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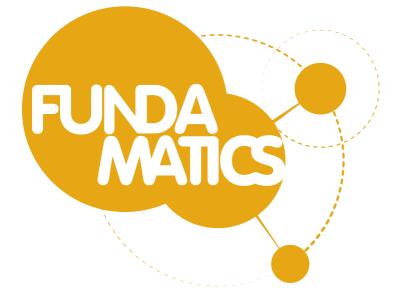
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Quarterly magazine of IIT Bombay Alumni Association

From the Beehive

terly magazine Funda-matics that will now brain food and pure, unadulterated fun, *Reinvigorating the art of the spirited essay,* on their toes. Within these pages you will bestselling authors, national policy makers, newspaper cartoonists, well-known mounprovoking pieces and a few wordy ones as well interlaced with some humour and light of its typical behaviour. For instance, bees show a remarkable level of social behaviour. IITBAA too, is a universe buzzing with busy multiple tasks to create and sustain a vibrant, fronts, creating and administering pathbreaking initiatives for the IITB community

consolidating the alumni database, extending reunions of all hues — silver, ruby, jade and thing that we have found lacking so far, has indulging nostalgia and above all, binding notorious in their student days for turning in assignments at the last minute. So was it looming deadline got in worker bees from while harassing alumni for contributions. We like 'dawn oil') to bring you this maiden isbring you one every quarter. We can only do back. Unlike our aphid counterparts, - more bees are always welcome at this hive. To end

All the bees

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Pi in an Onion

O-pi-nuon, they say is like a nose. Everybody has one. When it comes to opinions about IITs, many alumni have more than one opinion. After all, it's their alma mater they are talking about. From Jairam Ramesh to Narayan Murthy to just about anybody, opinions come forth very candidly, albeit differing ones. For this section, we decided to seek opinions from a cross-section of alumni. What would you call one who has done his B.Tech and M. Tech from IITB, done his PhD from a reputed university abroad, taught at IITK and has been the Dean and now, Director at IITG? Try calling him Dr Gautam Barua. We thought we would get a well-rounded opinion from someone who is 3-in-1: alumnus, faculty and administrator. True to our expectations, Dr Barua has described the needs of IIT very lucidly and backed them by making some prescriptions of how alumni can help.

And then, we have opinions from two old-timers. Both from the active batch of 1975, sometimes referred to as Jairam Ramesh's batch. Kirat Patel is the captain of an industry that manufactures chemicals, and is a founding director of IITBAA in its present form. Rajanikanth Shastry had a long stint with the IT industry and is a passionate alumnus, batch leader and fundraiser. Hence, we have opinions from both core and noncore sectors of the industry. And in case you thought that an opinion from a freshie, a 2009 graduate does not count, think again. The short piece by Dharma Teja and his simple suggestions for tweaks in the library and hostels has caught the attention of two of our Deans and an action plan is underway.

This is a start. We hope that more of you will come forth and freely express your opinions, preferably with a suggested action plan. We will not insist that your opinion or your plan conform to a 'world-class standard' – although no body so far has said that IIT Bombay alumni are not 'world-class'.

Bumblebee



Changes and Reforms in the IIT System

Gautam Barua

A big expansion in higher education, and in particular, in technical education, is taking place in India. Of course we all know that the expansion that took place through the establishment of private engineering colleges happened some time ago, but what we are now in the process of seeing is expansion by the Government and the corporate sector. The number of IITs have increased to 15 from 7 four years ago, and it is widely assumed that this will rise to 20 in the next few years (the 16th, the conversion of IT-BHU to IIT-BHU, has already been agreed upon). The number of NITs have risen from 16 four years ago to 30 today. About 20 IIITs are being proposed in the public-private sphere. All the IITs and NITs have also increased their sizes significantly and more increases are planned. Further expansion in higher education is likely with the passage of the foreign universities bill and with the conducive climate that has been created for corporate involvement in higher education. The Mittal group, ADAG, HCL, Wipro, and NIIT have already set up Universities or institutions. More are likely to follow. In this setting, the focus on the IIT system seems to have increased in the media, rather than decreased, as one would have assumed. Probably it is due to the "eyeball value" of the IIT alumni and the aspiring students along with their parents. What I call "IIT bashing" is a favourite pastime of the print media. Be it a suicide, "poor" ranks in

global rankings, JEE paper problems, court cases, the media gleefully reports the smallest "scandal". The IIT system is therefore under pressure, as never before, to perform, and to adapt to the changing environment, by making suitable changes in all aspects of its working. I would like to highlight some of the directions of these changes. Limitations of space do not allow me to delve deep enough into each area and so my arguments will seem incomplete. Nevertheless I hope I will be able to get you to appreciate the issues.

PhD Research

With the country growing economically at a healthy rate, people have realised the need for indigenous research to carry this growth story forward. Even though industry funding for research in educational institutes is still very low, the demand for research is increasing. This is a positive development for the IITs and the results are there for everyone to see. The number of PhD students on campuses has shown a big increase in recent years. IIT Bombay is graduating about 200 PhD students every year for the last three years. With about 500 faculty, a graduation of 0.4 per faculty is not bad. What is required to take PhD research to a higher level? The most important factor is to attract bright students, especially those who graduate from the IIT system itself, into the PhD programmes. If even 10% of IIT UGs enter into PhD

programmes in the IITs, we will have about 1000 IITians entering the PhD stream every year. This will make a tremendous difference to the quality and quantity of research in the IITs. We are doing what we can to attract our own students. Some of the measures that have been taken are allowing B.Techs with 8 CPI or more to get direct admission into PhD without sitting for GATE. Some of the IITs have relaxed the course requirements for B.Techs in the PhD programme by allowing them to sit for a written comprehensive examination (like the US model). The Government has increased the assistantships, but they are still far short of the salaries industries give. Much more needs to be done. We need help from the alumni both in words and action and in monetary terms. We need help in marketing the PhD programmes and we need money to "top up" the assistantships that the Govt. provides.

Autonomy

There have many discussions on autonomy in various IIT related forums. The IIT Council has discussed the matter a number of times. Now the Kakodkar Committee has made many recommendations on granting substantial autonomy to the IITs. IITs enjoy almost complete autonomy in academic matters. The Senate of each IIT is essentially the highest decision making body in all academic matters. Administratively too, the day-to-day running of an IIT is almost completely in the hands of the Director, the Deans and the senior officers of the Institute. However, there are constraints in procedures and processes that relate to financial matters. It is therefore in such matters that the IIT system needs more autonomy. But therein lies the catch. The Government argues that since it is funding the IITs they have to follow government rules and norms. We agree, but there is room for changes and unfortunately they are not taking places primarily because Finance Ministry officials are not spending time studying our proposals. Take for example the case of creation of non-faculty posts. There is a ratio of 1:1.1 set for faculty to non-faculty posts fixed by the Finance Ministry. On top of it the revenue budget for an IIT is determined as a multiple of the number of students in it (under the revised "Block Grant" scheme). Yet, when an IIT wishes to create new posts within the prescribed ratio and of course within the budget which is fixed irrespective of the number of staff, "concurrence" (read as permission) of MHRD is required (read as permission of the Integrated Finance Division of MHRD which in turn implies a nod from FinMin)! What is the logic behind this? None, except that while rules for other things have changed, rules for post creation have not. Who has the time to go into these details? We have, but who is listening to us? Another point we have been trying to push through is that "Institutes of National Importance" (IITs and NITs fall under this category) should be treated as a different category from "autonomous bodies". Should an IIT and, say the "Export Inspection Council, New Delhi" be treated identically by the Govt.? Should an order not to purchase new cars in the name of austerity apply to a new IIT? Many changes are possible within the current dispensation and alumni need to help us achieve these changes.

JEE Reform

There is a proposal to change the way students are selected into the IIT system, and in fact into all institutes of technical education. The adverse impact of coaching on young minds has been identified as a major impediment to the natural intellectual growth of our youngsters. So there is a proposal to take into account the result of Board examinations in some form along with an aptitude test as part of a new admission policy. There is a lot of doubt in the minds of many as how the Board results of 30 odd Boards with different standards can be compared. How will the differences in these Boards be handled? Won't there be marks inflation? The way the Board results are likely to be factored in is to use the percentile rank of a student as his / her marks out of hundred. So the rank of a student in his Board and the size of the Board he is in will decide his marks out of hundred. So if Board A has 100 students and the first 7 ranks are A1, A2, A3, A4, A5, A6, A7, and Board B has 50 students and the first 4 ranks are B1, B2, B3 and B4, then the overall ranks will be A1 B1 (tie: 100), A2, A3 B2 (tie), A4, A5 B3 (tie), A6, A7 B4 (tie). The marks a student gets will not be counted, only his rank in the Board will be. So marks inflation will not be an issue. Is this a fair method? We can have different opinions on this, as fairness is a complex issue, but we have to look at the overall result of the proposed changes and see if it is positive or not. There will have to be separate lists for the different categories. There remains a challenge of handling state vs Central category lists, and the challenge of getting the results of all school Boards on time and in electronic form with all details. This scheme will not stop coaching, but it will ensure that it takes place for the Board exams. More importantly, it will take place in the schools themselves. But then, is this not schooling? What will the coaching institutes do? They will have to convert themselves into schools. That will give us so many high quality schools! Alumni should support this bold initiative of the Government of India and they should help convince the faculty of IITs that this is a good idea.



Prof. Gautam Barua

Prof. Gautam Barua, B.Tech,'76, EE and M. Tech, '78, EE from IIT Bom-

bay and PhD from Univ. of California, Santa Barbara, USA joined IIT Guwahati in 1995. It was just a year after the first Director, Prof. Buragohain, another Ex Faculty member and alumnus of IITB helped establish the Institute in 1994. Before joining IIT Guwahati, Prof Barua was a faculty at the CSE Dept. of IIT Kanpur. He took over as the Director of IIT Guwahati on March 10, 2003 and is currently serving a second term there. As a student of IITB, Gautam Barua was extremely popular, excelled in both sports and academics and his name still adorns the Scroll of Honour marquee in the H4 lounge.

Five Questions towards a Better IIT

К N Теја

I am not an expert in the field of education. I could go on with my business as usual and not care, but I feel compelled otherwise since I have great affinity towards my undergraduate institute. I don't want to say that the IITs are perfect the way they are, because obviously, they are not. But the JEE, which may not exist a few years into the future, is a superior method of selection compared to the rest of the engineering entrance exams in India because of the unpredictability of its pattern and the novelty of its questions.

In this article, I would like to draw some comparisons between IITB and Cornell University, which is much older and is above IITB in all international rankings. Cornell, a member of the Ivy League, has its own problems. Yet we need to learn what it has got right. If we want the IITs to be among the top 20 universities in the world, some tough questions need to be asked.

1 Are the students being provided facilities to study peacefully, at any time of the day, without any restrictions?

When I was at IITB, most of my batchmates resided in shared rooms for two years. Most of these shared rooms were so small that there was hardly any space to walk, let alone fit a desk and chair. On the other hand, the library at IITB closes at 10 pm on weekdays, and does not allow students to bring their own textbooks. The study room can accommodate around 25 people and is open 24 hours day, but I couldn't stay 10 minutes in the room without getting 10 mosquito bites! On the other hand, a library at Cornell is open 24 hours during weekdays.

$2^{ ext{Is the curriculum up-to-date?}}$

As a B.Tech student, I didn't have a single CAD, FEM, or a CFD course. Mechanical Engineering undergraduates at Cornell take formal coursework focused on Solidworks and also learn other CAD and CFD softwares while in college. Not only this, they also take formal coursework in MAT-LAB and ANSYS. Some of my Mechanical Engineering classmates at IITB didn't know any MATLAB at the time they graduated. No wonder a lot of us have switched fields, because our curriculum is not exactly in line with industry needs.

3 How can IITs promote enthusiasm in research among undergraduates?

Cornell has an annual research conference. What if IITB started something on similar lines, where at least one student from each program was selected to present his/her poster and in the end, best presentation awards are given to the ones with exceptional papers?

4 Where are the students lagging behind in terms of skills? At IIT, I took humanities courses. Which was great, but there is something more important than that. At Cornell, courses on public speaking are offered regularly. We should make it compulsory for every IITian to take one or more public speaking courses in English.

One more skill can be more useful than simply taking humanities courses: foreign language skills. However, IITians should be first evaluated for their English knowledge skills, and if they are successful, then they may become eligible to learn another language. The rest can take English classes. Compulsory involvement of students in some sort of physical activity every semester might also be a good idea.

5 Do we have the funds to do all of the above?

Before concluding that there aren't enough funds and the fee for general category students will need to be raised, introspection is needed on whether the funds presently available to IIT are being used effectively and efficiently. Are a world class convention centre and world class badminton courts really the need of the hour? During my B.Tech days, my hostel got a large screen TV (which replaced a decent working TV) and a pool table. Alumni who are donating funds can make sure that their money is spent on initiatives that improve the quality of education.



Kanuparthy Nagabhanu Teja

Teja is a 2009 B.Tech Mechanical Engineering graduate from IIT

Bombay. After his graduation, he went on to pursue a masters degree from Cornell University. He is currently working in a consulting startup in the US. He has recently been to the pan-IIT summit and on hearing Dr. Narayan Murthy and others, got inspired to give his own views about the future of IITs.

The Bull Session More Engineers? Or More from Engineers? Kirat Patel

A reminder of the times when spent endless hours, pontificating on varied topics late into the night. The editors would like to invite comment on a topic, every issue. So start arguing.

Does IIT nurture leadership?

The boss once remarked, "When I need engineers, I go to UDCT. But when I need managers, I go to IIT."

That made me wonder, was he right? If so, why do IITians make good leaders or managers?

To avoid the hair-splitting which will naturally begin in any bull session involving IITians, let me say that I'm not getting into definitions of leadership, or whether all IITians make good leaders.

There seems to be evidence (and not all of it is typical IIT hype) that a disproportionate number of students out the five campuses who graduated in the 60s, 70s and 80s have reached leadership positions in academics, research, business and social services.

Each campus in those days hardly had 2,000-3,000 students, with maybe a thousand graduating every year. This is a small number, if you compare it to the numbers of students who were graduating out of various universities in India back then.

Then why is there a general impression that

IITians are special and make good leaders? Without having any objective evidence to prove whether this is a right impression, let's assume, for the sake of argument, it to be true on purely apocryphal stories.

What caused, or causes this? Let's start with raw material.

Back then, not too many people had heard of the IITs, outside of the small cognoscenti in the business of guiding children (counsellors had not been invented then) — which in those days meant your school teachers, engineers, doctors and other professionals in your family circles. If you were a 'good' student — meaning you got good marks (grades had not been invented then!), you were pushed willy-nilly into the science section of the class (the idea of a 'stream' had not been invented then).

Once there, you had a choice of pursuing either engineering or medicine. Pure sciences were for those who didn't make the cut.

The JEE had already started building a reputation, with Agarwal classes in Bombay ('Mumbai' had not been invented, then) being the first to smell a business opportunity. Trust the Marwaris to be the first there!

So there was a bunch of bright boys ("girls" had been invented then but didn't gravitate to this part of the woods, unfortunately) living together on relatively large campuses, in the

prime of their youth.

The system — which meant the syllabus (the term course content had not been invented yet) and the professors — put you through the wringer to make technologists out of you. By and large, they were insulated from the disease of politics which infected other campuses around the country, and the system had integrity. The values imbibed by them from the professors or the peers at that impressionable age remained with them. And fortunately, the values were secular, forward-looking and open-minded.

Most students made it through. Some dropped out for greener pastures, but all of them carried a germ inside them which set them apart.

What caused this?

Was it the fact that most students were toppers to begin with, and would have succeeded anyway?

Not quite. IISCs and UDCT had equally bright, if not brighter students. And there existed the Doon School/St.Stephen's mafia.

Better professors and a more rigorous system?

It wasn't a given in those days for the best professors to gravitate towards the nascent IITs. And the system wasn't more rigorous than the systems elsewhere. ('Relative grading' came later).

The campus atmosphere?

Perhaps. Put a bunch of bright, energetic kids together with no parental and very little adult supervision, and they churned out a life on campus, unique in its richness. The fact that most students had similar intelligence profiles but a very wide range of personalites played a significant role. You had to develop an additional sense of community to get along with nuts from all over the country. You couldn't be parochial and you built what was then called team sprit (EQ had not been invented then).

First you learnt intellectual humility and then you learnt that your way was not always the only way or the even the right way. That's what built the leaders of tomorrow.

Many eminent graduates have mentioned that their stints as Mess Secretary, Social Secretary or General Secretary on campus taught them more about life skills than anything they learnt in the classrooms — with little or no politics, which infected the other universities. This was unique amongst the universities in India then. Student leaders from other universities also made it in life, but mostly in politics.

How do you sustain this? What are the problems now?

To begin with, the raw material is a little different nowadays. It takes a lot more focus and dedication to make it through the JEE than it did when the current crop of leaders sat for their JEE. It appears that the kids joining now are not as blank a slate as we were. They have knowledge and they have opinions. Which makes the learning of life's unique lessons on campus that much more difficult to absorb, but not impossible.

Unfortunately, they also have a chip on their shoulder about 'Brand IIT'. We were spared that because the only brand we knew of back then was Dalda and Lifebuoy! We are guilty of this situation as we, of the older generation, created this brand. And the current lot is the victim.

Has the system changed?

The professors haven't. At least, not for the worse. If anything, there's been a bit of improvement. The brand has attracted better academicians to IITs, and will continue to do so with a little help from the alumni.

The emphasis on research, with more Masters and Phd students on campus has put older students on campus. Not all of them have been through the rigours of the JEE. Maybe that, along with the internet, has changed the character of social interaction on campus and the froth in the churn is more measured.

Is the concentration on 'deeper' in 'higher' education giving a miss to something? Why not 'wider'?

There was a certain stress then, not very pronounced, on giving each student some exposure to the humanities. One hears that it was because of Nehru's insistence, who wanted not engineers but future citizens of India — whatever that meant. Why not build a bigger better humanities department to give the kids more exposure to the arts, and other social sciences? Can we have a kid graduating in Mechanical Engineering with a minor in Theatre? The possibility of him turning out to be a leader is that much more.

What else could we do to ensure that the trend continues?

Clearly, encourage things that work. Anything that remotely smells of self-help should be encouraged. For instance, give more strength to Mood Indigo, Techfest and many other similar initiatives. Benign neglect worked for Mood Indigo. Maybe that's the way to go.

The current HATS programme, where students are encouraged to look after their hostels (with a little help from the alumni) should be enhanced so that students are given some control of the estate departments budget, empowering them to make major differences.



Kirat Patel

Kirat Patel (B.Tech, 1975, Mechanical Engineering) is the

Executive Director of Alkyl Amines Chemicals Ltd. An erstwhile Technik editor, he is one of the original founders of the IIT Bombay Association and has been conferred the Distinguished Service Award by IIT Bombay. If pursued and pestered diligently he does find the time to indulge his love of writing. He has been given honourary membership of the beehive.

Mission IITB

Rajanikanth Shastri

IIT is frequently in the cross hairs of controversy. Recently, the first salvo was fired by Jairam Ramesh, who claimed that the faculty at IIT is not world-class¹ and that if at all they are excellent, it is because of the quality of the students. This was followed by Narayan Murthy's claim that IIT graduates are not up to snuff and that coaching classes was one of the reasons responsible for this situation². Anand Kumar, who founded Super 30, countered that the coaching classes are geared to crack the JEE³. Representatives of the faculty weighed in with observations of their own and echoed Murthy⁴.

The biggest asset the IITs have created is intellectual capital. This has benefited the nation and the world. Brand IIT is internationally acclaimed. Looking ahead, Mission IIT aims to increase this asset with the right mindset that serves India's national and international interests.

A desire expressed by many is that the IITs should rank among the world's best universities, in the same league as MIT and Stanford. The MIT curriculum includes Anthropology, Economics, Political Science and other such subjects. Ivy League universities have broader and more diverse majors. Therein lies a clue. Expecting the IITs in its current avatar to rise and rank among these universities is like asking a leopard to change its spots. IITs should serve India's national interest. This is cast as an excellence versus relevance debate. Excellence is a given. The debate centres on relevance. The government of India is a major stakeholder by way of its investment in the IITs. That makes the citizens of India major shareholders. The IITs must serve the national agenda of inclusive growth and bridging the urban-rural divide. In that respect, achieving world-class rankings should be an outcome, not a goal. The goal ought to be to establish an iconic category of excellence with respect to serving the national agenda. This could very well result in the IITs becoming a role model for other institutions across the world.

Performance to Date

The output of IITs, i.e. the 'product' comprises of graduates, postgraduates, and relevant research and industry engagements. The nation has benefited from the accomplishments of B.Tech students and the role the faculty has played in shaping the minds and capabilities of these students. The institution has produced numerous PhD, M.Tech and MSc graduates. Their contribution to the nation is either unrecognised, or at present it is not as significant as the contribution of B.Tech graduates.

No one could have foretold that the nation would eventually benefit from the combined efforts of graduates (both from IITs and other colleges). These graduates – who had migrated to the US – together with graduates working in India would bring about the Software Revolution, as well as other technological advances. The much maligned and lamented Brain Drain morphed into Brain Gain.

As far as research and industry engagements are concerned, Ramesh says, "There is hardly any worthwhile research from IITs." However, past performances do not guarantee future results, and there is a general agreement that changes are required to generate the appropriate kind of output for the future.

The issue that surfaces occasionally is that the

Mr. Murthy's claim in the absence of valid data is conjecture. However, it could portend a trend that may be real. An important first step is to do a detailed analysis of the opportunities that graduates are pursuing, and also on the feedback about their performance from the industry.

Focus on Technology

Technology is a phase in a product life-cycle between a scientific discovery being demonstrated in a laboratory, and the discovery being part of some capability or utility that is reproduced reliably using engineering. That is to say, science is being involved in discovering 'something'. Technology is involved in demonstrating that this 'something' can be reproduced and therefore providing a platform for the engineering phase, which involves this 'something' into being part of a solution which has some broad or narrow utility.

With this in mind, the excellence versus relevance issue would actually focus on excellence in technology, with relevance being a target.

Expectations

The expectations from IITs are to provide excellent technologists – technologists with business acumen, technologists with managerial and leadership skills, innovators and entrepreneurs. The goal is to contribute to the technological intellectual capital of India. The country needs more individuals who will provide thought-leadership and become change agents – for instance, the likes of Nandan Nilekani, Narayan Murthy, Jairam Ramesh and Arvind Kejriwal.

Graduates are expected to possess attributes critical to be successful in today's environment, such as excellent presentation and inter-personal communication skills, being well-versed in group dynamics, having the practical skills required to solve real-world problems that go beyond just the theoretical realm. This underscores the importance of multi-dimensional skills and creative thinking.

Students will gravitate towards the most remunerative and challenging opportunities. It was opportunities that led IIT students overseas in the seventies, and it is opportunities that are attracting them into the financial and FMCG sectors in India today. Thus far, IIT's most successful product has been brains.

With the above in mind, the following recommendations are made:

1 Tune and refine the JEE. Improve it to filter in the best technical mindsets. Consider adding sections that test analogies and logical thinking. A focus on English is a red herring. The JEE could be translated into regional languages and it would still work. Coaching will always be focused on cracking the test, no matter which avatar it takes.

2. Expand the curriculum to include new majors in other areas, like Economics, Political Science, Social Science. Set up separate JEEs to filter in students with excellent multi-dimensional skills. Use the real estate of IITs effectively to build new departments. Make English proficiency an important criterion for these majors. New coaching classes will emerge.

3. Students enter the institute as rough gems. The professors play an important role in shaping and polishing them. The rigour of the academic programme acclimatises students to deal with and perform under stress. Theoretical knowledge is the fabric for procedural thinking, which provides the framework for solving real-world problems.

But this is not where education stops. Ask any successful IIT graduate, and they will assert that hostel life and experience gained outside of academics played a major role in their careers and lives. Assign a sizeable number of inter-disciplinary freshmen annually, to a select set of hostels and let them be together till they graduate. Each year a different set of hostels can be selected. Hostel 8 had the maximum number of IITB 1975 graduates, which has emerged as the most successful batch of all IITs so far. Hostel life fosters bonding and camaraderie that lasts for life and is stronger between batchmates, and less so between different batches. If this sounds like Social Engineering, it is. Empirical evidence supports it. Extra-curricular activities are important and should be allowed to foster.

This by far is probably the most important aspect of IITs. A healthy mix of academics and extra-curricular activities are the key to shaping these precious stones into polished gems. The environment is analogous to that of a petri-dish. Put the right mix of minds together, allow them to grow and progress. The results will be outstanding.

4 Rural India is trailing behind, and it will •take many years to catch up and assimilate advanced technologies that are prevalent in developed countries. What IIT can do for rural India is an enigma at this time. However, making a six-month rural residency a requirement for all students of government-aided institutes (not just IITs) will go a long way in bridging the 'mind-set' gap between urban and rural India. In the initial stages, the focus could be building infrastructure (toilets, living and dining quarters). With comfortable living conditions, these residencies could be a wonderful experience for students of all disciplines to converge from all over the country. It will promote national integration and another level of bonding. As part of this exercise, graduates should be instructed on the spirit of nation building. IITians collectively can play a major force in improving the quality of Life for all segments of society, both urban and rural.

Globalisation is nothing new. It has existed

for centuries. What has changed is the velocity at which capital, goods, manufacturing and services are moving across international borders. India is playing 'catch-up' and is currently importing 'packaged' technology for applications such as mobiles, internet connectivity and automobiles. The IITs have to play a significant role in fostering innovation and entrepreneurship. Competing in the global environment, leading India to be a contender in the world economy -- they require people who have quantitative and qualitative expertise. IITs are one of the many institutions which have to play a major role to address this challenge.



ianikanth S. Shastri

Rajanikanth (Rajan) S. Shastri is a 1975 graduate of IIT-B in EE from

Hostel 5 and a 1978 Graduate of Syracuse University, NY with a MS in Computer Engineering. His professional career spanned six years at Gould Computer Systems, a pioneer of 32Bit Mini-Computer Systems in Ft. Lauderdale, FL and eleven years at Intel. In 2005, after his youngest child graduated from High School, he relocated to India, much to the chagrin of his three children. He currently resides in a rural part of the Konkan Coast, in Uttara Kanada (UK), Karnataka, from where he wishes to partake in educational initiatives and other activist endevours. His dream is to see in his lifetime, a Bharat & US, (where his children, relatives, many of his batch mates and friends live) with minimal poverty, pollution (land, air & water), and corruption, and where a reasonable quality of life is achievable for all citizens.

From the Edge of the Abyss Looking into the Financial Crisis in Europe

Global economy is unchartered territory and in the past two years world trade has declined by more than it had in the entire post-World War II period. Following the massive financial crisis in 2009 advanced countries of the developed west have now been hit by a new series of shocks. The most current being the case of Europe struggling with sovereign debt crisis which have affected Greece, Spain, Ireland, Portugal and now Italy.

The bilateral trade figures that stand at over USD 67 billion, makes Europe India's largest and most important global trading partner. Indian companies need to understand the precise nature of the economic crisis in Europe to asses the impact on business prospects and future investment plans in the region.

