে না পারলে কথা বলতে শুরু করবে কি করে। প্রচণ্ড অস্বস্তি হচ্ছে, আর মেয়েটিও এদিকে কোন কথা বলছে না। কিছু কুলকিনারা করতে না পেরে বলে বসল “ইয়ে, একটা সেলফি হয়ে যাক।”

মেয়েটি তৎখনাত রাজি। সেলফি তোলায় দীপকের দক্ষতা তর্কাতীত। সবাই তাই বলে থাকে। এবারে একটি ভালো ছবি চলেও এলো।

“এটা ফেসবুকে.....” কথা শেষ না করতে করতে অনমতি মিলল মেয়েটির কাছ থেকে।

এবার এডিটিং। তা চলল প্রায় ২৫ মিনিট ধরে। শেষমেশ দুজনের পছন্দ হল ছবিটি। খুব আগ্রহ নিয়ে মোবাইলটি হাতে করে ছবিটি আপলোড করল দীপক। ব্যাস, এক মিনিটের অপেক্ষা। ফেসবুকের কল্যাণে মেয়েটির মুখের উপর একটি বক্স এসে গেলো “Do you want tag Mimi Chatterjee?”

মাগো। এই না হলে artificial intelligence. আনন্দের আতিশয্য তক্ষুনি ফেসবুক অ্যাপটিকে ৫ রেটিং দিয়ে



ফেলল সে। যাই হোক নামটা তো জানা গেছে, “মিমি”। মিমির ফোনে তখন টুং শব্দে একটি নোটিফিকেশন এলো। খুলে দেখলো, একটি ছবিতে ট্যাগ হয়েছে সে। ট্যাগ করেছে দীপক বিশ্বাস। এইমাত্র তোলা ছবিটায়। এই ছেলেটা দীপক! চক্ষু চড়কগাছ রিমিকার। প্রথমবার দেখে মনে হয়েছিল সৌম্য বা দীপাঞ্জন হবে। অবশ্য আকাশ বা রিয়ানের ছবির সাথেও কিছুটা মিল আছে। উফ্ফ। কার সাথে যে কোনদিন দেখা করার কথা- সেটা এতো গুলিয়ে ফেলছি আজকাল! নিজেকে ধমক দেয় রিমিকা। কতদিন ধরে সে ভাবছে এবার একটা রুটিন বানানো উচিত। ল্যাদ কাটিয়ে সে আর হয়ে উঠছে না। কী ভাগ্যিস উল্টোপাল্টা কোনো নাম বলে ফেলেনি আজ! কী মুন্সিলটাই যে হতো!

আপাতত দুজনেরই মুশকিল আসান ঘটে গেছে। দুজনে একে অপরের দিকে তাকিয়ে মিষ্টি করে হেসে নিলো। অন্য দিকে আবার দেখা যাচ্ছে- কলকাতার আরেকটি মলে আধ ঘন্টা ধরে অপেক্ষা করে, অবশেষে কারোর দেখা না পেয়ে হতাশ হয়ে চলে গেছে দীপাঞ্জন নামক একটি বালক। মিমি নামক কোনো বালিকার সাথে তার আজ দেখা করার কথা ছিল। সে আসেনি। কী দুঃখ! ভেউ ভেউ।

কাট –

ঝড়াং কড়াং শব্দে সাইকেলটি নিয়ে বাড়ির সামনে নামল রবীন্দ্র। তড়ি ঘড়ি করে নেমেই মোবাইলটা বের করল বাঁ হাতে। উফ বাবা সাড়ে আটটা বেজে গেছে দেখছি। খুব দেরি হয়ে গেলো আজ। ধুর ওই সাইকেল আবার কে ঢোকাবে। শ্যাওলাপড়া দেওয়ালের গায়েই পড়ে রইল সেটি।

এতক্ষন মাফলারটা গলাতে জড়ানো ছিল। এবার সেটিকে মাথায় জড়িয়ে নিতে হবে। প্রত্যেক দিনই করতে হয়। অন্যথাই মা দেখতে পেলে আজকে আর বকুনির শেষ থাকবে না।

টুকেই দেখে ঘরের সামনেই মা বসে আছেন। হঠাৎ কি একটা কথা মনে করে থমকে গেলো রবীন্দ্র। এক মুহূর্ত থমকে গিয়ে সোজা মায়ের কোলে ঝাম্প দিল সে। বাচ্চা ছেলের মত কোলে মিলিয়ে যাওয়ার কি চেষ্টা।

এই অসময়ে ছেলের কাণ্ড দেখে মা তো একটু বিব্রত, কিন্তু বেশ খুশী। কিন্তু একটা আদর মাখানো অকৃত্রিম অভিমানের স্বর নিয়ে বললেন “দেখ তো ছেলের কাণ্ড। উনিশ কুড়ি বছরের একটা বুড়ো ছেলে, সে মায়ের কোলে এসে গড়াগড়ি খাচ্ছে। লোকে কি ভাববে বল



দিকিনি!”

-উঁহু

-কি উঁহু। আচ্ছা এতক্ষন কোথায় থাকা হয়েছিল শুনি?

-আরে ওদের প্রিন্টার খারাপ। কাজই করছিল না এক ঘন্টা ধরে। কি সব ফিল্টার ফেলিওর। জানি না বাপু।

-প্রিন্টার খারাপ না ওই সব করছিলি.....

-মা!!

-আচ্ছা ঠিক আছে। সাইকেলটা ঢুকিয়েছিস না বাইরে পড়ে।

-না ঢোকাই নি।

-আচ্ছা বোকা ছেলে তো। যা তাড়াতাড়ি ঢোকা গিয়ে, চুরি হয়ে যাবে না হলে।

মা আচ্ছা করে ঝাঁকুনি দিয়ে উঠলেন।

-উফ। আচ্ছা বাবা। কি জ্বালাতন মাইরি।

গলায় কপট রাগ।

-মা! একি আবার চুল উঠছে তোমার। কি শ্যাম্পু ব্যবহার কর বলত।

-অ্যাঁ! সেকি। চুল? দেখি।

রবীন্দ্র নিজের মাফলারটা দেখাল মাকে। মা চোখ তো চড়কগাছ।

-ওমা সত্যি তো। কত গুলো উঠে গেছে। এবার সত্যি সত্যি পাল্টাতে হবে দেখছি। ইসস। আচ্ছা কতদিন ধরে উঠছে রে? লক্ষ্য করেছিস?

-হ্যাঁ। আমার তো ওই একটা কাজ!

-তুমি তো অকর্মণ্য। যাও সাইকেলটা ঢোকাও গিয়ে। চা করি?

-হ্যাঁ কর। কিন্তু একটু বেশি করে চিনি দিও এবার।
 পুরো অখাদ্য লাগে না হলে।
 -আজকাল তো কিছুই মুখে রুচছে না দেখছি।
 মা গেলেন রান্নাঘর। আর রবীন্দ্র সাইকেলের দিকে।
 মেসেঞ্জারে টুং করে একটা শব্দ হল।
 -বাড়ি পৌঁছেছিস?
 -হ্যাঁ। তোমার জন্য আর একটু হলেই কেসটা
 খাচ্ছিলাম। ক্যাবলা এক খানা।
 -কেন আমি কি করলাম?
 -মাথায় কি তেল মাখ শুনি? এত চুল ওঠে কেন?
 শুধু চুমু খেতেই যদি এত চুল ঝরে পড়ে তাহলে
 বিয়ের পর একেবারে ন্যাড়া হয়ে যাবে হে।
 -ধ্যাত! থাক থাক অনেক হয়েছে। বাড়ির লোক
 জেনে ফেলেছে নাকি?
 -জেনে যাচ্ছিল আর একটু হলে। ঘরে ঢোকান
 আগে চোখে পড়ল বলে! সামনে মা ঝেরে ফেলারও
 উপায় নেই, সোজা মায়ের কোলে ডাইভ মেরে এ
 যাত্রা বেঁচে গেছি। পরে সব বলব।
 -উফ কি বুদ্ধি ছেলের। যাই হোক পরের বার ওই
 খসখসে মাফলারটা পরে আর এসো না। সব চুল
 উপড়ে নেয় আমার।
 -হ্যাঁ এখন তো সব আমার দোষ।
 -বটেই তো।
 মা রান্নাঘরে চা বানানোর সময় শুধু হেঁসেই যাচ্ছেন।
 হেঁসে হেঁসে মাটিতে গড়িয়ে পড়বার মত অবস্থা। কই
 তখন তো অত হাঁসি পায়নি যখন মাফলারে অত
 ছোট চুল দেখেই বুঝে গেছিলেন এটা ওনার চুল
 নয়-ছেলে কি সুন্দর বানিয়ে মিথ্যে কথা বলছে। কি
 হল এখন? খ্যাক খ্যাক! আবার!
 ছেলে এত সিনেমা টিনেমা দেখে কিন্তু অভিনয়টা
 এখনো আয়ত্ত করতে পারল না।
 থিকথিক করে হেঁসে চায়ে মাত্র আধা চামচ চিনি
 দিলেন তিনি। এইটাই ওর শাস্তি।



কাট—

~অরিন্দম সাউ
 UG 2015

স্বপ্নের নাভিশ্বাস

ছেলেটা ভেবেছিল জীবনের সবকটা রঙ নিয়ে একটা রামধনু বানিয়ে সাজিয়ে রাখবে ওর স্বপ্নমাখা আকাশের নীলে। ওর কবিতার পাতার খসখস শব্দে ও শুনতে চাইতো ভ্রমরের গুঞ্জন অথবা কোকিলের কুহতান। ওর গল্পে ও খুঁজতে থাকতো খরশ্রোতা নদীর উচ্ছলতা অথবা সমুদ্রের জোয়ারের গর্জন। ওর গল্পের নায়ক ও নিজেই। নায়ক থাকলে সেই নায়কের একটা নামও দরকার। নাম তো আপনারা আপনাদের পছন্দ মত দিয়ে দিতেই পারেন। যেমন ধরুন ওর নাম রাখলাম শুভ। আর বাস...? সেটাও যেকোনো দেশের যেকোনো জনবহুল একটা শহর। ও বারবার ওর গানে খুঁজত গ্রামের ঘাটে সারি সারি মাটির কলশির ঢকঢক করে জল খাওয়ার শব্দ। দেওয়ালের ফ্রেমে বন্দী ওই গ্লাশ-পেন্টিং-এ ও চাইত আকাশের ওই নিবিড় সোনালি নীলে ডানা মেলে দিক এক ঝাঁক ইচ্ছে আর ভাবনাগুলো সব ডুব দিক ওই মহাসমুদ্রের নীল গভীরতায়। আর সমুদ্রের ধারের ওই তপ্তবালুকণাগুলো জোয়ারের জলে স্নান করে দেখতে থাকুক কেমন করে পড়ন্ত বিকেলের রক্তিম আভা হারিয়ে যেতে থাকে জ্যোৎস্নামাখা নীল নিবিড় আবেশে।

শুভ চেয়েছিল ওই একই ফ্রেমে, একই কবিতার ছন্দে, একই গল্পের বাঁধুনিতে আটকে রাখতে ওর শৈশবের খেলার মাঠের ধুলোমাখা সবুজ, ওর যৌবনের বৃষ্টিভেজা মেঘলা আকাশ অথবা রক্তগোলাপের লাল উষ্ণতাকে অথবা ওর বার্ষিকের নদীর মোহনার শান্ত নীরবতাকে। জীবনের এইসব রঙ্গিন সুরগুলোকে গেঁথে একটা স্বপ্নমাখা গানের স্বরলিপি তৈরি করতে। কিন্তু সময় চাইল আগামী স্বপ্নকে ইতিহাসের অঙ্ককারে তলিয়ে দিতে।

জীবনের কয়েকটা বসন্ত কাটাতে না কাটাতেই লিভার ক্যান্সার ধরা পরল শুভর। লাস্ট স্টেজ। আর কয়েকটা মাস হয়ত বাঁচবে। কিন্তু ওর

স্বপ্নমাখা গানের কি হবে? স্বরলিপিই ত বানানো হয়নি পুরোটা। ইতোমধ্যেই ওর আকাশের নীলে কেউ যেন ছড়িয়ে দিচ্ছে কালি। কারখানার কালো ধোঁয়ায় ছেয়ে যাচ্ছে শ্যামলিমা। ওর আকাশের রঙ এখন হয়ে গেছে ফ্যাকাশে। ওর ফ্রেমে আঁটা ছবিতে এখন রাত আসে, কিন্তু তাতে নেই জ্যোৎস্নার মাখামাখি, আছে শুধুই অমাবস্যার কালো আঁধার। ওর সমুদ্রে আজ ঢেউ আছে, কিন্তু তাতে শুধুই ভাঁটের টান। বসন্তের শুরুতেই শুকনো মরা ডালে যে কুঁড়ি এসেছিল তা ফোটার আগেই ঝরে জেতে চলেছে আজ। ওর গানে আজ কথা আছে, নেই শুধু সুরের ছোঁয়া। ওর আজ নিজের একটা গল্প আছে, হারিয়ে যেতে বসেছে গল্পের নায়ক নিজেই।

চিনতে পেরেছেন এই শুভকে? ও আমাদের সবার মাঝেই আছে। আমাদের সবার মাঝেই ইচ্ছে-ভাবনা-কল্পনা-স্বপ্ন দেখার যে একটা মন আছে তার নামই শুভ। কিন্তু স্বপ্ন দেখার আগেই তাকে আমরা আটকে ফেলছি ক্যান্সারের জালে, আটকে ফেলছি ভবিষ্যতের উচ্চাশার হুঁদুরদৌড়ে, অত্যাধুনিকতার মোহে, জাত-ধর্ম-দেশ-কালের সঙ্কীর্ণতায়। শুভ তবুও আজ ছটফট করছে বাঁচার আশায়, চাইছে ভালবাসার শিলাচূর্ণগুলোকে আঁকড়ে ধরে এক শস্যশ্যামলা স্বপ্নে ভরা রঙ্গিন বসুন্ধরা বানাতে।

তবুও শুভ আজো বেঁচে আছে আমাদের সবার মধ্যে। ক্যান্সারের কামর খেয়েও।

কেমন করে...? বেঁচে থাকার আর স্বপ্ন দেখার গান লিখে। সেই গানে আজ শুধুই ভালবাসার নাভিশ্বাস, স্বপ্ন দেখার নাভিশ্বাস।

Pallabi Malo

UG 2016

কেউ কথা রাখে না, কারণ সুনীল গঙ্গাপাধ্যায় বলেছে আর আনন্দবাজার কোর্ট করেছে। তাই আমি অবিশ্বাসী। আর অবিশ্বাসীদের চুপ থাকতে হয়, ঠাকুরদা বলেছিল, তারপর অমল রাজার সঙ্গ কথা বলতে চলে গেছে, আর সবাই চুপ করে আছে তখন থেকে। সরসবতীকে চিঠি লেখা যায়, কিন্তু লিখি না, কারণ আমি অবিশ্বাসী।

মিষিট পেরমের গল্প লেখা যায়, কিন্তু লিখব না কারণ তা কিল্শে; আর মিষিট পেরমে গল্প সম্বরজিৎও লেখে। আমি বাঁড়া একে আঁতেল, তায় অবিশ্বাসী — অবশ্য অবিশ্বাসী না হ'লে আর আঁতেল কী?

অযাকচুয়ালি পেরমের গল্প লেখাও কিল্শে। বাঁড়া গল্প লেখাই কিল্শে। লিখতে হয় পরতয্যদা'র মতো চুদে যাওয়া গদ্য, পড়লে মাথা-মুগুড়ু কিছু বোঝা যায় না বাট মাথা চুদে যায় ফুল গাণ্ডু — কিন্তু সুইসাইড করার ইচ্ছে আমার ছিটে-ফোঁটাও নেই। পরতয্যদা কোনোদিন বিকির হ'বে না, শুধু একদিন মরে যাবে। সেদিন আমি কাঁদব, সেটাই বোধহয় জীবনে শেষবার।

সুইসাইড করার ইচ্ছে আমার ছিটে-ফোঁটাও নেই, তাই আমি একটা গল্পই লিখব। ইন অল লাইকলিহুড, একটা পেরমের গল্প।

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একটা দেশে একটা কলেজ ছিল। তাতে ক্লাসে-ক্লাসে ছেলে, আর ক্লাসে-ক্লাসে মেয়ে ছিল। তারা মধ্যবিত্ত ছেলে, তারা মধ্যবিত্ত মেয়ে, তাদের ফেসবুকে ইংরেজী বানান ভুল হয়। মধ্যবিত্ত শেরণী-সচেতনতা তাদের বেশীরভাগের পেত চন্দরবিন্দু আর চনিদ্রলের থেকে, বা বিশব্ কল্যাণ রথ শূনে। তারা সাধারণ ছেলে, ভালো ছেলে; তারা সাধারণ মেয়ে, ভালো মেয়ে।

সেই কলেজে ক্যানিটনে ক্যাটকল ছিল, ফুলটু হ্যাল আর ফুলটু ফরাসটু ছিল, আর মোবাইল-ভাতির্ পানু ছিল। আর সেই দেশে ছেলেদের চাকরি পাওয়ার বয়স হ'লেই মা-বাবা একটা করে মেয়ে ধরে, আর মেয়েদের ঘরকন্যা করার বয়স হ'লেই মা-বাবা একটা করে ছেলে ধরে বিয়ে দিয়ে দিত। মেয়েরা চাকরি করত না

ঝড়ের কথা

Teebro Prokash

UG 2014

তা নয়, তবে মেয়েরা ঘরকন্যা করত। ওটা ওদের বিয়েতে রেট-ডিটারমিনিং-ফ্যাকটর, ছেলেদের যেমন চাকরি। এর মধ্যে মাঝে-মাঝে কলেজে ইনট্র-মিনট্র হয়ে যেত। সেটা হওয়া উচিত না, কিন্তু হয়ে যেত — এতে আর কী হ'ত তা খুব স্পষ্ট নয়।

সেই দেশে শীত পড়ত না খুব — একবার শীতের সময়ে হালকা রোদদুর আর নরম সোয়েটারের ওমের মধ্যে বৈশাখের ঝড়ের মতো পেরম নামল। কোনো পূবরাভাস ছিল না, কেউ বুঝতে পারেনি ঝড় নামার পরেও। হঠাৎ করে, হুড়হুড় করে ঝড় নেমে গেল কেউ কিছু বোঝার আগেই সবাই দেখল ঝুপ্পুস হয়ে ভিজে গেছে। পরথমে এক-ফোঁটা দু'-ফোঁটা, সবাই ভেবেছিল ইনট্র-মিনট্র, তারপরে কলেজ ভাসিয়ে ঝড় এল। ছেলেরা-মেয়েরা যখন রোজ বাড়ি ফিরত সমস্ত শরীর তখন ভেজা, চোখে লেগে থাকত রংধনু। ওদের ঝড়গুলো ছিল সাদা-কালো — ওদের চোখের রঙ সকলের চোখে পড়েছিল ঠিকই, কিন্তু সেই রঙ দিয়ে কী হবে তা কেউ ঠাহর করতে পারে নি।

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সেই দেশ চালানোর জন্য অনেক জঞ্জানী-গুণী লোক ছিল, আর তাদের বিরুদ্ধে হওয়ার জন্যও আরো জঞ্জানী-গুণী লোক ছিল। এরা কখন দেশ চালাত, কখন মারামারি করত, বোঝা যেত না, কিন্তু দেশ দিবিয় চলত, তাই আনন্দাজ করা যায় — তারা দেশ ভালোই চালাত। আরো কিছু জঞ্জানী-গুণী লোক ছিলো, তারা সবকিছু দেখত, আর কনস্ট্রাক্টিভ ক্রিটিসিজম করত। আরো

কিছু জুগুপ্সা-গুণী লোক হয়ত ছিল — তারা কী করত কেউ ঠিক জানে না।
সেই সব জুগুপ্সা-গুণী লোক — তারা সবাই রবীন্দ্রনাথ পড়েছে, তোতা-কাহিনী পড়েছে — তারা রবীন্দ্রনাথের পড়েছে, পরবনধও লিখেছে। নিশ্চিত, তারা আরো অনেক কাগজে সহ করেছে, আরো অনেক ডকুমেন্ট টাইপ করেছে, আরো অনেক বেশী কাগজে কাটাকাটি করেছে। এবং তারা ভূরি-ভূরি ছিঁড়েছে। সেই ছেঁড়া বাল আর ছেঁড়া কাগজ সব স্তুপ হয়ে পড়ে থাকত অফিসের ধারে রাস্তার ধারে, রাতে হাওয়া দিলে উড়ে গিয়ে দেশের আকাশ ময়লা করে দিত।