Bumblebee reached out to well-known experts from within the community and in this section we present to you two perspectives on the financial crisis in Europe - one from Jamal Mecklai (B. Tech. 1972, Chemical Engineering), well known economic analyst and CEO of Mecklai Financial. The second article is from Viral V. Acharya (B Tech. 1995, Computer Science and Engineering), C.V. Starr Professor of Economics in the Department of Finance at New York University Stern School of Business (NYU-Stern).

History and economic theory suggest that it is not fear we have to fear but the failure of policymakers to understand how a crisis evolves. Bumblebee hopes that the two articles provide you with some fresh insights on the subject.

Bumblebee



Financial Crisis in Europe Sovereign Debt Crisis or European Banking Crisis? Viral Acharya

The Eurozone crisis has now taken firm grip, with Greek problems now having extended to Portugal, Spain and even Italy. These problems are now dangerously threatening to result in a full-fledged banking crisis in stronger countries such as France too. The crisis is rooted in a substantial measure to the nexus between the sovereign debt and banks in the Eurozone which function without adequate risk controls, and also with the capitalisation against losses on sovereign debt.

Recognising this root cause enables us to use a three-point resolution plan, which involves separating the Eurozone debt with the European Central Bank into a special purpose vehicle, stress testing bank balance-sheets and recapitalising them, and undertaking an orderly restructuring of the troubled sovereign's debt, bringing it down to a sustainable, growth-friendly level.

Earlier this year, on 21st June, Fitch Ratings reported that the 10 biggest US prime money market mutual funds (MMMFs), whose combined assets totalled \$755 billion, had half of their assets exposed to European banks. Shortly thereafter, on 23rd June, following Moody's warning that 16 Italian banks faced a possible credit rating downgrade, tensions in America's MMMFs surfaced: about \$3.6 billion in assets were pulled out of prime MMMFs, and the three-month T-bill rate went into negative territory, last seen in late 2008. A day later, on 24th June, after a rumour hit the markets that Italian banks would have to raise more equity after the recent European stress test, Italian bank stocks crashed within minutes, and the weakness of Italian bank stocks quickly spread across Europe, with the UK banks being hit particularly hard.

Credit and money markets showed some relief after the Greek Parliament approved the 78 billion austerity programme on 29th June. Despite that, American MMMFs remain wary of lending money to European banks. A few hours before the Greek vote, senior IMF (International Monetary Fund) officers warned that given that many banks in Europe's core countries are funded in good part by American MMMFs, a spillover of the Greece crisis into the rest of the continent could have dangerous effects. They warned further that if there was a spillover to the core European banks, then tensions in American MMMFs could resurface.

The problems have unfortunately resurfaced. As of 23rd November, Fitch Ratings updated that money funds' European bank exposure had come down to 34.9% of their total assets of \$642 billion, down from 37.7%. 10 of the biggest funds had trimmed their short-term lending to European banks by nine percent on a US dollar basis, between the end of September and the end of October. This pull-back reflects lower exposure, shortening of maturities as well as an increase in the required collateral for lending.

All of these have put significant stress on banks in the Eurozone, including for banks outside the troubled sovereigns, notably in France. In particular, French banks heavily reliant on short-term dollar funding from money funds have had to de-leverage, by shedding their sovereign bonds from riskier countries (namely, GIPSI, which stands for Greece, Ireland, Portugal, Spain and Italy, only further depressing the market prices of these bonds). The de-leveraging has also induced a credit crunch to the real sector, especially small and medium-sized enterprises, further weakening growth prospects and hurting bank stability. So much so that SocGen, the second biggest bank by market capitalisation in France, has lost 61% of its value since January, BNP Paribas has lost 45%, and Credit Agricole and Natixis have fallen by 57% and 46% respectively.

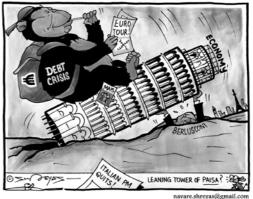
In essence, the Eurozone sovereign debt of weaker countries is fully entangled with the banking sector of stronger Eurozone countries, and the two are bringing each other down.

These facts, warnings and the likely turmoil to follow may appear reminiscent of the Lehman collapse in 2008. If history is a guide, however, we believe that we are still farther away from a potential Lehman event. With right policy adjustments, such an event can be averted.

To explain the reasons behind this belief, and propose some potential solutions, let

dAbs & Jabs!

by St Deyss-



us go back to 2006. When the American housing market changed course in the first quarter of 2006, the non-prime mortgage market began to deteriorate and many non-prime mortgage borrowers became insolvent. Since much of the non-prime mortgages were securitised, and most of the securitised mortgages were funded in the short-term by rollover debt markets, creditors in the rollover debt markets began to refuse funding to their highlylevered debtors in early 2007. This was followed by the financial crisis of 2007-2009, following the collapse of two highly-levered Bear Stearns hedge funds. They had been investing in non-prime mortgages in June 2007 after a 'bank' run on them in the repo market. It took another eight months of further runs for Bear Stearns to collapse in March 2008, and another five months of runs for Lehman to collapse in September 2008. The next in line for a run, Merrill Lynch, merged with Bank of America. Shortly thereafter, the remaining independent broker-dealers, Morgan Stanley and Goldman Sachs, were forced to convert to bank holding companies. The entire Wall Street system of independent broker-dealers collapsed.

Let us fast-forward to the Europe of June, 2011 and ask: Who are the 'non-prime

mortgage borrowers' and who are the 'independent broker-dealers'? The answer should be anyone's guess. Lastly, are we near the June 2007, March 2008 or September 2008 of the 2007-09 crash? We believe that even June 2007 has not arrived yet.

The good news for those who are willing to listen to it, is that the financial crisis that started in America four years ago and spread the world over offers valuable policy lessons. One, while liquidity support from central banks to distressed entities can help them live another day, they do not provide a sustainable solution to their distress. Second, distressed entities can get addicted to liquidity support, refusing to make difficult choices to reduce their leverage and recapitalise. And third, a one-time decisive recapitalisation of distressed entities based on a transparent and credible assessment of how much capital the system needs, is the only policy action that restores growth and stability by calming markets that are worried about distress.

While the European situation is more complex due to the intermix of bank and sovereign debt exposures, and now the significant involvement of the European Central Bank (ECB) in both, we still believe that similar principles apply to this scenario as well. In particular, the exact steps of a comprehensive plan would be as follows:

1 Sovereign bond holdings of the ECB — where bonds are distressed — should be separated from its balancesheet into a special purpose vehicle. Any potential losses on these bond holdings should be met through the funds put into the European Stabilisation Mechanism. This will ensure that risk to ECB's credibility from its losses is not the factor that drives whether the GIPSI debt is restructured or not. While the inclusion of Spanish and Italian debt into such a programme renders it rather large, the European Stabilisation Mechanism will have to be bolstered in order to deal with the substantial scale of the problem at hand.

2. Sufficiently severe stress tests show be applied, to systemically impor-Sufficiently severe stress tests should tant European financial institutions. Tests could include reasonably plausible haircuts on sovereign bonds (on both banking and trading books, unlike the stress tests of 2010, and to an extent, even of 2011, wherein the banking book holdings were not subjected to haircuts). The failure of Dexia, a bank that was rated as being extremely well-capitalised by the stress tests, only reveals the cognitive failure in not subjecting troubled sovereign assets to adequate haircuts while assessing their recapitalisation needs. Systemically important financial firms which are found to be short of capital should be recapitalised privately and promptly. For those firms which cannot, stabilisation funds should be used to do government recapitalisation, as necessary. This approach mirrors the approach taken in America in Spring 2009. Without a credible recapitalisation plan, national regulators are unlikely to reveal the full scale of their problems.

3. Sovereign debt restructuring should follow this expeditious recapitalisation of exposed financial firms. There is no way some of the troubled sovereigns can fix the left-hand side of their balancesheets without first fixing their right-hand side. That is to say, they cannot hope to generate growth without first reducing the overhang of debt (even if they undertake privatisations and structural reforms). Further, any failure to reduce debt overhang puts at risk the welfare of future generations in these countries, for whom the hope of retooling skill-sets is not beyond comprehension (as is, unfortunately, the case with part of the current generation). That the current method of treating the debts of troubled sovereigns — purely through fiscal austerity without any write-downs — is disastrous for future generations, is best manifested in the wave of protests.

In summary, complete bailouts of all troubled nations are beyond the pockets of even the wealthiest countries, now that the Spanish and Italian debt looks vulnerable too. Those who aim to avoid restructuring debt by simply window-dressing it are simply delaying the inevitable; in the short run, their efforts may help the financial sector in wealthy countries, but will produce little to fix the core issue – the insolvency of troubled countries. The real risk is that in the end, as with the Lehman Brothers bankruptcy, everyone will have to pay. This risk can be managed through appropriate policies, since the end-game of a full-scale run on sovereign debt and market freezes has not even started yet!



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Engineering, 1995, IITB) is the C.V. Starr Professor of Economics in the Department of Finance at New York University Stern School of Business (NYU-Stern). He is also the Program Director for Financial Economics and a Research Affiliate at the Center for Economic Policy Research (CEPR), and a member of Advisory Scientific Committee of European Systemic Risk Board (ESRB), International Advisory Board of the Securities and Exchange Board of India (SEBI), and Advisory Council of the Bombay (Mumbai) Stock Exchange (BSE) Training Institute, and an Academic Advisor to the Federal Reserve Banks of Chicago, Cleveland, New York and Philadelphia, and the Board of Governors.

Prior to joining Stern, he was at London Business School (2001-2008), the Academic Director of the Coller Institute of Private Equity at London Business School (2007-09) and a Senior Houblon-Normal Research Fellow at the Bank of England (Summer 2008). He completed his Ph.D. in Finance from NYU-Stern in 2001 and has been conferred Young Alum Achiever Award by IIT Bombay in 2011.

At Stern, Viral co-edited the books Restoring Financial Stability: How to Repair a Failed System, John Wiley & Sons, March 2009, Regulating Wall Street: The Dodd-Frank Act and the New Architecture of Global Finance, John Wiley & Sons, November 2010, and Dodd-Frank: One Year On, NYU-Stern and CEPR (released on voxeu.org), July 2011. He is also the co-author of the book Guaranteed to Fail: Fannie Mae, Freddie Mac and the Debacle of Mortgage Finance, Princeton University Press, March 2011 and Harper Collins (India), June 2011.

W(h)ither the Euro - A Fable

Jamal Mecklai

The year is 2035 and Helmut Kazantakis has just been sworn in as the first President of the New European Republic.

Mr. Kazantakis, who is half-Greek, has an unusual first name (for a Greek). His mother who was from Leipzig, had sworn that she would name her first-born after German Chancellor Helmut Kohl, who had unified East and West Germany during that very difficult time of change. She had been vacationing in Greece soon after unification and had fallen in love with a swarthy sailor, who took her group on an excursion to the islands, and the rest, as they say, is history.

Consolidating his pan-European DNA, young Helmut's upbringing took him to Paris, Geneva and Frankfurt. His mother, though hopelessly in love with Niko, a wild-haired, hard-drinking sailor, retained enough of her Teutonic values to ensure that her young son was spared the indisciplined joy of growing up *au naturel* on the islands. She sent him off to a gymnasium in Frankfurt, followed by a college of arts and letters at the Sorbonne, and, finally, finding that his wayward genes were still expressing themselves, to a finishing school in Switzerland.

And it was here on a skiing holiday, when he inadvertently tumbled in the snow with the very fetching wife of the French prime minister, that he was recognised as a potential Eurostar and groomed for a role in Brussels. By 2010, when the first cracks in the Euroland were beginning to show, young Helmut was dispatched back to Athens as a peacemaker between the Greek government and the unions. He was quite the laughing stock of many at first, with his strange name and rather formal ways. However, he won over the protestors with a worthy show of ouzoinspired Greek dancing and extravagant promises, key amongst which was that he would get Angela Merkel, the sternish then-Chancellor of Germany, to wear an itsy-bitsyteeny-weenie-yellow-polka-dot-bikini to the next meeting of the European Council, which was to be in Santorini later that year.

Of course, he was not able to deliver on that promise — Ms Merkel, with whom he had worked for some months, loved him dearly, but not that much. Despite that failure, however, his mission was a resounding success. The Greek government, supported by the ECB and on the sidelines by the IMF, was able to impose some pretty serious service and benefit cuts. The weakened Euro helped pick up tourism revenues, and all seemed well – at least for a while.

Unfortunately – though unsurprisingly – the inherent conflict in the birth of the Euro, akin in some ways to the conflict in Helmut's own gene pool, continued to reassert itself in succeeding years. Helmut was dispatched in turn to Portugal, Spain and Italy as the ambassador of choice, to ensure that people were entertained enough to accept the pressure of reduced benefits and having to learn to work. He also took the initiative to set up special events to stimulate frivolity in Frankfurt, Cologne and Düsseldorf. Once, when he was in Munich during the Oktoberfest, he ended up so drunk that he made advances at the Mayor, a large man in lederhosen, who subsequently tried to have him whipped.

Over time, Helmut's work began to change the way Europeans behaved and acted. They started becoming more and more like each other. The Germans and the Dutch became a little more wild-haired; their attitude to work and productivity became, shall we say, a little more Mediterranean; and Allah be praised, the clinical surplus that the North enjoyed with the South started to slide. On the other side, the Greeks, the French and the Italians started becoming a little more circumspect, a little harder working, and Real Madrid and Barcelona no longer qualified for the European Cup as a matter of course.

By 2020, seminal research in cosmetology by the Yves St. Laurent foundation began to merge skin tones across the continent. Pioneering work in active voice alteration by Nokia brought languages and accents closer together. Only wine and cheese remained parochial, but by 2025 it was possible to get a very Neapolitan pizza in places even as far north as Hamburg. The culmination of this almost genetic unification of Europe was seen in 2029 when the Italian finance minister (a nephew of the late Silvio Berlusconi, one-time Italian President who was not renowned for either fiscal prudence or probity), was made head of the European Central Bank.

And when, at long last, the great European experiment reached its desperate conclusion of political union, Helmut Kazantakis, the widely acknowledged Father of Modern Europe, was the unanimous choice as the first President of the Republic.

The Euro surged on the news, rising from a multi-decade low of 72 US cents to near parity with the dollar.



Jamal Mecklai

Jamal Mecklai is CEO of a risk advisory firm – the Mecklai Financial.

Normal is boring for this 60-year-young maverick, who feels at home in a shirt only when it has got an unusual hue. Mecklai grew up in Mumbai and got a degree in Chemical Engineering from IIT Bombay, before moving to America in 1972 to study Biomedical Engineering at the Rice University in Houston, Texas. He dropped out of the university after three years of research and began doing odd jobs. He returned to India in 1985 and headed the Mecklai Financial, an offshoot of his family-run broking business. Jamal lives with his wife, Pravina.

Aadhaar Ya Niraadhaar?

Bumblebee

When Nandan Nilekani took charge of the Unique Identification Authority of India he was feted for his business-like approach, his stewardship of a project to give identity numbers to millions of Indians, an exercise unprecedented in its scale across the globe. While most accept the need for creating a systematic database of our citizenry, the path to be taken for this has become the subject matter of a viral attack from many quarters—cabinet ministers and bureaucrats, policy experts and activists, even a few state governments. Everything, from Nilekani's procedures for data collection and the potential errors therein, to concerns over privacy, is being questioned.

UIDAI is also a subject very close to the IIT Bombay family. Nandan and many of his aides are from within the alumni community as are several detractors who question its "security" and "developmental" dimensions of they scheme. They claim that the former leads to an invasive state; the latter leaves us with a retreating state. Bumblebee felt that it was time some of that rumpus in the national stage was brought within the pages of Fundamatics in an unbiased point-counterpoint debate straight from the proverbial horse's mouth.

Bumblebee



Imagining Aadhaar

Raj Mashruwala

The Unique Identification Authority of India (UIDAI) will celebrate its third anniversary next month. When Nandan Nilekani took office, he defined its mission "to issue a unique identification number that can be verified and authenticated in an online. cost-effective manner, which is robust enough to eliminate duplicate and fake identities." Hardly a day passes without the press reporting on Nandan or UIDAI, with headings like 'Declare Aadhaar Illegal', or, 'Chidambaram wants Nilekani to log out'. Tabloids and bloggers have a field day speculating, insinuating and dispensing free advice on the matter. Interestingly, the ground-level reality is different. The reality is that Aadhaar has become the largest and fastest growing identity database in the world in less than 14 months. Is Aadhaar the first sign of a brave new world, the next stage of people empowerment?

Before we begin a discussion on the future of Aadhaar, let us first take stock of where it is today.

1 Just the numbers: Over 140M enrolled; •³/₄ million new enrollments per day; active enrollment camps (16) in every populous state. In short, Aadhaar is growing faster than the mobile phone subscription rate, the most successful private initiative in recent times.

2. The system is working. In a year, it has scaled up to become the world's largest



biometric system, doing 100 trillion biometric comparisons per day while exceeding target accuracy. The reality: Indians will receive a unique ID. Built in the system is a portal for transparency, a toll-free call centre for assistance, an online appointment system, an online enrollment status query, a developer portal and more technical documents than one can read. Let us face it: despite IIT alumni running the show, something real and functional has emerged.

3 • Aadhaar was sold to the public to facilitate delivery of public service. Whether this means direct payment for a NREGA recipient, delivery of subsidised LPG cylinders, KYC validation for the SIM card or opening of bank accounts for the unbanked, our babus are discussing, defining, building and testing new apps rapidly. We will see them in 2012.

4 Innovation — new ideas of UID's uses • are in the air. Once you assume a reliable verifiable unique ID, you can dramatically simplify banking and payments, healthcare and education monitoring, and identity fraud detection. People are building such systems right now. Our very own IITB professors are changing their 30-year curriculum and giving assignments to students to envision uses of Aadhaar. Admittedly, one application — the biometric student attendance system — is not in the best interest of junta.



5 Costs – as per government records, UIDAI has spent ₹ 468.91 crore (approx. \$100 million) from its inception till September, 2011. UIDAI strangely seemed to have grossly under-spent its budget, which was reported to be thousands of crores of rupees. Crap, another target missed.

6. Residents — do they want it? At the moment, enrollments lines don't seem to be getting shorter. We must love standing in lines for no benefits. Wait, maybe people do need verifiable IDs.

What is the problem then? The civil •society is deeply concerned. Their objections — privacy, reliance on unproven biometric technology, run-away costs and using the information for security instead of development — ought not to be dismissed summarily. Where do we, the armchair democratic activists, go from here? We could:

- a. Support the continuation of Aadhaar. This is what the government would want us to do.
- b. Raise our voice to scrap the programme. This is what some in the civil society would want.
- c. Find ways to help improve the vision of Aadhaar. This is what the idealist in us would want.

Let us examine some of the objections raised by respected civil society leaders such as Ms Usha Ramanathan, Arundhati Roy, Aruna Roy and Justice V. R. Krishna. As a know-it-



all, I will offer my commentary. At the onset, it is fair to say that a constructive dialogue has not occurred between them and the Government of India. The government has generally ignored them and the civil society has destructively criticised the government in turn.

Privacy: Civil society leaders discuss a •number of subtopics -

- a. Need for a strong personal privacy law that India lacks. Aadhaar is too dangerous without a personal privacy law in place. No one disagrees on the need for such a law. The question is, do we put infrastructure projects on hold until such a law is passed?
- b. Use of Aadhaar data for security, including national ID card. National ID card and building the National Population Registry (NPR) are in an act passed by parliament in 2004. Enrollment in NPR is mandatory and would occur regardless of Aadhaar. Would it make sense to build a chinese wall between Aadhaar and NPR?
- c. Operational issues, such as data sharing among agencies

Privacy is a topic that every country must find its own balance of. It can't be borrowed from the US or China. Do we put Aadhaar project on hold until we find acceptable answer to privacy? Do we believe we can achieve a national consensus on privacy any time in the near future?



2 Unproven biometric technology: The three most common objections are (a) it is inherently probabilistic and hence fallible, (b) it can easily be faked, and (c) it is not workable with India's large and diverse population.

I am absolutely amazed at the speed at which India has produced biometric experts (albeit self-proclaimed) in the last two years. You-Tube is now overflowing with these experts. Having spent a considerable amount of time getting entertained by them, I can safely say that

- a. These experts have zero understanding of the probability theory. For them, Heisenberg's theory of uncertainty would be deeply disturbing. Any verification system has a certain probability of error. We need to characterise it, model it to predict error rates, and include additional verification factors if higher accuracy rates are required. Biometric verification is simply one factor.
- b. Faking. A four-digit PIN has 1 in a 10,000 chance of getting faked. Credit cards can be spoofed en masse at a negligible cost. We use both daily. We need to understand the cost benefits of each verification method and use whichever method is economically acceptable. Biometric identification has many good uses just like other methods such as tokens and passwords.
- c. Self-proclaimed experts conveniently disregard empirical data analysis on Indian

population, which concluded that UIDAI can establish individual uniqueness with desired accuracy (> 99%). Current enrollment accuracy results seem to validate the original proof of conceptual results.

d. Indian experts have the uncanny talent of quoting real experts out of the context.

The fact remains — we could discuss privacy, technology and intentions of the government ad infinitum. The crux of the issue is

- a. Do we have a severe leakage problem in public benefits schemes due to duplicate and fake identities?
- b. Do we want to provide services to people who need them the most, but lack identity proof?
- c. Do we want to continue wasting umpteen hours at the bank, at the mobile shop and at the government office, trying to prove our identity over and over again?

Then we need Aadhaar. Aadhaar is necessary, but it may not be sufficient. Scrapping it is definitely not a solution. Can I challenge the IIT community to suggest ways to improve it?

Raj Mashruwala

The author Raj (Mashru) Mashruwala, 1975, Mechanical Engineering, has painstakingly researched the questions. The same thing can't be claimed for the answers. He refused to provide his bio(metric) to the editors for verification due to privacy reasons.

Imaginary Aadhaar

Samir Kelekar

At a recent debate on UID in Bangalore, UIDAI's Deputy Director General, Mr. Dalwai was asked about the faking of fingerprints, which can easily defeat the biometric scanners of UID. A video of how a faked fingerprint can defeat a typical fingerprint scanner has been put up by Mumbai-based biometric consultant, J. T. D'souza, on You-Tube. One expected a sensible answer from Mr. Dalwai, perhaps something on the lines of, 'our fingerprint scanners can't be fooled by such faking'.

But instead, he answered saying that if it does happen, it can only happen in small proportions. As a security professional, I don't really know whether to laugh or cry at such an answer. It is like saying, yes, our backdoor doesn't have a latch and is open. But there is little chance that anyone will notice it, or for that matter even if someone does notice it, let us hope that they are not tempted to take anything.

To put it bluntly, we are spending - by various estimates - right from

₹ 5,000 crores to ₹ 1, 50,000 crores on the UIDAI project. The exact estimate of the project is unknown — so much for its transparency.

But it takes just ₹ 30 — a little bit of wax and fevicol — to fake a fingerprint and fool a fingerprint scanner. It would take a bit more to

identify someone else's fingerprint from say a glass of water, taking a photograph of it, making a transparency, etching it on a PCB and then making a fake fingerprint.

Fraudsters everywhere are a determined lot, and when such a process to steal and fake fingerprints can be scaled to millions and billions, it makes 'business'-sense for fraudsters to invest their time and money in the scam.

To top it all, there are various news reports which say that banking will be solely based on one's fingerprints after the UID comes in full swing. This is indeed what the fraudsters would want.

The UIDAI project is meant to give an identity to all Indians. However, it is not just the security aspects, but also other aspects that don't seem to have been thought of thoroughly. For instance, the iris scan was not present in the originally proposed plan. But when it was commonly known that fingerprints by themselves may not be enough for de-duplication — and that they can be faked easily - the iris scan was introduced. There is no cost benefit analysis or feasibility study of any kind available in the public domain. No full life-cycle pilot study of any size for this project has been done and results studied, before launching such a huge and costly project nation wide. Privacy considerations haven't been looked into either.

All the claimed benefits of this project are mere speculations; they are not based on a systematic study. For instance, one of the claims is that leakages in governmentsponsored schemes such as NREGA and PDS will be reduced. There is no substantiation of this claim. Less than 10% of the leakages are due to double-dipping at the last mile. Most leakages take place at the back-end, with the active connivance of politicians and the powers that be, and UIDAI can do nothing about that.

Interestingly, a recent report by a US research entity — the research was commissioned by the US government itself — bursts the myth of the usefulness of biometrics. It recommends that especially in remote areas where no direct supervision is possible, biometrics by itself should not be used for any authentication. If it must be used, there has to be another factor of authentication. Two-factor authentication is not proposed by UIDAI, and cannot be easily introduced in a country like India where due to lack of literacy, things such as passwords cannot be easily used.

Another big problem with biometrics is that unlike a password or a PIN which banks use, biometric information once lost, is irreplaceable. Once you have lost your biometric identity, you have lost it for good. Passwords or PIN numbers on the other hand, can be easily replaced. In a recently reported incident from Mumbai, it was found that fakesters picked up biometrics of people in order to issue them UIDs. These fakesters now have the biometric data of those people, and now, they are forever excluded from the UIDAI project.

Other issues include the fact that the National Identification Authority of India bill has not been passed by the Parliament. Thus, the legality itself of this project is suspicious. Foreign companies have been given control or access to biometric data of our country's citizens. There is no concept of a security clearance to bid for projects from UIDAI - a fact which puts our national security itself at risk.

All in all, this project is a white elephant in its current form. The earlier it is stopped or at least seriously relooked at, the better it will be for all of us concerned.



Samir kelekar

Samir has a B.Tech in Electrical Engineering (1983) from IIT Bombay, an MS

from Clemson University, South Carolina (1987) and a PhD from Columbia University, New York (1994). He has worked for several companies including Motorola and Alcatel. Currently, he runs a startup called Teknotrends Software Pvt. Ltd. that does cutting-edge work in the area of network security. He is based in Bangalore.

Global Meltdown

Jai Narayan Vyas

Memories of two major events in past still linger heavily on my mind. It was few years back when SARS played havoc with virtually every sector of the economy, affecting some major economies, especially in the East and Far East. A couple of years back another disease, Swine Flu, which originated from South America played havoc in US, Europe and lately, has moved to Asia, including the Indian sub-continent.

The impact of some of the wars in the Gulf and other countries also influenced exports from many countries, including India. The recent news, therefore, of the recession hitting USA and Europe, and then the talk of global economic meltdown cannot be interpreted in isolation, without the acceptance of the fact that we live in the era of globalisation.

And yet, P. Chidambaram observed that the "Indian economy is insulated from the crisis... The global financial crisis will not affect us much". His boss and eminent economist, Dr Manmohan Singh joined the chorus, till he had to reluctantly admit that no developing economy could possibly remain immune to the global crisis. Economists of all hues maintained that this may be a storm in the tea-cup, and a mild recession could visit us too.

However, the gloom on the trading floors of the stock markets was found to be spreading to the shop floors in the factories, with the inflation defying all measures of control. Does this mean that the Indian economy is as vulnerable as anywhere else, to the global meltdown?

While I pen this piece, there is news that after one of the credit rating agencies downgraded America's ratings, the second wave of recession has begun spreading with an increasing pace. The European markets (Britain included) find themselves in the grip of a crisis. So is the case at several other places world over. The debate has already started: is a double-dip recession around the corner?

There may be conflicting views on this, as Prof. Bakul Dholakia believes, "Technically, to fully call it a double-dip recession, US has to see two consecutive quarters of negative growth. In 2009, the GDP of US showed negative growth of -2.6%, which increased to a positive growth of 2.8% in 2010. In 2011, the growth is estimated to be 3%. If US has to hit double-dip recession, the economy has to fall from 3% growth to zero and further down to negative growth, that too for two consecutive quarters. This seems difficult."

Whether we agree with this or not, America is experiencing a considerable slowdown, with the rate of unemployment crossing 9%. Though one lakh new jobs were created in September alone, compared to 1981-82, the number of unemployed, has more than doubled. Out of these unemployed, almost one-third are likely to be jobless for one year or more, which in itself is a record.

The only hope is that the US will go for presidential elections next year. In the past 20 years, the trend is that the US economy booms during the presidential election year. This may be some kind of respite for the global economy. With the US economy looking up, hopefully the global economy will also turn for the better. It would therefore be appropriate to derive that any contingency of this kind could only be truly global in a globalised world. High priests of globalisation in India therefore cannot expect that the country will be insulated from this all-pervasive crisis. How less or how worse could be the impact of the global economic crisis, can only be a matter of debate.

It is impossible within the scope of this article to deal with the subject, and cover all facets. An attempt will however be made to deal with issues of common interest.

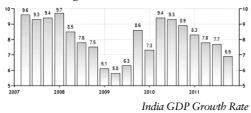
Prof. Dholakia feels that like in 2008-2009, India may see a slowdown. This, according to him, may come because under the worst circumstances of US hitting another wave of recession, the exports from India may see a decline. We have been oft-criticised for our not-so-impressive performance on the export front. Our share in the global trade remains less than 1%. The weakening of demand in the US would definitely affect our IT and Business Process Outsourcing (BPO) sector, and also result in loss of opportunities for young persons seeking employment, with attractive salary packages abroad. India's famous IT sector which accounts for an annual revenue of about \$50 billion or above is expected to be a major loser.

I would, however, like to derive a hypothesis that this hitherto termed disadvantage can be a real advantage in the present situation. The Indian economy will be, to a considerable extent, insulated from export performance fluctuations. According to me, the greatest advantage the manufacturing sector, specially the FMCG in India has, is our ever-growing middle-class market. Prof. C. K. Prahlad has termed it 'a huge bottom of the pyramid market'. The increasing rate of urbanisation and increased spending of the government through the schemes like MNREGA is bound to leave more personal disposable income in the hands of the rural poor. Though it is admitted that part of this will be adjusted against the increased food prices because of inflation, still, a reasonable sum will go for non-food items as well. This may continue to propel a buoyancy in the local market, partly neutralising the impact of global recession.

As regards the stock market, we are seeing fluctuations. It is my personal belief that this is partly because stock markets across the world are seeing heavy corrections in the recent times, and partly because the global recession might, to some extent, decelerate the flow of FDI. Though there is no relativity between stock markets and the economy, as the stock markets fluctuate on hope or despair, which largely depends upon the investor perception and therefore, beyond a point, stock markets cannot be used as a barometer to judge the economy.

Perhaps a more realistic test of the economic growth could come through the indicators of GDP growth. We were talking of GDP growth clicking around 9% or above. Now, the GDP in India which historically from 2000 till 2011 averaged a quarterly 7.45%, reaching a historical high of 11.8% in December, 2003 and a record low of 1.6% in December 2002, has been showing a continuous decline from a peak of 9.4% in the first quarter of 2010 to 7.7% in the second quarter of 2011 as shown in the graph on the next page.

Source: Trading Economics.com; India Central Statistical Organisation



This should not surprise us because according to me, there is not a single economy in the world, including India, which is immune to global turmoil. The global turmoil may see the decline of exports in certain sectors like IT or BPO, ready-made garments and fashion wear, manufactured goods, but it will not affect commodities.

On the other hand, countries like China which have a substantially large 12% share in the global trade, may look at our domestic markets for dumping their products. This should worry our domestic sector about unfair competition, and policy makers must ensure that necessary precautions are taken to prevent unhealthy competition and dumping, safeguarding the domestic sector. To an extent, the cumulative effect of all this can throttle job opportunities and also create sluggish demand in the domestic sector. This could further be aggravated if rain gods are not kind to us and in the near future, we have a comparatively bad and erratic monsoon.

All these contingencies are unlikely to coincide, and therefore it would be appropriate to conclude that while price rise and inflation may continue to haunt our economy, fortunately, for the conditions peculiar to us, even if the globe hits recession, Indian economy may at the worst experience only a slowdown.



Jai Narayan Vyas

Jay Narayan Vyas is an M. Tech in Civil Engineering from the class

of 1971 at IIT Bombay. In his long career, he has distinguished himself as a scholar, analyst, academician, administrator, manager and finally, a public life functionary. He also holds postgraduate qualifications in Marketing Management and a degree in Law. Jay Narayan Vyas is currently the Minister in charge of Health and Family Welfare, Tourism, Devsthan Pilgrimage Development, Coordination of Voluntary Organisations and the Non-Resident Gujarati Division in the government of Gujarat. Vyas provided able leadership and guidance for prominently putting Gujarat on the industrial map of India.

He has written a number of books and articles on subjects ranging from industrial policies and procedures, NRI investments, foreign collaborations, share markets, finance, import-export policies and small-scale industries, and can often be seen engaging in lively debates on various news channels.

Jay Narayan Vyas has recently shown his commitment to our alma mater by agreeing to enlist as a patron and a member of IITBAA's Gujarat Chapter. In this article penned by him, Dr Vyas shares some valuable insights into the global meltdown and its likely impact on India.

From Harry Potter To 'Hari Puttar': The Need For Scientific And Professional Import Substitution Shekhar Kulkarni

Why Import Substitution?

Import substitution means the development of manufacturing processes without any purchase of know-how for an imported product. This is as against 'collaborations', where products are manufactured by paying knowhow fees or royalties. Successful import substitutions carried out in a focused manner by a country have been the key to not only rapid establishment of industries, but also to the creation of viable industrial base. Japan in the 50s and 60s and Asian tigers like South Korea, Taiwan in the 70s and 80s are prime examples of this phenomenon.

Import substitution — either by the state or by an individual entrepreneur reacting to market forces — has been seen by developing countries not only as a means to conserve scarce foreign exchange, but also to build industrial capacities and capabilities, manpower upgradation and ultimately, self-sufficiency in the strategic sector. Later, many enterprising industries have adapted these products to suit local conditions.

In a few cases, the local industry or entrepreneur has managed to pass the 50% market share milestone in the local market. With suitable process innovations, some have also progressed ahead to capture international markets. As an example, Toyota started in 1930 with their first automobile model 'A1'. They drew inspiration from equivalent models of Desoto and Ford. Today, it is a dominant player in the world auto industry (the Toyota market cap \$95 billion as on 1st December, 2011). It is interesting to note that Tata's collaboration with Mercedes was also inked around the same period, but the Indian car industry could not grow beyond its boundaries for the next half century. The current turnover of Tata Motors is \$2.2 billion, as on 1st December, 2011.

Tried & Tested Approach

Far from being an accidental occurrence, scientific import substitution has been practiced by three successful economies as a planned exercise. Dr Hyuang Sup Choi, a technocrat who has been the Minister of Science & Technology, South Korea, is widely acclaimed as the father of South Korean industrial development. He spelled out the three-pronged Japanese approach to import substitution – 'Substitution, Adaptation & Improvement'. This was religiously followed by Japan in the aftermath of the World War II, and helped transform their country economically. Since then, it has been adopted by other countries like South Korea and Taiwan, leading to sustained industrial growth, and enabling these countries to reach the status of 'developed' countries.

Indian Scenario

India has also encouraged import substitu-

tion in the 50s and 60s but barring a few instances, our efforts have lacked focus at the national level. The efforts of Dr Kurien have seen imported products like milk powder and butter being successfully substituted by Amul. Also, Dr Kalam's initiative to make the country self-reliant in the strategic sector has resulted in the indigenous development of missile technology, nuclear power, submarine production, and so on. These are all examples of planned and well–executed import substitutions.

The success of these projects has been due to the government taking them up on a on a 'mission-mode'. Although import policies have generally been supportive of this activity, it has by and large been left to the imagination and efforts of individual entrepreneurs or on PSUs, which have taken up the responsibility of producing items which were needed in large quantities, e.g. steel, fertilisers, heavy chemicals, or products in the strategic defence sector. The individual entrepreneur and the SME sector – which, by their nature, are a potentially rich source of such 'creative' manufacturing process development – have had to work on their own, without the benefit of any specific policy initiatives or institutionalised support structures. There is no collaboration among entrepreneurs or planned assistance from industry associations.

Dr Choi decries our lack of focus and strongly advises India to take up the 3-pronged strategy adopted by his country:

- a. concentrated man-power development and capability building
- b. accelerated introduction of foreign technologies
- c. stimulation of domestic R&D activities for process development, for products relevant to the needs of society as indicated

in import data

He advocates creating "centres of relevance", which will concentrate the technological fire-power to select centres, guide them with governmental inputs to identify desirable technologies and also assist them financially to adapt, assimilate and improve products or technologies. Contrary to this, 'centres of excellence' like IITs, IISc, etc. have not really been able to contribute to such developmental, relevant activity to any great degree.

At the Entrepreneurial Level

The author is a Pune-based industrialist who has been active in import substitution for the past 30 years. He has developed close to a hundred products, which are also manufactured and marketed by him. He employs the 'Scientific and Professional Import Substitution' (SPIS) process, which is based on systematically studying and developing products. 'Scientifically' indicates the development process is carried out in a methodical, stage-wise manner: studying the product, its functions, materials of construction, breaking down the product into sub-assemblies. developing specifications for each and every component, and studying methods of manufacturing.

After this preparatory stage, the product is engineered and then tested to match the performance of the original. This scientific development is then backed by professional practices, to offer timely deliveries to customers in the domestic market with guarantees for performance and adequate after-sales service. The products targeted for substitution through SPIS are those which are Out of Patent Protection, and are not subject to any Intellectual Property Rights.

Product Improvement

Products developed through SPIS can be

consciously transformed into better variants by adapting basic technologies and further improving upon them. This stage, however, is dependent upon the entrepreneur being able to attain a certain size of the operation and market share in the domestic market.

A number of Japanese manufacturers, especially in consumer electronics and automobile industries have attained this stage. They have been able to challenge original products in international markets — for instance, Toyota in automobiles and Canon in cameras — taking the planned import substitution process to its logical extension.

In these cases, import substitution has not only saved foreign exchange but in time, these products have proved to be big foreign exchange earners and creators of much-needed employment and wealth in the developing countries. Unfortunately, India has hardly produced any such winners till now. As an example, Toyota started in 1930 with their first automobile model 'A1' drawing inspiration from equivalent models of Desoto and Ford, is today a dominant player in the world auto industry (Toyota market cap US \$ 95 billion as on 1st Dec 2011). It is interesting to note that that Tata's collaboration with Mercedez was also inked around the same period but Indian car industry could not grow beyond its boundaries for the next half century!! The current turnover of Tata Motors is US \$ 2.2 billion as on 1st Dec 2011. A difference of a couple of orders of magnitude

Opportunity for Indian Entrepreneurs

Without focus and concentration, Indian efforts for import substitution have had varied success across different sectors of the industry. At one end, we have the pharmaceutical industry, which has taken up the challenge of developing indigenous capabilities for drug manufacture. With a well-defined regime for satisfying acceptance standards and procedures, the pharma industry has been able to target drugs going out of patent control long before the patent expiry and work towards synthesizing these drugs indigenously. These planned efforts have been very successful and the Indian pharma industry has now been able to capture a sizeable share of the world's generic drug market.

On the other hand, due to a lack of focus, engineering and most other industrial sectors have a little more than a token presence in the world market, even after 20 years of liberalisation. One look at the statistics will bring out this point: all ports publish data on all products, which are either imported or exported by the country. These product numbers are divided into 100 'chapters', as per the 'International Harmonized' item code numbers. For instance, products or goods under the chapter 84 are products from Mechanical Engineering, chapter 85 are from Electrical Engineering, chapter 90 from Instrumentation, and so on.

The list provides us with details of the items imported, the total value of imports, country of origin of the product and the import duties levied thereon. India imports engineering goods under these three (84, 85, 90) chapters to the tune of Rs 70,000 crores every year. This can give one an idea of the enormous potential that is waiting to be tapped. This is a challenge that young entrepreneurs must take up.

What is the road ahead?

We suggest that the best way forward for us as a nation will be to formally adopt SPIS in a few "centres of relevance", where the academia and the industry can find a platform for active collaboration. It would be ideal to start with IITs, NITs, IISc, UICT and a few other institutes, which can be mandated with developing departments or centres for promoting this activity.

Each of these centres will focus on one sector, preferably one in which the institute has a certain degree of specialization, and/or is proximate to a specific industrial cluster. For example, Belgaum or Coimbatore, with their rich foundry infrastructure can take up hydraulic and flow controls. The centre should be equipped with staff which is commercially oriented, which will help them in a. zeroing on potential products by doing preliminary desk-based research, b. identifying the industrial units which could collaborate with the centre for mutual benefit and then c. developing a prototype of the product before entering into a suitable licensing arrangement.

The centres can also go long way in sowing the seeds of entrepreneurship in young minds of students and alumni of the institute, to take up projects which could be eventually transformed into successful commercial ventures. The chances of success would be quite high, as problems of marketing are dissolved due to an established market, and a good profit margin. However, it is essential that all entrepreneurs, irrespective of their origin, be encouraged to interact with the centre if they have a viable idea for import substitution.

A venture capital fund should also be set up in these centres, as it will nurture these budding entrepreneurs to reduce their gestation period. The centre should create the necessary ecosystem for further development. This could include experts, both from the faculty and the industry, who can guide developmental efforts, testing facilities, prototype manufacturing facilities and commercial production. The centre should be encouraged to develop good linkages with angel funds, which can bear part of the initial financial load, in return for a stake in commercial activity. effort will contribute substantially towards the development of relevant technology, generating a win-win situation for supporters, entrepreneurs and the country. The author is keen to initiate concrete steps for formally launching this initiative and is engaged in generating web site for benefit of all: www. iitalumni.com. Please send your suggestions to shekhar.iittech@gmail.com.



Shekhar Kulkarni

Mr. Shekhar Kulkarni (B. Tech Electrical Engineering, 1976 and

MBA from University of Pune,1979) is the owner of Manik Group of companies with an annual turnover of over 2.5 M US\$ aims to produce high quality ,dependable and competitive import substitute products with excellent service. It manufactures more than 100 different types of products every year. He has recently started IT company having own products in shipping, port call management and integrated steel plant management.

He is an active member of various social organizations and has been an inspiration to many young entrepreneurs by his speeches, articles and personal guidance on import substitution engineering. He feels that sharing his methods of success with young generation will help to build India as super power. He is looking for generating a network of IIT Alumnii to generate national movement for opportunity of Rs1,00,000 crore available in the import data published in all the ports.

The author feels that such a concentrated

Ek shiksha Quality Education for All Avinash Awate

One Nation = One Education

EkShiksha is a brand new, collaborative initiative under the ekalavya project, which is being run at IIT Bombay under the guidance of Prof. D. B. Phatak. EkShiksha aims to create unified, high-quality interactive content for teaching science subjects at the school level.

Raison d'etre

The Right to Education Act obligates the government to give access to quality education to all children aged 6-14. Millions of children who have hitherto been deprived of education can benefit from this initiative, if the government encourages and implements programmes which are designed to deliver education effectively.

There is every indication that the underprivileged class has realised the need to have education, and there appears to be a genuine want among all classes to upgrade themselves by imbibing better education.

The main hurdle in providing quality education has been the lack of good educators. This has been further exacerbated by the lack of good, planned syllabi in state-run education boards. Even in metro cities, the lack of good educators coupled with the poor standard of syllabi is driving parents away from state boards to ICSE and CBSE. There is no way that India will be able to generate the vast army of good and dedicated teachers required for educating millions of children, who are required to be taught and groomed well, if we are to reap any dividend from our burgeoning population. The only viable recourse is to harness technologies that have been developed in the field of computers and information technology.

The government of India has already announced a programme called Aakash, which aims to provide a low-cost tablet to every school-going child. The merits and demerits of this programme aside, it is definite that Moore's Law will ensure that tablet-supporting interactive technology (JAVA) will soon become affordable.

It is logical therefore, to rely on computer technology to fill the growing vacuum of quality teachers at the school level. Low-cost tablets take care of the 'last mile connectivity' to users, if one may say so, but that still leaves the question of providing quality content unresolved, as today a large part of primary and secondary education is imparted in local languages.

The only key is to immediately begin creating quality content in local languages to meet the future thirst for knowledge. This is the mission that has driven establishment of EkShiksha: 'to create a unified platform for primary and secondary school education'. As a bonus, we will make the entire generation of India's children computer-literate at an early age.

EkShiksha' progress so far

EkShiksha has now been operative for the past one year, and has been working with a small staff out of KReSIT, under the author.

The government (NCERT) already offers English (.pdf) books as free downloads. The content is interactive to the extent that print media can be interactive, and its quality is by far the best for promoting interest among the students and ease of learning the subject. The EkShiksha team has already converted this content into translatable html. You can visit our website to view the content.

EkShiksha has built a technology platform through which anyone interested and proficient in his or her subject can participate in content translation. This can be done as per the time available at their disposal, one paragraph at a time. The portal allows a potential contributor to register as a translator and choose a lesson from a subject best known to him or her for translation. The translators can manually translate the lesson paragraph by paragraph. The freshly translated content is simultaneously visible along with the yet to be translated English text. The portal also supports a supervisory role which is aimed at ensuring consistent quality of translation.

Learning through experiments or simulations, with very little reliance on English, is EkShiksha's second major thrust. EkShiksha team is developing a virtual chemistry laboratory, which will allow teachers to 'demonstrate' experiments and evaluate experiments performed by students (captured as a replayable journal). The team has zeroed in on Easy Java Simulation technology to augment physics lessons through simulations. The CBS Mathematics primary content is being offered through JAVA applets. EkShiksha is expecting young Indians to showcase their programming skills by contributing software simulations and experiments, again one program at a time.

EkShiksha's content will support continuous assessment through interactive exercises or experiments at all levels. The educate-assess cycle envisages the teacher to act as a mentor, by providing alternate material when a student is faltering. On the other hand, a bright student can be quickly promoted to higher levels.

An Appeal

The task of creating such a unified knowledge base is an enormous one. At a conservative estimate, NCERT Physics (which covers from 6th to 10th standard syllabus) will require about 1,000 person-hours per language for translation and quality checking. A single language syllabus, which covers Maths, Biology and Chemistry is expected to require up to 5,000 person-hours of work. Unicode currently supports seven Indian languages. In the future, we must try to support other languages as well.

But as they say, 'many hands make the work light'. In each language, we will need 100 volunteers to translate one lesson each to get the present content translated. There are estimated to be 2,00,000 IIT alumni, who we are sure will span all the languages we want to cover. A large number of them would have been educated in their mother tongues and can do a fair bit of translation if they apply themselves. Can there be a better way than this to contribute to the task of educating our nation?

You can visit the portal to understand more and interact with the team. You can join the increasing tribe of translators and start translating the content of your choice. If you have software skills, you can contribute by writing JAVA applets (Maths) or EJS simulations (Physics). The EkShiksha portal will carry a list of possible software contributions. The content will be released in open source in all (web) supported Indian languages. The EkShiksha team believes that a country of a billion plus people should certainly throw up hundreds of spirited people for this noble cause.

The venture is proposed to be run as a non-profit organization with intellectual shram-daan by translators, but we are willing to accept donors or sponsors who can help us move forward quickly by creating an organization to fast forward the content creation. More importantly, sponsors can provide a platform to popularise the concept and pursue the powers that be in accepting and implementing the solution.

www.it.iitb.ac.in/ekshiksha



Avinash Awate

Avinash Awate is a B. Tech in Electrical Engineering (1975), and an M.Tech in

Computer Science (1980) from IIT Bombay. He worked in TCS for 23 years on technology projects spanning graphics, GIS, image processing, VLSI design software and telecommunications. In 2005 he resigned from TCS, at a time when he was heading a 600-strong team of engineers. At present, he is the Programme Director for the ekalavya project under Dr D. B. Phatak. The ekalavya project (sponsored by the MHRD) is currently focused on improving the quality of engineering faculty through 2-week subject workshops, attended by over 1,000 faculty members, spread across multiple centres. Education catalysed his upward spiral, from a one-room tenement in Mumbai to where he is now. Avinash is passionate about creating opportunities for others to have the same benefits.

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You can also find out more about eklavya by visiting: http://ekalavya.it.iitb.ac.in/ekalavyaHome.do

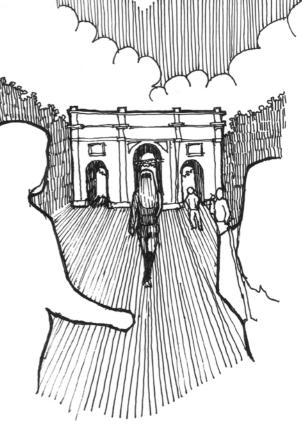
Body in Motion

Pradeep Anand

I did not see her face because she crossed over to my side of Oxford Street, just ahead of me, somewhere near Selfridges and joined the stream of pedestrians who were headed toward Marble Arch. I noticed her almost immediately—she had that perfect slenderwaisted, broad-hipped torso with long legs perched on top of super-high heeled boots and the exaggerated, calibrated walk of a practiced model that had spent a lifetime on ramps at fashion shows on the continent.

Even though I could see only her rear, she showed off her ensemble well—a cobalt blue silk blouse with ruffled sleeves, skintight narrow blue jeans and a short black leather jacket that matched the streaks in her carefully dishevelled blonde hair. Her surprising brown boots were an anomaly but the array of colors from the embedded beads and rhinestones made them objects of admiration and my focus, especially since they added a deep, wooden *Tick! Tock! Tick! Tock!* sound to this showy but seductive walk. The prominent Louis Vuitton hand bag that she swung and swayed added a mesmerizing pendulum to the rhythmic *Tick! Tock! Tick! Tock!*

She was a beautiful human body in motion and I was captivated by the choreographed composition in front of me. Her energetic yet slithering catwalk with stretched strides, the articulated muscles in her firm rear end, the swinging LV bag, and her care-



lessly outstretched narrow free hand with elongated fingers drooping at the wrist, all synchronized, were a tribute to movement. How smoothly a long curved leg swung out while simultaneously, with balancing grace, another equally well-formed one swung in, gently dropping and raising her *gluteus maximus* orbs and their connected hips. The unchanging metrical *Tick! Tock! Tick! Tock* of her shoes added to the visual spell. Atoms and universes thrived on the same kinetic principles that were being displayed twenty feet away from me.

Her Tick! Tock! Tick! Tock! had the cadence of a fast ticking clock and I tried to walk with the same rhythm, as if in a march, but could not. With heels, the woman was taller than me, and her legs were substantially longer than mine. I could not lock step with her without breaking into silly, bouncy ballet-like steps through the air that I could not have sustained. Nor could I keep up with her. Her strides were long, untiring, steady and deliberate. Often, I had to run in short bursts to stay about twenty feet behind her.

Tick! Tock! Tick! Tock! went that synchronized sensuality with the swinging satchel, leading me like a Pied Piper to any destination she wanted to take me. I was immersed in the moment, oblivious to the cold, wet, and windy surroundings of a winter's Sunday afternoon in London, until I was awakened from my trance by a car emerging from a side street, an almost invisible estuary into Oxford Street. In that slight moment, when I looked away and returned my eyes, I noticed that I was not the only one affected by her.

My momentary muse was like a human magnet cutting across a field of oncoming pedestrians made of iron filings. She created symmetrical patterns of gazes and glares as she vigorously ploughed through approaching crowds. Every person, male or female, reacted to her.

Men of all ages responded as if they had seen a vision. Their eyes lit up, their heads turned and stayed affixed on her till she had passed them. Almost none looked back at her rear, except one, who called out and said, "Hey fashion lady, give me a smile," and then walked on with a silly smirk.

The women were different. Teenagers and women in their twenties looked at her admiringly. Those in their thirties and early forties gave her a glance and, either sprung their heads and eyes back up front with displeasure or in a casual manner, as if an encounter with this beauty was an every day occurrence. Women in their fifties and older had that what-will-young-people-do-next look of amused disbelief and went about their business of walking along Oxford Street. Almost all women with mates in tow had the same reaction — they yanked their man's unseen leash to get his eyes away from the potential marital maelstrom. Most men complied and some practiced ones even brought their conversations back to normal within a few steps, as they passed me.

I was the human candid camera and she was my bait. I enjoyed the experience but as the shopping crowds' reactions became predictable, I hoped that she would be sucked in by the Marble Arch Tube station and I could quietly walk back to my hotel off Edgeware Road. She walked right by the station and continued on the same path as my intended trajectory.

A colleague had chuckled when I told him that I was staying at a hotel off Edgeware Road. "Welcome to Lower Baghdad," he had said. I could sense that the chuckle was going to turn into a chortle and perhaps a guffaw but my English friend quickly squelched it and returned to his normal understated self. I did not probe, assuming that the hotel was situated in a rough and violent neighborhood.

On the contrary, Edgeware Road was a peaceful area, with significant Middle Eastern influence. Unlike the hurried pace of Oxford Street, pedestrians on Edgeware Road traipsed or ambled casually. Shops along the boulevard sold ethnic goods and, like all immigrant neighborhoods, discounted luggage; restaurants served a wide fare of outstanding Mediterranean and North African food that I relished. Arabic and Persian patrons of these bistros, including women in western clothes and burkhas, sat huddled around small tables under awnings on the sidewalk, drank tea and watched people walk by. Some smoked cigarettes, a few sucked on hookahs that added a unique, sweet fragrance and character to the street.

Tick! Tock! Tick! Tock! My moving metronome turned on to Edgeware Road and I thought, perhaps she would go to the pub at the corner or into Odeon Theater to catch a movie. She did neither. My interest in being a human candid camera had waned by then but when she walked past the Odeon and proceeded into Lower Baghdad, my curiosity began to race; so did I, to catch up with her.

I was astonished to see that when she went past the first Moroccan restaurant, its hookah-sucking, tea-sipping patrons barely noticed her. They continued their subdued and profound conversations. No eyeball turned, no eyebrow was raised. But, when she went by the Persian restaurant, voyeurs either held their breath or postponed a puff. Heads turned, smiles of appreciation broke out and eyes gleamed as this swinging siren went by, at the same unrelenting pace, upsetting in her wake sober weekend rituals of polite tête-àtêtes over a smoke and a cup of tea.