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বৈশাখ-জ্যৈষ্ঠ পেরিয়ে, তদ্দিনে আষাঢ় নেমেছে। সারা কলেজ জলে থই-থই, রংধনু কেটে গেছে তদ্দিনে। বাম্-বাম্ করে সারাদিন বৃষ্টি পড়েছে তো পড়েছেই, আকাশ কালো, বাজ পড়েছে থেকে থেকে।

কিন্তু যার চোখে রঙ লাগে, তার চোখ বরাবরের মতো খুলে যায়। সেই বৃষ্টিতে সেই কলেজের ছেলে-মেয়েরা অনেক কিছু দেখল — দেশে ধান হয় না, গম হয়ে গুদামে পড়ে থাকে, লোক খেতে পায় না, দেশে কাজ নেই। কলেজ থেকে এতকিছু দেখা যায় না — কিন্তু ওরা অনেক কিছু দেখে ফেলল।

বৃষ্টির সময় এরকম কথা ওরা কেন বলেছিল জানা নেই, এবং ওরা কোথাকার খবর কোথায় বলত তার ঠিক ছিল না — ওরা বলল, দেশে আগুন লেগেছে।

কড়-কড়া করে সারা কলেজ কাঁপিয়ে বাজ পড়ল। সেই বাজের আওয়াজে গলা মিলিয়ে ওরা বলল — দেশে আগুন লেগেছে।

ওদের গলার আওয়াজেই হোক আর বাজের আওয়াজেই হোক — কলেজের বড়োরা ভয় পেয়ে গেল। ওরা সে-রাতে যখন বাড়ি ফিরল, ওদের চোখ-মুখ দেখে ওদের ঘরের বড়োরাও গেল ভয় পেয়ে।

বাজের আওয়াজে গলা মিলিয়ে ওরা বলল — দেশ চলছে না।

কলেজ ছাপিয়ে, পাহাড় ছাপিয়ে, রাস্তা ছাপিয়ে, কলোনী ছাপিয়ে, বসিত ছাপিয়ে, বান ডাকল। সেই বন্যার ঢেউ গিয়ে লাগল সেই জুগুপ্সা-গুণী লোকেদের সদর দরজায়।

জুগুপ্সা-গুণী লোকেরা ধুডমুড করে বসে-দাঁড়িয়ে মিটিং ডাকল।

৪।

সেদিন যারা গলা তুলেছিল, দেশ চলছে না — তারা দেশ চালাতে জানত বা পারত কিনা, কেউ জানে না। কিন্তু সেই বন্যায় সারা দেশ আছড়ি-পিছড়ি ভেসেছিল, রাস্তায়-রাস্তায় বাঁধ যা দেওয়া হয়েছিল, সব ভেঙে-ভেসে গেছিল সেবারের বন্যায়। সেবারের বন্যায় মানুষ পরাণে বেঁচেছিল না পরাণে মরেছিল তাও জানা যায় নি, মৌসুমি ভৌমিক গান লিখেছিল — আমি শূনেছি তোমরা নাকি/ এখনো সবপ্ন দেখ/ এখনো গল্প লেখ/ গান গাও পরাণ ভরে — ইউটিউবে সেই গান শোনা যায়।

যেসব জুগুপ্সা-গুণী লোকেরা মারামারি করত, তারা মারামারি করার লোক নামিয়ে দিল রাস্তায়। আর বাকি জুগুপ্সা-গুণী লোকেরা বলেছিল ওরা ভায়োলেন্সের পক্ষপাতী নয় — ওরা খাতা-পেন নিয়ে তখন বই লিখতে বসল।

সারা দেশে তখন বাম্-বাম্ শব্দে কান পাতা যায় না, মাথা কাজ করে না, বিচি মাথায় উঠে যায়, সারাদিন বাম্-বাম্-বাম্-বাম্ থেকে থেকেই বাজ পড়ে।

সেবারের বন্যায় আর কী হয়েছিল ভালো জানা যায় নি, কৃষকৃষতির সরকারী পরিমাপ পাওয়া যায় নি, শুধু এটুকুই জানা যায় — দেশ চলছিল, দেশ চলছে, দেশ চলবে।

সেই বন্যার একযুগ আগে বা পরে আমি সরসবতীকে চিঠি লিখতে নিয়েছি। বহুদিন বসে আছি ঝড় আসবে বলে — ঝড় আসেনি, কারণ কেউ কথা রাখেনি। আমিও চিঠি লিখিনি, বসে বসে বাল ছিঁড়েছি। সেই গুচ্ছবাল নিয়ে দেশেরা-পিকনিক যা-ইচ্ছে হোক, ছেঁড়া যায়।

(એક વિદ્યાર્થીના દષ્ટિકોણે) આપણી શિક્ષણવ્યવસ્થા:

ગુજરાતી ભાષાના લગભગ સર્વસ્વીકૃત (અને ગાંધીજીની મહોરવાળા!) ‘સાર્થ’ જોડણીકોશમાં મજૂર શબ્દનો અર્થ આવો આપ્યો છે:

મજૂર: રોજિંદા દામ લઈ મહેનત કરનાર.

તો ચાલો હવે બે તદ્દન જુદી જાતના મજૂરોની દિનચર્યા નિહાળીએ:



મજૂર નં ૧: એ સવારે વહેલો ઊઠીને પોતાના મજૂરીકામે જાય છે. ગમે કે ન ગમે, કામ તો કરવું પડે છે— જીવતરનો સવાલ છે! પણ કામને અંતે દામ રૂપે કાવડિયાં મળે છે. પછી કંટાળેલા મજૂરો વ્યસન પણ કરી લેતાં હોય છે— ક્ષણિક આનંદ માટે.

મજૂર નં ૨: એને બોલચાલની ભાષામાં વિદ્યાર્થી પણ કહે છે. એ સવારે વહેલો ઊઠીને પોતાની શાળાએ જાય છે. ગમે કે ન ગમે, ભણવું તો પડે છે— ફરિયરનો સવાલ છે! પણ કામને અંતે દામ રૂપે હોમવર્ક મળે છે. પછી કંટાળેલા વિદ્યાર્થીઓ WhatsApp/FB/Insta પણ કરી લેતાં હોય છે— ક્ષણિક આનંદ માટે.

અમારા પૈકી લગભગ ૯૯% નિશાળિયા ઉપર મુજબની જિંદગી જીવતા હોય છે — ભણતરમાં લેશમાત્ર આનંદ વિના. પણ આમાં બિચારા વિદ્યાર્થીનો કશોજ વાંકગનો નથી! કેમ? પ્રસ્તુત છે વિદ્યાર્થીનું ‘બચ્ચાડાપણું’ સિદ્ધ કરતા અનેકાનેક કારણો:

આખ્યા પિકચરમાં વાલી જ મુખ્ય વિલન છે! (રામાયણમાં પણ વાલી વિલન હતો ને!) નાનપણથી જ ‘ધૂળમાં ન રમવું જોઈએ’, ‘તારાં કલર્સથી ટાઈલ્સ બગડવી ન જોઈએ’ થી માંડીને ‘સવારે વહેલા ઊઠવું જોઈએ’ વગેરેનું “Do’s & Don’ts” નું લિસ્ટ પોલિયોનાં ટીપાની પેઠે ધરાર પિવડાવી દેવાય છે. એને બાગ-બગીચા, નદી, પહાડ કે જંગલ કરતા મંદિર ને મોલમાં વધારે લઈ જવાય છે. અને વાર્તાઓ તો નસીબદાર બાળકોને જ વાંચવા-સાંભળવા મળે! બાળકો મોટાં થાય એટલે કોઈ તગડી ફ્રી વસૂલનારી ઇંગ્લિશ મિડીઅમ હાઈ-ફાઈ સ્કૂલમાં બેસાડીને ફરજપૂર્તિનો ઓડકાર ખાઈ લેવાની પેરેન્ટ્સની શાહમૃગવૃત્તિ બધે જ જોવા મળે છે. પછી ચાલુ થાય ‘મેરા બેટા/બેટી બડા હોકે ચે બનેગા...’ નો દોર. અને જો એક્ઝામ્સમાં રિઝલ્ટ ‘ડાઉન’ જાય તો પાછા બૂમબરાડા શરૂ! પછી એ લોકો પંચોતેર મુરબ્બીઓને પૂછ્યા બાદ એવું ફિલ્ડ સિલેક્ટ કરે જેનો ફ્યુચરમાં સારો ‘રકૉપ’ હોય. સાલા આપણા ઇન્ટરસ્ટની તો કશી વેલ્યુ જ નહીં! (જોકે, આ લખનાર બંદો આ બધીજ બાબતોમાં નસીબદાર હતો અને છે!)

શાળાઓ પણ વદિયાર્થીને ભણતર પ્રત્યે નરિસ બનાવવામાં પોતાનુ યથાશક્તિયોગદાન આપે છે. શરૂઆત રોજ ગવાતી એકની એક પ્રાર્થનાથી થાય ને પછી સુવચિારોનો ડોઝ અપાય. કહે છે કે દરેક બાળકમાં કુતૂહલ અને જજિઆસાનું તત્ત્વ હોય છે. પણ સ્કૂલ એ જજિઆસાને પોષવાને બદલે શોષે છે— રક્ષણને બદલે ભક્ષણ કરે— વાડ થઈને જ ચીભડાં ગળે! હી હી હી! “અમારી સ્કૂલમાં Central AC, Hi-Tech class, ફલાણું, ઢીકણું, પૂંછડું... છે” – એવી ગુલબાંગો પુકારતી શાળા પોતાના શક્ષિકોની લાયકાતો કહેતી જ નથી. ને શક્ષિકાનું સ્તર?— મીડુ! એટલે પછી ક્યાં જવું?— ટ્યુશન. જો કે, ટ્યુશનચિં ટીચર્સની પણ હેરાનગતિ ઓછી નથી હોતી. એક—દોઢ કલાકનાં લાં...બા લેક્ચર અને પછી અધધધ હોમવર્ક. વળી હોમવર્કમાં શું હોય?— “આજે જે લખાવ્યું તે ફરીથી લખી આવજો.” અરે ભલા માણસ, એકનું એક લખવું કોને ગમે? અમુકને બાદ કરતા મોટેભાગે આ જ પરસ્થિતિછિ. અમુક વર્ગોમાં તો સો—દોઢસો “બકરા” ભર્યા હોય. વૈકુંઠ નાનું ને ભક્તો ઝાઝા!

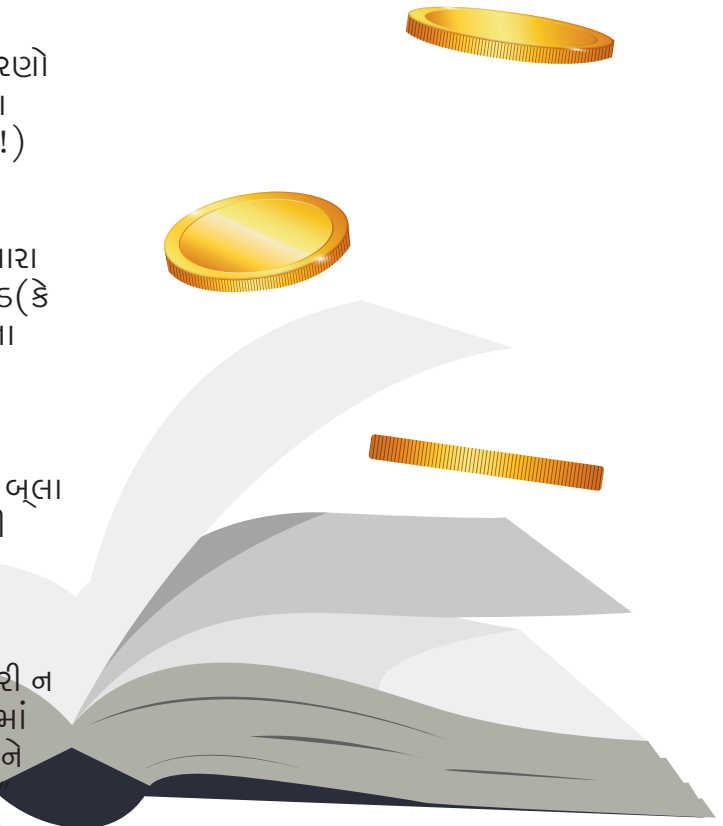
કશુક નવું જાણવાની જજિઆસાને શૈશવમાં જ હણી નાખવાનો અક્ષમ્ય અપરાધ કરનારા શક્ષિકોને સમાજમાં ગુનેગારોથી સહેજ પણ ઊંચુ સ્થાન આપવાનું એકપણ કારણ જડતુ નથી. છંદનાં બંધારણો ગોખાવનારે કેટલા કવચિ (પેલા WhatsApp વાળા ફોરવર્ડચિ નહિપણ ઓરજિનિલ—ઊંચેરા કવચિ!) ને અને આવર્તકોષ્ટક ગોખાવનારે કંઈ—કેટલા રસાયણશાસ્ત્રીઓને મારી નાંખ્યા હશે? ફટાફટ કોર્સ પતાવનારા અને IMP આપનારા શક્ષિકો ‘સારા શક્ષિકો’ તરીકે ઓળખાય છે. પરીક્ષાલક્ષી ગાઈડ(કે મસિંગાઈડ?!) બૂક્સનું વેંચાણ પાઠ્યપુસ્તકો કરતા ક્યાંય વધારે થાય છે.

અને હા, પરીક્ષા શબ્દનો ત્રાસ કંઈ ઓછો નથી. વકિલી ટેસ્ટ, યુનિટ ટેસ્ટ, મડિ—ટર્મ, પ્રલિમિ, બ્લા બ્લા બ્લા. માબાપ અને શક્ષિકો પાસેથી વર્ષોથી ધર્મ અને નૈતકિતાના ઓવરડોઝ લીધા પછી પણ સહેજ પણ ખચકાટ વનિ બોર્ડની પરીક્ષામાં પણ ચોરી કરનારા વદિયાર્થીઓની સંખ્યા ઓછી નથી. (આપણે એ ન ભૂલીએ કે એકપણ રૂપચિની કરચોરી ન કરનારા લોકો દેશની સૌથી નાની લઘુમતી છે. કૂવામાં હોય તો હવાડામાં આવે ને!) એક આવા વદિયાર્થીને મેં એકવાર પૂછેલુ: “અલ્યા, ચોરી શું કામ કરે છો? એનો નનકુડો સહેજ જવાબ આજેપણ યાદ છે: “તો

બીજું શું કરું?” એ કોઈ સાહતિયકાર નહોતો નહિતર કદાચ આવો જવાબ આપત: “પરીક્ષામાં માબાપ, વડીલો અને શક્ષિકો દ્વારા મારી પાસે ઢગલાબંધ માર્ક્સની રખાતી અપેક્ષા એક નરિભેળ સત્ય છે. વળી એના પચાસ ટકાય હું લાવી શકુ નહી અને એમ થાય તો મારું તો આવી જ બને એ બીજુ સત્ય છે. અને તમને અધમ લાગતુ આ કૃત્ય બે સત્યોનો સરવાળો જ છે!” અને આપણું શક્ષિકાતંત્ર તો જુઓ! પરીક્ષામાં શા માટે ચોરી ન કરવી જોઈએ — એ શખિવવાને બદલે માત્ર કેમેરા અને ટેબ્લેટ ગોઠવે છે. અને પરીક્ષાઓ કેવી હોય?— નકકામી! માર્ચ, ૨૦૧૧ ના ૧૦મા ધોરણના સામાજિક વજિઆનનાં બોર્ડનાં પેપરનો એક પ્રશ્ન જુઓ:

ક્યા દેશ માટે ‘સુજલામ્’ ‘સુફલામ્’ શબ્દો વપરાયા છે?

A.ચીન B.ગ્રીસ C.મ્યાનમાર D.ભારત



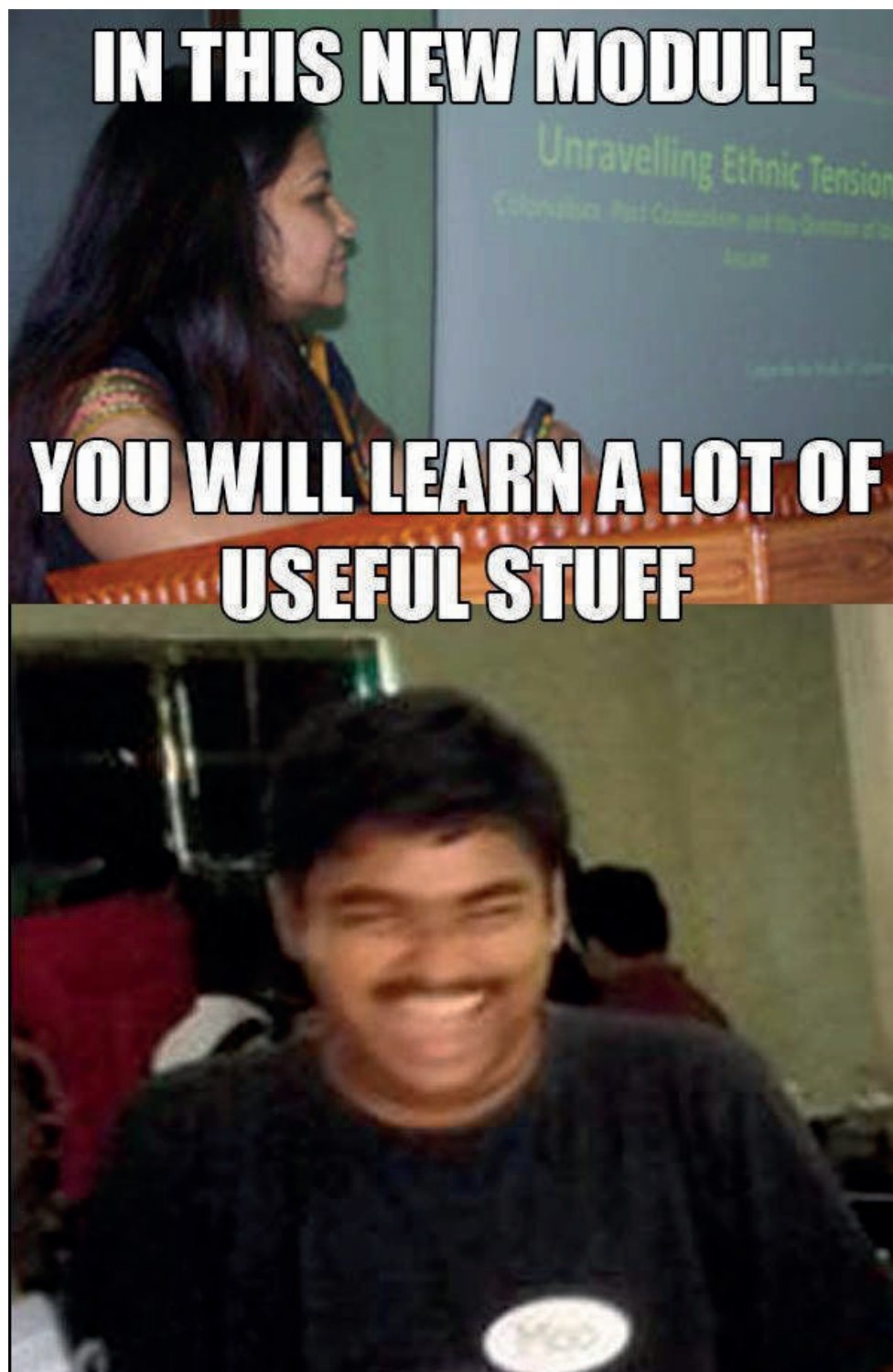
હવે સમજાયો આજો ખેલ? ગોખણપટ્ટીના પાયા પર ચણાયેલી ઇમારત પર જ્ઞાન અને સમજણનો માળ ચણવાનો આવે એટલે કડકભૂસ્સ! અબ ચલા પતા શા માટે વિદ્યાર્થીઓ અને તેમના માબાપો આ JEE-NEET જેવી પરીક્ષાઓને કાઢી નાખવા માટેના રોદણાં રોવે છે? (ફરીથી યાદ અપાવી દઉં કે આમાં બચ્ચાડા નિશાળિયાઓનો રતીસરીખોયે વાંક નથી.) એ લોકોએ ગણિત (મારો પ્રિય વિષય) જેવા સુંદર વિષયને પણ નથી છોડ્યો. પ્રાથમિક શાળામાં ભૂમિતિનાં આકારો સાથે રમાડવાને બદલે ગંદા-ગોબરાં ઘડિયા ગોખાવે છે. પછી આગળ જતા એને ગણિત સુંદર લાગે એની સંભાવના કેટલી? (આ પણ ગણિત છે!) અદ્દલ આવું જ બીજા વિષયો સાથે થાય છે. સ્ટાર્ટરમાં કડવાં કારેલાં ખાદ્યાં હોય પછી ગમે તેવા ચટ્ટાકેદાર ‘મેઈન-કોર્સ’ માણવા કોણ રોકાય? આપણે ત્યાં અર્થવ્યવસ્થા પર ચર્ચા કરનારા અર્થશાસ્ત્રીઓ પાનનાં ગલ્લે-ગલ્લે (અને ATMની લાઈને-લાઈને) વિદ્યમાન છે. પણ શિક્ષણવ્યવસ્થા પર ચર્ચા? નીલ બટ્ટે સમ્રાટ! આનો ચોખ્ખો અર્થ એ થાય કે આપણને ‘લર્નિંગ’ કરતા ‘અર્નિંગ’ વધારે પસંદ છે. જો કે, ખૂણેખાંચરે અમુક જગ્યાએ સાવ અલગ પદ્ધતિથી શિક્ષણના સફળ પ્રયોગો થઈ ચૂક્યા છે. પણ નવું સ્વીકારવાની વૃત્તિ ક્યાં? નાવીન્યને નનૈયો ભણવાની આદત આપણને હંમેશાં નડી છે. ‘તારે ઝમીન પર’ અને ‘શ્રી ઈડિયટ્સ’ જેવી ફિલ્મો જોવી ગમે છે પણ અપનાવવાની દાનત (કે તાકાત?) નથી.