As she approached George Street, young patrons seated on stools at windows of a coffee bar overlooking the road, stopped mid-sip, their faces aglow as if they had seen an apparition float by.

Tick! Tock! Tick! Tock! She crossed George Street and continued on Edgeware Road, creating seismic shifts in yet another neighborhood. But, I had to turn at the coffee shop to go to my hotel and a waiting appointment. As I went towards my hotel, a young man rushed out of the coffee bar to get another look at her just as she receded from our view. He looked heavenward and said something in Persian or Arabic. All I could understand were three words, *Mashallah*, *Allah and Khudah*, all in praise of the Lord's creation that had just passed by. Noticing me watching his reaction to her, he asked in English, "Was she not from Heaven? Did you see her face?"

"No," I replied, "I did not see her face."



Pradeep Anand

Pradeep Anand (B.Tech Metallurgical Engineering, 1975) was born in

Mumbai, India, where he lived for twentyeight years before migrating to Texas. He has lived and worked in Houston for more than thirty years. For most of those years, he has worked within the bulls-eye of cowboy culture in Texas, the oilfield service industry. He is the President of Seeta Resources, a management consulting firm.

Pradeep did his MBA from the University of Houston, Houston, Texas and has been an Adjunct Professor of Marketing at University of Houston's Bauer College of Business' MBA program. He serves on the Advisory Board of the University of Houston's College of Technology and the Houston Technology Center.

Pradeep is the author of the book "An Indian in Cowboy Country" which is about an IIT engineer's sometimes humorous, sometimes poignant struggle to fit and assimilate into the fabric of American life, while retaining and celebrating his Indian cultural and spiritual moorings.

You can find out more about his book at http://iitbombay.org/initiatives/book-corner

Travellers on "The Road not Taken"

Forget the stereotypes, because some jobs are just too cool to be bound to any dated, dodgy nerd-like image. The conventional image of an IITian is of engineer-managers, successful technocrats, entrepreneurs and career academics and the alumni of IIT Bombay are no different.

But in every batch there are the mavericks -- the odd balls that chose to walk to the beat of a different drum. Then there were others who started out as the regular Joes but chose to abandon the rat race. While we don't wish to downplay the ingenuity and dedication of the engineers and scientists who have graduated out of IIT Bombay, we also wish to highlight the fact that the profile of an IIT Bombay alum is much broader and includes artists, musicians, film makers, ministers, farmers, activists, monks, and so much more.

This is a regular column of the magazine, where we feature people who have chosen to leave behind the comfort of the familiar for the adventure of the unknown. This poem by Robert Frost which Bumblebee has used in the title is all about metaphors on life and the choices you make. Scattered across the magazine are bios, interviews and notes on such travellers, politicians, a monk, a forest officer, an ad-man turned film director. Bumblebee hopes you not only enjoy reading about them but also feel inspired to write about others, or provide leads about similar fellow travelers that you know and send it to us at the bee hive to be featured in subsequent issues. To end with Frost,

"I shall be telling this with a sigh Somewhere ages and ages hence: Two roads diverged in a wood, and I--I took the one less traveled by, And that has made all the difference".

Bumblebee



Junta Fundaes Travellers on the Road not Ta



From Karl Marx to Saffron Sparks: Sudheendra Kulkarni's Journey

He was bearded. He wore a soiled kurtapyjama. He carried a jhola — a sling-bag that contained cyclostyled pamphlets which he handed out to passersby. Pamphlets that spewed venom at a high-handed IIT administration, and an insensitive student body. In short, he was a rank leftist activist of his time, 1975 to 1980. The beard, the kurta, the sling bag — all these were the ingredients of a uniform for a set of people uncharitably referred to as "commies." That was Sudheendra Kulkarni.

Attempted objective in IIT: B.Tech in Civil Engineering. But a constantly needled and pilloried Director A.K. De thought Sudheen to be most uncivil. "Scruffy youths!" is how he denounced Sudheen and friends once, in an outburst. He was glad that Sudheen left in 1980 and went incognito into the world of journalism — with Russi Karanjia's Blitz, as it turned out later.

Fast forward to 1996: Sudheendra Kulkarni is a key aide to BJP's L. K. Advani. Policy maker, speech writer, manifesto writer, ace troubleshooter, key strategist, poll campaign manager, think-tank, a powerful OSD (Officer on Special Duty) in Vajpayee's PMO. Sudheen was everywhere in the backstage area of BJP. More recently, Sudheen was in the news again for his nationally televised arrest which took him to Tihar jail. Reason: His role as a mastermind of a major sting operation to expose what became famous as a "Cash for votes" scam. A stunned nation watched in disbelief, as ₹1 crore of bribe money was paid to buy votes in favour of the ruling UPA party, during the parliamentary debate on the confidence motion in the Lok Sabha in 2008.

What caused such a radical change in his ideology? What does he treasure from his IIT days? What are his future political plans? What is the status of the 'Cash-for-votes' scam? What is his message to IIT alumni? To get answers to these questions, Humbl(ed) Bee spoke to Sudheen in a no-holds-barred interview.

Introduction by NOSEYBEE

HB: During your student days at IIT, you were seen as a rabble-rouser who took on the IIT administration. Are there any specific memories that you'd like to share with us?

SK: I don't know if I was a rabble-rouser, but it's true that I was greatly radicalised within a year of my joining IITB in 1975. Hailing from a small taluka town in Karnataka, I had come to a big city for the first time in my life. The deep and wide inequalities in urban India filled me with anguish and anger. The second reason for my political radicalisation was that Indira Gandhi's authoritarian government had imposed the Emergency. Many fundamental democratic rights and freedoms,



including the freedom of expression, were suppressed. There was an undercurrent of rebellion in the country.

Here are a few memories: In my very first year, I took to social service, under the institute's NSS programme in a serious way. I was inspired in this by Prof. Indira Mahadevan (Department of Humanities). She was a teacher with a kind heart and motivating personality. She introduced me to an NGO called Mobile Créches, which took care of children of construction workers, providing basic education and health-care to them. Along with fellow NSS volunteers, I started going to the shanty homes, located on the hillock behind Hostel 1, where labourers working on several construction projects on the campus were provided temporary shelter.

One of those projects was the construction of the swimming pool. These illiterate and impoverished men and women, all of whom had come from the drought-ravaged areas of Maharashtra, Karnataka and Andhra Pradesh, were engaged in digging a large pit in the large playground in front of my hostel — I was in Hostel 2. I once asked them, "Do you know what facility you are building here?" Their reply shocked me. "How can you expect us to know? We are not educated like you. We only know that we are digging a *khadda*." Their reply filled me with guilt. I said to myself, "We privileged people are going to enjoy swimming in this pool once it is built, but these poor workers who are working on it don't even know what a swimming pool is."

Observations and experiences like this made us (a group of radical students) think that the institute authorities were neglecting the needs of the poor, and wasting money on the wants of the rich. I must admit that our thinking was somewhat immature and our angry reaction was often misdirected. For example, we protested against the authorities' decision to build a new 'five star' Guest House overlooking the lake. I realised much later that the beautiful Guest House, which is hardly 'five star', was a much-needed facility for a premier institution like IIT.

However, I am really proud of two protest actions from my IIT days, one inside the campus and the other outside. Along with my comrades, I spent a lot of time organising mess workers in various hostels (there were only ten in those days). These workers, because of whose daily labour we students ate nourishing food, were paid poor salaries and many of them had no job security. But they were fine and caring human beings. I still fondly remember their leader Takat Singh, who used to cook in the mess at Hostel 4. He was an embodiment of honesty and dedication.

The location of my other protest action was Delhi. I have mentioned that I was working with Mobile Créches. Prof. Indira Mahadevan had arranged for me to spend the two-month summer vacation after my first year, as a volunteer with the same NGO in Delhi. I worked at many construction sites, including Nehru Place and the embassy

of Czechoslovakia.

But I was suffocated by the atmosphere of the Emergency in the national capital. There was sycophancy all around. Newspapers were censored. But I didn't know how to protest in a city where I was a stranger. I just wanted to do something. One day, I slung a cardboard around my neck, on which I had written an anti-Emergency slogan, and travelled all over Delhi in a bus. It was a risky thing to do. Somehow, nothing happened to me.

HB: You and your friends championed the mess workers' cause during your IIT days. Yet, a majority of the students appeared to be either against you or indifferent. Do you ascribe any reason for this?

SK: In hindsight, it is easy for me to know why a majority of students were indifferent to our championing of the mess workers' struggle. Students who get admission here come with a lot of aspirations. It takes enormous hard work to succeed in the highly competitive entrance exam. They have to work hard even after getting into IIT, semester after semester. Therefore, they tend to feel that the atmosphere on the campus should be peaceful and incident-free. This feeling is natural. I don't blame them. What I do think, however, is that students should not be unconcerned about or insensitive towards the condition of less-privileged sections of society around them. By the way, I am very happy to learn that IITBAA has, among its other commendable activities, raised funds for mess workers welfare. Those alumni colleagues who are behind this initiative have shown that IITians have a caring heart.

HB: What did you do after you graduated from IIT? How did you get into active politics?

SK: It's a long story. I'll cut it short, very short, by saying that my political radicalisation at IIT took me to activism in the communist movement. I decided to devote my life to the collective effort to change our society and our economic-political system, knowing fully well that I as an individual could make only a small contribution. I worked as a fulltime activist on the student and trade union fronts in Karnataka. I returned to Bombay in 1984 to work as a journalist. My association with the communist movement continued for a few more years. After a decade in journalism, during which time the influence of communism on me had waned. I was back in active politics – but this time with the BIP.

HB: In IIT, you were perceived as a strong, left-leaning activist. How then did you get into BJP which is seen as a strong right-wing party? When did this transition in your thinking occur? What caused this change?

SK: Yes, I was a committed Leftist in IIT. Marxism had taken hold of both my head and heart — heart more than my head. I took the plunge without a second thought and joined the communist movement as an activist after IIT. However, three turning points came in the mid and late 1980s. The first was my visit to the (now-extinct) Soviet Union in 1985, and my fascination with Mikhail Gorbachev's Perestroika (restructuring) and Glasnost (openness). I became disillusioned with the theory and practice of communism.

The second was my study of great Indian thinkers — Mahatma Gandhi, Swami Vivekananda, Maharshi Aurobindo and others. One effect of this study was my discovery of the positive aspects of Hinduism. (Communism had taught me to hate Hinduism.) Incidentally, *My Journey from Mahatma to Marx, and Back* is a chapter in my forthcoming book on Gandhiji.

The third turning point was my contact with

Atal Bihari Vajpayee and Lal Krishna Advani. I was inspired by them, and also by the basic ideology of the BJP. Hence, I embraced the BJP in 1996 and went to Delhi to work as a full-time activist of the party.

HB: You have been L. K. Advani's blue-eyed boy and were also a powerful OSD in Vajpayee's PMO. But you preferred to operate from behind the scenes. Why did you not take up a cabinet berth?

SK: I have always believed that everybody in politics has a role to play and a contribution to make. And one can make a solid contribution without coming into the limelight. I have never been fascinated by the thought of becoming an MP or a minister. I was happy doing whatever responsibility the two leaders entrusted to me, knowing well that I enjoyed their full trust. In politics, nothing is more rewarding than earning the trust of the people you respect, being able to do the kind of work you like and through which you think you can make a difference. Both Atalji and Advaniji gave me ample opportunities to do such work.

HB: In the 2009 elections, the UPA won despite its questionable performance and the NDA was humbled again. As the chief campaign strategist for BJP, what do you attribute this defeat to?

SK: The chief reason, as I have written elaborately after the BJP's defeat in the 2009 parliamentary elections, was that the party did not learn the right lessons from its unexpected loss in the 2004 elections. There was also lack of cohesion in the party. In politics, as in any other endeavour in life, success comes only to those who have achieved unity of purpose, unity in thinking and unity in action. The BJP had displayed these qualities in abundant measure in the previous electoral battles from 1989 to 1999. But these were somehow missing in 2009. *HB:* Why did you resign from the BJP after the poll debacle? What are your future political plans?

SK: I had some ideological differences. But that did not mean complete severance of relations with the BJP. I continued my close association with Atalji, Advaniji and other leaders. I am going to be back in active politics.

HB: You have recently been released from Tihar jail. Do you think your arrest was justified? Are you going to contest it?

SK: Along with my colleagues who participated in exposing the 'Cash-for-Votes' scam of July 2008, I was arrested on false and politically motivated charges. Please read the order of the Delhi High Court which released us on bail. I have faith in the Indian judiciary. Whenever the trial gets completed, I have not even a shadow of doubt in my mind that our innocence will be conclusively established.

HB: Many people say that with such high profile inmates at Tihar, it should be renamed as the Tihar Hilton. Did you get to interact with any of the other high profile occupants like Raja, Kanimozhi, Suresh Kalmadi or Amar Singh?

SK: To describe Tihar Jail as Tihar Hilton is to betray complete ignorance of what an Indian prison is like. A prison is a prison, irrespective of who is incarcerated there. True, the corruption of jail staff enables some inmates to have a few comforts that are denied to others. Let me tell you, that as a political activist, I consider myself fortunate for the opportunity that Dr. Manmohan Singh's government gave me by sending me to Tihar. I learned first-hand about the terrible state of the criminal justice system in India. Do you know that 75% of the nearly 14,000 prisoners in Tihar are undertrials? This is a blot on India's claim to be a law-governed nation. We must endeavour to change this system. No, I didn't meet Raja or Kalmadi as they were lodged in Jail No 1 in Tihar; Kanimozhi was, of course, in a separate jail for women prisoners. I was in Jail No. 3. Amar Singh was in the same ward as mine in Jail No. 3. Indeed, he had been lodged in the same cell as mine (Cell No. 1). However, by the time I entered Tihar (on 27th September), he had been shifted to AIIMS for medical reasons. The finest person I met in Tihar was Kobad Ghandy, a former ideologue of the Maoist communist party. About my memorable interactions with him, I have written in the Indian Express (27th November and 11th December)¹.

HB: Everyone is dying to know about what went on behind the scenes in the 'Cash-for-Votes' scam exposé, which you allegedly masterminded. Did you believe that you would be able to successfully carry out this sting operation that eventually shocked a nation?

SK: Our whistle-blowing operation was indeed a success, albeit a partial success. Today nobody can deny that the UPA government indulged in brazen horse-trading for survival in the trust vote in July, 2008. Indeed, the charge-sheet filed by the Delhi Police itself states that horsetrading took place, although it is silent on the crucial question of who were behind it and who benefited from it. Since this matter is sub-judice, I cannot speak about it in detail. I am, however, going to write a book about the entire episode. It is tentatively titled *My Days in Tihar Ashram*.

HB: It seems odd that a person who functioned effectively as a whistle-blower, i.e. exposed corruption in high places is arrested, while the actual perpetrators and beneficiaries of the corruption scandal are yet to be nailed down. Where do you think this is headed?

^{44 &#}x27;To find out more visit 'MY DAYS IN TIHAR ASHRAM' on November 27 (http://www.indianexpress.com/news/my-days-in-tiharashram/880879/) and 'MEETING 'GANDHIJI' IN TIHAR' on December 11 (http://www.indianexpress.com/news/meeting-gandhiji-intihar/886347/).

SK: The question supports my contention that our arrest was politically motivated. The case must reach its logical conclusion by nailing those behind the corruption scandal. An exemplary deterrent must be set by the judiciary, so that the sanctity of the Indian Parliament is never again defiled by 'Cashfor-Votes' scandals in the future.

HB: Can you make an informed guess about the final outcome of this whole scam? Is there more information that you'd like to break to your fellow alumni first?

SK: The final outcome depends on the judiciary. I have faith in it. However, as I have earlier explained, I cannot comment more on the case at this stage, since it is sub-judice.

HB: If you were to recollect one memorable incident from your student days and another from your political life, what would they be?

SK: From my student life: how Karl Marx opened my eyes. From my political life: how Mahatma Gandhi, Swami Vivekananda and Yogi Aurobindo opened my eyes about the inadequacies in Karl Marx's understanding of society and human life.

HB: Lastly, people believe that IITians and politicians do not go together. Yet our own IITB has Jairam Ramesh, Manohar Parrikar and Jay Narayan Vyas apart from you, and each of you have left a mark in your own ways. Do you think IITians need to get more active in the socio-political space? Any advice or guidance that you have for alumni in this regard?

SK: I certainly think that IITians should become more active socially, in addition to pursuing their professional and personal interests. However, my views are nuanced on whether they should become active politically. Politically aware, they certainly must be. However, it is neither possible nor necessary for most IITians to choose political activism. Politics is generally understood to be party politics. This is a very narrow understanding of politics. What India needs today is strong and sustained citizens' action aimed at making political parties more accountable, the political process more participative for the common people, and the governance structures more just and responsive. In this effort, privileged people in society, such as IITians, have an important role to play.

But I have another thought to share with my alumni friends. Just strive for excellence in whatever business or profession you are in, and combine excellence with a strong commitment to society, nation and the global community. By doing so, you will have contributed as much as, or even more than, those who join active politics. Swami Vivekananda urged Jamsetji Tata to set up an indigenous steel plant in India. Mahatma Gandhi encouraged Ardeshir Godrej to strengthen indigenous manufacturing facilities in India. Is the contribution of Tata or Godrej to India's nation-building any less than that of typical politicians?

Times have changed. The fast-changing global order has brought immense new opportunities to achieve our long-cherished goal of making India a strong, prosperous, egalitarian and culturally, spiritually a renascent nation. For this to happen, India needs to achieve excellence in every field. IITians have already set high standards wherever they have gone. Whether they are in India or abroad, they are already serving their motherland with passion in many different ways. Patriotism is not the monopoly of professional politicians. However, now there is a need to aim higher.

Prose from the Real PRO

Queenbee

There are PROs and then there are PROs. I could never get much out of a sentence l ike this. What does it really mean? Whatever it does, the fact remains that IIT Bombay has also had several PROs.

Two to be precise. Even now as I write this, there is someone masquerading as the third PRO. But If I was the PRO of IIT Bombay, could I settle for a masquerade? I think I could. But if I did, it would have to be the best masquerade. My 3-month induction period would be a self-induced, back-breaking, rigorous exercise to learn and master three essential skills:

Perfecting the art of meet and greet for • persons of varying importance belonging to these categories: MIPs(Most Important Persons), VVIPs (Very Very Important Persons), VIPs (Very Important Persons), IPs (Important Persons), PIPs (Partially Important Persons), SIPs (Sometimes Important Persons or Slightly Important Persons), BIPs ("Bery" Important Persons {from Kolkata}), DIPs (Damn Important Persons), HIPs (Highly Important Persons), LIPs (Likely Important Persons), TIPs (The Important Persons), NIPs (Not Important Persons) and RIPs (persons who should be RIP).

The meet and greet schedule will be carefully designed in a diminishing order for each of these categories. For MIPs and VVIPs, it will start two months before the date of arrival. This will include sessions of reading up and memorising trivia, gossip and dirt available on them through the internet, magazines, acquaintances, anywhere. A dedicated team from the PRO's office will be put in charge and will remain in touch with the office of the MIP or VVIP to create a productive and meaningful itinerary. The itinerary would include meaningless Teas, Hi-Teas, Lunches, ample photo and press opportunities and an address to the underprivileged, like students and campus residents.

The flight details will be sent by the personal secretary of the MIP/VVIP. While being in touch with the personal secretary, vital information like food allergies, people allergies and car preferences will be extracted. The choice of limo, flowers, accommodation, and specifics on age, height, weight, gender and grooming standards of the person receiving the dignitary at the airport will be determined by the category of importance.

2. Making small talk and conversation-fillers. Extremely important skill for a masquerading PRO who will never need to know boring, unimportant, long or arduous facts. For her entire tenure, she can significantly stay away from all the insignificant research stories that claim to be breaking new grounds somewhere. She should, however, be able to instantly break in to conversations ranging from nothing to nowhere at any given point of time. Weather, airlines, hotels, geographies, Bollywood, Hollywood and fashion are some of the topics she should always be updated on and excel in.

During uneasy silent gaps that can pop up anytime – meet and greets, car drives, meetings, lunches or dinners – she should be able to lead a conversation on any

of these topics. She should also be comfortable doing a monologue while pretending it to be a dialogue, when leading these conversations as the chances of the ignorant, uneducated other party joining in on any of these topics are slim.

3. Learning all about all-time, all-cuisine menus. By the end of these three months, the PRO should have succulent menu ideas ranging from Korea to Kangra, Switzerland to Saharanpur, Poland to Patna falling off her finger-tips. At the core of each menu will be the underlying philosophy of mind, body and soul. The PRO's hectic daily itinerary will compulsorily include new menu trials and food, drinks and cocktail tastings for pre-breakfast, breakfast, 11 'o clock tea, lunch, Hi-tea, evening drinks, dinner and post-dinner drinks. No detail will ever be too small and will have to addressed with ample attention. In the end, it will all pay off.

Complementing the food menu will be the finest wine and liquour selections. It will carry only top shelf liquors and a wide selection of cognacs, brandies and other after-meal drinks. Teas, coffees and soft drinks will be strongly discouraged and only served during pre-breakfast and breakfast events.

Last but certainly not the least, will be service. An important component if service is that it will be synonymous to snooty. Each experience would be designed to make one forget the dreary life one had before, and will have immediately after the conference/seminar/lecture/convocation/teacher's day/alumni day meal.

These three months, I do not doubt will be the most productive months of my life and I will come out as a reigning champion in the masquerade. I will set a shining example of what a real PRO should be like. I already have so many ideas in my head; I could start an academy for future PROs.

My only concern is will this masquerade be too ahead of its time? Is IIT Bombay ready for this masquerade? The current PRO will never know.





Plane-ly Speaking

Grumblebee

While creating Fundamatics for you, the beehive was abuzz with activity. All manner of bees flitting in and out. Collecting material, proofing, laying out, chasing deadlines and fighting to stay sane. Grumbebee continued to do what he does best. He grumbled away incessantly. The irate worker bees asked him to grumble at something else for a change. That's when Grumblebee looked heavenward, saw a passing plane and decided to grumble about planes and air travel in India. Do not grumble at what you read. We warned you.

ack in the vintage 60s, air travel in India was the exclusive refrain of the rich – no, make that stinking rich. The aerial route was not for one in a hurry. Because back then, no one was in a hurry. Weddings and deaths, both were preplanned events that could be marked on a calendar well in advance to plan a train booking. Sometimes, trains were exchanged from Dadar to Bombay Central. Sometimes, from broad gauge to metre gauge. Sometimes, one changed from a train to a bus in much the same fashion as one changed trousers. Onward journeys were a way of life, a travel period spanning a week was in vogue and bedding (didn't some people also call it a hold-all?) with one suitcase full of clothes and another full of snacks, pickles, Glucose biscuits, pooris, papads, paan kit were necessary and sufficient embellishments that one

carried on train travel.

Train compartments by themselves were awesome social networking sites. Forefathers of the present Facebook Express, perhaps. In days of internetlessness, victims of random allotment of seats, say cycle store owner Chandubhai, ittar salesman Agnihotri and Major Bhalla spent two nights and one day in adjacent hold-alls, trading dhoklas, biscuits and chiwda with each other, and playing rummy before disembarking from the train in a new spirit of back-slapping bonhomie.

Each discovered India in one's own commonly unique way. Train travel was more than a commute from one place to another. It was an experience in community living and very often, a lesson in survival. A mega Indian joint family per bogie. People lent their soaps and shaving creams to one another. They played *antakshari*, shared ribald jokes, revealed *gotras* to each other, discussed alliances and 'matches', heard commentary on All India Radio. Camaraderie reigned supreme between total strangers who came together for a fleeting moment in their lives, by sheer happenstance.

But air travel - aha! That was a game in a different league. The stinking rich didn't care why they paid so much more than the more 'down-to-earth' Chandubhais to move from say, Madras to Bombay. Was it necessary to fly just because you could save mere two days of time? Bombay was going to stay in Bombay, no? Wasn't it going to be stationary? (pun intended) Even among the rich, there was a silent caste system. Some stinking rich stank more than the rest and travelled only in the new and snazzy Caravells, that didn't need a propeller to propel itself. And they made a lot less noise than the downmarket Viscounts and Dakotas, and outshone the Avros any day. Trips cost the same bomb irrespective of the aircraft.

But there was a snootiness in opting for a travel on the day the Caravell wheezed into your aero-space. Technically, it was not a money matter. It was more of a style statement. The Dakota-er was like a Safari suit wearer, while the Caravell-er was like a smart pleated trouser ensemble.

Every air traveller was accompanied by a retinue of see-off-ers and also 'receivers', depending on which direction you were flying – out or in. The see-off-ers waited till the aircraft had taken off. When the see-off-ee had presumably seated and strapped himself, the gawking entourage would run up to the viewing balcony and wave at every window as the aircraft moved past, in the hope that their see-off-ee would see the farewell waves and wave back. This was reflected glory. In some mystical way, the riches of the air traveller rubbed off on those who waved louder than others.

But when it came to the stinkiest and the filthiest from among those rich, it was at a different level. Because these guys travelled phoren. Back then, it was not abroad, not overseas, not even the rather neutral 'out of country'. It was just phoren. Plain and simple, with no synonyms. For a guy going phoren, wedding-like festivities preceded his travel. Every colony resident and relative in town would step in unannounced, days in advance, and offer help with packing, shaking hands, canvassing for getting gifts and photos. Newspaper adverts by sycophants wished them a 'Bon Voyage'. Dozens of huge Samsonite bags, plastered all over with labels and names added to the pride of the traveller. He was not one of the 'masses' anymore. Bye-bye, common man-ism.

The see-off party at the airport boosted the fortunes of garland makers and photographers. People descended at the airport in hordes. This was a hand-me-down style statement. The next best thing to travelling *phoren* was to garland the one who was, get photographed with them, shake their hand and hope that enough people had seen the *phoren* traveller recognise and smile at you. When they returned – they all did – they were called *phoren*-returned. How often have you been asked if you were a *'phoren*-returned'?

But I digress. When he returned, it was as if a silhouette of the Eiffel tower was growing out of his shoulder blade and Statue of Liberty was imprinted in the halo around him. While unpacking bags for days, and handing out gifts and postcards, he would regale you with stories about how he unpacked and ate his bhel-puri in the lawns outside the Leaning Tower of Pisa, and how he put his bio-chemical paan kit to good use on a boat ride at the Thames. Some tez channa, katha, kacchi supari, star chutney sprinkled in paan leaves from Banaras would be found, still moist in the plastic bag they were holed up in. This was the advantage of being a rich Indian. You carried India with you in Samsonites, and unleashed them in phoren lands. Guerilla warfare at its best.

All this had to change. As years went by, time did become a precious commodity. Many people came on a short-duration visa to get married, and had to marry quick. More and more people began eloping and there had to be a hurried, respectable wedding to be carried out in a hurry. People still died of cancer and long-term ailments, but there were now peculiar and new diseases that killed people unexpectedly. More people needed to travel quickly and by air. Middle class-ism was up for an overhaul.