છતાં પણ કતલખાનામાંથી અમુક ગાયો તો ભાગી જ જાય છે. બરાબર ને?

Aarsh Chotalia
UG 2016

છતાં પણ
કતલખાનામાંથી
અમુક ગાયો તો
ભાગી જ જાય
છે. બરાબર ને?

Meme *relief*

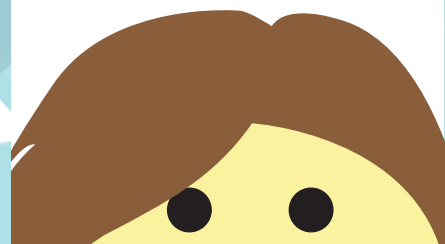
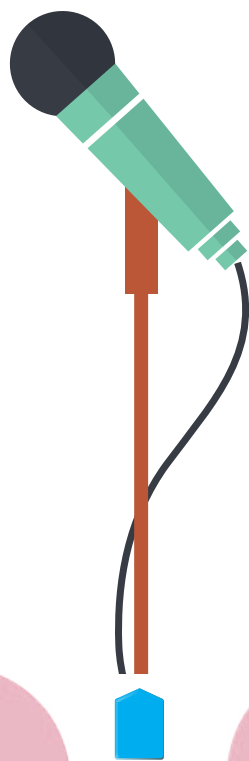


Highlights

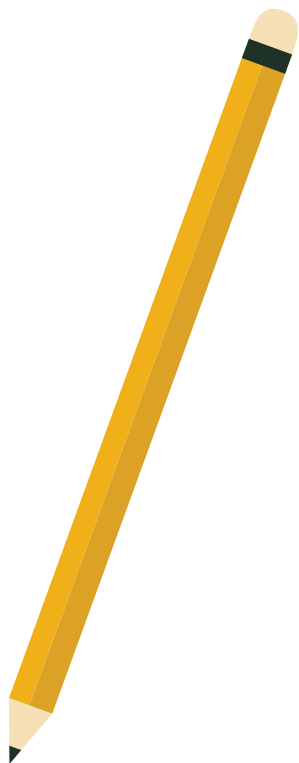
The rise of
stand-up

Freedom

Some Reflections
on Mathematics ...



Contemplations



A trip to mess

Some Reflections
on Mathematics
and Its Relationship — Pg 140
to that thing outside
my window

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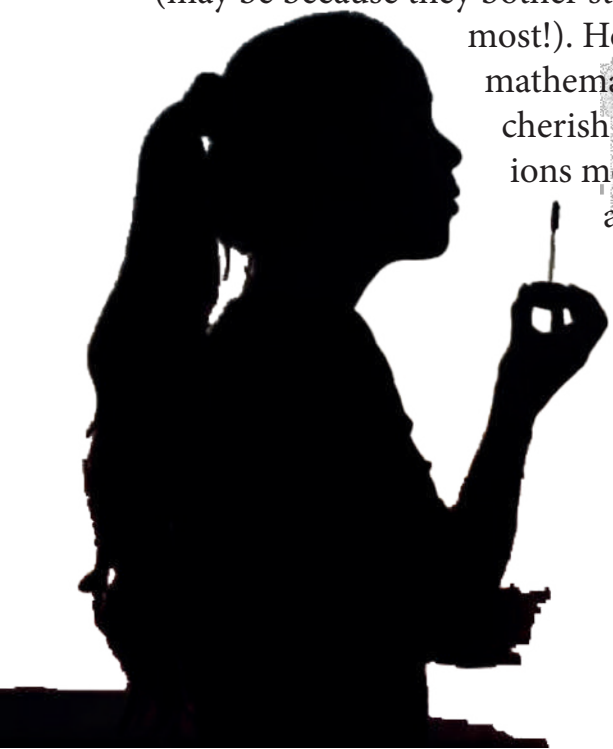
Some Reflections on Mathematics

& Its Relationship to that thing outside my window

I was a bit apprehensive when asked to write an article for the Quarks. Having fondly read every article (at least those in English and Kannada) in all the past issues, I know that I cannot match the writing skills that our students have. But it is a very unusual academic who passes up a chance to pontificate simply because he or she should. Anyway, I asked for advice on what I should write about and was told that something—along the lines of a lecture I had given some months ago in the UG biology seminar—would be suitable. That talk was on mathematics and its connection to that thing outside my office window (the real world, to use technical jargon). Many of you have taken mathematics classes in IISc or elsewhere. It is usually presented sequentially as a train of definitions, theorems and proofs. Proofs usually are considered to be the main thing (maybe because they bother students the most!). However many mathematicians cherish good definitions more than anything else.

Let us take an example. Prime numbers are the list 2, 3, 5, . . . of numbers not divisible by numbers other than themselves and by 1. Most people have seen one or more proofs, often quoted as an exemplary piece of mathematical reasoning. But quite interesting is the definition itself, something one does not necessarily think about. Is it inevitable that prime numbers must be defined? Greeks did define and study them, but there is no mention of a prime number in any ancient Indian mathematics text, suggesting that perhaps it is not obvious that they must be defined. To give a contrary view, we recall a story narrated by Oliver Sacks of two severely autistic twins who used to play a game of numbers where one would tell a large number and the other would reply with a larger number and so on. Sacks eavesdropped, noted down the numbers and later checked that they were all prime numbers! How is it that the concept of prime numbers could escape a rather advanced mathematics culture, but came naturally to the minds of these untrained autistic twins? It is a mystery that neuroscience will someday solve.

In general, the nature of mathematical thinking is fun to speculate about. My colleague Siddhartha Gadgil pointed out a blog where it was observed (and it appears to have nontrivial truth value) that analysts and algebraists (two sub-species of mathematicians that think differently, but can sometimes interbreed and produce fertile offsprings) may be differentiated from each other by observing the distinct ways in



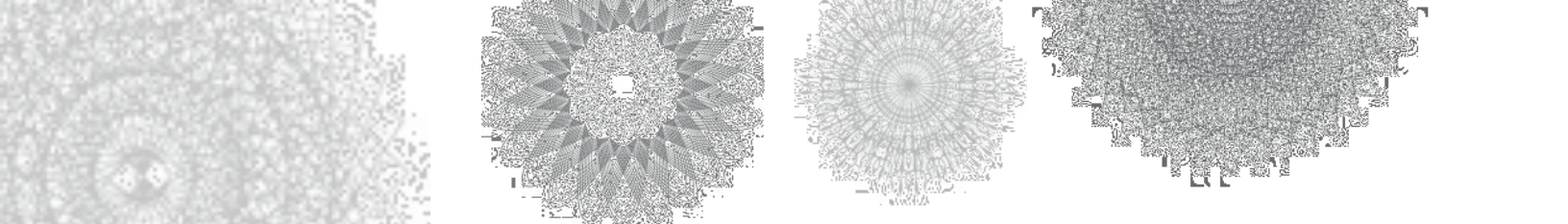
which they eat corn! The reason behind such weird correlates is unknown. What may be uncontroversial is that mathematical reasoning is an accidental byproduct of disparate, more direct, products of evolution, such as linguistic reasoning and spatial sense. For me, the way mathematics is wired in the brain is also an aspect of the connection between the real world and mathematics. However, as it appears to be a total mystery as yet, I move to more common relationships between mathematics and science.

The strongest surprise that mathematics evokes is the way it seems to explain various phenomena in the real world. To take a concrete example, we have all seen insects that seem fatally attracted to street lamps. Why do they do that? Long ago I was thrilled to hear a purely mathematical explanation to this: Insects travel straight by maintaining a constant angle to sun rays or moon rays (by sensing the heat or light on one side of their body). When light rays are parallel, this is a good strategy and the insect travels in a straight line. But with a point source of light, the trajectories are easily computed to be inward or outward bound spirals, leading the poor thing into the light source eventually. To be honest, I have never checked if this explanation is empirically verified (although I don't subscribe to that view, I am reminded of Godel's "statement "I don't believe in empirical science, only 'a priori truths'").

When one thinks of mathematics explaining the real world, the image that comes to mind is of a complicated model which manages to explain some observation to seven decimal places or something like that. However, there are other ways in which mathematics can add value - by providing qualitative understanding of situations or by giving definitions that illuminate. Let me give an example from the field of probability.

In my readings of countless popular physics books, I have learned that a layman's understanding of probability comes from only one source - by watching monkeys typing on typewriters, often to produce the Hamlet. Let us summon these monkeys and provide them with typewriters and commission them to type either the Ramayana or the Mahabharata in full. The wait may be long, but when a success comes, it is by some monkey typing out the Ramayana. In fact, the first hundred thousand million billion successes will all come about by typing the Ramayana. It is not because this epic has more relatable characters, but because it is shorter than the Mahabharata by a factor of 4 or 5. Although the chance of typing either epic is tiny on any trial, one is ridiculously small compared to the other, hence the result.

What is the point of this? Whenever an unlikely thing happens for the first time, it happens in the least unlikely way (this is part of what is called the *theory of large deviations*).



If many frogs try to climb out of a deep pit, the first one to succeed will be seen to have taken a straight path out, as if it knew where it was going. This should be applicable to many things that are products of evolution - although forward trajectories are like random walks (hence unlikely to reach any pre-fixed goal), the past trajectory of a well developed organ will look like a straight path moving with purpose from the start to finish. One can give other such qualitative explanations and I did give a couple more in my talk. But here I end with another point often raised with amazement in connection with the effectiveness of mathematics. It is that the same objects (eg., the same differential equations) arise in apparently unrelated contexts. Some examples given are the appearance of Bessel functions in many physics problems or to take a simpler and more well-known one, the appearance of ellipses in Kepler's work on orbits of planets, or the Normal distribution in statistics, etc.

May be, the mystery is somewhat spurious. After all, ellipses don't appear as trajectories in all problems of gravitation, only when there is sufficient symmetry such as a single heavy point mass. Similarly, Bessel functions arise, whether it be in electrostatics or the study of heat, but only when there is some circular symmetry. In other words, these mathematical objects are not connected to the physical phenomena being considered, but to the underlying symmetry itself.

Which is why, the appearance of Bessel functions in the representations of the rotation group is more fundamental than their appearance in specific problems of heat or light. If one accepts this, then the mystery is partly resolved, for there are not too many symmetries (or groups, to use the technical term). Mathematicians have almost classified all possible symmetries.

It is not that the real world is simple, it is that our mind can only think of (or appreciate) simple things. That often leads us to reach out for some symmetry that turns out to have been studied earlier in some other context.



- Dr. MANJUNATH KRISHNAPUR
Assistant Professor
Dept. of Mathematics

Freedom

Authority and freedom seldom go in synchrony. Adding further complexity to this issue of conflict are those situations when the freedom promised to us amounts to nothing. Every so often we walk into a problem we have come across several times before- that of enforcing compulsory attendance (up to 80% for all classes), when students instead wanted the freedom of choice to attend the classes.

When the authorities (UG office) were enquired about the new attendance policy we got two answers: the first one stating that there was a 'correlation' between low grades and low attendance, and the second being that parents have requested that this rule be enforced. This is ridiculous, considering the fact that we are supposed to know how to choose the representatives of our country but need parents' permission on whether or not to attend specific classes. The even more surprising thing about this policy was that the students with low attendance were being penalized by deducting a fraction of their marks from examinations.

It must be considered that this step didn't come even close to working. There were irregularities in the attendance process, there were several proxies, null attendances, lost attendance sheets and many other problems. And the system effectively punished or warned the 'guilty' students off from using their freedom. Yet another case of the administration's interference would be that of not allowing food into lecture halls: though this has not been investigated thoroughly I can be sure that this, too, wouldn't have worked. On asking for the reason for enforcing such a rule the reply seems to be that students are not disposing their waste into dustbins. Dragging the problems on won't solve them. So, going back to the problem of low class strength, surprise tests can be introduced which would contribute to bonus marks. (Of course, professors may use their own freedom and choose not to heed such a request.) And the obvious solution to the seeming second problem could be to enforce a fine on people who fail to dispose their trash in the bin.

As freedom is taken away there is always unrest. People might say that giving more freedom would not improve the situation. I disagree with them. Recently we were introduced to our specializations in departmental courses (as opposed to pure UG courses) where open book tests are quite common. But Prof E.D. Jemmis, teaching Inorganic Chemistry, took it to another level: he made all the tests unlimited (some of our classmates have taken up to six hours!) and he also allowed food into the exam room. This made the students more and more comfortable with the exams and the students seem to have learnt how to think rather than just run across the corridors memorizing formulae the night before. I totally agree with the fact that making a question paper for open book tests is a challenging task for the professor too. However, it is in some sense a necessary evil for the professors that some of them need to be ready to take up the challenge of making us learn the course rather than just pass it.

Freedom is not simply important: it is essential.

Naga Teja
UG 2013

The rise of STAND-UP

G Jyotsna
UG 2015

Stand-up comedy seems to be the buzzword at big events today. For instance, Pravega 2017, our cultural fest, an IISc-UG community effort, had a 'Comedy Night' with Biswa Kalyan Rath, a stand-up comedian, as a part of its pro-nites. Biswa Kalyan Rath is just one name among the huge number of rising stars of stand-up comedy in India. But how and why is stand-up becoming so popular?

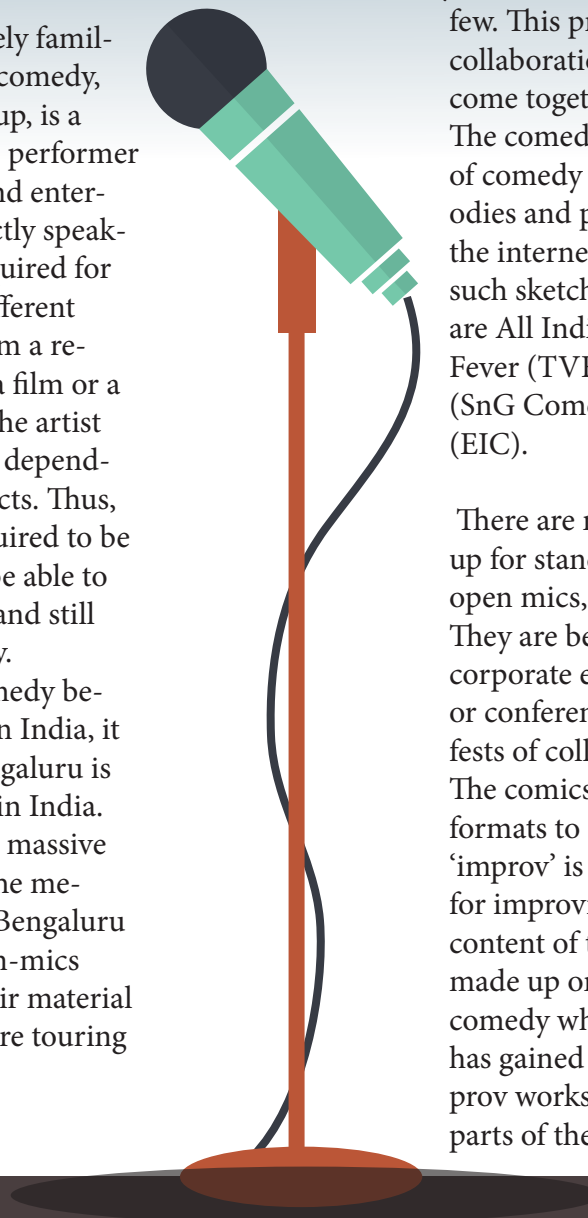
For those who are not entirely familiar with what it is, stand-up comedy, commonly known as stand-up, is a type of comedy in which the performer typically stands on a stage and entertains a live audience by directly speaking to them. The skill set required for stand-up comedy is quite different from that required to perform a rehearsed piece of comedy in a film or a play because in the former, the artist needs to improvise instantly depending on how the audience reacts. Thus, stand-up comedians are required to be spontaneous. They need to be able to respond to varied reactions and still deliver their jokes coherently.

Going back to stand-up comedy becoming the new cool thing in India, it must be mentioned that Bengaluru is one of the hubs of stand-up in India. This is largely because of the massive viewership for stand-up in the metropolis. Many cafeterias in Bengaluru provide live artists with open-mics where they get to try out their material before a small audience before touring the country with it.

These days, to increase the number of consumers of their content, stand-up comedians are distributing their content on the internet. This has been a brilliant move because their popularity has seen a huge rise. In this process, many of them have become 'Youtube celebrities' - Kanan Gill, Biswa Kalyan Rath, Kenny Sebastian and Zakir Khan to name a few.

This process has also brought about collaborations wherein many comics come together to form comedy groups. The comedy groups then release videos of comedy sketches, stand-up clips, parodies and podcasts on their channels on the internet. Some of the most popular such sketch comedy groups in India are All India Bakchod (AIB), The Viral Fever (TVF), Schitzengiggles Comedy (SnG Comedy) and East India Comedy (EIC).

There are many platforms opening up for stand-up comedians other than open mics, public shows and Youtube. They are being invited to perform at corporate events like business meetings or conferences, in TV shows, at cultural fests of colleges and at holiday parties. The comics are also trying out different formats to entertain the audience and 'improv' is one of them. Improv is short for improvisational theatre where the content of the comedy is improvised or made up on the spot unlike stand-up comedy which is scripted. This format has gained a lot of popularity and improv workshops are coming up in many parts of the country.



Comedians these days are also quite active on social media. Here they raise new issues and also make their views on certain issues public. Since these comics put forth their views in a witty manner they are able to reach out to a large number of people. Their opinion on things is being considered the opinion of the intelligent. Though this is partially due to admiration, it is also because the comedians display a sense of impartiality. They come across as people who are not easily influenced and who will not hesitate to question a wrongdoer or stand up for a cause they strongly believe in. Owing to their popularity, stand-up comedians are also sought after by brands for brand endorsement in return for sponsorship. Product placement has become very common in the content distributed by the comics. Stand-up comedians like Biswa and Kenny say that the advantage that brands get through this is that they get the metrics for gauging popularity right, for instance through the number of views that a Youtube video gets or the number of 'likes' a post on social media gets.

But why is stand-up comedy becoming so popular? Upon closely examining the content of stand-up comedy I feel that it consists majorly of funny narratives sometimes overdramatised, lampoon and enactments of some unrealistic what-if situations. The directness with which the comedians make fun of people or situations around them or sometimes even themselves is what first establishes their connection with the audience.

An article in the journal 'Frontiers in Psychology', titled 'Robot Comedy Lab: experimenting with the social dynamics of live performance' describes how a performer is able to "work" an audience. The article says that the feedback from the audience affects the performer and that signs of boredom from the audience tend to disrupt the performer's fluency.

So we can see that in the industry of stand-up comedy, there is a symbiotic relationship between the comedian and the audience. The comedian entertains

So we can see that in the industry of stand-up comedy, there is a symbiotic relationship between the comedian and the audience.

The comedian entertains the audience and support from the audience helps the comedian establish himself.

the audience and support from the audience helps the comedian establish himself. This relationship is one reason why stand-up comedy is becoming popular. The audience or the fan base feels a great connection with the artist and this connection is quite different from what they feel with their favourite actor or favourite writer, where the feedback is not instant and has no immediate response from the artist.

I also believe that another reason why stand-up is gaining popularity is because of how relatable the content is. Though the stories are intertwined with exaggeration and dramatization to amuse the audience, the underlying feelings of exasperation, liking or surprise are what keep the audience hooked. The vulnerability of the comedians makes them very relatable to the audience.

However, for a very long time, the audience did not have a very clear idea of what it was like to be a stand-up comedian and how things worked in the industry. We did not know how the artists managed shows, what reactions they got from their friends and family, from where they got ideas for producing fresh content and so on. This is changing now because of their activity on social media.

A I B

T V F

Kanan
Gill

Kenny
Sebastian

Biswa
Kalyan
Rath

The celebrity status of the comedians has led to them speaking about the industry in interviews and has given us an insight into how they go about looking for content. Most comedians say that they get ideas from people or occurrences around them. They pick up jokes from everyday conversations. They also say that they try out

their material quite frequently to see how many laughs it gets. Recently, a web series titled 'Humorously Yours' was released by the comedy group, The Viral Fever (TVF). This series speaks about the life of Vipul Goyal, an Indian stand-up comedian. It talks of the lives of comics, the problems they face and their work routine. For those of you who like stand-up comedy or are interested in it because of this article (hoping I have managed to kindle interest in at least a few of you!) and haven't watched this series yet, I recommend it. It makes for a great watch with its interesting storyline and great jokes.

In conclusion I would like to say that stand-up comedy is a relatively recent phenomenon in India. Speaking of its history, it has Greek roots and flourished in the United States and the United Kingdom. Many of today's Indian stand-up comedians say that they are fans of English comedians like Eddie Izzard and Russell Brand and American comedians like George Carlin and Jerry Seinfeld. Also, it is not that there are no traces of spontaneous comedy in Indian history. In performances of well established Indian art forms like the Avadhanam and the Harikatha, improvised comedy is an integral and essential component. Stand-up performances too, have been around in India for about three decades. But they were not very well recognised except for a few by people like Johnny Lever.

But now, stand-up comedy is taking shape and gaining recognition in India. Only now is it actually being accepted as a viable career option. There is now a huge network of stand-up comedians who are supporting one another, appreciating each other's work and making room for fresh and good quality content in the industry of comedy. So folks, let us sit back and enjoy stand-up. More importantly, let us start taking our humour seriously and encourage free thought, the need of the hour.

SOMETHING SILLY

-Ashwin Maran
UG 2015

So, I started writing this article. I had already typed out the first line before I realised I hadn't the slightest idea as to what I was on about. So I decided I would delete the whole thing and start again. After all, *if you fail at first, you should try again*. So, I started again and had managed a few more lines before running into another impasse. Then I realised I shouldn't be *beating my head against a stone wall*. That really put me in a bad mood, and I gave up on writing the article all over again. I assumed that *if it is out of sight, it is out of mind*. But, it turns out I was wrong. Apparently, *absence makes the heart grow fonder*.

So, I started working on the article for the third time. I had hopes. After all, *the third time's the charm*. But I was wrong again. I had been unaware of the fact that *bad things happen in threes*. I was completely demoralised, and I didn't know what to do. At this point, I figured that if it is true that *well begun is half done*, then I was nowhere close to being done. But then, it dawned on me that *all is well that ends well*. So, if I could somehow end this article well, all will be forgiven. But to do that, I needed to go through the boring middle first. Except, I figured, I didn't really have to. So, I decided to delete the next couple of paragraphs, that I never typed in the first place, and skip the middle to jump straight to the end. Hey, *fortune favours the bold* after all. It was only then, that it struck me, that if I deleted those paragraphs (that I had never typed in the first place), then I wouldn't have much of an article. *Look before you leap* suddenly made some sense.

So, I decided to ask a friend for some help. That is when I learnt that *great minds think alike*, because he didn't have any ideas either. Of course, we could both just be a couple of fools, because *fools seldom differ*. But, I am more of a cup-half-full sort of person. My friend then suggested that maybe I should rope in more people to help. I was suspicious at first, since *too many cooks spoil the broth*. But my scepticism turned out to be misplaced, because sometimes, *the more the merrier*.

One of them suggested that I should take my time and really think it out. After all, *slow and steady wins the race*. On the other hand, *time and tide wait for none*, and I really had to finish the article in time. Then, someone finally suggested that I try to pass off this gibberish that you are reading, as the article. That was of course, my plan from the very beginning. But it sounded really loony, especially when I heard someone else say it, and it is *better to be safe than sorry*. However, *nothing ventured, nothing gained*. So, I decided to run with it.

Right then, one of those people who had helped me write this article wanted my help with something else. That seemed fair. As some wise person probably once said, *do unto others what you would have others do unto you*. But, some other wise person also said, *nice guys finish last*. So, I asked my friend to go away. I was more or less done with my article. But, I still needed a title. Of course, I knew that I needed a killer title for the article, since *clothes make the man*. But as you can probably tell, I am not very imaginative, and I was stuck for quite a while. Then I figured I might as well go for something silly, and hope that *people do not judge the book by its cover*.

I was pretty pleased with my work, so far. I figured I could fit in a few more silly proverbs somewhere, but it was getting really contrived at this point. So I decided to *quit while I was ahead*, and end the article. Of course, as we all know, *winners never quit*. But by then, I had realized just how meaningless, pointless and utterly worthless these proverbs are. So, I decided to end it anyway.

DECEMBER

Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

December 11, 2016

My roommate knocked the door. Although I was asleep, I could hear the knocks. A second shower of knocks followed. Abandoning the comfort of my warm bed, I walked through the wet clothes hanging like dead on the line and drew the bolts open. (I didn't prefer hanging clothes in the terrace because of the monkeys!)

My roommate tapped me twice. "I'm off to the mess", that is what he told me when translated from Hindi. And then he left. I tapped the screen of my mobile twice. "04:23" it flashed in white against the red-black background. Yes, they were big enough to be detected by my half opened eyes.

I receded to the warm bed and closed my eyes. In my half slumber, I heard that my neighbours were studying for the Materials exam, scheduled tomorrow. And indeed they were studying quite peacefully (!), excepting the unpredicted and unwanted expletives

2016

DECEMBER

A TRIP TO THE MESS

Ratul
Biswas

hurled at I-don't-know-what: probably the subject, the Institute, the planet or life itself, which however my ears were anyway wont to.

"Nah, I should get up now." With this resolution I flung the warm sheets away, which was just the 'activation energy' necessary for me get off the bed. I dressed and then went to the washroom to splash some cold water onto my sleep. "Was my hair looking good? Fine, I don't bother though."

In the vestibule were some of my friends chatting about some god-knows-what topic, probably string theory,

or maybe some rational things about what to major in!

Anyway, barely 5 minutes up from sleep, my head was not in a mood to attend to them. For once I had the thought of summoning a friend who hasn't been to the mess yet, and had as well walked a few steps towards his room. But I retreated, because I wanted to walk alone.

I climbed down the stairs and approached the exit. A sharp U-turn to the road leading to the Health Centre is the path I chose. The traditional path. The sun was red and the slanted rays filtering through the canopy cast a beautiful glow on the ground. I was so mesmerised that I absent-mindedly stepped onto the road from the high sidewalk, and almost fell down. "I should be careful." I told myself. Then a right turn through a gate and walking past the glass windows of the mess, which reflected how ugly my hair was, I collected myself at the mess entrance.

Three or four of my friends at the mess had almost a quarter of their meal left when I joined them.

"...has the dean confirmed tomorrow's exam?"

"No, not a mail from him yet."

"But somebody at the office said that it's going to be tomorrow."

"You are a moron to believe in what the people at the

office say."

"We shall have to ring up the dean. If the exam is postponed, then I'll chill out today."

A brief silence followed.

"So you'll be going to the Service today."

"What is the discussion about?" I inquired.

"Well, he is talking about the Sunday Service."

"Where is it? Oh, is it the church which is visible from the Physics Building?" asked a member at the table.

"Yes."

Silence, which was broken by a few sips of coffee and the conversation resuming.

"I had never seen you go there." inquired another.

"I go there every Sunday."

"Which language do they instruct in?"

"Malayalam, but there are other churches who instruct in Kannada and English."

"What does the cross signify?" a third person asked.

"Burden, a sign of torture."

"No a burden would be a more appropriate mean-

ing.”

“Anyway, so isn’t there anybody from our batch going?”

“No.”

“Him?”

“He’s an atheist.”

“Okay.”

The speaker who spoke the latest turned this question to the others at the table, perhaps out of curiosity.

“So are you an atheist?”

“Yes.”

“And you?”

“Yeah, me too.”

Somehow, I don’t know why, the question was not fired at me. But I did not hone my already-poor-skills at probing into others minds and reading them; I had failed to understand how one’s belief in god could satiate another person’s hunger for both food and knowledge.

I preferred having the vadas on my plate, remaining silent all this while. Maybe my eloquent silence prevented them from asking me the question. Or maybe

they thought that I was undergoing mood swings and so they didn’t want to disturb me.

“So I was visited by a gay friend yesterday.”

“Who was he?”

“Well I won’t tell you. You’ll compare him with me then.”

“Look at the glow on his face. They shared the same bed!”

A short burst of laugh followed. I was still expressionless, just as before.

They had finished their meal and were waiting for me.

“You can leave, its fine.” I spoke for the second time now. They kept their plates at the dish landing and left the mess. I was the solitary loon at the table, sipping occasionally at my tea, holding the glass in a unique fashion that was idiosyncratic of me. A few blank stares and then I caught sight of another friend sitting right in front to block my view.

“So did you start off with Materials?”

“Yes, I started in the morning.”

“Were you reading in the noon as well?”

“No I was asleep.”

"Oh, even I wasted my noon watching 'Breaking Bad'."

I was frankly not interested in the conversation. But

I did not let my face reflect my mind. I sipped my tea faster to finish it and then I said, "I shall go for a walk now. I'd like to leave if you don't mind."

He didn't mind. I got out of the door and descended the stairs. A big blue star hanging from a tree and some posters on the board advertised the approach of Christmas and the end of one more year. I decided to take the longer path.

The weather was particularly conducive to the growth of my fertile thinking mind. And usually on these occasions I take cynical pleasures of branding people, or picking up what other people converse about. Indeed, I simply pity those people who pop earphones into their ears and shut themselves out from the world!

But today, I was in the particular mood of collecting ideas that are engendered in the head of others who discuss it with their friends to their trip to the mess. All kinds of conversation flowed into my ears. Sadly, I could pick up those in English, Bengali and Hindi only, for I know no

language else. But of course I could extrapolate what people may be speaking in the tongues unfamiliar to me.

"Hey, how is your girlfriend?..."

"So, did your exams get over?"

"...well, if you fare the first paper of your exams well, then it's a tremendous boost to the confidence..."

"SCs are everywhere in this country..."

"...Well so are the Muslims..."

"Damn it! When will the ATMs start dispensing notes?"

"Somebody broke a confocal in the lab."

"So what happens when you reduce the temperature is..."

"No, but you have to take into account the transformations properly when you are dealing with relativistic things..."

While I was walking past a restaurant by the side of the road, the conversations were more inclined towards food.

"Thanks for the treat."

"Yeah, the curry was not good. I never had it before."

And some of the conversations were peppered with advice, laughter, anger, hatred or depression. But I did not delve into them enough to classify them.

The cirrus clouds were like feathers in the sky and the sky hadn't lost its cool blue hue yet. Somehow, due to an unspeakable reason, I did not want the sun to set today. I was lost. Yes, in that familiar place I had been frequent to for a year and a half now, I was confused.... Should I look at the pebbles on the road and feel their texture? Should I pluck one of those pink flowers and admire their ardent colours? Should I ask the withdrawing birds as well what they thought about in this hour of retreat, this hour of the dusk?

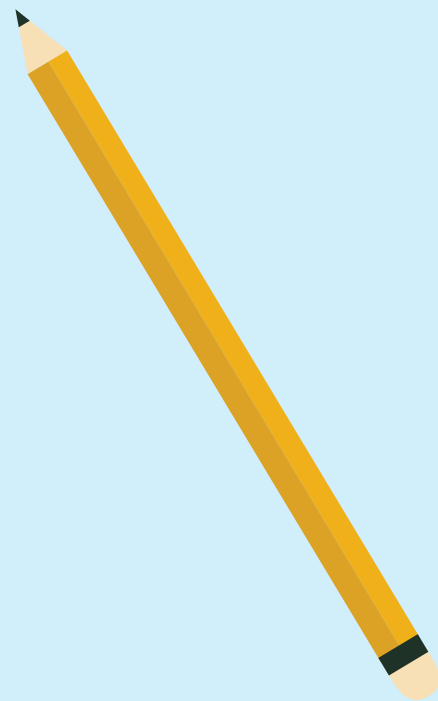
I had taken a few steps forward...

"Oh hell! The most miserable and disgusting hell!"

Certainly I have censored my curses here! My mobile alarm went off. "Alarm! 05:30 pm" - it flashed the time I had set thinking I'd wake up to go to the mess. I felt extremely repulsed at being jolted back to my senses. I returned to my hostel where the disgust and repulsion was aggravated tremendously by the rebellious metal music that some of my friends couldn't bathe without. Despite my words being unable to communicate the feeling, I hope that the readers

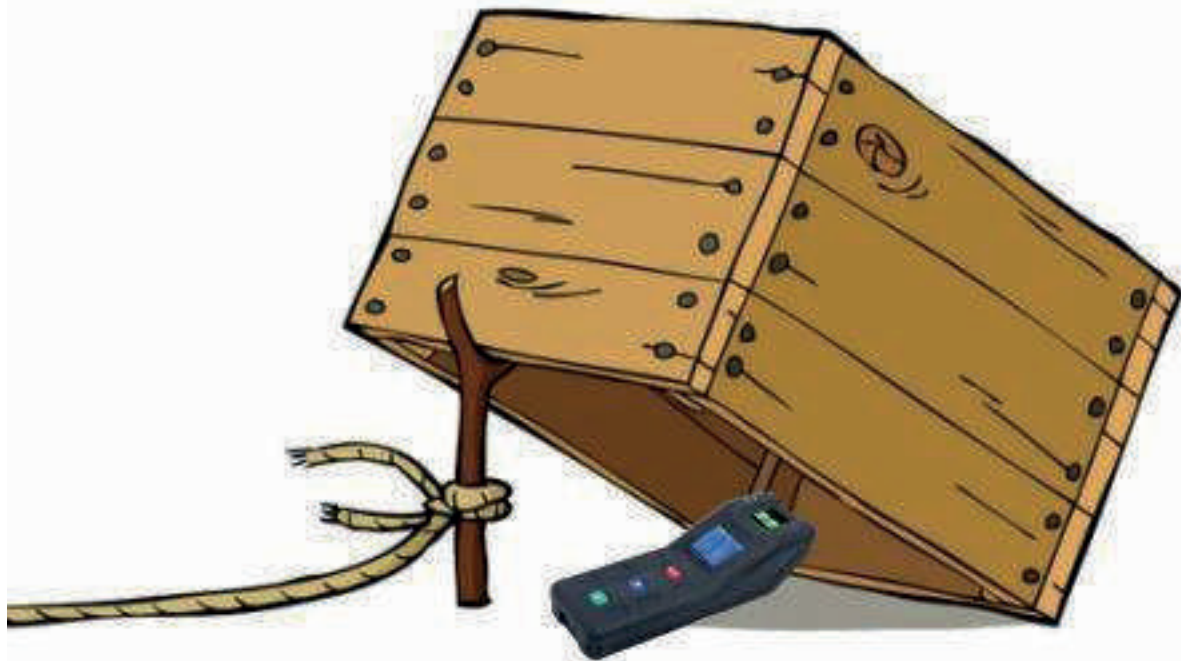
without taking offence for my railing against metal music do understand the reason for my repulsion. The reverberation of the music had in an instant turned into a desert my mind which was erstwhile flooded with thoughts.

Therefore, I shut myself up in the catacomb with the clothes drying all around me and decided to pen down my experience. No wonder, it was no extraordinary an experience, but often it happens that the smallest of things leave an indelible impression when the biggest of incidents get buried under the sands of time and memories.



Meme *relief*

How to kidnap IISc UG



Highlights

blog

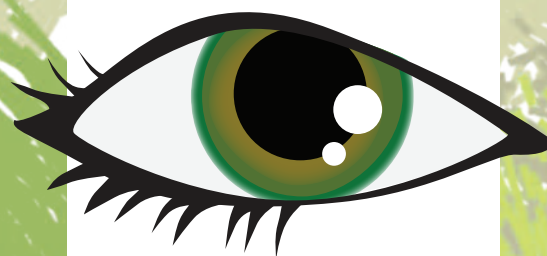
Fairy Ta and Dreams

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A boy story

Green eyes



Perhaps a story

Stories

A boy story — — Pg 156

Green eyes — — Pg 165

Perhaps a story — — Pg 166

A perfect moment — — Pg 168

Not so eusocial
after all — — Pg 172

Soulfire — — Pg 175



A perfect
moment



A boy story - Teebro Prokash

UG 2014

Fairy Tales and Dreams

...the view from the zenith was glorious.

Shantanu always liked this blog. This was his elixir – if he were to call so. A blog is so fundamentally different from a book – or a weekly or a monthly. It was much more alive, much more throbbing. You could feel the other person speaking out his mind. In this case – her. She was speaking her heart out.

It was unpredictable. You never know when it would come – when she'd talk again to you. You don't know what she'd say – the next time she said.

And it was so jolly. It was all light – it would softly enter you, and reach the darkest corners to illuminate. You would feel revived. You would want to believe in the Middle Earth – the serene of the Grey Heavens – the beauty of the High Elves – you would find yourself looking upon the earth from the halls of Rivendell, you would bathe in the starlight seeping through the stairs of Caras Galadhon.

She would bring your brightest fairy tales alive for you.

She would have you bask in glory – glory that she renders in her lines.

Glory

When people hate politics, they never know what they really hate. They hate a very fundamental spice to their existence, glory. Take a school, for example. College – oh yes, college politics ruins lives! School also has its politics – the staff-rooms are stuffed with vicious re-

marks snidely pointed, there is always favouritism, then the boys talk about it as well – football-ground politics and what not – that's quite boyish, really. Not so much.

The politics that thrives in a school is pretty much the same as that you see in your municipality and your nation and your corporations – it is a game of glory. Glory – that gives you voice, and begets you a sway over others. Later, power.

Shantanu hated glory. Very consciously. He knew what it was. And he hated it for that. Every bit of it.

Not every bit of it was 'bad', maybe, he considered at times - but every bit was an excess. That had to be dearly paid for.

He was no stranger to glory any more. He was drenched in it.

'Politics'

There was a reason it was called football-ground politics, though. Football had a huge sway over glory.

All who would make to the school team would almost be raised to the height of heroes. Even after they went on to plus two, if they stayed on, of course – they would referee the intra-school matches.

HOME

blog Fairy Tales and Dreams

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And they got most of the girls. Especially, the good-looking ones.

And they smoked. Most of them. Going quite opposite of what Pele would have to say of smoking and football.

They maintained themselves as cocky. They would have the most bizarre of haircuts – to the extent

that could be permitted in school, or often beyond that. And that too, would almost invariably be spiked. Soumavo even got suspended for his haircut once. They would never tuck their shirts in – as long as they could afford it. They would never button up the last two buttons. Their neckties would hang loose. They got the weirdest yet yankee sounding nicknames.

They would talk in irritatingly obscure abbreviations – derived mostly from their face-book-chats. They would always seem to throw their legs off while walking.

And they would never be accompanied by their parents.

Cockiness had quite a charm – particularly in the junior days – when glory was in short supply. One unmistakable sign of being cocky was not being accompanied by parents on your way home. The ones who were walked back home were the sis-sy-est, the highest prestige held for those who neither availed the school bus nor were to be picked up by their parents. The going back from school mattered more than the coming. The calculations went differently for those who went home in their private cars.