They wanted a change in the default settings. Do you think that the middle class should also travel by air? Click 'Next' to proceed and 'Cancel' to go back to the Main Menu. The entire class clicked 'Next'. And then, there was a lofty socialistic objective at play. The skies had to get more inclusive. They had to broaden their base. There were no urban sky ceiling laws. Radio waves, sparrows, pigeons, bacteria, pollutants, clouds, political speeches – they all flew by air, didn't they? So why not the middle class Indian, who still argued, but argued in English now?

Aircrafts were bought, airports were re-furbished, airlines were invented. New wannabe pilots did a crash course in flying. (This pun is very much intended.) A new breed of an air traveller was thus born – and it took over. Witness the new dynamics at any airport waiting lounge now. Air travel is now a composite experience, less about going from Point A to Point B. There is an ambiance that has to be imbibed, drunk and internalised.

There is a protocol about how to alter the decibels you generate. Shout a loud "Ta-ta!" to your son while getting off the car, but switch into library/hospital mode as soon as you enter. When your crotch itches, just amble over to the edge of the baggage trolley and get your nirvana by a surreptitious rub against the handle. Scratching is reserved for Nampallys and Howras, please. Stand in the check-in queue without walking into the butt of the guy in front. Look around to see if you spot familiar faces, and impress a known acquaintance with your apparent ease at what seems like a familiar environment for you.

Walk to the bookstore. Browse a few magazines and books. Pick up a couple. Flash your credit card. Amble into the waiting lounge. Open your laptop. Type out "the quick brown fox…" if you want. Someone stupid enough to be watching you may believe you're writing a nuclear treatise. Bring out your mobile. At this stage, your decibel level can be upped a bit. Tell the called one that you are leaving by the 19:35 flight. You have to say 19:35, not 7:35 pm if you want to be fashionable. Why you need to say 'flight' after you've already announced that you're at the airport is a question that may not have any answers. Not a sane one anyway.

And when they announce that your flight is boarding, mayhem breaks out. Eager Indians, anxious men and women in a hurry all get up in unison, and jostle to reach the departure gate. This brings out the grim reminder that there still exists in our DNA, Dadaji's genes. Genes which fought pitched battles at railway stations to wade through throngs in order to reach the bogie at the 7:35 pm time because back then, some trains occasionally did hoot and chug away at the promised 7:35 pm, irrespective of whether you had got yourself and your hold-all into the train or not.

Some residual fear about being stranded still seems to exist in the jostlers' minds. And when Indians jostle, they jostle hard. They can ram their laptop bag into a guy's vertebrae. Pitifully, grown-up men are asked through mike announcements to 'please form Q' and to 'please do not push your fellow passengers'.

But they still push, still spit and still scratch all the way to the aero-bridge or ladder.

To a certain extent, it depends on whether you're in a metro or a wannabe metro like Udaipur, Patna or Baroda. The metros are being formed faster than the protagonists are causing their formation. Sounds like a good deal. But a DNA correction is in order which is not happening. And that's not good news. Because when a neo-traveller is in the aircraft, he's plying two massive suitcases, three magazines, gifts, roses, kids and a forgettable attitude, despite being told that he is entitled to carry just one compact handbag.

But there's a Mahesh in his office who told him, "Balls! Just carry what you want. Whose grandfather will stop you?" The angry, youngish man, braver and newer in this world than Amitabh Bacchan, listens to Mahesh more than he listens to his conscience and an attempted upbringing. End result: he's got multiple bags in tow that he's deftly manoeuvring down the aisle, opening every overhead baggage locker and cussing like a stable-boy, when he finds them full and occupied by other beneficiaries of Mahesh's advice.

Part of the attitude of the neo-traveller is the realisation that he or his company has paid through their nose to fund his ticket. He pays for not just the octane and pilots, he pays for services. He's into a call-button-pressingspree. "Hello, madam!" No, madam is not being wished. This 'hello' is an order that means, "You'd better come here right away." So back to "Hello, madam! What can you serve me?" Madam has been there and done that for some time now, so she smiles and says that she can serve coffee and tea. Mr. Neo wants to be difficult. "How about some fresh lime and soda?" Oh, yes! Why don't you simply ask for Russian salad? Or maybe rajma cooked in Agra by a Mithalal Maharaj from Jodhpur, if he's married to Radha, but sleeping with your servant Shravan in 3/RT, Post Office Colony, 8-3-141/A/123-C Part, Hyderabad? Sometimes, a reminder of the grim realities and humble origins and nonsensical existences are in order.

Bags are jostled into nimble manufactures by Boeing and its plastic overhangs. There is tension in the air. High level demands by high level travellers. They animatedly argue about the bad Indian habit of spitting and eating *paan*. They are livid when they recollect that a flight from Aurangabad took off after a 25 minute delay without an apology or an announcement. But they are equally appreciative of the saucy stewardess who told an irate Cathay Pacific traveller in Hong Kong,

"What is you hurry?"

Welcome to the new caste system in air travel. Domestic is untouchable. International is Brahmannical, esoteric and ethereal. Indian skies are pliable and very nicely security checked. Clouds don't throw a tantrum or a hurricane like their Houston counterparts. They allow visibility and safe landings and move according to Air traffic Control's wishes. And when the aircraft finally lands, taxies and stops, passengers spring to their feet in synchronised unison.

Simple logic – the plane stopped, we have to get out. We have to get up to get out. So why are you snarling at me, old man, if I get up, slide over your knees and invert-turn to open the overhead baggage locker, in the face of whoever is foolish to stand in front of it with polite manners and a smile? Yes, I'm fanning my face with a newspaper that I grabbed from your seat's front jacket. And while walking over you, your knees, your persona and your existence, I am going to show you my finger, pull my bag down on your shoulders just as you get up, and hurt you enough to remind you that you are an old fogey who doesn't know how to catch an early locker. This is an attitude with a vector, it has direction and a velocity. It makes for a good recount. But at the end of the day, the bottom-line is what Nawab Aminuddin Khan had to say to a tossing, turning, agitated lady traveller who went ballistic on the pilot for a not-so-smooth landing. Amin chacha cocked half-an-eyebrow at her and murmured, "Having a tough menopause, eh?"

Arbit Fundaes

M&B

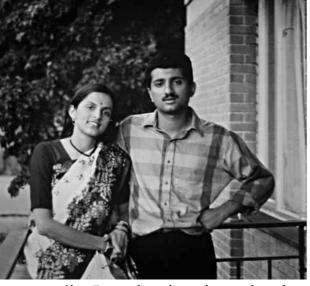
For some, M&B denotes Morrison & Boyd, authors of the Organic Chemistry textbook taught in the 2nd year. For a few more, M&B or, Mills & Boons takes them into the mushland of sunsets and roses. Folks who forever espy a spring in the air. For most, MB is the dreary, dark-grey Main Building with classrooms and lectures. But for a very few, MB denotes all three. Boy meets girl in a lecture hall at MB. They trade lecture notes. An organic chemistry develops between them. And they walk away hand-in-hand towards a Powai sunset and swear undying love over a glass of sugarcane juice at YP.

With a skewed boy girl ratio of 300:4 or thereabouts, it's only the intrepid travellers in the world of romance who sail through and come out winners. Back in 1983, the hotly pursued Mukta Ghate walked away with winner Shaji Farooq and they were soon proclaimed man and wife. Almost two decades later, Parul Gupta walked away with Prateek Sharma in 2002. The end result is the same. But what is the real story of these two famous couples on the campus that has seen several such, and will hopefully continue to be a compliant ground for breeding romance? The spring in the air? Why should I, replied a snooty GB Shaw, but that's a different story. Noseybee delved into the lives of MG-SF from then and PG-PS from now and cajoled them into penning their confessions. Read the stories in their own words. And marvel at what has changed and what has not over these twenty years.

Noseybee







Shaji Farooq from the graduating class of 1983 was tall, fair and handsome. Mukta Ghate, from the same class, was pretty, chirpy and a livewire. A talented dramatist, debater, what's-the-good-word-er and more. Little wonder then, that she was hotly pursued by several admirers. While Mukta worked her way up from the Physics department to Metallurgy, Shaji, despite his Elec brains and Elec department, decided to downgrade himself to Metallurgy. "Foul!", cried the other wannabes.

Shaji had the looks that could kill. And brains to match. He also played the sitar and strummed Boney M's Rasputin on his sitar in the Convo once. With so many seemingly unfair advantages, why did he need to seek the havens of the Metallurgy department to seal his — and by implication — his rivals' fate? To be fair to Shaji, it was fate that had decided to forge this relationship in the crucible of the Metallurgy department. It was sheer coincidence, and not a nefarious design, due to which Shaji moved away from the evil wizardry of short circuits and settled for metallic habitats.

After completing the mandatory MS and PhD, the ex-metallurgist duo are safely ensconced in New York, work with Infosys and IBM respectively and live with their son and daughter, who are grateful to IITB's Metallurgy department for causing their creation.

Shaji's Story- Stranger Than Fiction

y story begins in Bangalore, when the JEE results appeared in the newspaper one early summer morning in 1978. Suffice it to say that I was completely bowled over to see my registration number on the list – I had screwed up Math so badly the first day that I did not even want to attend the remaining exams the following day. Thanks to very persuasive middle-class parents who refused to give up on their dream (even though I had pretty much given up on mine), and a kick-ass performance in Physics and Chemistry (probably because I didn't care anymore), I made it with a rank in the 200s.

And now, on to the fun part – getting ready for my interview at IIT Madras. My father decided to accompany me to Madras, and my mom did her thing by insisting that I buy new clothes for the interview, which I did. I bought the most god-awful clothes one can imagine (the print on my synthetic shirt would have been ideal for drapes, and I even had a pair of stretch pants tailored) – cannot believe what terrible tastes we had in those days, and how clueless we were about how outfits looked – shirts with dog collars, and pants with 32" bell bottoms!

I had assumed that guesthouse arrangements would be made available to us when we arrived at the IITM campus, now that I was an official hotshot IIT entrant – wrong! Fortunately, my father had the sense to carry a couple of bed-sheets. We ended up sleeping on rusty, steel cots in the Alaknanda hostel, with a bed-sheet but no mattress, on a horribly muggy, mosquito-ridden summer night.

The next morning, we grabbed a hasty breakfast in the hostel, and I headed to the main building for my interview, dressed to kill - I was even wearing shiny, flat-toed leather shoes with 1.5 inch heels, Bacchan style (don't laugh, that was haute couture in those days!). I had told my parents that I was applying for Madras Electronics as my first choice. Given that it would be touch-and-go, getting into Madras Electronics with a rank of 246, I had to put in other back-up choices as well. The obvious next choice should have been Madras Electrical, possibly followed by Bombay Electrical. I cannot say exactly what it was, but I ended up selecting IITB Electrical as my second choice - maybe it was that awful night in the IITM hostel, maybe it was the fact that I didn't want to be in an Electrical department minus Electronics, or maybe it was the image of the beautiful, verdant IIT Bombay campus standing next to a lake, that I had seen about seven years ago when we had visited Bombay, and gone to Powai for a picnic. And as it turned out, IITB Electrical is where I finally ended up, but only by a hair! I was the last but one to get in.

Back in Bangalore, life after the interview was a blur. My parents held a party for my friends, and you could tell by the way my parents, sister and brothers looked at me that something was going to change forever within the next few days. When the day of departure finally arrived, the tension was so palpable that you could cut it with a knife. I cannot remember another day where all of us experienced such mixed emotions – everyone was so proud that I had made it to IIT, the first one ever from our extended family and family friends, yet at the same time I was leaving home at the age of 17 having just celebrated my birthday in June. At the station, as we waited for the whistle, I remember being choked up but maintained my composure. My sister could not hold herself back, and my parents were on the verge. The train started moving finally, and after waving to my family on the platform till I could see them no more, I walked back to my seat and sat amidst my luggage, with mixed feelings of a little joy, a lot of sadness, and a fair amount of trepidation.

After changing trains in Guntakal (there were no direct trains from Bangalore to Bombay until my final year), I boarded the broadgauge Dadar-Madras Express. At Raichur, my aunt, uncle and little cousins came to meet me. My aunt had made me a box of shaami kababs to carry with me to IITB (Muslims have difficulty in expressing their love without throwing a meat delicacy in the mix, thank god!), and a full dinner of pulav, kurma, and mutton masala. The train started moving just as I managed to lick the dabba clean, and I had barely enough time to give everyone a big hug and get them off the train. I remember my dear Rashida Aunty warning me in good humour about 'Bombay girls', as they walked alongside the train. I guess it's a good thing that I didn't pay any attention to her!

On the train, I slept really well, and arrived in Pune very early in the morning. It was a beautiful, rainy day, and as the train pulled out of Pune, I sat by the window waiting to see the Western Ghats in all their pristine monsoon beauty. There was a young Marwari couple sitting opposite me, who appeared to be heading for their honeymoon (the henna on the lady's hands and feet, and red glass bangles from her wrists to her armpits were a dead giveaway), holding hands and getting really amorous (yet nothing compared with what you might witness nowadays). For some reason, seeing these lovebirds irritated me; I ignored them and looked out the window, getting nostalgic about the family I had left behind – I had not even reached Bombay, and I was already homesick.

The plan was to get off in Kalyan, and to catch a local to Vikhroli. I had never done anything remotely like this before and was pretty tense about making the switch. I managed to get into the local and get off at Vikhroli — Bombay was hot and sticky, and I was already missing Bangalore (the only consolation was that Madras was probably worse). I found a cab with a friendly Sardarji, and headed to my destination: IIT Bombay, Hostel 2.

When I look back, here is what the seniors and my fellow freshies must have seen when they first met me. I wore these huge glasses with thick, black frames, looked like a complete nerd/dork, had this slight stutter, and a strong Southie accent to boot (I simply couldn't believe that I had an accent, but that is what everyone told me; even the Gujju guys had the audacity to make fun of my accent, whot seet ya!). The Bombay crowd, particularly those who came from Xaviers, Cathedral, Campion sounded unbelievably cool and polished (how naive must I have been to be impressed by those bloody frauds). I also looked at every other freshie I ran into and said to myself that these must be the really brilliant guys, and I am the only lucky lame duck who got into IIT by chance. Boy, was I going to get screwed.

Nonetheless, the first two years went by quite fast (or at least it seems that way now), and I could feel the change in myself with each passing semester. I became cooler (it didn't matter if I really did or not, all that matters is that I felt cooler), and more confident (getting good grades helped), my taste in clothes improved quite dramatically, my Southie accent became less prominent (I had no choice, unless I wanted to be made fun of, for the rest of my stay at IIT), and even my friends in Bangalore felt that I had metamorphosed slowly, but surely, during the course of those critical two years.

I met Mukta for the first time during our second MI somewhere near LT (we were introduced by Sanju and Swati whom I knew from my division). We all hung out for the better part of the morning, and I remember feeling quite elated, but cannot quite remember now what we talked about. I don't think it mattered, because just having a girl talk to you was good enough. Devdas, Nadu, and Bhaiyya were also there. I must have been feeling really confident, because later that afternoon I convinced Devdas that we should ask Mukta and Sanju to go dancing with us (the bloody nerve!). I tried convincing the others to join in as well, but wisely they all backed out.

By that evening, most of the hostel knew about our plans. Devdas and I had now painted ourselves into the proverbial corner — so we had to go through with it, no backing out this time. All the bravado and machismo of the afternoon disappeared after having several seniors and classmates make fun of us and tell us about the humiliation that awaited us. In any case, we both got ready. Devdas borrowed one of my shirts (a testament to my improved taste in clothes, I think), we doused ourselves with copious amounts of cologne, and then quietly slunk out to the Convo to accost our targeted victims.

They must have sensed something as we approached them (I am told a similar phenomenon occurs when prey are stalked by carnivorous beasts in the wild). Thinking about it now, maybe we should have approached them up-wind. So we talked about the good time we had in the afternoon for a bit, and then, completely out of the blue and with no finesse whatsoever, we blurted out together, "Would you like to go dancing?" The answer came almost instantaneously and simultaneously from both of them (they must have practiced this, I am sure), "We don't dance!" And that was that! We stared at each other awkwardly, talked about the weather for a little bit, and then took off for the hostel.

I don't think Devdas and I talked for a good 5 minutes after that (we were in a state of complete shock), but once reality dawned, we started planning what we were going to tell everyone who was waiting for us back at H2. Getting refused by the girls was one thing, but the prospect of getting humiliated mercilessly back at the hostel was as scary as hell. Still, like the real warriors that we were, we went back and took it like men (well, almost like men I should say, since we had just been emasculated outright - and the only thing missing was a stamp on our foreheads that said "REJECTED"!). Looking back, our approach seemed perfect in theory, until it blew up in our faces during its actual execution. I am reminded of one of Yogi Berra's famous "intelligent-sounding dumb sayings" that seems very appropriate here: 'In theory, theory and practice are supposed to be the same, but in practice they are not!'

At the end of Spring Semester 1980, I decided that I would not continue in Electrical. I had a pretty good CPI and could have walked into anything I wanted, but I decided I wanted to do Metallurgy. Don't ask me why, possibly my mentor in Bangalore (a friend's father), who talked to me about the great advances in chips and materials science, had something to do with it, but that's a long shot. More importantly I just did not want to do Electrical, and that was that. I put in my change form and left for Bangalore. My father was thoroughly perplexed when he heard of my decision – he wondered why I hadn't stayed in Madras if I wanted to do Metallurgy, and I muttered that I didn't know it then, hoping he would let it go (which fortunately, he did).

I arrived back at IIT to start my third year. On the first day of class, I walked down to the Metallurgy Department, and then went up the steps to the first floor where our classrooms were located. And guess who was standing there looking at the bulletin board? I walked up to the Mukta Ghate, one part of me wondering if she would even remember me (she did!) – I asked her what she was doing here. I cannot quite remember what she said or what we talked about, but I had definitely learned my lesson about what not to say to her from our last "encounter in the wild"! All I do remember is that when I sat in the class that first day, Mukta came in and sat next to me. The pattern was established and before we knew it, we were studying together and going to each other's hostels. We became very good friends, and the rest, as they say, is history.

Looking back, I cannot help but wonder about how serendipitous life is, and how tenuous the linkages are that determine ultimate outcomes. First, there was my selecting IITB over IITM for no compelling reason whatsoever, and then there was my decision, made almost frivolously, to move to Metallurgy from Electrical (I am sure, it is a record that stands to this day!).

And as it turns out, this game of chance did not end with me; Mukta had her own story. Her first preference was UDCT (can you believe that!) but decided to join IIT because she did not make it there (her parents advised her to go to IIT). Then at the end of the second year, Mukta decided to change to Metallurgy on the very last day (based on the advice of her parents), even though she had originally submitted her application to change to Chemical. The only difference was that Mukta's parents had a lot to do with her decisions (something I am sure they regretted bitterly until they got to know me well, at which point they probably regretted it even more), whereas my parents, much to their chagrin, had very little to do with mine. Our children, Priya and Sameer, gave me a big hug and refused to let me go when I told them how close they came to not existing at all!

That, in essence, is how I ended up where I am today. Life is indeed stranger than fiction, and I couldn't have made this up even if I had tried like hell, since I was never very talented at writing fiction (unlike my beautiful and talented wife). IITB was always special to me, but meeting my life partner there has made it especially dear to me! My only worry is that this whole story is beginning to sound more and more like that pretentious American TV serial that I so thoroughly despise – How I Met Your Mother!



Mukta's Story- I Saw Him Standing There

hen the JEE results came in the summer of 1978, I was somewhat stunned — by some stroke of luck, I had made it into IIT. I remember being in the bathroom when my family started banging on the door with the news. I was shocked, thrilled and elated! My parents were with me at the IIT Bombay campus in Powai for registration and department selection. I wanted Chemical Engineering, but it closed way ahead of my rank.

I ended up in Physics and was quite dejected about it. My dreams of IIT included a B.Tech degree in Engineering and in my foolish 17 year-old mind, an M.Sc in Physics just did not cut it. I was about ready to cry at this unfortunate turn of events. I even told my parents that we should leave and head home right then. My mother firmly insisted that I should register as a Physics student and then change departments in my third year (as was explained to us). My dad, a metallurgist, thought Physics was actually a terrific branch. So being the very good daughter that I was, I did not argue further, but instead agreed to give it a shot, stating that if I did not like it I would be leaving.

So when I came to IITB on 17th July, 1978, I was nervous, unsure of my decision and already homesick. Yet within a few weeks of being there, I realized that this place was extraordinary, that nothing else could ever come close. I honestly did not care that I would exit with an M.Sc instead of the coveted B.Tech, although I was going to try like hell to change to Chemical.

Mrinal and I were both in Division II, and went to and from class together the first two years. She too wanted to change from Physics to Chemical Engineering just like I did. At the end of each semester, we discussed our Cumulative Point Indices (CPIs) with great gravitas (you show me your CPI, and I will show you mine!), and seriously weighed the odds of achieving this goal.

In fact, this change to Chemical became a defining theme in all our grade conversations the first two years. At the end of two years, much to our relief, it looked like we would both easily sail into Chemical Engineering. We submitted our change forms, and left the campus in the summer of '80. My story of course doesn't end there.

30th June was the last day to submit the change form for our batch. In the week leading up to that date, my father asked me which subjects I liked most at IIT (that would be Physics), and which ones I did not (Organic chemistry!). He asked me if I was hell-bent on Chemical Engineering, and I was surprised to find myself saying - no I wasn't. He discussed the curriculum for Metallurgical Engineering. The more I thought about it, the more convinced I got that I wanted to become a metallurgist; the course of study he described appealed to me strongly. Unbeknownst to my fellow H10 batch mates, on 30th June (the submission deadline) I submitted the change form for the second time.

In July 1980, returning to the campus for third year, I shared my new department update with the H10 gang. They were shocked. I even felt a twinge of guilt at ditching my friends in Chemical, and a small amount of remorse at the decision I had taken. But there was no going back now.

On the first day of class, I watched Mrinal & Indira march off to ChemE, and Sanju and Swati to EE. I felt a tremendous sense of isolation. I remember feeling sick in the pit of my stomach as I walked alone up the steps of Metallurgical Engineering to the first floor, little knowing at the time that my life was about to be changed forever, in a way that I could never have imagined.

It was a good 15 minutes before the start of classes so the place was empty and since I had nothing better to do, I began perusing the notices locked behind the glass bulletin boards. Then I heard footsteps and turned to see another third year coming up the stairs. I recognised him immediately but was fairly sure he was in Electrical Engineering. So what was he doing here? I had met him briefly during Mood Indigo just six months earlier, along with a handful of other Division IV guys from H2. We had all hung out together for a day — these H2 guys, and some of us from H10.

This guy had actually mustered the nerve to ask me to go dancing with him then. It had come so unexpectedly and caught me so offguard that all I could do was blurt out a 'no'. I recall thinking later that he was actually alright — with a quirky sense of humour (I remember he had made me laugh that day) and he certainly had the guts to ask me out just like that. However, after that chance encounter, the semester had rolled on, and since I was in Division II and he in Division IV, our paths had not crossed again — until now.

Shaji Farooq walked up the stairs and then stopped when he realised he was not alone. I saw him standing there, apparently as shocked to see me, as I was to see him. I think he asked the question first, but we confirmed that neither of us was lost – that we had each had changed intentionally to Metallurgy. Now, standing there in our new department, realising that this guy was going to be in all my classes for the next three years, I had already begun to feel better about Metallurgy. I looked at him again. He was definitely tall, good-looking, and well-dressed. I noticed he had a nice checked green shirt tucked into dark jeans, his broad shoulders leading to a slim waist. And he was wearing dark shoes, which counted for a lot on a campus where 99% of the population

lived in rubber chappals.

But I shocked even myself at what happened next. He walked into the classroom before I did and chose a seat near the door, close to the front. The place was now filling up with guys and most of them appeared to be in disbelief at seeing me there. The seats were built with attached desks and were arranged in pairs. Most of them were now occupied but a few desk pairs were still empty. I found myself walking to where Shaji was sitting, and planted myself in the adjacent seat.

If he was surprised, he certainly didn't show it. In fact, neither of us looked at the other while I sat down and removed my notebook and pen from my book bag. I assumed that the rest of the class was staring at us so I fixed my attention on my notebook, and began carefully writing the course number and name, the date, and the name of the professor, all the while waiting for the lecture to start. The professor walked in a few minutes later, and as he started to talk, I found I could breathe again.

After lectures ended that morning, we walked down the stairs together talking about the courses, and then we parted ways. Looking back, I think it started that first day, and gathered momentum at a rate I wouldn't have thought possible. Within a week, we were discussing problems and homework, and staying back in the department a lot longer than we needed to, well after the rest of the class had dispersed. I just liked being with him although there was no way in hell I was going to admit that to myself, let alone to anyone else.

Then came the first joint lab report. This we could not have planned even if we had tried. Our new roll numbers were the last two assigned in the class, since we had joined the department last. No one else was between our roll numbers, there was an even number of guys before him so no one else was paired with him, which would have meant I would either be alone, or paired with someone else had I not been the last roll number in the class. So we were paired for all our labs and projects.

When the first big Fluid Mechanics lab report was due (a course taught by Prof. Pani, believe it or not!), Shaji asked me to bike to his hostel to work on it. This was a difficult step for me. I mean, talking after class and in the department was one thing, but to go to a boy's room! I discussed this dilemma with my friends, and asked for advice. Sanju immediately suggested that I invite him to my room instead so I wouldn't have to walk into a boy's hostel and see them in their native habitat, so to speak. I suggested this to Shaji, who jumped at it right away, thrilled no doubt at being invited to my room. So we worked on the first report, finished it in an hour, and then as he was getting ready to leave, I started a conversation on something totally unrelated so he ended up staying for another hour. Hostel 10 rules allowed male visitors until 11 pm though, so when the next lab report rolled around, and we could not finish it in time, we both had to bike over to his hostel, and work on it there.

By the end of that first month, I was completely comfortable biking to his hostel, asking the watchman to announce his room number which the watchman did by hollering "Room Number 144, Guest!", waiting until Shaji came down to the lobby, and then walking up to his room with him. Shaji always escorted me back to my hostel at the end of the evening, which was often well past midnight. We would bike back under starry skies, enjoying cool breezes from the lake.

Truth be told, we began studying together for tests mainly because it was another excuse to spend more time together. There's no denying that it helped to have two people crack onerous problems in Metallurgical Thermodynamics, but in reality that wasn't the reason we were doing it. Within a few weeks, I had forgotten what it was like to study alone in the evenings. We began meeting every single day, and on weekends. We were together almost all the time. This was lost on no one, least of all on the IIT faculty.

At the end of the first semester, a high fever forced Shaji to the dreaded IIT Bombay hospital, causing him to miss the final exams in two subjects, one of which was Structural Engineering. This course was taught by Prof. K. S. R. K. Prasad, Aeronautical Engineering department. "Kasrak" Prasad was a known terror, who had started the semester with a surprise quiz, and then failed 80% of the class in that quiz, the passing grade being a 4 on 10. I had scraped by with a 4.5, shocked at my performance until I realised that only Shaji had a higher score at 5.