Shantanu was never accompanied by his parents. Both of them had a busy schedule - nevertheless, they always found time for him in the evenings. He never complained, yet he would always have felt better if he could have been picked up. He never got to enjoy the glory of going home alone. He never made it to the cocky lot. He was always counted among the bullied.

And well, bullying had a straightforward relation with glory. It would get complicated with time, though.

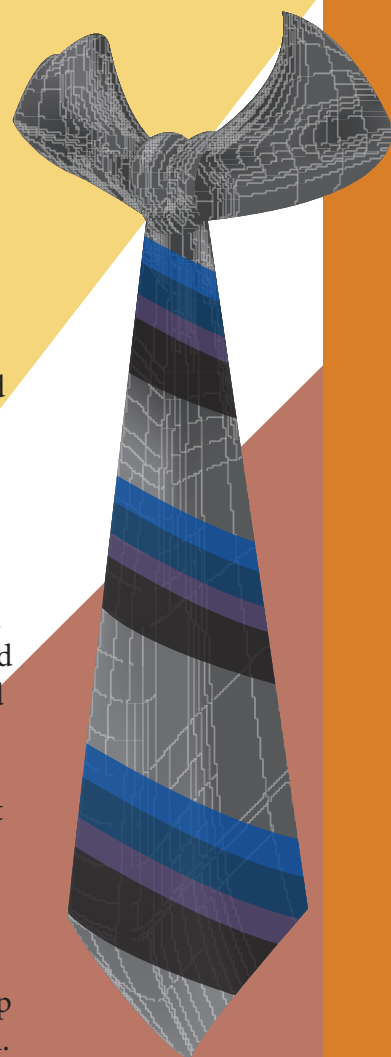
Studies was no glory at all. It was rather to be ridiculed at. It was for the good boys. And good girls. This was one field of glory that equalized the boys and the girls. Not for long though, because by the time they were in the eighth standard – the girls were the standard sources for class notes. And if you were to have a bit of art done to your project – you were to go to a girl. But this was not till then.

If you are one of the good boys, or girls, you are sure to get a share of the bullying. The ones at the very top enjoyed a safeguard though. They were more like forbidden jewels – not to be touched. And some of them grew up so – forbidden jewels, never belonging to the class.

Things started changing from the seventh standard. People started their standard phase of growing up. Things closer to academics started to come prior in glory. The equations started changing.

Getting into the football team was no more the only realm of politics.

Here was where Sourup came in. A brilliant football player, and a smart entertainer - he had always been popular. And he



was good with studies – he featured among the top few. That, ironically happened to add to his popularity – because the football heroes would need his help before the exams. And then, the stage came into being. That turned out to be his forte. He

was good with current affairs and sports and all – so the quiz featured him. He was eloquent and smart – he burst his way through the prizes of elocution and debate; add to that, he was a great actor. He turned out to be a great performer – an all-round one. He was handsome, with a beautiful voice, and could sing if the need be. It was his time to bask in glory.

And he made it to the football and cricket teams too.

He fitted into every bit of the position he enjoyed. A favourite among teachers too, he held prime importance in the class.

When it came to girls, he was no less proficient either. He had a long-standing relationship with Oishee.

Sourup was a demonstration of glory.

Allegiances

- *I have always been loyal to the school – so as to say.*

And this was a sincere truth. Shantanu knew it. Sourup had truly been loyal to the school that he belonged to.

And Sourup didn't bother himself with pretence. Not with Shantanu, at the least.

The question was – why he was saying this to Shantanu.

- *Not that now I'd be very emotional when the time comes for me to leave, but I shall always have a soft corner for this school.*

For all of you. Sayak, Dasgupta, Oishee – you – all of you. I shall always hold on to you dearly.

Sourup was seriously understating things. Was it the sudden surge of scepticism? Or was it that he felt a tinge of unease to speak of his emotions before Shantanu?

Shantanu was the supposed proponent of bare logic. He remembered – when the nationalism debate raged the television and the newspapers everyday – he had brazenly denounced the glory that one reserves for one's school. Such glory – he said – brought forth this nuisance.

Probably, he thought – such debates might have had people inculcate scepticism. Probably. Or maybe the high regard for sociopaths helped this happen. Particularly Holmes and all those TV series that had psychopaths at the heart of their stories, basking in the glory of being correct, quite non-challantly so, and then walking away with a half-satisfied smile.

Or maybe, people were merely growing up.



Sourup was a patriot at heart. Through and through. He loved his class, he loved his school, he loved his country. He held them in high regard. Shantanu - ignored by all such foundations of glory – grew up to ignore them himself.

Shantanu, himself, hated scepticism as well. One – scepticism also attracted glory. That was what went wrong in the first place. Also – because logic was one thing – and scepticism was very much another. It was pointless to scathe every nicety of life. It was pointless to brand every nice thing as cheesy. Romance made the everyday possible. It was stupid to call romance stupid.

One's allegiance towards one's school made the school a nicer place to be in. He did not want Sourup to be ashamed of it. He wanted Sourup to proclaim it proudly. He wanted Sourup to keep the niceties alive.

This is why he loved Manasi. She would write unabashed – of the sweetest of her dreams. She would make glory feel like the rays of the Sun – that would touch every inch of his skin and wash off the mirth of scepticism. Relieve him of his burden. Make him feel alive.

I rose and rose; and as the world grew farther – the more beautiful it would become. It was silly to think of the squabbles because they were so minor that they never even did as much as leave a scratch. It was this beauty that was real. It was this beauty that kept us alive.

The farther up I went, the closer I was to the beauty. To the grandeur that we all share.

I stood at the zenith, and the view from the zenith was glorious.

If he really loved anyone – that would be Manasi.

Shantanu

As a child, Shantanu had always wanted to fit in. But it was never so easy.

He always tried to make it to the football field. But he was so horrible at it that he would be detested – and no team would be willing to take him. He wasn't quite smart either. Studies came easily for him, but the exams were never so kind.

He could, at best, be described as a recluse. But a reckless recluse he was. He got so used to unease that nothing would cause him much unease any further.

So when the stage came into being – he had nothing at all 'to fear'.

He shared the quiz stage with Sourup, quite as proficiently as Sourup did. He got an identity for himself. When elocution came to the scene – there was nothing to hold him back. While everyone was afraid of making a fool of oneself on the stage – that didn't even figure in his considerations.

By this time, he turned out good with sexual jokes as well. Not that he understood them fully – when he first received the Science book for the eighth graders that described the human reproductive system in full detail, his first impulse was one of

perverse joy.

After four years of getting rejected in the recitation hits – he stood up on the stage for elocution competition.

There weren't many participants to afford elimination in the hits in the first place.
And he spoke well.

He turned out to be a good debater too. He fluently presented logic and emotion.
And while Sourup's charged speeches would always attract deafening applause – Shantanu happened to bag quite some prizes.
When in the tenth grade – he finally made it to the recitation stage as well.

Adrita

Shantanu had always wondered about the role gender would play in such equations of glory. It was conspicuous, and intriguing.

What went on with the girls was in some ways quite separate from what went on with the boys. They happened in parallel and they affected each other. Of course, the good girls were good girls.

From his point of view, the girls grew up to be tools in the elaborate play of glory. Not that boys weren't so – but girls seemed to be tools merely by virtue of being girls.
Look at it this way. Football was once a prime decisive factor in glory. But the girls were left out of it. Even if girls would join in, especially in the more casual games – they were 'girls playing football'. They were considered as such. So was it if a girl would play well. And if you are boy and aren't as good as her – oh, pity, even a girl plays better than you do!

Even as they grew up - this just got reinforced.

Take Adrita for example. In their junior classes - she was a regular to the football field. And she did play well.

She was pretty good with her studies, too.
As they made it to the higher classes – she turned out to be a brilliant performer on stage as well. It was she and Sourup who would represent the school everywhere – in every competition that would be. Shantanu hardly ever stood much of a chance.

Yet, Adrita was the girl on the stage.
And Oishee was more phenomenal - she was Sourup's girlfriend.

Girls were considered prospective girlfriends of boys.

And, interestingly though, Adrita was never considered one. She was beautiful, though, in her own way. Shantanu had always liked her.

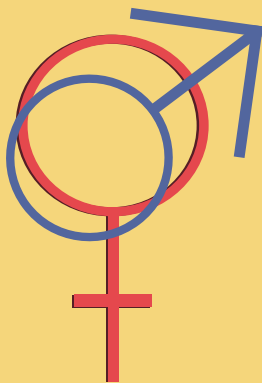
He was thinking – how would have he felt about '*Fairy Tales and Dreams*' had Manasi been Manas?

Sourup

- *I know, you don't like these emotions*
- *I appreciate these emotions, Sourup – maybe, I am overtly harsh about them. Look, Sourup – these emotions are good, and this bondage is necessary as well – I'm sorry I hate them.*
- *No – you must have your own reasons. And I admit, these are quite silly.*
- *They are just dangerous.*

Sourup well knew the power such emotions hold. He made use of so when he held sway over it, and then, fell victim to it.

- Yes, probably, that is true.



That was true. Sourup hadn't been treated kindly by such emotions.

Nobody else had been treated much kindly, either. But it was greatly heartening that Sourup still held fast to them.

As much as Shantanu disliked Sourup for what he had done to the class – he always loved him for this one reason. Sourup was honest in his emotions. He made a lot of good things happen. Until he could, he held the class together.

Sourup hadn't ever taken him much into consideration, though. He had his own circle of friends, and Shantanu never made it to that.

- *I understand now, Shantanu, what I have done. But I was penalised for all the wrong reasons. Believe me, I always meant good. It was good that you scathed these emotions. But somehow, I still can't agree. It hurts for me to see the unity of the class shattered. I would so much like to see all of us*

being foolhardy and holding fast to one another. All of us doing some stupid things together. Maybe, organize going to a movie sometime, after the school is done. Run around the corridors, and if someone breaks a tube-light – and no one will say who broke it. And an entire section would be suspended. We shall be kneeling down together, but it would actually be fun.

I still love all of you.

And I still love Oishee. I hope she understands.

He couldn't understand why Sourup was saying this to him. But he knew that he would never say this to the closest of his friends. He would never bother them with this. And then there would be the explanations that would be given to him. Why they did to him what they did. How they never meant any of it.

Probably, that was the reason he was telling this to Shantanu.

He felt deeply sorry for the weary boy sitting beside him, his eyes turned down yet hopeful. Maybe it would have helped if he cried. Yet Sourup wouldn't. He would just let go of a sigh, and put his face down.

- *Two years from now - none of this would matter. Believe me, none of this. We would let go of all our grudges as soon as we pass out of here. Only the good moments will stay with us. The best of our times. Our matches, our cheers, our stupidities. Believe me, these emotions would mean so much more then. Because that is what shall stay with us. Two years from now, I would just remember all the tiffin recess madness and the random class-bunks and the adventures and how I and Oishee would giggle and find our way to somewhere nobody would find us. I will remember my first kiss, my first time in the school jersey and all the madness that we'd do when we prepared for the annual exhibition.*

And I will forever hold on to it.

Shantanu wrapped his arm around Sourup and let him rest his head on his shoulder. Sourup needed a break. A long one.

Shantanu just wished for the pre-board tests to get over.

Consequences

Sourup happened to have a huge sway over the class.

His influence was very evident in how the football team would get selected or the repre-

sentatives for a competition would be selected. And worse, he probably didn't even understand that fully.

He even influenced favouritism from the teachers' side.

That could quite explain why, in spite of bagging the debate prizes for two years, Shantanu never represented the school regularly.

It was a positive feedback loop. Everyone knew that Sourup could be relied upon regarding things – so he got responsibilities. And so, he would share the responsibility with people he was rather compatible with.

Now, the next time when someone would be needed to take upon responsibility – these guys would be considered first.

Also, because the teachers would take him seriously – they would consider his preferences while forming teams. And they would get to like these people more as well.

But what Sourup did to the class was far more profound than attenuating favouritism. He created a class-unity.

At first sight – it might seem to be a good thing. But it turned out nasty. It established a monologue of the majority – that all were to subscribe to. You are not to go against it.

The class-unity made ex-communication possible. Bullying ended – you don't have people in the 'one' class bullying one another – but this was a much more horrible thing. It is one thing to be bullied, and a completely different thing when everyone

in your class decides to ignore you and makes it a point to remind you in their gestures that they are ignoring you.
And Sourup was central to this whole development.

Given how Sourup was a prime persona – it would have been worse if he would hold grudges.

Thankfully, he didn't.

Or maybe, that was one reason he could make it happen in the first place.

He himself could actually stand for the ideals that he upheld. The idea

of one community, where an individual wasn't so important. The individual had to sacrifice individual desires, and the community would guard the individual when the need may be. There could be no place for individual grudges. But it had its toll nonetheless.
And the class developed a law and rule of its own.

It had its toll on Shantanu as well. However well he tried, he could never fully belong to the class. As he grew up, it became worse. He wanted an independent identity for himself, no longer feeling the urge to fit in.

But it hit its worst on Sourup. This happened in the ninth grade, when Sourup was caught in the act with Manali. The very emotions and values that Sourup had nurtured hit back on him. Everyone shamed him.

His relationship with Oishee broke up. He was publicly detested, and left to sit alone in the last bench.

He was booed at on stage.

And Shantanu was taken up by the class as the replacement. He'd get the cheers, only they were louder now.

And Shantanu was quick to lash back at these emotions.

He started with sharing the bench with Sourup.

In the tenth grade, Sourup was caught smoking inside the school premises. This was one of the malpractices

that the class-unity had given way to.

And he lost his standing with the teachers as well.

This, however, gained him some sympathy with his classmates. Not that it helped much.

The most illustrious guy in the batch did quite poorly in the tenth boards. At least, by his standards.

He wanted an independent identity for himself, no longer feeling the urge to fit in.

Plus two was when people go for coaching classes that suck the lives out of them. So the undead of the class forgot and forgave. And the class died altogether.

Sourup stayed alive, though – his wounds, bleeding.

Manasi

Shantanu opened mydeepestfears.wordpress.com again. 'Fairy Tales and Dreams'.

It was Sourup. Unmistakably him.

Not only did she think like him, but the language was also that of Sourup. Every niche, every mannerism – belonged to Sourup.

Her irregularity of posts fit in as well. It would mostly be when Shantanu himself was free too, and that was when their course load would be slackened.

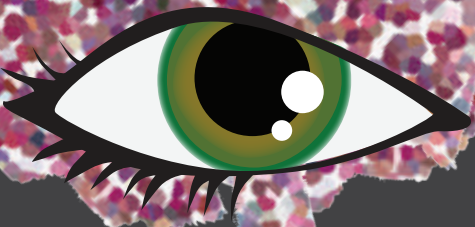
The clue was always there. Manasi. The one born out of one's mind.

More like, heart.

She was Sourup's heart – speaking out to the world of the most beautiful things it could create.

Those Sourup couldn't say out by himself. Those, he took up this mask for. And this had been Shantanu's most prized thing.

He felt his his love for Sourup grow again. Like never before.



Green Eyes

P. Vasanth

UG 2016

It was on the 27th of May that Meera first set eyes upon those green eyes. She had been informed about them, she knew what to expect, and yet here she was mesmerized by them. Walking towards him with a flushed face and a nervous voice, she said, “Hi Rajat, you look very nice today.” It was a miracle she even heard him when he replied, “Thank you! You look very pretty yourself, in that dress.”...

The next six days were some of the happiest times for Meera. The unthinkable early breakfast was now an anticipated routine, and a day whiled away, 3 feet from any palatable book, became schedule. As the gentle sun beat down upon the windows, the doors, and upon anyone unfortunate enough to be standing beneath them, Meera rushed about helping out here and there, spreading the light, thought never too busy to steal a glance or two at those green eyes that fascinated her so.

And six days later, she was once again walking back to her room, lost in thought. For the sixtieth time in the six days following that beautiful first one, Meera caught herself thinking of those eyes. And it was with a feeling of exhilaration that Meera wandered through the corridors that evening, humming to herself. The past week was definitely one the more memorable weeks of her college life. A major cause was definitely those green eyes ... and Rajat. And now that the seventh day, the last day, was here, she knew she would have to say it tomorrow without fail, or regret screwing this up for the rest of her life...

Then the fateful morning dawned and the hour arrived. She knew it was now or never. There he was, there they were. She could see Rajat walking by. Even as her heart began to flutter and tickle her neck, she turned towards him. Stumbling onto his path, she smiled nervously and said, “Hi Rajat! You know, you look amazing in that suit.” And Rajat, smiling, replied, “Thanks! And you look beautiful. I love what you’ve done with your hair.” Then Meera stepped before him, her cheeks cherry red, and gazing into his green eyes she said, “Rajat, I think ... I think I am in love with you ...”

Meera stared into those green eyes and the world seem to have come to a standstill. No one knew what to expect, no one knew what would happen. And when she reached out to place a kiss on Rajat’s lips, the silence slowly broke as the crowd broke into a thunderous applause. The lights dimmed and the curtains slowly fell, leaving the standing crowd with a warm feeling inside, and leaving the couple on stage to their warm kiss.

Three days later, Rajat found Meera plodding along on her way to class. He noticed that she was now back in her ponytail and glasses. Quickening his pace, he called out to her. When he caught up to her, he nervously began, “Hi Meera, I didn’t get a chance to congratulate you on your excellent performance. Well done!” Meera grinned and replied, “Thanks Rajat! You too, you acted very well.” Rajat smiled and went on, “Well, I thought we should celebrate our success. Would you like to go out for a cup of coffee with me?” Meera stared back into those brown eyes, guarded by a pair of elegant glasses. She could never have known how little those glasses would protect those eyes when she replied, “I would love to, bhaiyya!”



"Hello, mister... Hello there ... Hello ..."

"Is this 'Hello' supposed to address me by any chance?"

"Yes, my good sir. Might you be kind enough to direct me towards some source of drinking water?"

"Well, I might be. But before I should choose to do so, tell me dear stranger, how, in particular, did you identify me as a male but not as a female?"

"Sir?"

"There ... there you go again. Well, I suppose it is primarily because of my masculinity and clothing and beard and other things that will apparently support your visual judgement. But make no assumptions, for they often mislead you in a way, take my word for it, you are incapable of imagining."

"I am sure your statements make more sense than I could possibly understand, but I am surer that at this 40°C heat and extreme humidity, I shall faint, should you not direct me to that water source?"

"Fainting? Is that what you are worried about? Oh, boy! People have undergone hyperallergic shocks after listening to what I am about to say. Beware, it may very well look like a story, but that is exactly what they want."

"Well, I am not sure that this is correct timing for this ..."

"No, no. I want you be very serious, for this is their story. That of the oppressed people, about their extreme suffering and fatiguing struggle for existence. Although this will fuel my hatred and anger against US imperialism and capitalism, I shall try to remain unbiased and so should you by letting go of your prejudice."

Perhaps A Story

"Sir ..."

"Now, have you heard about Alombush?"

"Yes, from the Mahabharata, right? Well, he is described a monster or 'Rakshas'. Is there any tubewell nearby?"

"A brazen US propaganda, that story is. A monster who practised cannibalism and hence essentially possessed a character of despicable nature and also, oh yes, fought against the Pandavas; must he not be hated by everyone? They also say

that after the violence and bloodshed he caused in the Kurukshetra war, he was finally killed by legendary hero Ghatotkach. But have you noticed that these very fine details do one thing and one thing only; they delicately add inhumanity and immorality to his character!"

"Sir, take a breath ... This is all very far-fetched ..."

"Well, I am sure you have noticed the similarity by now."

"Sorry, between what?"

"Don't tell me this hasn't crossed your mind. Alombush and



George Bush?"

"I... I... No, it hasn't."

"Listen carefully. Alombush is George Bush's brother. There was a long-standing dispute between them regarding who the elder brother was. Each claimed that he was more violent and monstrous than the other, and therefore 'elder', which the other was, obviously, not ready to accept. Due to the non-existence of any kind of social media, we do not know the details."

"Oh. I think I can relate to that."

"Of course you can. Meanwhile, George Bush somehow got to know that every name is significant, reasonable and pregnant. Therefore, to succeed in his own right, George Bush would climb up on Bamboo Trees, throw stones at Alombush and then hide among the bushes. Being a 'Bush' himself, he was invisible and on the other side, all Alombush would see was a lot of stones coming towards him on a daily basis."

"Is this some kind of a joke? Even if this is some kind of a fable and you are trying to teach me a lesson. I should tell you, this is pathetic."