It had taken solid work during the semester to get in position for an A, and I was concentrating hard as I attacked the complex solid mechanics problems he had given in the final. As I worked through weirdly-angled trusses and cantilever beams. I saw a shadow across my paper. Looking up, I saw a not-so-happy looking Prof. Kasrak Prasad standing there. "Where is your friend today? How come he is not at my final exam?", he wanted to know. In fact, Shaji had called me that morning from the 'hospi', saying he had checked in there during the wee hours because of a fever, and was not going to make the exam. However, he had not yet passed this information to any of the professors. I could feel my ears turn very hot. Suddenly all the pens and pencils in the room stopped moving. Everyone, it seems, wanted to know where my 'friend' was. "He's in the hospital with a fever," I managed to croak. That seemed to satisfy Prof. Kasrak, who grunted and moved on. It took me a few minutes to regain my composure and then I attacked the damn trusses with renewed vigour.

When the first semester of third year ended, and we all left for home over Christmas Break, I found myself in a new situation. For once, I couldn't wait for the start of the next semester. I found myself counting down the days, waiting for January and Mood Indigo. That year and for the rest of our stay at IIT, Shaji and I attended almost all the programmes at MI together. Ironic indeed, given that a year earlier, I had refused to go to just one programme with him.

The most memorable of those programs was the Chitra-Jagjit concert. I remember what I was wearing (a pink churidar kameez), what he was wearing (a beige flannel shirt and black corduroys), where we met (right at the entrance to the Convo), where we sat (in the middle section), and what we said (not much, actually, we were enthralled by the concert). It may count as our very first date, because neither of us had a book, a lab report or any other excuse at hand. But unlike a conventional date, we didn't hold hands and we certainly didn't kiss each other good night!

Life moved on after that at a frenetic pace. We studied together, sometimes ate meals together at one or the other hostel, and went out as part of a group with the others. In a sense, the Hostel 2 and Hostel 10 connection got sealed with our spending so much time together. Shaji with his close friends Devdas, Nadu, Valli, Bhayya, Kauli, and I with my close friends Sanju, Mrinal, and Swati went out together a few times. We went to movies at the theatre in Kanjurmarg, for Southie fare at Radhakrishna, the local Udipi establishment, and pav bhaji, frankies and ice-cream at Waikiki.

We both realised early on that this was no ordinary friendship. And try as we might to view this as a platonic relationship, it was anything but that. However, it was a discussion we continued to skirt around. We knew that it would have to be tackled some day, but why spoil a perfectly good thing by doing it now? My friends asked me about it a couple of times, and with a perfectly straight face, I said we were very good friends, and that was all. I think they knew, and I knew that they knew, but we left it at that.

Sometime in the second semester, we saw posters advertising Himankan '81, a twoweek hiking expedition in May arranged by the IITB Mountaineering Club. This seemed like a once in a lifetime opportunity to trek the Himalayas, even for those with no mountain climbing experience. All one needed was a good pair of hiking boots, and of course, cash for the trip. The Mountaineering Club guys had taken care of all the lodging and meal arrangements; hats off to them.

In fact, Himankan '81 turned out to be a college trip to beat all trips, and an adventure in every sense of the word. Among the girls in our batch, Sanju, Mrinal, and I signed up. Getting parental permission for this was by no means easy, but somehow, we pulled it off. Shaji and Nadu were part of our group, along with a few other guys. The overnight train trip from Victoria Terminus to Delhi, then the two-day stay in Delhi, were a lot of fun. But the real trip started with the scary bus ride up the foothills of the Himalayas, to Manali. The deep ravines bordering the tortuous roads up the mountains were frightening enough, but the bus driver, possibly under the influence of certain substances, was taking hairpin bends at warped speeds that were truly terrifying us. As it grew dark, we fell asleep, too tired to worry about the crazy driving on the narrow roads.

At that point, our lives were no longer in our hands. All we could do was hope to be able to see the sunrise without a mishap. As luck would have it, we did reach Manali in good time. And when we reached base camp a few miles away from the bus depot, we were greeted with the aroma of a fresh meal being cooked by the local help.

Manali's scenery was breathtaking: mountains as a backdrop to gurgling streams fed with spring melt. The hikes from Manali, and later Solang, turned out to be challenging but rejuvenating. My head started to clear each time I sweated up the slopes with my backpack and water canteen; at ten thousand feet, it was easy to forget one's worries, and just revel in the moment. A couple of times the climb was hard, but I wanted to do it on my own.

Once though, I was having a pretty difficult time. I stopped to catch my breath, and Shaji who had been a little bit ahead, came back to where I stood. He just gave me his hand, and I took it, neither of us saying a word until the tough part of the climb was over, and I unlinked my hand from his. The rest of Himankan '81 flew by like a dream, and it was time to say good-bye to each other until the start of fourth year.

The fourth and fifth years at IIT rolled by, each with their ups and downs, with new courses, labs, guizzes, and exams. And of course, there was the usual slate of inter-hostel activities, treasure hunts, Mood Indigos, and fun times. We took part in everything, and we had a great time. It's true that even after Shaji and I had acknowledged to each other how we felt, we did not share this with anyone else. It was not a matter of trust, it was just that we had to be sure about this for the rest of our lives, and it was not something either of us took lightly. And I think our close friends knew that. It was a tacit understanding between them and us, and nobody ever raised the question, although the eight-hundred-pound gorilla was always in the room with us.

Three weeks before final exams in our last year at IIT, a freak accident in a Hostel 2 cricket match left Shaji with a fractured upper jaw. I went to the hospital as soon as I learned about it, and was stunned to see his bruised face and black eye. I asked him when he would be leaving for Bangalore, but he surprised me by saying he was going to stay put and finish off the semester. I think he could not bear the thought of leaving at that time. No matter how we felt about each other, there were still pretty big hurdles to cross within our families, and we were in a fairly stressed state. It was a big relief to hear him say he would not be leaving before the end of the semester.

Shaji then got his jaw wired at an external hospital according to the surgeon's recommendation. He began to lose weight at an alarming rate as his nourishment reduced from the usual hostel fare to whatever juices, milk and soups he could consume through jaws shut tight. There was little I could do. He proceeded to attend classes in that state, even taking all his final exams on schedule.

Finally, on 6th May, 1983, the surgeon removed the wiring from his jaws, satisfied that the healing was complete. The next day we defended our B.Tech projects, for which speaking was a requirement, so the wiring removal could not have come a day later. That afternoon, having now completed all our B.Tech requirements satisfactorily, Shaji and I walked out of the department together.

It was hard to say anything with so many mixed emotions. We crossed over to the Humanities and Social Sciences department for our last cup of tea in that building as IIT students. That night, the Hostel 2 guys hosted a party in their wing, and both Sanju and I were invited. It was quite a night, and a terrific way to cap the five years on campus.

Looking back, I wouldn't change a thing. IIT Bombay gave me the best of many worlds. It would be no exaggeration to say that I did not know who I was when I entered its gates for the first time; I discovered who I was along the way. It would also be no lie to say that I had absolutely no intention of falling in love with anyone there — but it happened anyway!

Epilogue:

In the fall of 1983, Shaji joined Rensselaer Polytechnic Institute (RPI) in Troy, NY, and I enrolled at Northwestern University in Evanston, IL. That year, he proposed to me and I accepted. As expected, our families weren't thrilled about it initially, but his parents surprised us by being fairly open and receptive to the idea, and shortly thereafter, my parents came around, too.

I moved to RPI in the fall of '84, after getting my MS from Northwestern. We were married in the summer of '85, almost exactly five years to the day we met in the Metallurgy Department at IITB. We now have a 21 year-old daughter and a 17 year-old son, who are pretty glad that I submitted my second change form to Metallurgy when I did.

M&B V.2002

He

Prateek Sharma (Potty as he is fondly known among friends), from the graduating EE class of 2002, is a not-very-tall, very fair and very chubby dude. Even some profs could not resist the urge to pull his cheeks! A natural charmer who can make you laugh even at a funeral, Prateek was always in the good books of the fellow ladies. But it was one particular dove from the same department who caught his attention.

She

Parul Gupta (or Pallo, as Potty would fondly call her) is one of those rare combinations of beauty, brilliance, activism and humility. No wonder this "unheard of" combination caught Prateek's attention right from the start. Many a guys from the class of 2002 tried to make "friends" with her, but it was our lucky boy Potty who finally succeeded. It wasn't easy though. And this is their story.

THE STORY

It begins with Potty asking for Parul's clothes for Sophies' Social, even though they wouldn't even fit an arm of his! And in return, leaving his heart with her. Acquaintance grew into friendship, strengthened by long lake-side walks and their first period apart during the winter break of 2003. However, it wasn't until a late night discussion that definitely involved alcohol at a joint in nearby Hiranandani, and relentless persuasion from friends, that Potty finally got the courage to go to the girl's hostel in the middle of a rainy night and expressed his feelings to Parul.

It became clear that they are soul mates when Potty jumped over his pals to save Parul's life when their jeep turned turtle on the way to Mahabaleshwar! (don't worry, we all lived to tell the tale!).

But of course, no Bollywood love story is complete without drama and there was plenty when Parul moved to the US - twice *at that, once to start her PhD and the second* time to finish it! The pain of separation was too much and some of us think that it was the fear of leaving Potty to pursue MBA (married but available) in India that brought her back. But that's a story for another time. Their love and friendship has grown stronger with each passing year. In 2010, their son Abir arrived to complete the perfect family. They live happily in Bangalore where Potty works at his own startup MyGola and Parul is at IBM. But Potty still can't fit his arm in any of Parul's clothes!

Parul and Prateek's Story

"221, Parul please come to the PA, 221, Parul please come to the PA, 221. Parul."

rateek's familiar voice on Hostel 10's PA never failed to excite me, and I would bound down the stairs and almost break into a run all the way to the PA. We would sign in the guest register kept with the security guard at the entrance, logging the in-time - aware that he was not allowed to stay beyond 11pm, and walk back up to my room. In those times, when we had no mobile phones, no laptops and no internet in our rooms, these (often) unannounced visits were what made the day. Till he got a scooter (in his third year, presumably for Techfest work!), Prateek used to make the long hike from H4 to H10 determinedly on foot, unfazed even by the Convocation Hall slope. It kept his bulging middle in check for one last year.

Prateek and I were in the same class - the 1998-2002 B.Tech class of Electrical Engineering. We were in different divisions in the first year, meaning we didn't have common classes, so didn't know each other much beyond the courteous hello at some batch gatherings. With the second year came common department courses, and hence more opportunities to cross ways. But it was the Sophies GC (General Championship) that made our first conversation. Sometime in August 1999, we had the Sophies dramatics, and H10's performance was scheduled first. We finished our play and were clearing the props from the stage, when Prateek walked up to a group of us in a state of panic, saying his team needed a "dress" for a

female character in the H4 play. This wasn't an uncommon request, and I offered to lend one of mine. So we walked back to the hostel together, making small talk, and as soon as I handed the dress over, Prateek rushed back, promising to return it soon. The second visit happened a few days later on the pretext of returning the dress and more conversations followed over emails, the phone and soon, walks by the Powai lakeside.

The lakeside was undoubtedly the most vital catalyst of college romances of our times, and any missing couple could be found there with a very high likelihood. The other one was the H10 sidewalk. At 11 pm, when all boys were required to leave H10 premises, one could see a long line of couples seated on either side, carefully well-spaced so as to preserve some privacy for everyone.

Since my first year, I had given participating in the Inter-IIT Sports tournament a thought a couple of times. In those years, one could get into any women's sport team with very little effort. I had done a bit of running for the Sports GC, so when Inter-IIT 2000 was to be held at IIT Kanpur (Prateek was from Kanpur), I promptly decided to put in the rest of the effort required to convert the thought into action.

Besides the amazing athletics team that trained together, the bonus of getting to meet Prateek's family made Inter-IIT in Kanpur a terrific experience. And oh, I should not forget to mention the sports camp's food, which you can gorge on guilt-free. That alone makes all the sweat worth it.

Another time I remember is when I was at home for the winter break and Prateek was on campus, working away for Techfest. My parents were then posted in a remote village called Dahej, 50 kilometres off Bharuch in Gujarat, and there was no internet access at home, only in my dad's office. I would go to his office sometimes to browse the internet and sneak in



an email or two, but on most occasions my dad was our email-messenger. I would save emails I needed to send in a file along with the recipient email IDs (we did have a computer at home), and dad would just copy them, mark the subject "from Parul", and send it off from his official email ID. On his way back, he would get printouts of all the emails that came for me, and he never did read any of them. Now when I look back, I find it quite incredible.

2002 came before we realised it, and we were headed different ways after Convocation – I left for the US for higher studies, whereas Prateek took up a job in Bangalore. However, the bonds that had been strengthened over years spent together at IIT – the years that both of us agree to be the most formative ones of our lives – made sure we got back together. The SAC, Staff Canteen, Y-Point, MB, LT, EE Department, Chinkos, Powai lake, Guesthouse, Vadi's, Lakshmi, Hiranandani Galleria, Marine Drive, the Endsems, Techfest, Inter-IIT, GCs are all, in some part, the reason why we are together today!

Nosybee dug out some excerpts from the early emails exchanged between the two love birds. Here are a few selected snippets:

From Parul to Prateek:

ONE:

Hi nishu,



Firstly, I must apologize for not writing - actually there was so much to write that I got all confused where to start from ! Other mails are choti choti, I reply to them and get done with immediately, but gotta write a long one to u, u c......

For the maths quiz - don't feel upset, its just one quiz and I'm sure it'll be out of ur 8 best ! Anyway a lesson learnt is never too late, so u should start attending lectures right from today ! I agree that they are extremely boring and terribly sleep-inducing, but u can make sth. out of them with a leeettle effort ! And if u still think they are useless, let go, instead whenever u are missing a lecture, sit down with the lecture notes and try to cover all that must be going on in the class. That way u'll be at par with those who attend lectures. And lets hope that Pallo # 2 's plea does have some results before our last Ma course gets over !

TWO:

Hi Prateek,

The treat was no doubt nice, thanx ! I made quite a fool of myself, didn't I ? You must be thinking how I managed to survive all these years of my life without knowing how to cross a road ! Actually I was woken up by your call (I do this often, take a nap at arbit times!) and wasn't fully back to my senses - it did take me some time to get

what was happening, even where we were go-

ing ! So just let things go on as they were ...

I am a bit confused about how u define a date - if that means going out with any MALE I did go with two of my friends for my birthday treat to hiranandani. But never thought there was any difference between that and going out with my GIRL-FRIENDS for a treat ! Is there ? Ah, I haven't been able to progress much with the good ol book.

Actually, with all the Insight, Tf work and baskee practice sessions taking up all the time and with acad pressure building up and the course presentation imminent, even when I sit down to read, I can't really concentrate - so am still stuck on the third chapter ...

Then congrats again on ur new mansions are u still sharing it with ur previous roomp? 'Guess now u'll look down not only on ur hostel junta but us too as slum dwellers. Have u seen our rooms? They are really tiny! Life isn't fair atleast its fair to some.

This time it'll be u with all the fun, so have fun! Bye

Parul

P.S. : U seem to be genuinely concerned that I find "HIM". Don't u think if there were such a person, he wud just come along ?

Mails from Prateek to Parul:

ONE:

hi pallo

seriously i am really sorry for my mishtake.i shall check my mail regularly frm now on & if u have to talk to me u can call at the mess times. then i'm generally around the PA.so i wont miss it ok. if want to call at times other than mess timings, ask the person to write some message for me on the blackboard ok.so dont worry .i'm not all that far. now about that insight thing.ya i did think about it a bit but coccluded the same things as u explained in ur really needed mail.so dont worry.in fact if i feel that u did something rude i would tell u on the face,bebu.so quit worrying about these silly stuff.there's endsems to worry about.

ya i've been looking forward to our long cack session too.i even have a plan for it.i will come over on the 26th morning,around 9-9:30.then we can si t & cack away to glory.what do u say? tell me about the shoppers stop thing too. we shall consider that issue too. i probably wont be able to come over for the next few days.but i shall check mail daily.so u can say whatever u want in the mail. well then ,so long bebu. and all the best for the exams.

love

nishu

TWO:

when we were talking today i realized that u were slightly uneasy while talking.why do u have to be so afraid to open up?? i mean it feels very relieving to tell everything to someone.ya & i think u do trust me enough. so here is an algo for u to work on .next time u mail me, u should tell me 5 interesting things about u that u have not told anyone in iit. ya i do mean it . infact u dont have make the things interesting .they just have to be things about u.tell me about all the things uliked, all the people u hated.all the icecreams u ate.all the movies u saw,all the friends u had.remember all those things & tell me abt it.everything u want to tell me is interesting to me .why ?? because its about "U". infact if u look back at what i tell u.i assume that u find me reasonably interesting .so look back at what i talk to u about.i tell u hajaar things, which r totally arbit. in these hajaar only a few r genuinely interesting, rest r fart.but u still feel that i'm interesting.so its simply a law of averages.so u shall tell me about all thats happening in ur life.right from the moment u got up to the moment u went off to sleep.dont forget, i shall quiz u about it, ok.

A Hot Texas August Afternoon

Pradeep Anand

It's a pleasure sitting on the eastward facing porch at the back of my home, with a bottle of chilled beer, listening to the gentle rustle of nearby trees as they wave in the hot gentle breeze, as if desiring to fan me for comfort. There are a few sounds here and there. The cicadas' choral song rises and falls in contrast to the steady, monotonic drone of air-conditioners.

Yes, it's cooler in the home. I'd be comfortable inside. But, I'd miss the particular pleasure and satisfying sensations of consuming a chilled beer on a very hot, humid day. I'd miss seeing the gentle colors in motion

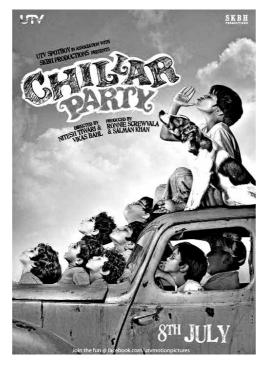
green plants, multihued flowers, green leaves turning yellow-brown, and dry, white cotton balls floating in the expansive Texas sky. I'd miss smelling the heavy aroma of the humid air tinged with a whiff of a neighbor's culinary exploits. I'd miss listening to the cicadas' intermittent crescendos, while birds chirped, scrambling to and from the makeshift birdbath that I made to give them some relief during the hottest summer in recorded history. I'd miss experiencing and appreciating the cooling protection of the shadow of my home.

contd.

I'd miss reminiscences of long hot summers in Bombay, before the monsoons brought relief. Except, there I didn't have friends in nature to please my senses. All I had was a furiously rotating fan with grudging sounds. There were no partridges to distract me with their fluttering or red cardinals with their chirping. Common crows, sparrows hid from the sun, pigeons cooed unseen; the sky was blue and bare. The ground and my surrounds were grey and black asphalt, stone, concrete and cement, with a tidy layer of textile soot, waiting, like me, for the oncoming cleansing rain. Books and music were my escape then; books, music and nature are my escape today. After my beer, a cold shower soothes the body,

while my mind is refreshed by the memory of bathing in nature's well.

From IIT to Chillar Party An Adman's Journey



Nitesh Tiwari passed out from IIT Bombay with a B. Tech. degree in Metallurgical Engineering and Materials Science, but chose advertising as a career simply out of love for creativity. And he has enjoyed every bit of it for the last 14 years. Currently working with Leo Burnett, Mumbai as an Executive Creative Director, he has worked for a wide range of clients – Tide, Heinz Foods, Sony Entertainment Television, Reliance Mobile, McDonald's, Perfetti Van Melle, Bajaj Elec-

tricals, Axe Deodorants, Castrol, Amul, Ceat Tyres, just to name a few.

His first venture into writing and directing a full length feature film, Chillar Party has been quite successful. Chillar Party has won the 'Best Indian Feature Film' award from both the Regular Jury as well as the Children's Jury at the recently concluded 17th International Golden Elephant Awards. As a writer and creative director, he and his team have bagged numerous awards at international as well as local Indian advertising award shows, like Cannes, Asia Pacific Adfest, Media Spikes, New York Festival, Abbys and Goafest India.

He has been on the jury list of various international award shows like Cannes, Asia Pacific Adfest and the New York Festival. We caught up with him at the Golden Elephant Awards.

Q: What made you take a plunge into advertising after IIT?

NT: I have been fascinated with dramatics and writing ever since my childhood days. But it was during my stay at IIT Bombay that I realised my true potential and discovered what real creativity was. The guys out here demonstrated it in every field. Whether it was coming up with brilliant solutions to a problem or devising an innovative prank on someone, or the mammoth efforts and thought



that went into cracking PAF, the atmosphere overflowed with non-stop creativity. Also, IIT Bombay has a very strong culture of extracurricular activities, be it sports or dramatics. During my stay, I was very active on the dramatics front. I used to write, act, direct plays and had loads of fun at the same time. Sometimes during all this I thought to myself, 'Why not give it a shot as a career?' If it would work out, great. If it didn't, then I had my degree to fall back upon. So as soon as I graduated, I got into advertising and since then, there's been no looking back.

Q: How did you get entry into an ad agency?

NT: It wasn't easy. Not many people took me seriously. They thought I was one of those eccentric kinds, who just wanted to have fun. And my biggest achievement till then, i.e. my degree, was the biggest barrier. I finally managed to land a job at FCB-Ulka (courtesy a couple of IITians who were in the senior management, and were at least willing to hear me out) and guess what got me the job? A poem that I had written for one of Hostel 4's creative writing competitions.

Q: Which advertising campaigns are you really proud of?

NT: Some of the memorable stories that I have been a part of are KBC's "Koi Bhi Sawaal Chhota Nahi Hota" and "Koi Bhi

Insaan Chhota Nahi Hota" campaign, Tide's "New Pinch", Reliance Mobile's "Bol India Bol" "Apun ka Sapna" and "Ye India ka Cricket hai Bhidu" campaign, HDFC Life's "Singapore" and "Car Badi Ho Gayi aur Beti Bhi" campaign, Creamfills Alpenliebe's "Papa Office Mein", Chocoliebe's "Broken Arm", McDonald's "Boyfriend Girlfriend" and "Romantic Walk" campaign, just to name a few.

Q: What next after Chillar Party?

NT: I am working on a couple projects, but it is too early to disclose details about them at the moment. Parallely, I have been nurturing a dream for the last 10 years to do something about the wonderful moments my batchmates, friends and I have shared at IIT Bombay. I hope it will materialise someday.

Q: Do you think you should have studied something else, instead of engineering at IIT Bombay?

NT: Not even for a second. Whatever I am today and whatever little I have achieved so far, it's all thanks to my stay and learning at IIT Bombay. In fact, I often think if I had gone to IIT Kanpur or IIT Delhi, my life would have been shaped very differently. And I always end up thanking god for sending me to IIT Bombay.

20,000 Centimetres Under the Sea

Lazybee

I ran into my late uncle's late friend's nephew, once more the other day. It seems one cannot go to SoBo and not run into him. Okay, just to shorten his name, let's call him simply 'N' (with apologies to Ian Fleming, who made single alphabet names so fashionable). N was just coming out of the Taj, when he spotted me across the road having a *pudi* of *khaara sing*, while enjoying the evening breeze. "Hi, L!" he yelled. (I think this single alphabet thing is catching up.) "Come, come join me," he gestured, as a 40 foot long, 6-door caaaar swept in the apology of a driveway of the Taj.

I hopped in and sunk into a cool, comfortable seat and the seat belt automatically tightened to fit snugly around me. "So, how have you been?" I queried, as the caaaar gathered momentum. "Oh, I just moved to my new residence," said N with enthusiasm. "You must come and visit me. In fact, I'm just heading there, so if you don't have anything important to do, why not join me?" "Thanks a lot! I'd be glad to," I blurted. Having seen his late uncle's abode on the 21st floor, courtesy my late uncle taking me along on a couple of occasions, I did not really want to miss out on any new pad of N's.

The caaaar moved ahead towards Colaba Land's End, and soon there were nothing but fishermen's colonies and some shanties to be seen. I was wondering where we were headed, when the caaaar came to a small plot of land right on the shoreline surrounded by slums. There was solitary board there which said, "Site for Ideal Co-op Housing Society – Proposed". The chauffeur parked the caaaar right in the middle of the small lot, the caaaar barely fitting in the fenced part.

Suddenly, the floor moved and the caaaar began to move down. It seemed like a car lift, and so it was. The lift seemed to go down for an eternity; in between I could get glimpses of passages leading off the lift shaft, towards different floors. I was too dumb-struck to speak, and chose to keep observing. N also seemed to be deep in some thought. At the end of the descent the lift stopped, and the doors opened to show us a long, brightly-lit corridor. "LEDs," said N. "I always insist on saving energy". The caaaar sped forward along the corridor which had transparent, glass-like material as walls. I could see the silhouettes of some fish moving outside. "We are about 200 metres under the MSL," said N. "The outside pressure is 20-25 kg/cm2, so the glass used is a special glass, impregnated with carbon nanotube filaments which are specially grown in zero gravity on one of my satellites," qualified N, just when I had started wondering where he would get hold of carbon nano-tube filaments grown in zero gravity.

The caaaar came to a halt at what seemed like a semi-circular drive-way. Both of us got down when I noticed that there was no one in the driver's seat. N saw my consternation with some amusement and said, "Oh, I forgot to tell you. This is a voice-controlled intelligent vehicle, which understands my commands and simply takes me there. I believe all the automobile majors are working on it, but I lost patience with their slow progress and put in a scratch team at IITB to get it done," he added.

"Are we really 200 metres below sea?" I asked him. My mind was still numb. "Yes, my dear L. And not just that, we are right now so much off the continental shelf that we are almost in international waters," answered N. "But what made you go for such a... such a place?" I stammered. I was going to say 'outlandish' but I managed to realize on time that this place was on no land.

"Simple," shrugged N. "I have always liked the sea but there are so many restrictions on having a house near the sea. CRZ, environmental clearances, always the threat that MSRDC may want to build a Western Coastal Freeway by evicting you, or build a Nariman Point-to-Murud Janjira-under-sea-tunnel right under your house. You know." "Yes," I nodded. "I can see how that would be a problem."

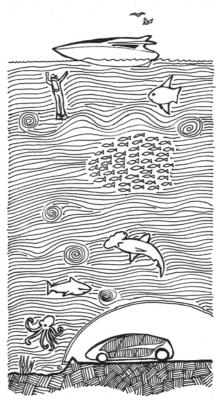
"Then there is the air-pollution," continued N. "Here, I control the air I breathe. It is purified and filtered to remove SO_x , NO_x , particulate matter, etcetera." "Moreover," continued N, "from here I can also access the outside world easier. I have my fleet of nuclear-powered submarines parked here. Any time I want to go abroad, I can travel without having to go through busy airports." I could see his point.

"But still, isn't it too much that all this is built for a single individual?" I did feel a slight twinge inside, coming from the land of a billion hungry stomachs. "No, no my dear L, how you wrong me!" exclaimed N, amused but thankfully not upset at my impertinence. "As we came down in the lift, you must have noticed the structure had other floors as well. All these floors have been specifically built to accommodate lots of needy people," explained N, very matter-of-factly.

"Lots of needy people?" I was a bit incredulous.

"Yes! Lots of them, commonly known as the PAP or Project Affected Persons," continued N.

"And which project would this be?"



"Why, the poor fishermen and all those who will be affected by the Jaitapur nuclear power plant," clarified N.

"Oh, how thoughtful of you," I said admiringly.

"Thank you." N was graciousness personified, as I chaffed myself for doubting such nobility of thought.

"So you are waiting for the Jaitapur project to be finalised, so that you can offer to rehabilitate the PAPs," I said, just to clarify my slowwitted thought process.

"That's right. Once the project is finalised, all the deserving persons can be accommodated here," confirmed N. "You see, I already have applications from the CM's gardener who is from Karad, the Chief Secretary's cook's sonin-law from Bikaner, and IGP's second cousin's brother-in-law's driver from Panipat. I really want this to be an Ideal Society."

Anil Gidwani ko Gussa Kyon Aata Hai?



Bumblebee

B.Tech in Electrical Engineering from IIT Bombay in 1982. Then an MS in Computer Science from Ohio State University in 1985. And then, he dunked it all to provide special translation services. He translates legal documents — contracts, agreements, legal correspondence, decrees, orders, patents and particularly property-related documents, from German, French, Spanish and Russian into English. Anil Gulabrai Gidwani, 53 years old, resident of Bandra (Mumbai) and owner of a famous Santro, bearing the number MH-02-PA 2381.

With his last name and his height, there was only one nickname that would apply and it is a nickname that has stuck with him since 1977: Giddu, But Giddu walked tall on 22nd October last year, and beamed wide and proud before a galaxy of news reporters, who were anxious to capture a landmark moment in the history of Indian legal jurisprudence. It was a culmination of a saga that had started on 9th March, 2007. The cops towed Giddu's car away for allegedly parking in a no-parking zone. A common, everyday occurrence that came with an equally common ₹ 300 fine. Just pay up and get over it - that's the refrain of a common man who is harangued much more in day-to-day life.

But herein lies the mark of a hero. Giddu was not a common man. In fact, he was quite uncommon. He had been an angry, young man for a good part of his life. Though not so young anymore, he was still quite angry (and still a man).

Moral of the story: Giddu decided to fight it out. The meagre fine was not the issue. Giddu's loftier mission was to contest the *goondagiri* of the towing vans. Arrogant metal monsters who would hook a hapless car and drag it wherever they wanted, just because they knew that the beleaguered citizen would yield to the 'system' and walk away ₹ 300 poorer to retrieve their vehicle.



Understandably, Giddu would have to fight this injustice singlehandedly. After all, who would not advise, "Jaane de yaar Giddu! Pay the fine and move on. Just think how much more you

will spend on this fight. What kind of a Sindhi are you?"

Giddu was dogged and persistent. But perhaps he was not prepared for what followed his decision. If the police system of towing away cars unfairly was bad, the legal system at work defied logic and common sense. It took Giddu more than three years of fighting, for what was clearly an open-and-shut case. But Giddu was clear. He would put in whatever it would take to win this one.

The fight was not about this specific case per se, but it was about a larger malaise in our society. So Giddu bought legal books, educated himself about the law, argued the case himself and withstood the travesty of justice which included 30 hearings. There were repeated adjournments. The errant constable claimed to be sick for over eight months and took his time conjuring up 'med certs'. Then, the case was transferred to a trainee judge who was not empowered to hear the case. Magistrates conducting the trial were transferred.

The matter was then transferred from a morning court to a regular court and had to be started from scratch. The High Court then had to order the Magistrate's court to expedite the trial. Eventually, justice was delivered. 'Not Guilty', pronounced the magistrate. The now-famous Santro had been parked a safe distance away from the no-parking sign. The constable did not know the correct definition of a no-parking zone. He did not know the rule of the Motor Vehicles Act under which he collected the ₹ 300.

Giddu spent about ₹ 2,500 in terms of direct expenses — legal books, photocopies, transportation and about ₹ 1,20,000 in terms of loss of earnings. But he won many hearts and admiration from those who, unlike him, gave up without a fight. But the real battle that Giddu fought, and is still fighting, is the PIL he filed and the four others he is currently preparing to file in the High Court, questioning the rot in the judicial process. This PIL induced Justice FI Rebello to remark that Anil Gidwani had been a looking glass for them. "For the first time, we are looking at ourselves," he said.

Giddu's questions in the PIL were elementary and simple. The ones we ask everyday in various forums, but never in the courts.

- Should a trial for an alleged parking (non-moving) violation be extended to 21 months?
- Are constant transfers and re-transfers justified in any court? Do they lead to a severe loss of accountability?
- Can magistrates arrive late to court, even if matters are traffic matters, of a trivial nature?

Can magistrates ignore their own or a predecessor's orders, giving a 'last chance' and grant constant adjournments?

- Should a citizen's valuable time be wasted in coming to court for 21 months, for an alleged petty non-moving violation, resulting in severe stress and loss of earnings to the citizen involved?
- Can the court staff make mistakes in listing matters wrongly with impunity?
- Can the continuous failure on part of the witness to appear without having produced a medical certificate, for extended periods of time, be allowed?
- Can the matter be transferred peremptorily from one court to another, without giving any explanation to the litigant concerned?
- Can judicial authorities have the right to withhold replies to letters of complaint from litigants or citizens?

Giddu's questions can be listed under a title, everything you wanted to know about the Indian Legal Tamasha, but were afraid to ask.

For IIT alumni, perseverance and tenacity are nothing new, having had to call upon these attributes during the course of their rigorous academic pressures (more so for those who were in Electrical Engineering).

But this specific battle is far more daunting and tenacious than most IITians can handle. When Giddu is not translating or not zipping around in his Santro (that now evokes salutes from Mumbai's constables), he can be spotted on the IITB campus — having lunch with students from different hostels, or meeting security guards and campus residents, learning about their problems firsthand. From the beehive, we salute this crusader extraordinaire, who can be reached at akhanda@vsnl.com

Armchair travel

Cult Fundaes in this issue focuses exclusively on travels old and new. There is a travelogue to Alaska. There are also two articles that enable you to relive the extremely popular Himankan Treks organized at IIT Bombay in 1981 and 1982. Travel after all manages to achieve the same effect that good novelists also do to everyday life, placing it like a picture in a frame or a gem in its setting, so that the intrinsic qualities are made clearer. Thus the very stuff that everyday life is made of gains the sharp contour and meaning of art. .Bumblebee hopes that this armchair travel agrees with our readers transporting them for a moment from their everyday humdrum existence to days long past and places far away.

Bumblebee



Setting up the Liddarwat Camp *Himankan 82 Makarand Karkare*

For the uninitiated, Himankan was a series of Himalayan High Altitude Treks arranged by IIT Bombay Mountaineering Club. The intent of Himankan was to introduce IIT students to the joys of Himalayan trekking.

In the year 1982, the Himankan was organized in Pahelgam region of Kashmir. Sandeep Shah (Sandya), Ajit Ranade (Chiman) and Makarand Karkare (That's me Makya) were the core group members.

One of the most memorable experiences during that Himankan for me was setting up the Liddarwat camp. Why?

We had sent about a ton (really a whole ton) of material on the ponies to the Liddarwat camp site. Four or five of us started a little later from Pahelgam. I don't remember everyone in the group. There was Ms. Madu Kale, Surya and I think Mayya. We also had one of the doctors with us.

Our job was to set up the Liddrwat camp. We had the whole next day to set up the camp, and the participants were expected a day later. We were very confident that the task was easily achievable. But it was not to be so.

As we were nearing Liddarwat, we met with the ponies and the pony waalas returning. They told us that all the luggage was dropped near the river in a shed and they had kept a



pony and a boy behind to help us out. We didn't understand what they meant.

After some time, as we reached the shed, we found that the shed was on one bank of the river. All the luggage was dropped there about 200 meters from the bank. The camp was to be in a log hut on the other side of the river about a kilometre away. The bridge to cross the river didn't exist, instead there were only three cross logs going across the river. When I walked on them, they were swinging with an amplitude of about six inches.

PANIC. What were we going to do? The shed was so small that it would just not be possible to have the camp there. We somehow had to move the whole ton of material to the campsite before next evening.

We calmed each other down. I did a recce on the other side of the river over the swinging logs. To my utter relief, I found the cross planks on the other bank. We knew that we could get the bridge functional. That gave us a lot of hope.

We had dinner (Khichadi, soup and papad) and went to sleep. In spite of all the tension, we slept like logs. We had covered about 22-23 km on that day.

Woke up next morning. Just had some tea and biscuits and we started off. I with Surya (I think) went across the river, picked the plank and nailed them on the logs and got



the bridge steady. While we were doing that, the remaining people repackaged the luggage. Initially, we had packaged all the material for ponies. Which means about 40-50 kgs per pack. Now we had to carry it ourselves, we had no ponies. So it had to be packaged in about 20kg weights.

We decided that the best course of action for us was to carry the luggage down to the river and then across the bridge ourselves. And then from there to the campsite, let the pony boy carry it to the campsite on the pony back.

We started moving the material across the river. Madhu, who herself weighed 41 kgs was carrying 20 kg packs. A few bags like the 50kg rice bag could not be repackaged and hence we had to carry those whole bags.

We had no clue how the time passed. Finally at 5.30 PM, all the luggage was in the campsite. We heaved a huge sigh of relief. Now, we were ready to receive the first batch of participants tomorrow morning. Madhu made tea for all of us and we congratulated each other.

I have had many other challenging experiences later in my life, but this still stands out as a day of great achievement.



Makarand Karkare

Makarand Karkare (B.Tech, Metallurgical Engineering, 1982,) Managing

Director of Skyscape India Pvt limited, is a programmer at heart, but gets to do very little of it. One of the things that he would like to do is to get back to programming. One of his prominent traits is his gift of gab and a love for the written word. Makarand is an avid blogger and his blog called Makarand's Musings with thousand of visits so far is where he expounds on a variety of subjects including, cricket to personal philosophy to hiking to mundane day to day experiences. His blog is available at http://mkarkare.wordpress.com/



Letter from Girish to his Mother

friendship warm the cockles of your heart. They did mine.

Introduction by Makarand Karkare

Dear Aai

While in IIT a handful of students, including me, had started an initiative called Himankan. The idea was to introduce IIT students to high-altitude Himalayan trekking.

Himankan '82 was organised in Pahalgam, with a little fewer than 250 participants. One of the organisers, Girish Dravid wrote a 22page letter in Marathi to his mother, describing the trek. It was written to someone who had never done trekking and had never been to Kashmir, and thus described things in rich, leisurely detail. It was also written when digital photography didn't exist — Girish sketched and illustrated his descriptions instead.

After decades of being a part of nostalgic conversations, Girish's letter was reinvented on Himankan's Facebook page. Non-ghats, equally fascinated by the letter, clamoured for a translation and I volunteered. Predictably, I found myself falling into a lingual rabbithole à la carte Alice, with my eyes wide shut. Translating Girish's letter was a challenge — at every step I had to ensure that I wasn't being louder than his voice.

The fruits of five weeks of labour will be presented in a serialized fashion in Fundamatics and the first installment is presented below. Any mistakes or mistranslations are purely mine. But I hope that despite these roadblocks, you find yourself transported to ruthless, snowy mountains, wild, gushing rivers; and I hope these stories of courage and We safely reached Pahalgam. Our actual trekking program began after Pahalgam. Everybody gets diverse experiences during journeys, in this letter, I am writing about various events that happened during the trek, and various related information. So even though you couldn't come here, you will get a lot of information. Of course, we didn't come here like other ordinary tourists; our reason for coming here was different from others. So I am not sure if you will find everything in this letter interesting. As you read this letter, you will understand my (our) perspective behind this tour, and why is it different from others. Another thing that I want to warn you about. I am going to write stuff as I recall it. So I may make mistakes in the (chronological) order in which things happened. Now get ready to read my personal observations, experiences and a whole lot of other stuff.

Pahalgam is a tourist destination. In the Kashmiri language, *Pahal* means Shepherd. So Pahalgam means town *(gam)* of shepherds. One can reach Pahalgam by bus from either Jammu or Shrinagar. As the bus approaches Pahalgam, the road steeply climbs, the (river) Liddar is on our left and we are confronted with big, wall like mountain with snow clad peaks.



As we reach near Pahalgam, gaudy, loud advertisements for various hotels stand out

against the natural surroundings. In the picture above, Pahalgam is behind the hill on the right.

Pahalgam is a single street town. The various lanes that branch from this singles main street, have various expensive hotels.

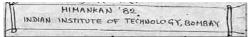


The arrow on the top right corner shows the place where the bus enters Pahalgam. And the whole of Pahalgam is only as big as shown in this map. Our camp was at the

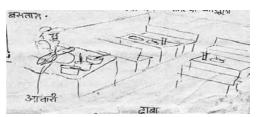
top left corner, marked by the small checkered rectangle. As soon as we reached the camp, we advertised our arrival by putting up the banner on the camp as shown below.

The entire day was spent unpacking the luggage and hence we had to do our dinner in a "*dhaba*". The local eateries (hotels, restaurants) are called "*Dhaba*". In a typical *Dhaba*, the cook sits outside the restaurant and the customers sit inside.

The standard fare in a *dhaba* is *subjis* like *aloo-matar, palak-paneer, kofta, rajma, matarpaneer* etc. and *tandoori roty, allo paratha or egg paratha*. Nowadays, even in Mumbai, we eat Punjabi food, and hence we were all used to this. "*Khalsa Hindu Dhaba*" became our favorite hangout. It was run by a group of Sikhs, and they became very friendly with us. They treated me to free tea many a times during our stay.



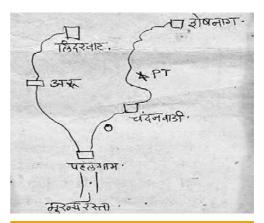
We reached Pahalgam on 5th (May, 1982). Since we reached this height from sea level in a very short time, I had some breathing trouble initially. However, I quickly adjusted to the height. In those two days, we became



acquainted to almost all the shop keepers in Pahalgam, since we visited almost all the shops to buy all kinds of stuff including lanterns, tents, tarpaulin, onions, potatoes, bread, blankets, etc. All these shopkeepers soon realized that we were a potential large scale customer, and treated us to a lot of free tea.

You will be surprised to know that Kashmiri tea is salty! Kashmiri people hardly ever drink tea as we do. They put whole tea leaves in their tea. Even these leaves are not similar to our tea leaves. When the leaves are boiling, they add milk and salt to it. This is called *"kawa"*. I didn't like it very much. I was ok with it. This is supposed to be very good for headaches. Some of our team members experienced it.

The 6^{th} and the 7^{th} were spent buying the stuff in Pahalgam and segregating it to pack for sending to camps. In my last letter, I had written to you about our various campsites. I will write about them again. In the map below, I have shown all the camps.





A word to the wise: the two articles on this section have not emerged due to the curious case of the skewered sex ratio at the IITs. Rather, it is centred around material that is best left to mature readers, and those who aren't easily offended by, um, the 'S" word.

More than 400 years before the birth of Christ, the Greek dramatist Euripedes had thus spoken about change – 'All is change; all yields its place and goes.' Time does grind to dust all things corporeal. But ideas and attitudes linger and are slower to change. A classic case would be to look at the Indian attitude towards sex and sexuality. Seen through the telescope of history, many things have changed, but quite a bit has not.

No, this is not meant to be a boring blah-blah on sexuality in India, but to narrate a change of events of what happened when we received a submission from Manu Hinduja (B. Tech, 1973) who sent us an article that he had written exactly 40 years ago in 1971, when he was a third year student at IIT Bombay.

In his mail he confessed that although his essay had won first prize it was never published anywhere and he was sending it along as he was curious to find out "how everybody, including current students, cogitate over what a 20 year old, somewhat erudite writer in 1971, was thinking about sex at that time. How different is it for a 20 year old student now?"

The bees at the bee hive got excited (for obvious reasons) by this interest on the subject of birds and the bees. But it was decided that an unexpected twist will be added to the plot. Instead of everyone reacting to the original article, it would be so much better for the readers to compare notes and to see if there has opinions of two young men of roughly the same age, but set 40 years apart and, if there are any changes, in what areas do they manifest themselves? An intelligent and willing sophie, Anubhav Mangal who dabbles in writing was immediately commissioned to write on the same subject without seeing the other, older article.

If our ideas and attitudes are a reflection of the state of the society we live in, and IIT Bombay is but a microcosm of India, then this comparison should highlight how much has really changed so far as Indian attitudes towards sex and sexuality are concerned. We will let you, the reader, decide for yourself.

Stumblebee

Birds & Bees Take I -1971 Manu Hinduja

study of the past clearly reveals that the Indian attitude to sex has always Libeen the most paradoxical and ambivalent. Let us begin by analysing the past. The social framework in Indian society was essentially based on the joint family system. Its major consequences were the lack of privacy and spontaneity. The functioning of the joint family was based on a dictatorial basis, the eldest in the family being the dictator. Now this person (generally the father) was the most revered person in the family. His decisions were final and the law. He, sometimes in conjunction with his wife, chose the bride for his son and the bride-groom for his daughter. Child marriages were common; often before the child had reached puberty. The married partners remained separated occasionally, the girl having to rush to her parents for various seasons of the year.

When his wife was with him, the son had to pretend not to be leading an active sexual life. The only time he would be able to meet and exchange a few words with his wife was during the night, in the sanctity of a separate partition or in a room, if the family could afford it. In order not to appear disrespectful to his elders, he naturally could not talk to his wife near them, nor could he show extra affection for his children for 'they are nothing but God's gifts.'

This is what Carstairs, a foreigner, has to

remark about the father-son relationship in India. "A father," he says, "stands for selfcontrol, disciplining of the passions and the emotions... On the other hand, to yield to spontaneous emotion or to sensual appetite is felt both wrong and dangerous: this is specially the case with sexual satisfaction, which is always felt to be illicit or somehow impious."

I take a rather extreme case of Gandhiji, to prove this point. Although he is called the 'Father of the Nation', he behaved abominably with his two oldest sons. When at the age of forty, he decided to renounce sex forever, he expected his two sons (which he thought were born of 'carnal lust') to do the same. Mind you, he had married in his early teens and he had led a full sexual life till the age of forty, and now he wanted his sons not to marry at all! How miserable his sons must have felt, and how they rebelled against him is a different story.

Thus, we see a paradoxical attitude towards sex in the past – although a man married as soon as he attained puberty and was thus thrust into sexual activity, he was denied acknowledging acceptance of it in society. Also we see that in a joint family, the father and traditional customs played a prominent role in the sexual life of married partners. If Ayn Rand had her way, she would not have deemed them fit to live! Thus, the sex life of married partners was not a spontaneous gesture born out of pure love and respect for each other, but it was rather a rite that had to be performed for propagating society and, of course, towards the animal lust that is generic in man.

The sexual act was just an exercise where the male tried to prove his manhood, the female submitting herself completely to her husband, letting him masturbate himself into her in the short time they could sneak in the dark. There was no time for preliminary sex-play as the husband needed his rest in order to be able to work in the fields on the morrow. During the day, they were complete strangers, the wife hiding her face under the *palav* all the time - perhaps hiding her degraded womanhood. The only thing that bound the girl to her husband was the strong sense of duty towards her husband religiously taught to her by her mother, and, of course towards the children.

There was no intellectual companionship, no shared interests or human understanding between the husband and wife. That a wife could also be a friend was realised by great luminaries like Nehru and Gandhi late in their life. Gandhi writes in his autobiography: "I have already said Kasturba Bai was illiterate. I was very anxious to teach her, but lustful love left me no time. For one thing, the teaching had to be done against her will, and that too, at night. I dared not meet her in the presence of the elders, much less talk to her."

Our ancient body politic considered the vital fluid as some kind of *attar* distilled from blood, every loss of which, even for the legitimate purpose of procreation, is an impoverishment of the body and spirit. (There are yogic *asanas* in the *Hatha Yoga Pradipika*, e.g., *Vajroli Mudra*, where you ultimately do not lose the vital fluid even while having intercourse.) Thus we see that sex was regarded as that which enfeebled one's constitution not only physically, but mentally as well as spiritually.

Here is the ambivalent attitude that I talked of earlier. Sex was not sacred, as we were taught in school, but it was a pleasurable, indulgent monster. This, to some extent, was why a woman was regarded as a necessary evil in society. Perhaps, that is why we have stories in the *Ramayana* and *Mahabharata* like the one where a courtesan seduces the chaste Rishyasringa, the son of sage Vibhandaka, in order to prevent a famine in the country of Anga.

India is a confused contradiction where sex is concerned. All logic vanishes where sex comes in. On the one hand we have the Kama Sutras, the caves of Khajuraho, where sculptures displaying the various positions in which the sexual act could be enjoyed, attract thousands of tourists annually. On the other hand, we have sex as a rationed commodity in the film-world, rationed by our 'erudite' censors having cocky ideas about sex and Indian culture; where an innocent kiss between two lovers is considered a form of nasty exhibitionism, but where the lewdest of cabaret dances go unscathed. And then, we have absolutely no trouble in getting the lewdest of books, whether they are imported or desi.

When I visited the Ajanta caves, I saw paintings of nude bathing beauties. But I noticed that every bathing beauty was covered by a transparent overcoat, the nudity being clearly visible however. I asked the guide the reason for it. He explained, with all seriousness, that it was considered improper to paint women in the nude. This epitomizes our confused state of mind regarding sex. Are we not fooling ourselves?

Coming to our present day society, we see that we are caught up in a web of our anachronistic traditions with the western wind of 'permissiveness', trying its best to free us.

We see that there are people of three distinct categories in the realm of sex in Indian society. First of all, we have the 'traditionalists'. Such people stick rigidly to the dictates of their forefathers. They do what their fathers did and ask no questions. Fortunately, the number of such people is declining.

Then we have the 'permissivists'. They do whatever their counterparts in the western world do. Such people are mainly the youth from the affluent section of society, and the cigarette-smoking, well-cut, bra-less women you see moving about in Chevrolets provided by their over-busy husbands. We intellectuals just watch them chasing coloured balloons and giggle, waiting for the moment when the balloons would burst and consternation would be writ large on their faces.

The third set, which forms the majority, we shall call the 'confused' set. The people from among this set are confused. They are the people who are neither completely free from the web nor completely bound by it. Actually, they could do what they wish, but they choose to be confused. They sit in co-educated classrooms, overtly conscious of the other sex. They remain in the same class for four years of college but do not dare to approach each other and this invisible barrier is only pierced by furtive glances. This only reflects upon the incompetence of our social structure, because there is none to clear the confusion.

Love is smouldered in the nascent stage and refuge is sought out in vulgar tripe (Hindi especially) where the hero and heroine represent the symbolic romanticism for the frustrated youth; where the beauty of a girl is standardised by her likening to a screen idol; where the male is the ideal man if he conforms to the vagaries of the screen hero. Sometimes a boy does meet a girl in the street corner, only to discuss the last movie they had seen and the movie they would go to next.

Intellectual companionship between the two sexes is rare and one cannot think of a boy having a girl as a friend; she can only be his girl-friend. We are to have a law wherein a man cannot marry unless he is 21 and woman 18. But a man is normally expected to marry only after he has finished his formal education and settled with some kind of job. so that he can at least support his wife. This makes the average age about 25. The girl, however, can be shop-lifted from college provided she is above 18, precisely because she is not the earning member. In fact, she was put in college primarily to facilitate the arrival of 'Prince Charming', as a women's mag puts it. What we would like to tell the mag is that she does nothing to attract him!

Till the day of marriage, one is supposed to curb one's sexual impulses and maintain a self-imposed restriction as far as mixing with the other sex is concerned. This lack of intermixing of the two sexes in college campuses has been noticed even by foreign observers like Edward Shils *(Encounter)*. This, no doubt, creates frustration, for sex is an instinct and not a game which is played by following set rules.

The personality of a man gets its final shape during his college days. But the sexual frustration keeps one very important field open. Thus we have fear, awe and delusions about sex set in the minds of the youth. Lack of proper sex-education corroborates this corrosion of the mind. The extent to which a warped mind could work itself up is shown by the following query by a young girl to the medical man in a women's mag. She wrote asking whether it was safe for her to learn swimming in a swimming pool where boys also swam. Was there not a possibility of her becoming pregnant by the sperm that could be afloat in the water? This is a typical example of the corroded mind and we have none other to blame but the social set-up in which the poor girl lives.

Let us now come to the married people in our present day society. We see that the essence of the past still remains. You are not expected to kiss or express your love for your wife in public. One peculiar phenomenon is that, once married, you feel free to mix about with the other sex and probably flirt a little and get away with it. This is because of the popular belief that once married you are bound to it. Divorces are rare and an Indian applying for a divorce on the grounds of sexual incompatibility would be too shocking. This is because on the social plane, sex is still considered secondary in marriage to the other aspects like social prestige, family considerations, etc.

The joint family to a large extent has disintegrated, specially in the urban areas, and consequently, so has the hold of the father on his family. Traditional customs play a lesser role in the sex life of married partners. The wife need not rush to her mothers' just because a particular season of the year has arrived. This is a healthy trend.

While the barred 'permissiveness' dances a lascivious cabaret from the west, we watch, from within our glass house, taking care not to throw stones lest *we* burst out.



Manu Hinduja

Manu Hinduja was born in Mumbai, India. He got his PhD from Rice

University, Houston, TX and his MBA from Pepperdine Graduate School of Business and is a graduate of IIT Bombay, India.

He is currently owner of two privately held companies: one in Private Investment Banking and the other in Software Consulting. He is a Trustee of two publicly traded Mutual Funds. Manu Hinduja has extensive experience in Finance and Corporate Management. In his versatile career, he worked at various increasingly responsible positions at Exxon-Mobil, ConocoPhillips, Aminoil, Kelt Energy among others.

Manu is an active public speaker on metaphysical topics at various spiritual centers. He is an accomplished writer and poet.

Birds & Bees Take II- 2011 Anubhav Mangal

The world is on the move. The erstwhile powerful, developed countries of Europe now face dire economic problems. Particles which travel faster than the speed of light have been detected by CERN. Microsoft is no longer the dominating force it once was. Within India, the masses have declared that they will not sit back and allow corruption to thrive within the highest echelons of the government.

But even with all the changes happening all over the world, sexual tolerance and inhibitions hardly seem to change within our society. Temperaments towards sex are still what they were many decades ago. The public at large still views the topic of sex as taboo, something to be swept under the rug and never discussed. From people blushing at the very mention of the word, to the murder of young couples in the states of northern states of India in the name of 'honour', the issue rises again and again in one form or the other, in some part of the country.

Even with the Supreme Court ruling this year in favour of live-in relationships – saying that two adults wanting to live together is not an offence – our society still bears a very negative attitude towards pre-marital sex. For 61% Indians, live-in relationships are still not acceptable. An astounding fact is that amongst the people that seem to cast a somewhat tolerable eye towards pre-marital sex, it is often perceived that at the time of the marriage, it is the women that must be 'pure and untouched'.

It is acceptable if the man has entered into some kind of sexual activity before tying the wedlock, but the same courtesy is not extended to women. Even amongst men who have engaged in pre-marital sex, it is found that when asked about whether they would be okay with their sisters or cousins engaging in the same activity, they find it unacceptable.