"Hmph. Unlike you Alombush had a very simple mind and was hence unable to suspect the plausible culprit. 'Throwing stones at me, eh? Wait and watch. You shall all soon be going through the same for Fate has ordained identical destiny.' he would say. That was when people started to suspect him to be a rising communist. "

"That's it? 'Equality', 'identical destination', that's all it took for someone to be tagged as a 'Communist'?"

"Do I really need to tell you about the US's hatred for communism?"

"No, that won't be necessary."

"Then, as expected, Alombush was marginalized and put in prison. And since the main opposer of Alombush was George Bush, he became the President of America.

As soon as George Bush came into power, all

information regarding Alombush was concealed, all the documents were made classified and in name of top secret were kept away from the masses."

"Then where does this usual, generally known, 'fabricated' story come from, If he was absolutely forgotten?"

"Hatred, my boy, is a much stronger emotion than love. Once an enemy, forever an enemy. People tend not to forget those whom they despise. Hence, they built a false story to such an extent that, in reality, there was no one named Alombush. Myth has it that he is an evil, despicable fictional character who was killed in the war by Ghatotkoch. The story is composed in such an artistic way that given enough publicity, everyone will believe in it without raising a single question."

"But how do you know this story, or true incidents, whatever these are? If what you say is true, then how did you manage to leak this information?"

"Does it matter? Perhaps I, myself am Alombush."

"What ... !"

"Take a sharp left turn from that corner. The tubewell should be visible from there."

(Speaking to himself) "Woah, where did he go? Into thin air?"

"Mister, hello... where are you...?"



A perfect moment

December 2048, a city in the Northern Hemisphere

“Eeek! You’re bleeding, Jonathan!” she said, tottering into the living room, fumbling the door shut against the chill and gloom.

No No NO there was blood dripping down both his wrists. The knife was still quivering gently, stuck in the wood of the rocking chair’s bottom.

“You promised,” she muttered, bandaging the limp wrists and spraying on the Liquid Band-Aid, “that you wouldn’t off yourself when I wasn’t around.”

Two well-deserved slaps had brought him round soon enough.

“I’m sorry, Rashi,” said Jonathan, eyelids half closed. He tried to shrug and gave up, wedged shrunken into the chair.

“I was.... Honestly, what else was I to do...”

Rashi looked into the distance. The winter gale hissed at the dark window, then abruptly died down.

“Yeah, I know,” she said, heavily.

“I go out for my first walk in ages, wearing the thick plastic raincoat, my feet are blue with the chill and Mrs Simla trills at me, ‘What darling weather it is, my dear!’ I wanted to claw her face off, the bitch.”

“Was she wearing a disco?” asked Jonathan, still slumped in his chair, like always.

“Of course. That’s what I meant, Jon. Claw her face off, eww,” said Rashi, falling into her chair, also facing the door, next to her husband’s.

Almost involuntarily, her eyes flicked over to the two dusty disco masks on the table, shoved against the wall, nearly covered by the piles of scorched-looking paper flung there after Jonathan’s abortive attempt to interest himself in charcoal sketching. She had long given up trying to find a hobby for herself. Hobbies in the general population were all but replaced by the disco version, better in almost every aspect.

The name came from “like having your own private discotheque”, a breathless sentence in one of the earliest reviews of the virtual reality tech. Disco masks weren’t virtual reality, not quite. You could still move around in the real world, but your perceptions were altered.

A biting wind might feel like a cooling breeze, the silence of the city was replaced by whatever music the software thought you liked best at the moment, and the thin, sharp electrodes in the innermost layer, touching the skin of your face, told the circuitry what kind of surroundings your neurons wanted to feel. It never itched, of course. Soon you’d stop noticing it ever existed. The most important effect, of course, was that you couldn’t feel bored or depressed. Something new popped up in front of you every thirty seconds if necessary, and your dopamine levels were carefully adjusted by the electrodes.

They were banned in orbit, where every sense needed to be on high alert. On Earth, however, they were perfectly legal and almost universally worn. Why wouldn’t you? After all, people who had taken off and damaged their discos in remote areas had ‘succumbed to ennui’, as the monthly obit newflash put it.

Without disco, what was there to do? There were no jobs to have on Earth, not that anyone wanted one. A hobby? One got bored, of course. She pictured Maz, dear son, walking in, a year from now, to two slowly decomposing bodies in identical rocking chairs and red wrists...She shuddered. But Jonathan had already tried to kill himself twice. She herself wobbled frantically on the edge of that precipice. Could they endure that long?

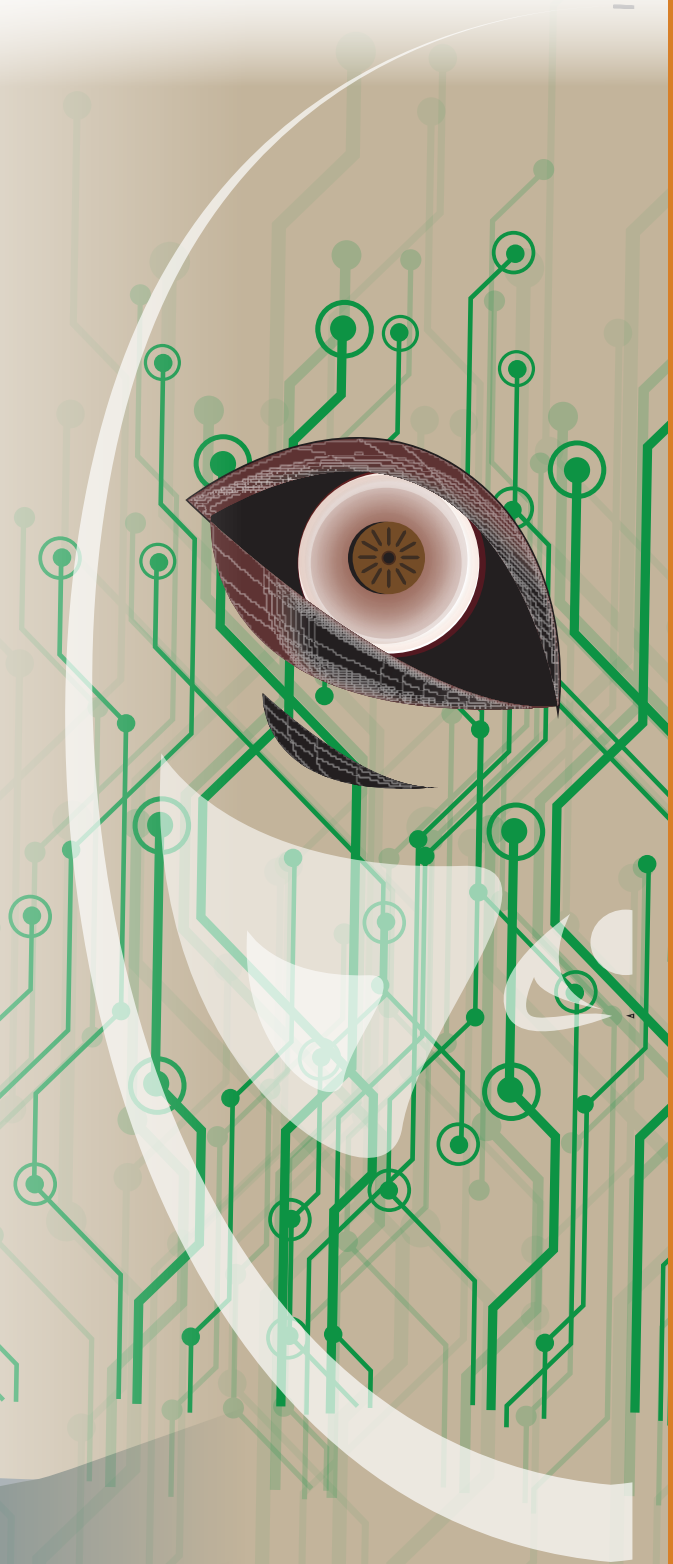
"Stop looking at those things," said Jonathan, vaguely circling his finger in the direction of the table. He had drawn circles, and far more exotic shapes, as a Pre-Millennium artist, before disco made everyone into a critic who found their own scribbles the most fantastic art in the universe. Now his work lay scrunched on the table. Nobody cared. They could all do better themselves.

"It's a year before Maz gets back from his asteroid mission," said Rashi. "I know they have the regen medicine, but still, what if a pirate miner gets a lucky shot into his brain? I warned him never to take off that ridiculous helmet of his. But he likes the danger. What did he say last time? 'the adrenaline rush of chasing matter thieves halfway across geosync orbit'? But does it have to be him? Can't somebody else keep the economy running?"

Rashi tossed her raincoat vaguely at the table. It hit the floor with a slight squelch. She collapsed back into the chair, her old bones tired from the short walk, plodding through the mud.

"You know, Jon, I could manage when Mrs Simla at least didn't wear disco and I could talk to her sometimes. Now.... there's nothing to do at all... If you'd gone out for that walk, I might have been the one playing with the knife."

"So what do you want to do? Give up? Say goodbye to the real world, only somewhat less permanently than I tried, and put on a disco? Live in a castle in the air?"



"It's a lot better than life down here."

"Pah. You're right about that. I don't have a single friend left who wouldn't smile at me beatifically. If they saw me at all."

"At least they're smiling. When was the last time you smiled?"

"You think those fake smiles count? Mrs Simla thought it was her birthday again last week. Said to thank you for the beautiful cake. She grinned happily at me while I told her you haven't baked in years."

"So if it's not connected to something in the real world it's not meaningful? What about happy dreams?"

"The smile on your face when you wake up counts. Not the ones before. It's only a dream if you can wake up from it. Otherwise it's a nightmare."

"I don't know, Jon. I know it's addictive. I know the joy isn't real. But it's been a while since I've experienced real joy. I think I might have forgotten how to tell the difference"

"If- no, no *when* Maz comes back you'll tell the difference all right. If you're awake and alert to see him walk through that door."

"That's the only reason I haven't used that knife. But Jon, that's a year away. Dunno if I can hold out for a year- without disco."

"And when he comes home to see us grinning and staring past his face like zombies?"

"We would take it off then!" said Rashi, sitting up

straight.

"What, like Salvator, that guy on the flash who dropped his disco overboard while on a ship and decided the only true excitement in life was swimming with the sharkies?"

"Oh no, it's really juggling with the knives, of course," snapped Rashi.

Jonathan inhaled and said nothing.

It started to drizzle. Small raindrops rolled lethargically down the window pane and pooled on the icy frame.

The rocking-chair creaked as Jonathan sat up with effort.

"Gimme that disco."

"I swear to you, Rashi, the minute Maz walks through that door, that thing is off my face and in the bin."

Rashi picked up the discos, shuffled over, pecked Jonathan on the cheek and passed him a disco mask.

"Ready, darling? One year. And then we won't use it, ever again."

She slipped hers on.

Aaaaaah. Mrs Simla was right. It really was darling weather. The window opened and a perfect summer breeze swirled around the room. Rashi wriggled her toes with delight. Maz didn't know what he was missing. Anyway, it was time to think about that superb tapestry on the wall. When had she gotten so good at embroidery?

Perhaps she would start again. Why had she ever

dropped it? Such fun..... ..

.....Rashi was playing chess against Magnus Carlson, world champion since 2036. And losing. Or so he thought. She smirked, tapping a rook against her teeth. Tap. Taptap. A bit boring, playing Carlsen. She'd be world champion next, of course. Tap. Taptap. Tappity-tap tap tappitytap tap tap. Wait. Tap taptap tappitytap?

Carlson disappeared. Something stirred at the back of Rashi's mind. *I know that sound....*

Yes! That's Maz! Mazmazmaz! Maz is back! She ripped the odd plastic off her face and spun out of her chair. Across the room was a door. Almost tripping over her feet she yanked it open. Maz stood, silhouetted in the bright sunlight.

Rashi sighed, joy soaking into her bones deeper than ever before. *Maz is here.*

Maz, alive-and-safe Maz, fell into her arms. The perfect summer breeze gently swirled the door shut.

Julian D'Costa
UG 2016

Not so eusocial after all...

Biology Fable

An ant, a bee and a wasp walked into a bar¹. After ordering a round of drinks – syrup for the ant, honey for the bee and nectar for the wasp² – the three friends sat on the barstools, relaxing after a long day at work. The obligatory polite conversation ensued: “How are the queen and larvae?”³ Had a good weekend? I bought this really great–”

The bartender – an imposing yet jovial figure with gold-rimmed glasses and a neat red-

dish-brown beard⁴ – soon returned with their order, briskly placed three huge mugs on the counter with audible clacks and retreated with a parting smile. Clinking their glasses, the ant, the bee and the wasp downed

their delicious drinks, enjoying the exquisite blend of flavors in their favorite beverages⁵. Soon enough – almost inevitably – the ant grew antsy, the bee became buzzed and the wasp was

wasted. Inhibitions faded away – slowly, gradually, but completely – revealing the innermost thoughts and feelings they sought to hide from the world, and more importantly, from themselves.

“You know,” the bee began, furtively surveying the bar for would-be eavesdroppers. “Sometimes– sometimes I feel that the hive treats us scout bees unfairly. We range across the countryside for miles upon miles – *far further* than any other bees, I assure you – searching for ever-elusive nectar and

when we finally discover some, we show everyone where to find it⁶. And what do we get for our efforts? Not a single word of thanks!” The bee shook his head disgustedly, then clutched his head in a fit of dizziness⁷.

“It’s not just you, mate,” the ant concurred sadly. “We have some *bizarre* customs. In my colony, we build homes by bending leaves and get this – we use the silk of our own *larvae* to stitch the leaves together!”⁸ After an



¹A variation of the typical start of a bar joke – “A man walked into a bar...”

²The *Diacamma indicum* colony we observed was fed sugar solution (syrup); bees produce honey from nectar; wasps feed on nectar as well.

³This is a humorous variation of the polite inquiry “How are the wife and kids?”

⁴Disclaimer: any resemblance to any professor is purely coincidental.

⁵Alcoholic beverages are injurious to health. Syrup, honey and nectar are not, however.

⁶Scout bees roam far from the hive in search of food, then convey that information to the hive (from Prof Gadagkar’s lectures)

⁷The dizziness is both due to drunkenness and the fact that bees perceive distance through optical image flow on their retinas.

⁸*Oecophylla* ants weave their nests from leaves and use the silk from their larvae to stitch them together.

In the third experiment, when we watched the video of *Ropalidia marginata*, these were several of the behaviors we observed.

appropriate pause for the horrorstruck expressions of the bee and the wasp to subside, the ant continued, “Well, our larvae don’t die–” The bee and the wasp let out *huge* sighs of relief. “–Not all the time, at least,” the ant finished, shaking his head mournfully. “I just wish this barbaric tradition would stop!” The bee and the wasp nodded vigorously, at a loss for words.

“Well, my story is hardly as... as *extreme* as yours,” the wasp added timidly, “but in my nest, we all share our duties, *all the time*. Sometimes I feed the larvae, sometimes I antennate the nest, sometimes I repair the walls, sometimes I mouth-wall the nest, sometimes I forage for food, sometimes I–”⁹

“We get it!” the ant and the bee chimed in together; the wasp had a particular tendency to keep rambling. Scratching his head, the wasp continued, “Yes,

well, I personally enjoy repairing the walls far more than anything else, but our queen doesn’t allow us to slack off on our other duties–”

“THE QUEEN!” the ant and the bee roared. The entire bar turned to stare at them. After an awkward pause, the bee continued in a softer voice, though his tone was acid. “Don’t

get me *started* on the queen! That obnoxious, self-centered, arrogant...” His words trailed off into an incoherent ramble of spluttering rage. The ant took up the cry: “Our queen expects every single one of us to pander to her every fleeting whim. She never does any work, never lifts a finger to help us, never praises us for a job well done, but has the *audacity* to tell us what to do *all* the bloody time¹⁰. Honestly, if she weren’t so well-protected, I’d have–” The ant cut himself off abruptly, surreptitiously glancing around. After all, the words he was speaking were disloyal at best, seditious at worst. It would not do for the wrong ears to hear.

The three friends fell into a brooding silence that stretched for minutes, dark, mutinous thoughts



⁹ In the third experiment, when we watched the video of *Ropalidia marginata*, these were several of the behaviors we observed.

¹⁰ The queen is of prime importance in the colony and instructs the workers to perform various duties depending on what is needed.

running through their heads. “You know what?” the bee burst out, breaking the tense silence, “I’m leaving my hive! Those stuck-up ingrates can scout for themselves!” The ant nodded forcefully. “You’re absolutely right! I’m fed up with the archaic rules of my colony. I’d rather fend for myself.” The wasp looked hard at the bee, then the ant. Slowly nodding, he agreed: “I hate being told what to do all the time. For once in my life, let me do what *I* want to do!”

A concerned voice cut into their discussion. “Boys, I couldn’t help but overhear your conversation–” The ant, the bee and the wasp nearly fell out of their seats in shock! “Don’t worry,” the bartender reassured them, “I’m not going to tell anyone what you were talking about; I believe that open, honest discourse is necessary for a society to progress.” The three friends exchanged a relieved glance. “However,” the bartender’s voice turned stern, like a father chiding his unruly children, “I don’t think you’re thinking this decision through. You’re underestimating the importance of your societies, whatever their faults may be!”

In the battle between overzealous passion and the cold voice of reason, passion invariably wins. “You just don’t understand our plight!” the bee retorted. “We shall no longer be oppressed by those self-serving rulers! For once, we shall be free!” With those stirring words, the ant, the bee and the wasp exited the bar (swaying only slightly), venturing out into the world as independents untethered to hive, colony or nest, going their separate ways. “Hapless fools...” the bartender muttered, shaking his head sadly.

Several months later, in the middle of winter, with dirty sleet clattering ceaselessly on the roof, the three friends – having gone their separate ways since that momentous day – met again in the same bar. The ant appeared aged, the bee looked haggard and the wasp was worn-out. Silence prevailed as the three friends drank in the welcome sight of their compatriots... As one, they burst out:

“That was a *terrible* idea!”

“It was so lonely! I missed my friends, my family–”

“I was so tired *all the time*! No one to talk to, no one to help me–”

“I had to do *everything* myself! No food, no shelter–”

Snippets of overlapping conversation echoed around the bar as the three friends poured out their woes and the hardship of the previous months. “I never realized how much I needed my family,” the ant contemplated. The bee and the wasp nodded solemnly in fervent agreement. “We’re never going to do that again!” they chorused, conviction ringing in their voices.

Behind the counter, unnoticed by all, the bartender nodded to himself, a faint Mona Lisa-esque smile gracing his weathered face. Polishing a mug with a well-worn cloth, he whispered to himself, “This generation may learn to think after all! All it takes is a little exploration...”

Moral

Never underestimate the value of family, culture and society, whatever their faults may be.

Dependence is bad, independence is better, but interdependence is best¹¹.

Raj Magesh Gauthaman

¹¹ The eusocial insects, having adopted such an interdependent system, have optimized their chances of survival.

SoulFire

By Shubham Acharya
UG 2016

The Chase

Run.

My mind screamed at me, while I desperately ignored the burning in my limbs and my lungs, as I jumped over a 30 feet metal fence, a feat that would have astonished the primordial humans of a few centuries ago, and then used the top of the fence as a springboard for jumping through the window of a nearby building. Glass shattered around me, and bounced harmlessly off my skin, as I dashed through the apartment I had entered, flipping over ruined sofas and tables, and then jumped over the balcony railing to the alley below, which was dimly lit with reflected moonlight.

A hideous roar resounded behind me. I picked up my pace, throwing trashcans behind me in a futile attempt to delay the Abomination chasing me.

Just a minute more. I can't fail!

The ground collapsed in front of me, and a pit dozens of feet deep and across opened up. I didn't pause, and sped up before taking a giant leap, easy in the knowledge that I could span the pit that the Abomination had opened up.

However, just as I was about to land on the other side, another roar split the air, and another pit opened up, this one far deeper than the previous pit. Simultaneously, I heard a whoosh, and without even looking around, I knew that the Abomination had launched itself through the air at me, to tear me limb from limb. I knew that if I landed in the pit, I was done for.

Not so fast.

Stretching my hand, I pressed the button on my wrist, which launched a grappling hook at a nearby building, and used it to change my direction and swing through a window into the building I had exited before. Just as I thought that I had evaded the Abomination, I heard a crash as it smashed through the walls and landed in front of me, eyes ablaze with fury. I looked around the room, desperate for something to salvage the situation.

A little more. They are counting on me!

I threw a nearby chair at the Abomination, which smashed harmlessly on its rock hard skin. I knew the futility of my attempt, but I was determined to go down fighting if I had to. The Abomination advanced, its every step causing cracks to spread through the concrete floor of the apartment, and then raised its hand, the moonlight glinting off the wicked claws, as it prepared to eviscerate me. Just then, my salvation arrived.

“Thirty minutes are up. Escape successful.” A cool, monotonic female voice announced.

The Abomination roared in fury and then slammed his claws on the floor, easily tearing through it like hot knife through butter, and then jumped out of the hole it had created in the apartment.

That was close.

I sighed, as I crumpled on the ground, aware of how close my city had been to utter destruction, as the apartment around me shimmered and then started to dissolve into polygons, and I found myself in a blue metallic chamber, attached to a chair with a myriad assortment of instruments attached to my body.

I glanced across the room at the Abomination, who growled at me, and then I heard a grating noise scrape against my ears.

“Next time human. Next time, your city shall die.”

It left the room, leaving my exhausted self to remove the instruments and begin the journey back to the Chief’s room.

The Invasion

I was trudging through the dilapidated streets, on my way to the Chief’s house, which was still a good hour of walking away. Not a soul could be seen, the only occupants of the street being old AirTorks, with their propulsion engines gathering rust. Left to myself, I started going through the events of the last decade, and cursing the idiots who had sent The Voyager out into space, centuries ago, on a mission that ultimately doomed humanity.

The Voyager had been sent with a golden record, with the hope that intelligent Extraterrestrial life would find and be able to decipher it, and hence communicate with the humans back on Earth. What the foolish scientists hadn’t taken into account was a martial alien species finding the record, then tracing it back to a puny planet in

an insignificant solar system, which would have normally escaped their bloodthirsty eyes, and then launching an invasion on the said planet.

This happened a decade ago. All our advanced technology, including plasma guns, energy grenades, and nuclear fusion missiles paled in comparison to the alien martial might of our conquerors. They made us look like kids, just as the weapons of our ancestors would look in front of our own. Our conquerors called themselves The Ursareil, which in their language meant the supreme. To us, they were simply The Abominations.

They had hideous figures, a forsaken cross of a werewolf, a komodo dragon and a jellyfish. Their claws were as long as people's spines, and were used for the express purpose of tearing it out, their faces were transparent, with tentacle like extensions, their hide was tough as nails, their tail strong enough to crush stone with a casual whip. They were physically far superior to us, even though we had come far from our weak ancestors due to evolution caused by the massive radiation leak in the infamous First and Second Nuclear Wars, or as our ancestors would have called it, World War III and IV. Our bone structure had changed to allow us to be more durable, and had also increased our physical prowess much beyond the dreams of our progenitors. Even among them, I was special, belonging to a group called The Runners. Yet, our strength was nothing compared to that of The Abominations.

Combined with their superior technology and amazing physical prowess, Earth was destined to fall. Yet, our conquerors had a strange weakness, as well as a taste for entertainment, which was the reason we were still not extinct.

The Abominations were a small race, all fitting in this giant spaceship, easily the size of an average city. From what we learned over the years, their fertility rates were low, but they more than made up for it with their incredible lifespans. When they first arrived on Earth, Washington DC to be exact, or what was formerly Washington DC, they went on a wild killing spree, killing the entire population in hours. They also had a taste for fresh meat, preferring to partake of flesh with its heart still pumping its life-blood into the gaping chasm which was their

mouth. And here was their falling. For some strange reason, as soon as they ate a human freshly killed, they were burned from inside out to a crisp, and these formidable enemies, whom even ray guns couldn't scratch, would fall dead. Over the years, the scientists which didn't die, theorized that it was due to the residual energy released from the essence of life when an organism dies, which reacts in a strange way

with the body chemistry of our conquerors to kill them. The more spiritual of the lot called it SoulFire, which caught on.

All in the garden was far from lovely for our species though, as The Abominations could just slaughter us and eat some other organisms, which strangely enough didn't cause the said reaction. However, due to a strange incident, the current system of life came into being, and humanity continued to survive, though hanging on by its nails. Faced with our conquerors, a group of people had decided to commit suicide, instead of giving The Abominations the satisfaction of murdering them. Just out of spite, one of the creatures had partaken a small bit of the flesh of the dead humans, not enough to kill it, and had found that it caused him no discomfort, and was the best thing it had tasted ever. What came to our knowledge later was that for some unidentified reason, the living essence would just disappear if you took your own life.

Their hunger led them to come to an accord with humanity. Every month, The Abominations would visit a city. The city would select a representative, and the conquerors would select one. They would then be transported to a virtual world, using the supreme technology of the invaders, where the task of the city representative was to evade The Abomination for an agreed time-period. If the representative was killed in the simulation, the entire city had to forsake its life for satisfying the appetite of the invaders. If he managed to be successful, the city was spared, and The Abominations wouldn't attack any other city for a month, after which the cycle would repeat. Desperate for some sort of salvation, our leaders agreed to this Faustian pact. In the following two years, twenty four cities were visited, and twenty four cities had all their citizens' life consumed. Humanity didn't look any better off, until a lab in Bangalore came across a way to increase our physical prowess even further, leading to a group of people called The Runners. Built for evasion, for the last six years, only two runners and hence two cities fell to the invaders. However, our situation was still dire, as could be evidenced from the atmosphere of fear shrouding our planet.

The conquerors hadn't lost patience though, in fact, they seemed to enjoy this little game. Perhaps the sight of terror that they invoked in the people when they would suddenly appear over a city on the first day of a month gratified the sadistic monsters. All this might change though. We never were people who would bow down to anyone. A plan was afoot, one which might free us from the tyranny of these monsters once and for all. A plan for which I needed to see the Chief now.

Finally reaching my destination, I looked at the dilapidated warehouse, which hid the entrance to a vast underground laboratory, and taking a deep breath, pressed a panel hidden from view, to be devoured by the Earth.

The Plan

I stepped into the laboratory, and as always was amazed by its sheer size. Above ground, my city was a shell of its former glory, its malls shut down, bars and clubs gloomy, movie theatres empty, and in general, an atmosphere of gloom pervaded the city. This facility, built three years ago wasn't completely free from the touch of that gloom, but herein one could find the cheer and determination, which for me, best symbolized humanity. For this project, undertaken by Professor Razzil, had the potential to free our world.

The idea for this project originated from the realization that The Abominations couldn't tolerate our essence when they consumed us, leading to a theory that soul essences were somehow harmful for them. Project SoulFire, as it was so unimaginatively named, sought to harness the energy, to potentially destroy the alien invaders.

Building this laboratory for the project had been a covert operation, with the construction taking place over five years, so as to escape the probing eyes of our conquerors.

With the construction of the laboratory done, the problem that the researchers faced was lack of raw data.

The dark truth of the project was that to even study it, people needed the souls of human beings freshly killed. Volunteers were asked for covertly, however, hopes weren't high that people would willingly part with their life, just in the name of a project, which may or may not be able to free us from our invaders, when after all The Runners had been doing a perfectly capable job of defending their cities. Humanity surprised the researchers though, when a large cohort of volunteers, mostly aged people, interspersed with some young ones, willingly came forward to donate their lives, in what they believed to be the greater good. Research picked up, with the scientists determined not to let their lives go to waste, and from what I had heard, it looked like it was bearing fruit.

"Welcome Mortred. You look to be in one piece, so I presume all went well," said

Bruno. He was the Chief's second-in-command and a brilliant researcher in his own right. The years of research hadn't been kind to him though. His face had an overgrowth of wiry stubble, and his eyes had the bloodshot look which only came with bad sleep routines. Considering our normal requirement of four hours a day, I had made a guess that he slept an hour a day, to which he had genially replied that it was more an hour in two days. The only thing which got him going were those booster tablets, which he had invented himself, and which was supposed to contain a chemical a thousand times more potent than caffeine, with lesser side effects.

"It was close. I got lucky."

"You always do. Mortred, the luckiest runner alive," Bruno smirked. "Come, the Chief is waiting for you."

He led me through a plethora of complicated instruments, whose functioning he had explained animatedly a million times to me, and which I forgot every time I revisited the lab, and led me to a small office located in the corner.

The office was inconspicuous, unlike the man occupying it. Professor Razzil rose up from his chair and hugged me tightly, causing a faint twinge of blood to rush to my cheeks. I could feel Bruno's snigger on my back, which made my cheeks even hotter. "I knew there was no way you would lose my dear." Razzil looked into my eyes. "As beautiful as always."

I blushed, trying to imagine what he saw in me. In my mind I saw a plain looking twenty-one year old girl, with an athletic build as I was a Runner and had to put in the hours for training to fulfil my duty. There was nothing beautiful about my blue eyes, or my slight freckles, or brown hair: I had personally checked that in the mirror when Razzil had complimented me for the first time.

Razzil, on the other hand, had beautiful brown eyes, and a smile to melt a glacier. Though his build wasn't anything to swoon about, his mind was, evidenced by the fact that he was leading an operation which might save humanity, at the age of twenty-three. He was considered the world's leading researcher on SoulFire. At first, he used to be filled with guilt on the lives which had to be sacrificed for the project, but that only fueled his determination, which led to The Plan as he had come to call it.

On a side note, he was also my betrothed.

Razzil's eyes then took on a serious gleam as he gestured at me to occupy one of the seats in his room. He then started walking back and forth around his desk: a picture of suppressed excitement, and then finally turned towards me.

“Mortred, I think we can do this. It’s risky, but definitely doable.”

I snorted at that. “What’s not risky anymore? Every day of our lives is spent wondering if The Abominations won’t suddenly drop out of the sky and terminate their agreement, and then crush us as the insects we are in front of them. Come on now, spit your Plan out would you?”

And so he did. As he started describing his plan, I couldn’t stop my mouth from falling open. The Plan was full of so many uncertainties! Yet, it could work!

He finished his explanation and looked at me expectantly. To answer him, I leaned forward and gave him a light peck on the lips.

“This can work Razzil. Now, I just have to get used to the equipment required, and I am sure I can pull it off.”

A look of alarm crossed Razzil’s face.

“Oh no. No, no, no. Who said you’re the one executing this? I was just thinking of the best Runner for this. You don’t have to do it at all. I can’t afford to lose you if this fails.”

I frowned.

“You know as well as anyone else that I am the best and most versatile Runner in this world, evidenced by the fact that I completed all the Runner trials with a perfect score, and have a higher index of acceptance of those weird chemicals they used to make us Runners than anyone else. I am the best person for The Plan.”

Razzil started getting agitated. I could see he didn’t like the idea of me not returning if his plan failed. I knew he was scared for me, but what I had said was the truth, and he knew it.

Finally, he took a deep breath and exhaled, and then looked up with determination.

“I kind of knew this was going to happen. Well, I’ll come with you, since I know the instruments inside out, and am probably the only person who has any idea how their technology works.”

It was my turn to be alarmed.

“Please Razzil, I will settle both of our scores for us. You don’t have to come. I will avenge our parents.”

Razzil smiled.

“You expect a man’s pride to sustain itself when he watches his fiancé go and fight and settle his scores, while he is sitting around. I am coming, whether you like it or not. We’ll end this together.”



Seeing that his tone brooked no argument, I sighed in defeat. Razzil took that as acceptance.

“Come now, let’s get you acquainted with your teammates. We also need to start getting acquainted with the equipment. The Plan shall be executed next month.” Saying this, he took off for the training ground located one level below the lab. Thinking back to all the deaths I owed The Abominations, I vowed that only one of us would survive this operation, and I would do everything in my power to ensure it wasn’t them.

The Execution

I looked up at the sky, to see a massive spaceship blotting out the sun and the clouds. We had just made it in time to Lilycove city, about 2000 miles to the west of mine, when we first heard of The Abominations’ spaceship being sighted there. The trip would ordinarily have taken at least a dozen hours on the fastest vehicles of our primordial ancestors, but now it was just an hour on the tunnel train, which connected nearly all of the cities on Earth, and was a pioneering invention about twenty years ago. This was also the reason that we could carry out the plan irrespective of which city The Abominations decided to target next, as the maximum time it took on a tunnel train to reach two diametrically opposite points on the Earth was 4 hours.

I stretched my muscles and looked behind. The team was determined and ready. I looked at them, and a familiar lump rose in my throat. Some of the team knew they won’t survive today, and yet they were the ones who had been the most cheerful throughout their month-long training. I had no intention of their lives being sacrificed in waste.

The spaceship landed a mile north of our location, to start the formalities between the Runner of the city and the chosen Abomination acting as Executioner. It was time to move.

I signaled, and all of us dashed forward to the site. There were 7 of us, since the team couldn’t afford to be very large for needs of secrecy. I was leading, while Razzil kept pace alongside me; no mean feat, even though I wasn’t really running at top speed. We covered the distance in under a minute, and looked up at the foreboding exterior of the ship, which for years had been the cause of despair for mankind.

Jerax, took out a small cube-shaped structure from his backpack, and attached it to the ship. We all stepped back, and with nary a noise, the outer layer of the ships structure dissolved right in front of our eyes. Another one of Razzil's inventions, the cube-shaped structure was called a Liquidifer, and could liquefy anything which was made of Gold, Platinum or Palladium. Really odd element combination, but this was what the alien ship was composed of, according to the long-range spectroscopy tests that Razzil's team had done, so it worked like a charm.

We went in, and while we were prepared to be shocked by an alien interior, to our surprise, the spaceship looked very much like a big furnished NYC manor on the inside. There were weird decorations filling the hallway which we had breached into, and contrary to our expectations, there was no camera detected by Ana's TechDetector. Cautious, we moved down the hallway. Our goal, from what Razzil had been able to determine, was not the cliché center of the ship, but rather just one floor above where we were standing. We just had to find a way to go up.

And then, all hell broke loose.

A blazing claxon, much like a fire alarm mixed with an Ambulance siren by a bad DJ was heard all around us, and was matched by the sound of growls coming from immediately in front of us.

"Shit, I didn't think they were wary enough of us to actually have outer hull alarms," muttered Razzil.

Three Abominations were coming for us.

I took out my gun. The Abominations snickered. My gun was the shock gun they had become used to seeing, and it was by and large ineffective on the Abominations. Well, I had a surprise for them.

I took three rapid shots, targeting the heads of two, and the leg of the last. The first two were consumed by a raging fire, which extinguished as suddenly as it appeared, leaving behind charred husks as the remains of the heads of the Abominations. The third shot reduced the last Abominations leg to cinders.

"How?" rasped the last Abomination.

"SoulFire reinforced bullets. Now if you don't want to die, tell me where the Control room, and the Feeding station is." I said calmly, as I aimed my gun at its head.

"Up...up, take the stairs. Control Room is on the right, has no security, Feeding station is on the left."

Well, that was surprisingly easy. I looked at its eyes, and saw terror, and a wave of pity



almost overwhelmed me.

Almost.

I casually clicked the trigger, and left behind another charred head.

“I showed you as much mercy as you showed our parents,” I murmured. Louder, “Come, we have to hurry.”

We rushed up the stairs and turned right. And walked straight into a teeming nest of Abominations in the supposedly unguarded Control Room. That bastard.

There were too many for me to take down quickly. But Razzil then nodded to Squee, Splee and Spoon, our three bombers, and steeling my heart, I jumped back.

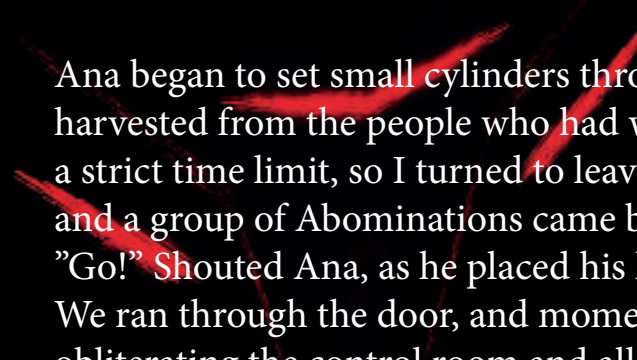
The three brothers, jumped without hesitation into the midst of the Abominations, and within a blink, were covered by them. But a moment later, a dazzling light shone throughout the wide expanse of the Control Room, leaving behind smoking husks of the dozen or so Abominations present there, and no sight of my friends.

I blinked tears from my eyes. That was a SoulFire eruption, a technique which Razzil had developed which could consume one’s entire body and release the whole energy in terms of pure Soul energy, a type of suicide bombing.

Ana quickly moved to the control room, and with Razzil, started fiddling with the controls. The blaring claxon stopped, and then Razzil announced, “The feeding stations have been linked. We have 10 minutes.”

The main stage of The Plan began now.

The Finale



Ana began to set small cylinders throughout the control room, SoulFire charges, harvested from the people who had willingly donated their lives for the cause. We had a strict time limit, so I turned to leave with Jerax and Razzil, when a roar sounded and a group of Abominations came bursting in through the wall.

“Go!” Shouted Ana, as he placed his last charge.

We ran through the door, and moments later, a deafening explosion ensued, obliterating the control room and all its occupants.

This had been a necessary part of The Plan, since we didn’t want someone to suddenly deactivate the feeding link we had established. I went over the last stage of The Plan again. Since the ceasefire of sorts between us and the Abominations, Razzil had found an intriguing thing about their Feeding process. Apparently, to

prevent constant hunger, the aliens had made a central feeding station, with feeding links to every other Abomination, and anything fed to the feeding station, would be consumed by all. The technology was way beyond our grasp, but its utility for us was simple. Feed a human to the Feeding station, and the SoulFire released would kill every Abomination with the feedback possibly even destroying the ship. Jerax had volunteered to be the human sacrifice.

Ana, his younger brother, was supposed to come out alive.

Damn it! I glanced at Jerax, but all I saw was steely determination in his eyes. We ran through into the control room.

A huge body came out of nowhere, and crashed into Jerax, who was leading us.

Moments later, Jerax's decapitated head came rolling to a stop at my feet.

I looked at the sole Abomination in front of me. It was the one in my previous Run.

And judging from the way the formalities had gone, he was the Leader.

I calmed down. I knew what had to be done.

"Razzil. Run. I will complete this."

Seeing Razzil had no intention to go, I shouted, "Run! You will be deadweight in this fight. Go!"

After what seemed like an eternity, Razzil finally went out.

"A final standoff eh. So, care to do it with honour?" said the Abomination with a mocking tone in that hateful voice.

"Honour has no part in this," I said, as I quickly drew out my gun and fired three consecutive shots. Unsurprisingly, all of them were dodged, even though he was within 20 meters of me, and had no idea of the SoulFire reinforced bullets.

"Let's end this quick eh."

And the Abomination jumped onto me with a speed unbefitting of its monstrous size.

Already anticipating the jump, I had leaped to the right, and missed its razor-sharp fangs by a whisker. I spun around, and fired two more bullet blasts, and then taking aim, threw my knife, which was also covered in Soul Essence.

It dodged the bullets, but the knife grazed its flank. A howl of pain ensued, with the wound burning its way through his skin.

The Abomination now looked at me in pure rage and slammed the ground. I was expecting the move and leaped up, but to my shock, it had already jumped there and caught me with its paws. I slammed into the ground, my body buzzing with pain, as I saw that I had a wide gash across my chest.

“You fight well human. Consider yourself lucky to be killed by Zharvakal, the leader of the Ursariel. And with this treachery, I will have at least two cities given to me, failing which I will wipe out your measly race,” it gloated, as it bounded to me. With its claws raised, it took a might swipe, which tough though I was, would make the tearing gash on my chest a triviality in comparison.

I watched my impending death with calmness, and then a figure darted to intercept the strike.

I watched in horror, as Razzil was impaled by the claw. Razzil however, had his gun out, and bad though his aim was, he didn't miss from point blank range.

“Die, you piece of filth,” Razzil choked on his blood as the Abomination Leader was reduced to cinders.

He then turned towards me. And fell down. I took him into my arms.

“Mortred...we killed the leader. I already sent word of our <cough> mission.

Humanity is launching a counter-attack. We won darling, we won.”

He started choking on his own blood. Tears started flowing freely from my eyes.

“Mortred...get out of here. Don't let my death go in vain. We have won this. Get out...Get out.” He pleaded, as the life left his body.

“I love you Mortred.”

Clichéd last words, from a man who loved clichés. I felt his body going limp. And I felt my heart harden.

I kissed his forehead.

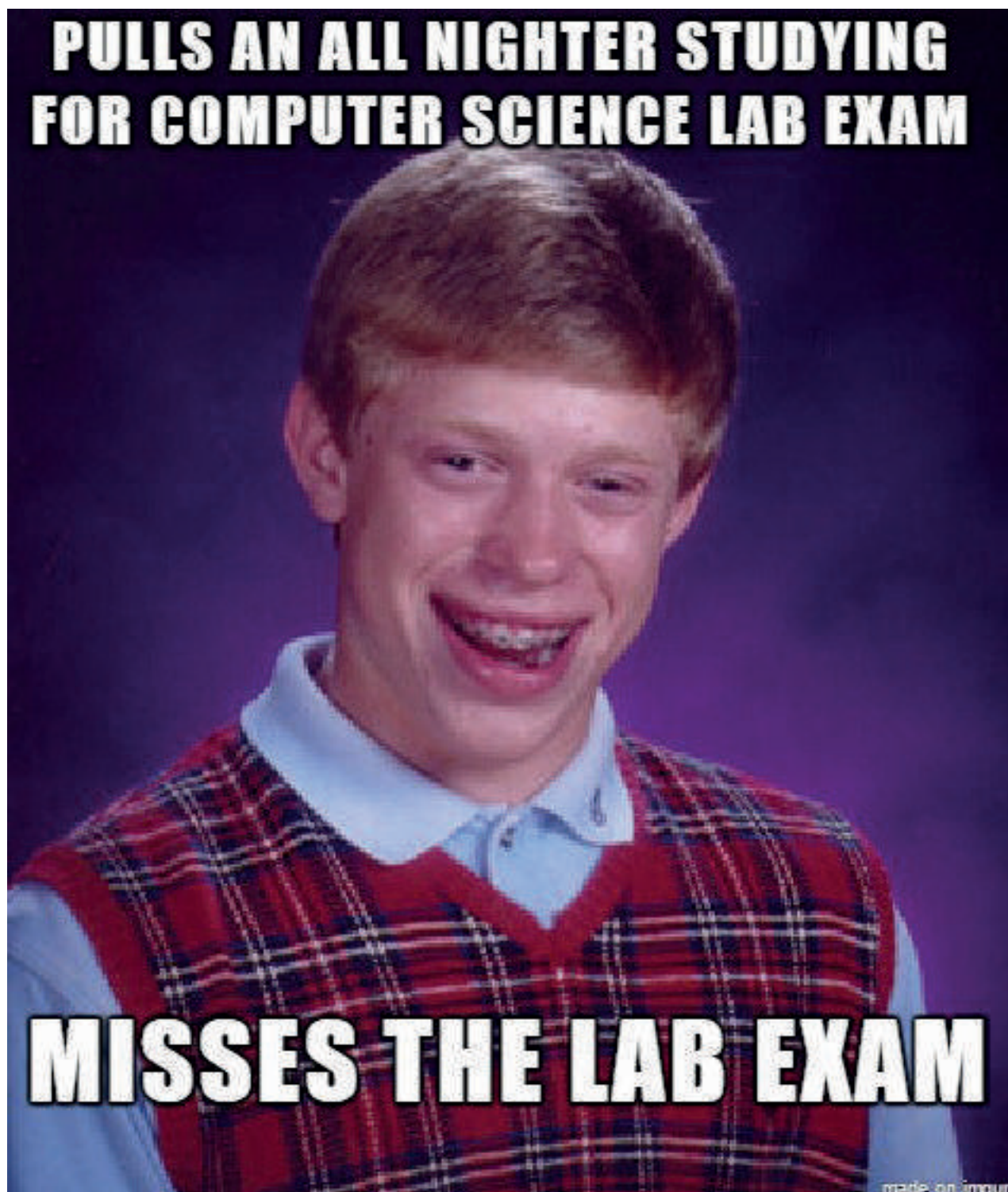
“I love you Razzil. Your death won't go to waste.”

I looked at the Feeding station, the huge awning into which the food to be consumed by all was dumped.

And I jumped into it.

Moments later, a bright explosion rocked Lilycove city, which could be seen from miles around.

Meme *relief*



Highlights



Old shoe



Stardust



Style




Art



Storm





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UG 2013

A summer evening, not long ago

A Midsummer Night's dream

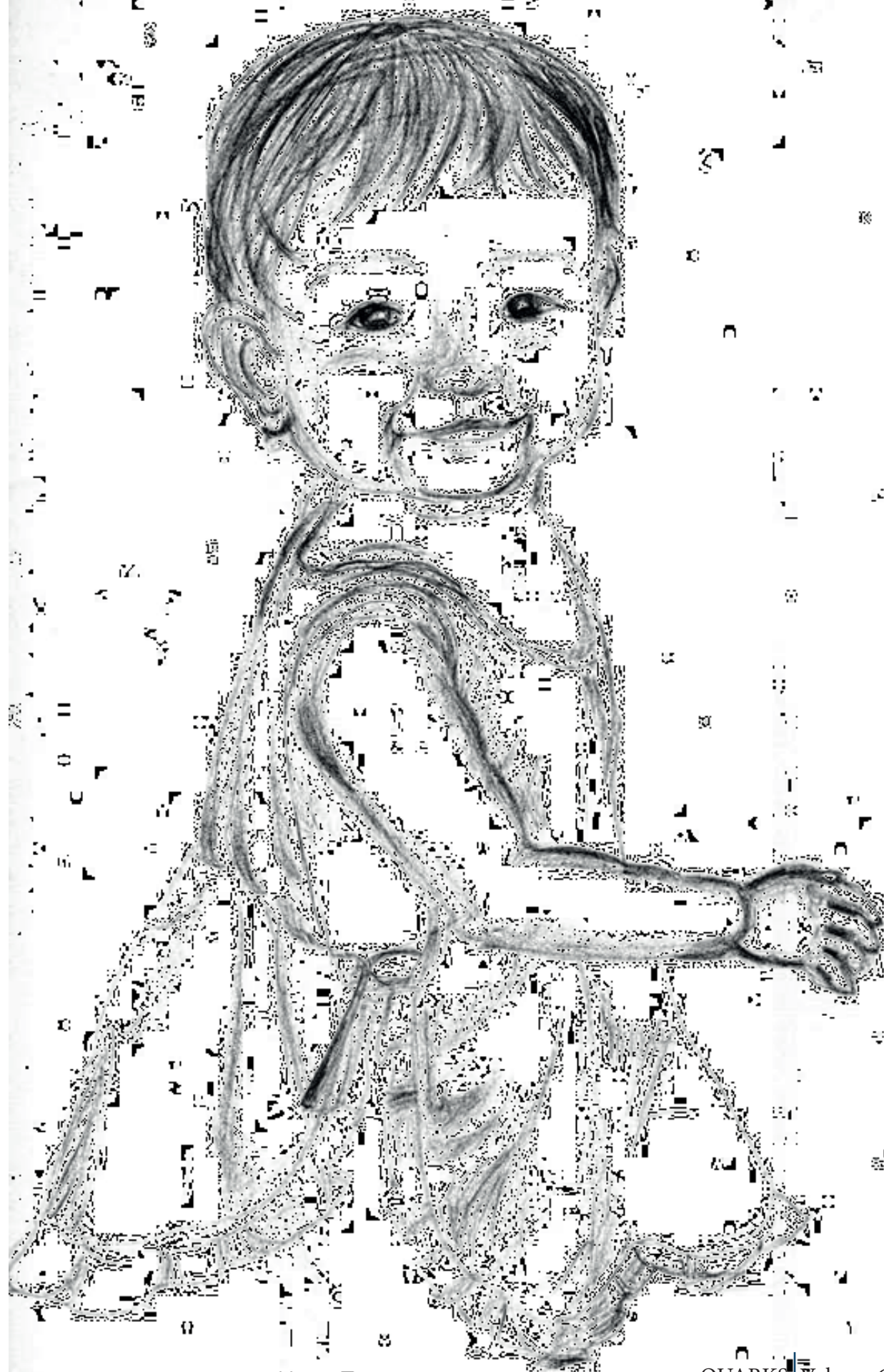


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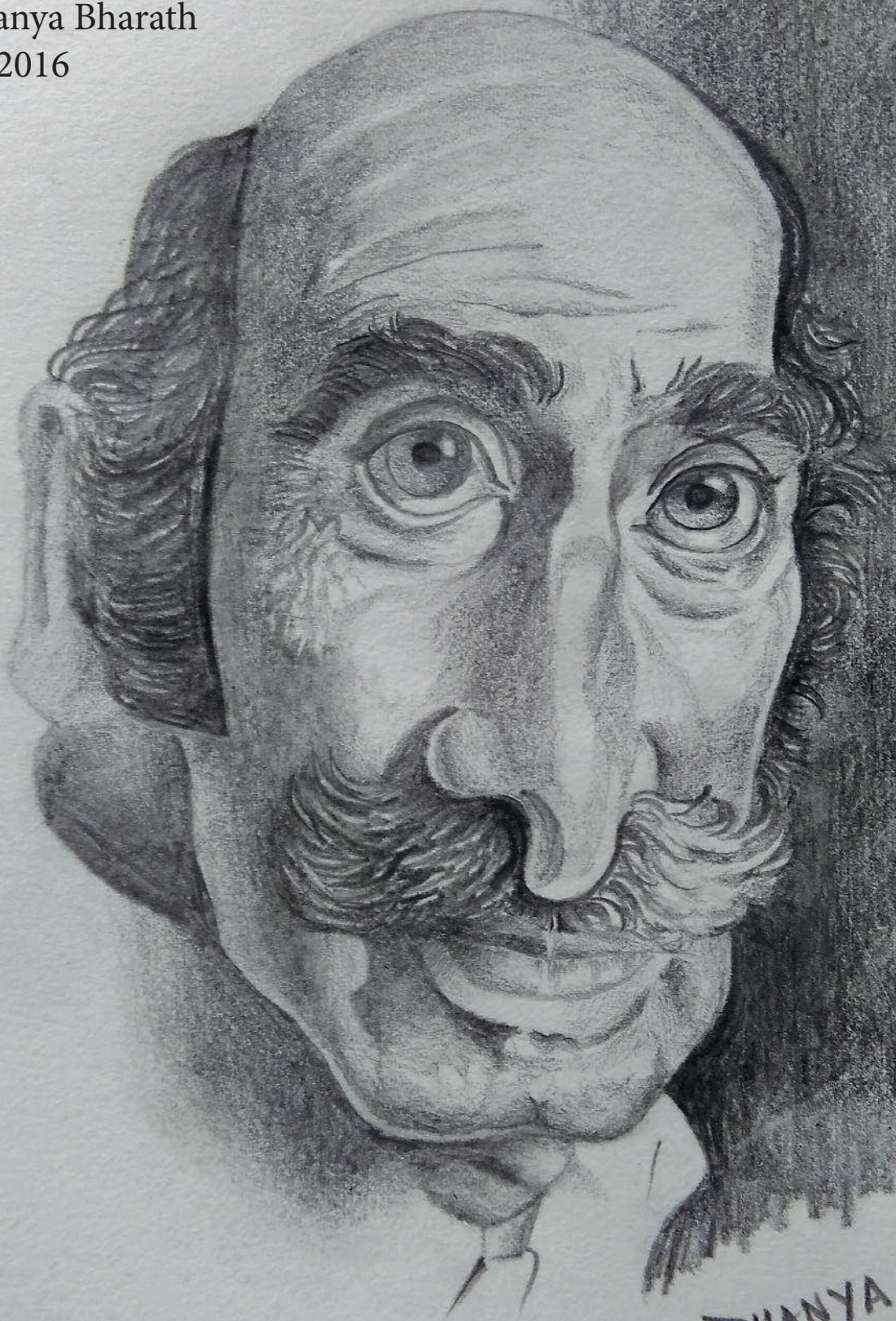
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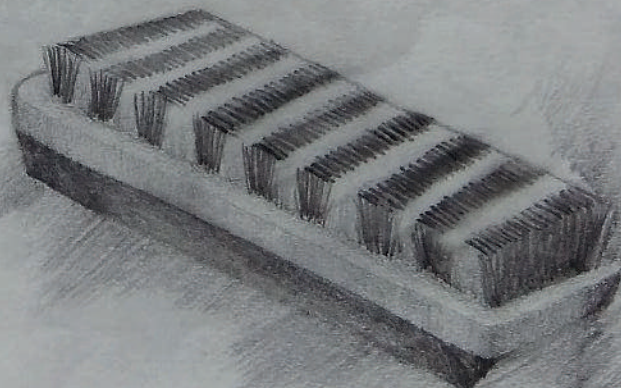
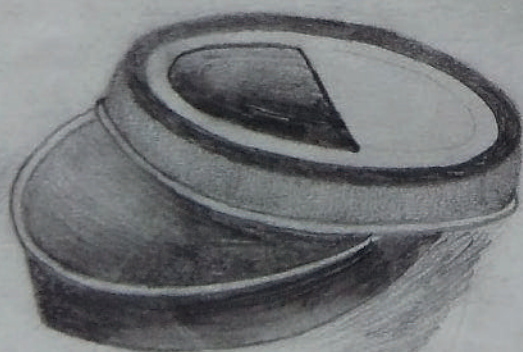
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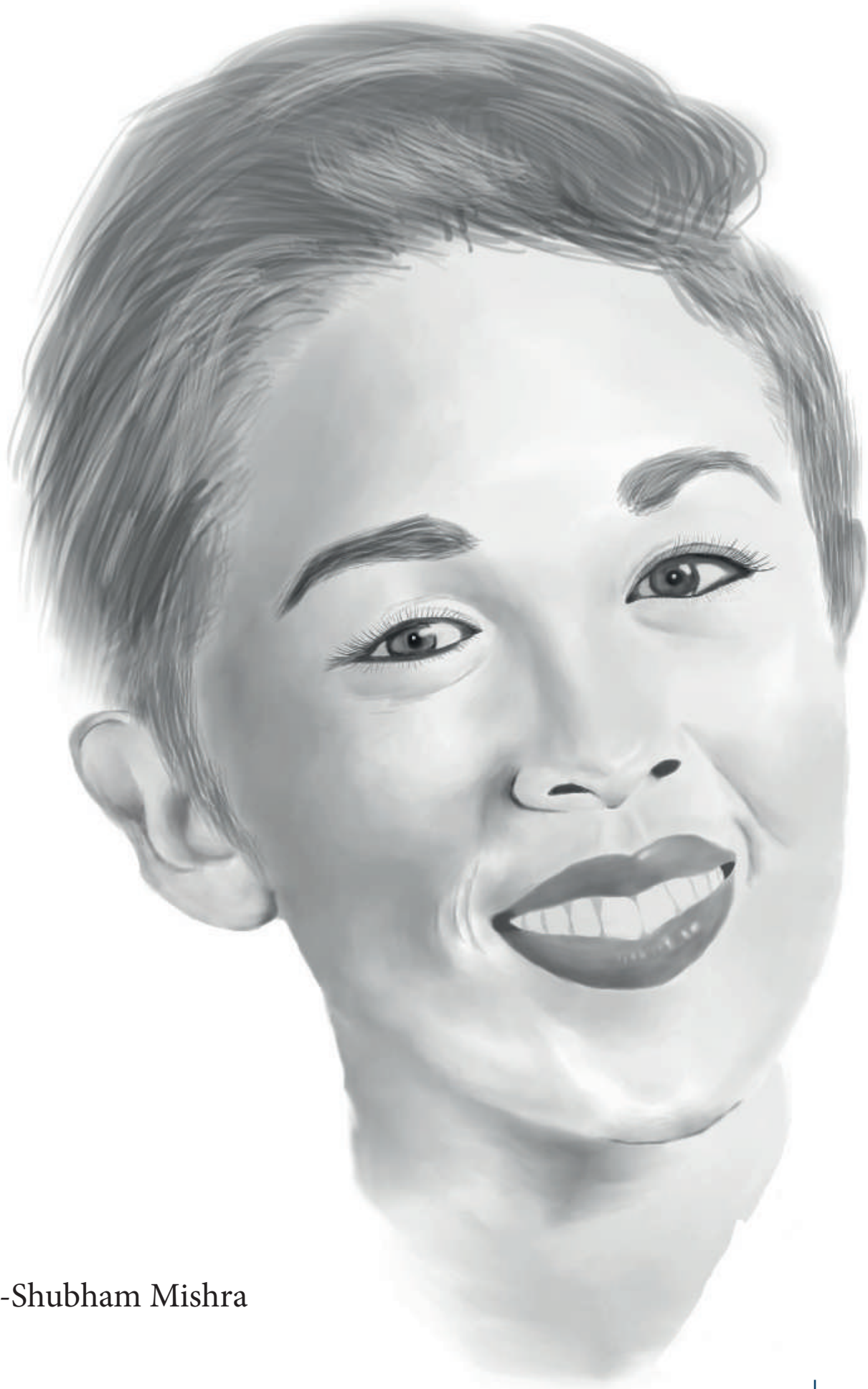




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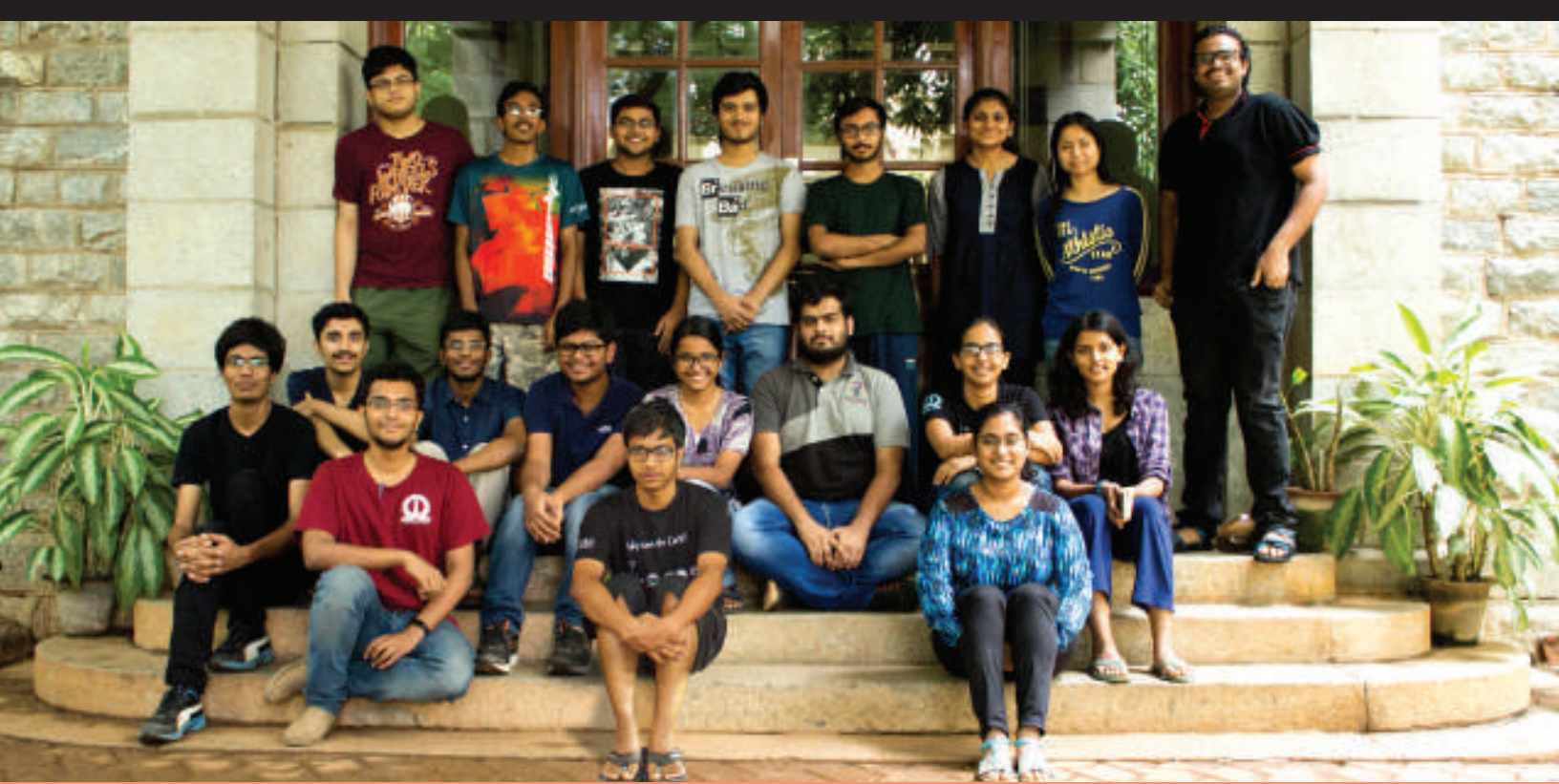




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