Although this is consistent with the way society views women vis-a-vis men, one must ask that the woman with whom the man engages in sexual activity with, is also some other person's sister or cousin. When one does not consider such things while having sex, then why this biased attitude towards the female members of one's own family?

The most extreme case of sexual intolerance and unwillingness by the older generation, to give any freedom to the younger generation in such matters, manifests itself in the form of 'honour' killings. These blood-curdling incidents have been reported across many northern states like Rajasthan, Punjab, Haryana, UP and Bihar. The level of intolerance and cold-bloodedness it would take for a father to kill his own child with his own bare hands, whilst feeling no guilt or remorse, baffles me.

However, this is where the 'generation divide'

comes starkly into view. While the older generation might cast a wary eye towards having sex before marriage, pre-marital sex is no longer taboo amongst the younger generation. Nowadays, having flings with the opposite sex is often viewed as something desirable and is used as an indication of social status.

More boys and girls now engage in sexual relationships with their boyfriends and girlfriends. On an average, Indians lose their virginity at the age of 19.8 years. For reasons ranging from curiosity, to social status, to just plain lust, many adolescents are now freely engaging in sexual activity. Pre-marital sex is no longer a complete no-no; it now remains a question of choice of the individual of whether they choose to engage in it, or refrain to do so until marriage.

Unfortunately, and this where I believe the real problem lies, is that the generation divide does not simply stop at the way sex is perceived amongst society. Although parents nowadays - specially in urban cities - tend to be very open with their children on all accounts, there still exists a gap between the two generations. While teenagers may find it easy to tell their parents that they have a boyfriend or girlfriend, when it comes to discussing anything remotely sexual, uneasiness creeps in. From any matter related to the opposite sex, to matters about their own changing bodies, there is still a decisive gap between the two generations. They fear how their parents will react to such questions, whether their freedom will get curtailed or that they will be severely reprimanded.

Sometimes, it is also simply a feeling of embarrassment. Adolescents still feel unsure of how their parents will react were they to find out that they have been sexually active. But can they be blamed? Just look at society's reaction to the infamous MMS incident. Such extreme reactions will make any teen think 20 times before discussing anything remotely sexual with their parents. Intolerance to-wards premarital sex causes teens to get stuck between a rock and a hard place — between their raging sex drives and what their friends are doing, and parental reactions and societal backlash.

As teenagers, sex is something that is on their mind constantly, and therefore sex education becomes incredibly important. There are three main inlets for sex information to flow into a teen's mind - parents, friends and the internet. But friends tend to mostly be as clueless the individual himself, and so are of limited or no help. In fact, in sexual matters, one's peer is often the source of rumours and inaccurate information, which could actually be detrimental. The Internet, although a great source of information, tends to be very scattered. Even if someone goes on Google and searches anything basic about sex, one will find limited information on certain 'popular' topics, and not necessarily what one wants.

So often, one gives up before finding what one needs. Many websites on the internet offer contradictory information as well, adding to the confusion. In this scenario, having an open channel of communication with parents is incredibly important for the teen. Without it, teenagers are often left in the dark about what is right and what is wrong.

Sex education is more than just knowing that things such as condoms exist in the world. Insecurities and doubts all haunt a person at this stage of life. At this point, one needs reliable information, and without the support of parents, the child naturally succumbs to the rumours that spread around amongst his or her peer groups. Falsities such as 'masturbation leads to blindness' or 'if a guy he doesn't have hair growth on his arms, legs and genital area, he is not a man.' I come from New Delhi, from a highly respected school, but in all my years in school there was only one time when there was any attempt by the school to provide sex education. That was in an enormous hall with the entire batch listening to some expert brought from outside. Surely they did not expect to clear anyone's doubts that way?

With the growing ease of internet access, adolescents are now exposed to something, which wasn't an issue earlier. Pornography is now prevalent in all parts of the country where there is internet access. To look at its foothold, just look at the impact the inducting of the porn star Sunny Leone into the reality show *Big Boss* has had on the media.

The filming and creation, as well as sale and distribution of pornography, colloquially referred to as porn, within India is a punishable offence. Pornography is not just a male phenomenon. Many women also watch pornography as a means of sexual release. Yet even with its prevalence, since it is related to sex, it is still a topic not talked about much. Although I do not think they are any direct harms of exposure to porn to the consumer, apart from the moral issues, I do believe that it has many indirect impacts.

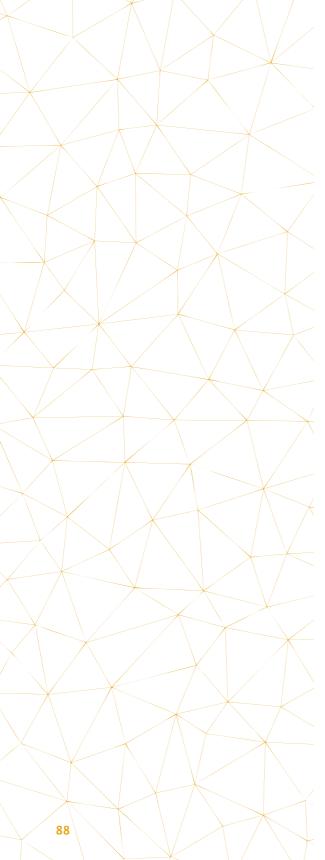
With its ease of access, pornography becomes the easiest outlet for our pent-up sexual energy. In the initial stages, it simply provides gratification, but as the dependence on porn increases, people spend more and more time watching it. As a result, a large part of a person's time is wasted in the activity. This also includes the time spent fantasising about what is seen on the computer. Studies also show that excessive exposure to porn can lead to addiction. Due to the uncertainties about how parents would react to them watching porn, many teens go to great lengths to hide the fact that they watch porn. This further widens the already large rift between generations.

Homosexuality has been an issue that has acquired importance over the last few years, occupying more and more of the media eye. With the High Court declaring homosexuality legal, to various 'Gay Pride Parades' being held in major cities, it has today become one of the most important issues to tug at the cord of sexual tolerance of Indian society. Even with the legal recognition of homosexuality, as well as the depiction of homosexual relationships in Bollywood, in films such as *Fire* (1996) and *Dostana* (2008), it still largely remains a taboo topic, and often incurs the wrath of various religious fanatics and moral policing groups.

The reasons that are cited for acts of violence against homosexuality vary. Some say that homosexuality is a disease, and that 'straight' people must be protected from gays or they will catch their disease. Moral policing groups often cite the negative impact a gay person can have on someone of an impressionable age, like a child, thereby passing on their 'disease'. Religious fanatics say that homosexuality is 'unnatural' and is condemned by the sacred texts of their religion. This is in contrast with what one of our most sacred texts, the *Rig Veda* states. It does not denounce homosexuality, saying, 'what is unnatural is also natural.'

Incidents of violence against homosexuals are numerous in number. Many prominent personalities often come out in the media stating that homosexuality should be banned. Many times homosexuals are violently attacked without any provocation, except for the fact that they are gay. There are instances of 'corrective rape', wherein a homosexual woman is gang-raped in an effort to forcefully 'drive the homosexuality out of her'.

Although in our country no gay pride parade has been attacked by any group, there are



several isolated incidents when people take matters into their own hands. Even if a homosexual is not directly attacked, they are often disowned by their families and made outcasts by the society. Even with the newlyachieved, legally acceptable status of homosexuality in our country, our society at large is still far from accepting LGBTQs (Lesbian, Gay, Bisexual, Transgender, Queer and Questioning) into the mainstream community.

Issues of sexual inhibitions, sexual stigmas are all barriers to growth and the well-being of the society at large. Even though today India is heralded as one of the emerging economies that will one day lead the world, our perceptions towards the matters of the flesh are still very much unchanged. Until we can develop certain levels of tolerances towards people that are not absolutely similar to us, develop a humanitarian attitude towards things that we do not agree with, we cannot possibly hope to be the shining light leading the world into the future.

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The Game of the Name



, Stumblebee

Mining of iron ore is a scam that can put the mighty and powerful in jails. But mining of data is a scheme that is natural to IITB alumni. Our roving reporter Stumblebee stumbled upon some startling facts while rummaging through data from the alumni directory at iitbombay.org. From 37,557 alumni spread over at least 316 cities worldwide in over 70 countries, Stumblebee files this report.

That's in a name? Thus spake the bard. Would he have said the same thing if someone told him that his name was not William Shakespeare, but it was Wali Mian Sheikh Peer? Irrespective of how he would have reacted, IITans certainly lived by the bard's axiom. Real names were mauled and replaced by nicks like nowhere else. We Patya-ed, Satkya-ed, Fatso-ed, Taklu-ed, Ghated and pseud-ed just about anyone and everyone. And after IIT, after a stint at regaining respectability, we hear several anecdotes about unexpected encounters at airports, restaurants, Board meetings resulting in..."Abbey Bawa! Tu hai kya? Remember me? I am Motu." We have heard of even a central Minister being "Jerry-ed" (not jeered, though that may be happening too) and a former Chief Minister being Manu-ed in the middle of a star-studded entourage.

Be that as it may, our iitbombay.org website gave us an opportunity to enter our names the way our parents envisaged them. To regain our lost glory lost to wing lingo. Not only that, we got an opportunity to enter our first name, middle name and a last name. Differences of opinion persisted about what constituted which? For example, how do vou deal with a name called CV Easwaran? Is his first name C? If not, is his name actually Easwaran CV? Best part of the directory is that it allowed you to decide for yourself how you want to arrange your name. Thus Easwaran-and people swear that Easwaran is his distinct, specific, personal, first namechose to call himself Coimbatore Vishwanath Easwaran. Technically, it is nobody's business. If someone walks over to Easwaran at a party and slaps his back and says, "Hi Coimbatore! I am Kodaikanal", why should anyone except CVE wince?

But what happens when a person has a name that has more than a first/middle/last combo? Many have "left of centre" and "right of centre" names and not political ideologies. Don't fear! Our good old directory tells you once again, "Do whatever the hell you want. Mere baap ka kya jaata hai?" Sometimes, first names take on 3 sub names like in the case of **A V Manivanan-Srinivas-Mudliar.** Or 4 as in the case of **B.V.R.V-Hanumantha-Rao.**

But the prize should fairly be awarded to PhD graduate from 2001 whose first name has 3 sub-names, middle name has 2 sub names and last name has 3 sub names. Meet Dr. Quadri Sayed Abdur- Razaq Quadri- Sayed Ishaq Quadri. It is not known if anyone choked while reading out his name during his convocation. But his bank must have provided him with an A4 sized chequebook to carry his signature. Incidentally, this DR. QSA-RQ-SIQ wins the longest name contest hands down if you count the sum total of alphabets in the first and last name only, with 36 alphabets. Thaakur Yogendra Prataap Singh Gaur and Lakshminarayanan Ananthasubramanian with 34 alphabets each are a close second.

This brings us to the question. Which is the shortest name if you count the total alphabets in the first and last name? According to the Guinness Book, the shortest first name in the world is U. As in the case of Burmese Secretary General of UNO, U Thant from yester-years. So, looking at names that are indeed names and not mere initials, we espied one Lee Ba, a Malaysian from C74 and a "lost soul" as per our records. And also a Yi Vin, PhD from C91 and an equally lost soul. At 6 alphabets, we have several. Arun De, Ho Keat, Lau Lim, Lav Das, Le Bang, Mir Ali, Om Mall, Raj Das to name a few.

In the eighties, during a Friday movie at the convo, a screening would often be interrupted by flashing a slide asking a say Gadgil to come out because a Gopi wanted to meet him urgently. 4-5 Gadgils generally got up and went out accompanied by boos and heckles from a frisky irritated crowd and all but one Gadgil trooped back in cussing and swearing. Thus, when a screening of Karz met with a jampacked crowd of "outsiders" bursting at the seams, someone came up with a bright idea of flashing a slide asking Joshi to come out. Nearly half the convo got emptied and the "legit" users moved in and took their seats. The belief that IIT overflowed with Joshis was bang on the target. This factoid is confirmed by checking the last names in our directory of the alumni of the eighties. Joshis numbered 106, second only to Rao at 123.

For those who believe it is still Joshi-dom amongst IITB alums, think again. Kumar is a clear winner last name with 710 occurrences amongst 37,557. High, by any standard. Joshi with 399 is a distant 7th with Singh, Gupta, Jain, Sharma and Rao leading from No. 2 to No. 6. Not only that, Kumar is also a first name belonging to 66 alums. And if look for Kumar as a component of the first name as in Nandkumar, you have another 924. And another 161 as a component of the last name. (Eg: Sukumar) If you were to gather all IITB alumni at the Ramlila Maidan (you can gather them anywhere. Ramlila Maidan is the most fashionable venue from recent times, Annalytically speaking) and throw 100 stones, 4.955 of them are likely to hit a Kumar. Why you should throw stones is a different issue altogether. We did not say Kumar *ku maar*, did we?

The **Kumar** harvest came in the 90s and stays on till date, having replaced the **Raos** and **Joshis** of the 80s. But it was the Shahs who dominated the 70s, be it the Shah of Iran, or twenty pages of Mumbai telephone directory or IIT students. It was Shah-en-Shah everywhere. What about the 60s? It was a clear neck and neck race between **Raos** and **Shahs**. Virtually a tie. No wonder that the Sixties decade was referred to as a necktie era.

But first names first. That's how we should have started. There are 9707 unique first names as against 11,325 unique last names. Clearly, alumni parents were not as imaginative as their ancestors. But surprisingly, the leader of the pack is Amit with 298 occurrences. Sanjay and Vijay follow with 278 and 260 respectively. The proverbial Tom, Dick & Harry, can yield to Amit, Sanjay and Vijay when you talk about IIT alumni. Example: Every Amit, Sanjay and Vijay can understand what is being said here. Pundits at Maths department need to figure out that if you have 298 Amits and 710 Kumars, how many are likely to be Amit Kumar. All of 12, says our directory. If this is less or more than what the Maths pundits proclaim, we need psychologists from HSS to tell us why Amit or Kumar is less or more popular than it needs to be. But while Amit and Kumar are the most common first and last names, Amit Kumar is NOT the most popular full name. It is beaten marginally by Amit Jain and Anil Kumar, both at 13. Ergo, the John Smith of UK is Amit Jain/Anil

Kumar of IITB. While we rejoice in making this earth shattering discovery, someone needs to mull over the reason we have only ONE **Rajgopalan** or one **Yeshwant** or one **Bhagat** (and this **Bhagat** is not even a **Singh**). More amazing is the fact that we have as many as 39 **Mandars** (we looked again. It is **Mandar** and not **Mandir** or **Mandira**). Now, who opened this "Mandora's box" and made **Mandar** outnumber the more commonly known **Pradip**, **Vilas, Manohar** and **Ketan**?

We need to clarify that Amit was a post '90 phenomenon, probably a truncated version of Amitabh, and in hope that these strapping young engineers would become truncated crorepatis at the least. (Nota Bene: Truncation is meant to apply to the crore and not to the pati, though there are many of those as well) The 60s and 70s belonged to those who said, "am not it". It was the Ashoks. Sons of parents who either eulogized Ashoka the Great or were diehard Dada Moni fans. The 70s and 80s saw the dominance of Sanjay, despite Sanjay Gandhi and Sanjay Khan. Certainly a brave and a new world in its time. Among the girls, Swati (and variant Swathi) leads with 36 occurrences. A grim reminder that girls cannot do engineering in the Swat valley.

Of course, we have parents who wanted to sculpt their tongues into corkscrew shaped objects and devised some tongue twisting names for their progeny. Parents of Yogaxem Sharma, Yezdezard Lashkari, Akhtaruzzaman, Nguyen Quy, Khali Quzzaman, Hyder Quasilbash being some of them. And while we know of Daruwala and Batliwala carrying the family profession of their ancestors on their handle, did you know that IITB alumni community also has a mix of ancestors who peddled goods described in names like Bookwala, Sandalwala, Sabuwala, Reshamwala, Cementwala, Chawalwala, Gheewala, Hundiwala, Presswalla, Bandukwala, Furniturewala, Pittalwala, Bootwala, Fruitwala, Boxwala, Batterywala, Charbiwala and so on? From blubber to rubber, from Ghee to guns, these guys hawked it all. The Fruitwalas would be glad to know that while we've had 6 Santras and 2 Kelas, there was another who wanted to stress his fruit-ness in English and voila-we have Jagmohana Rao Banana. Incidentally, both the Kelas i.e. Ajay and Ashish are A. Kela (rumoured to dance to the tune of the song, "Akele, akele, kahan jaa rahe ho!"). Maybe they were lonely souls, but there is a Sham Alone too staking a claim to more loneliness.

All came to IIT to become engineers. But Mehernosh Engineer, another Mehernosh Engineer and Yohan Engineer proclaimed themselves as engineers 4/5 years before it was time. We all know that Dean Aliasgar Contractor is actually a Professor. And we believe that none amongst Allaudin, Ardeshir, Mahmadzakir and Muslim are contractors, though their last names proclaim them as such. And joining this band of 3 Engineers and 5 Contractors, we have 7 Doctors. Gautam, Hanni, Marazban, Murtuza, Mustafa, Sharukh and Viraf. But Hanni has done his PhD. So he is Doctor Doctor. Much like the Major Major character in Joseph Heller's Catch-22. Mercifully, the rest stayed engineers and can be called engineer Doctors if they want to engineer or doctor some confusion. And yes, we do have a Hussainee Plumber to work with Contractors to execute Engineers' orders at Doctor homes. Talking about Doctor Doctor reminds us about the legendary Vasant Vasant Limaye. Ace mountaineer, hero in the Madhouse book, who lives with a story about how his father and he landed with the same name, long before they heard about George Bush Sr. and George Bush Jr. Joining this band of Bushes and Limayes, our directory refers to Sanjay Saniav Navin and a guy named Komal Komal Meena. As if the first name and middle name being the same is not bizarre enough, what

do you say to those who have the same first and last names? Ask Vaman Vaman, Solomon Solomon, Ali Ali, Akash Akash, Pratyoosh Pratyoosh, John John, Oomen Oomen and few others. Whether these same first and last were by design or due to a "stammering" keyboard, needs to be investigated.

Surender, Surendra, Surendur et al number 73. But one amongst them i.e. a Kapoor version has perhaps surrendered to numerologists and has re-fashioned himself as Surrender Kapoor. Most of us grew up with admonishments like, "Don't waste money. You are not a Tata/ Birla". The younger amongst us picked up a 3 pack series. Tata/Birla/Ambani. But neither Cyrus, Krishna, Nirmala, Xerxes-all Tatas nor Manish and Rajendra Birla nor Saumil and Udaya Ambani are likely to have received this all important life sermon.

While Lancelot Stanislaus Desouza may not be a knight in King Arthur's kingdom, his claim to fame is that his name acronyms to LSD. Consider this tidbit as an inside "dope" on his name. And if LSD was embarrassed at the combo that delivered him a tripped out acronym, what about Shekhar Trimbak Dhake and 2 other similar STDs? But our maximum sympathies are reserved for those poor souls who came with names that were designed for winning a gaali competition. As in the case of poor Banchhor. No prizes for guessing what he must have been called for the 4/5 years that he spent at IIT. Yes, there was one DK Bose before Aamir Khan brought it into the realm of notoriety. And one Shaikh Mehboob too. (fortunately, it is not a woman's name). And horror of horrors, there is a last name called Boob. At a family outing, will someone say, "The Boobs are out, picnicking in Powai"?

Does our directory tell us how many couples have evolved from IITB? How many IITB parent-progeny combos? How many twins? Not quite. But this can be investigated for the next issue. How are IIT alumni spread out over the globe? From the 23,382 known (and perhaps not updated fully) cases, we believe 20.6% to be in Obama land, 75.5% to be in Mama land and the remaining 3.9% to be in 67 other lands. Countries housing a solitary IIT alumnus include North Korea, Bhutan, Bahamas, Cyprus, Venezuela, Palestine and 15 others. But this too could be the subject matter of the next issue, where we will start by invoking the name of around-the-world explorer Ferdinand Magellan without corrupting his name to Fardeen Anand Maganlal.

May the bard Wali Mian rest in peace.

Post Scripts from the Beehive...

The other bees at the beehive are of the opinion that this is Stumblebee's way of coping with the fact that his real name though pretty and simple has no interesting possibilities. Our **Queenbee** has even pointed out that Stumble undoubtedly holds a subliminal grudge against his parents for their heinous simplemindedness and that the best way out for him was to just let go. Because, "look at you Stumble. You've done so well for yourself. You're the foulest of the foulest. Even with such a interesting name, you have created a fine specimen of an evil, malicious, dirty mind and you should be proud of it".

The Queen and all the rest in the Bee Hive have therefore decided to re-christen Stumblebee as the resident **Beastly Bee** and hope that all the worthy denizens of the Database whose name Stumble has been playing fast and loose with, will not take offence. After all, a rose by any other name would smell as sweet.



Get Real Mr. Murthy

Rajanikanth Shastri

The claim that IIT graduates are not up to snuff; that coaching classes are one of the reasons responsible for this situation could well be the outcome of the statement being framed incorrectly. *An alternate claim could well be that the IT industry does not provide interesting opportunities to attract IIT graduates*.

Kudos to the IT Industry:

The IT Industry comprising of notable companies such as Infosys, TCS, WIPRO and others, has put India on the map as a leader in World Class software solutions and BPO service providers. The IT Industry has been so successful that the term "Banglored" is being used to describe jobs in the developed world that are being outsourced. Even President Obama, (who moves his head from side to side as he speaks), talks of jobs that he wants in Buffalo, (while he looks in one direction), instead of evaporating to Bengaluru (while he looks in the other direction). The people involved in the IT Industry are doing a yeoman's job and something that has brought our Nation a tremendous amount of pride, employs a lot of individuals both directly and indirectly and brings in much needed foreign exchange.

There is more to IT:

IT activity can be broadly categorized as Architecture, Construction and Services. The Indian IT industry for the most part is involved in "construction" activity that extends the customers existing computing environment and services. The former involves "pounding the keyboard", and the latter involves providing technical support, maintenance etc., answering the phone, and/or doing some administrative work. Star IIT graduates look for opportunities that go beyond these activities, let alone answering the phone during night owl hours!

Where the Opportunity is, Graduates will go:

Consequently graduates gravitate to where the opportunity and remuneration is, be it the Financial or FMCG sectors. Yes, they follow the money. Furthermore, there are attractive opportunities at companies such as Intel, GE, Microsoft, etc. Graduates interested in software development would rather work for high tech companies involved in developing innovative products rather than IT companies involved in "construction" activities. The fact of the matter is that industry comes to IIT and clamor for IIT graduates. Many have multiple job offers. Some are disappointed with the compensation extended and do look for alternatives. And yes there maybe some slackers.

In search of the ideal IT candidate:

The issue of competency in English was

raised. Technical skills and competency are orthogonal. One could be very competent technically in Hindi or their regional language. Obviously, English competency is important in the IT industry that is involved in what is commonly referred to as "body shopping". And yes the IT companies eagerly look for technically competent individuals, fluent in English who would be happy and content "pounding the keyboard" that they i.e. the IT company can "body shop". Infosys is an excellent company and it does well by hiring graduates that augment its success from regional colleges. An IIT graduate who scores the JEE, and graduates from this elite institute, probably aspires to something more than being recruited and bunched with second and third rung college grads.

In Summary:

It appears Mr. Murthy's statement was based on anecdotal experience and not grounded on facts. Maybe, just maybe, the IITs are the wrong place to look for the ideal IT employee.



Rajanikanth Shastri

Rajanikanth (Rajan) S. Shastri is a 1975 graduate of IIT-B in EE from Hostel 5

and a 1978 Graduate of Syracuse University, NY with a MS in Computer Engineering. His professional career spanned six years at Gould Computer Systems, a pioneer of 32Bit Mini-Computer Systems in Ft. Lauderdale, FL and eleven years at Intel. In 2005, after his youngest child graduated from High School, he relocated to India, much to the chagrin of his three children. He currently resides in a rural part of the Konkan Coast, in Uttara Kanada (UK), Karnataka, from where he wishes to partake in educational initiatives and other activist endevours. His dream is to see in his lifetime, a Bharat & US, (where his children, relatives, many of his batch mates and friends live) with minimal poverty, pollution (land, air & water), and corruption, and where a reasonable quality of life is achievable for all citizens.

At IIT, we learned about torsion and its effects. In real life, we learnt about distortions and its deadlier effects. When one speaks without a background or a context, distortion propels itself with a multiplier effect. Our correspondent, Jumblebee decided to put this to the test by asking a person to respond to a question. The answer — and that answer alone — was then relayed to a new guinea pig without providing the source question. And that's how it went forward. Each person was asked to respond to a specific sentence spoken by his immediate predecessor.

Jumblebee discovered to his delightful amusement that almost everyone fumbled at this missive of his. People merrily and delightfully steered the topic away from its original, intended goal. Some did not even attempt to decipher what the sentence preceding their predecessor's sentence must have been. Expectedly so, since the good chess players at IIT calculate 76 moves ahead, but none backward. Does that make them forward-looking? While debating an answer to this question, let us move on and read some of the classiest fumbles — sentences which make you wonder whether they are sane tenses.

Jumblebee: If a chameleon moves on a mirror, what will its colour be?

Shirish Potnis, *CEO IITBAA*: This 'ground lion' will probably see a darker shade of colour, nearer to the 700 nm wave length.



Nitin Kumar Singh, former Institute Alumni Secretary: Lion shade and wavelength, this is called diversity.

Ram Kelkar, President, IITBHF: A crouching tiger can get a hidden dragon.

Prof. Ali Contractor, Dean ACR: But she said, 'not tonight darling, I have a headache'.

Jaya Joshi, PRO, IITB: I can't do this now Bakul! I am in a meeting. I'll call you later.

Ajit Ranade, Chief Economist, Aditya Birla Group: I am in South Africa. Why don't you wait for her call?

Sandeep Bhandarkar, Alumnus, C1986: I will give you a glass of water while you wait.

Ashish Kochhar (IITBAA): Please bring some snacks or refreshment along with the water.

Rama Nair, Project Manager, IITBAA: Oh no dear, it's dinner time now, refreshments will scarcely do the trick.

Suresh Goray, Canara Bank, IIT Bombay: Too many refreshments not good. Eat less and only good food.

Appa Kadam, IITB Guest House: Wrong. Eat more, become fat, you only live once.

Ajay Makwana, Student, IITB: What rubbish! Eat less and stay slim, especially if you are a girl *(smiles)* besides saving food for other hungrier people *(points to self)*. *Rahul Bahadur, Campus resident:* Are you what you eat?

Vandana Shirsat, IITBAA: I am an Anarkali but I don't eat *anar*.

Sampreet, Student, CSE: But are you really a Sundar Kali?

Jitendra, Student, Physics: What rubbish! All I know is that there is not enough time to cram for tomorrow's exam.

Tez, Student, Mechanical Engineering: Man, all I know is that today's Lit exam was awe-some.

Upasana, OSD, *Dean*, *Alumni and Corporate Relations:* Exams are only good when you are the invigilator.

Sothomas, Patron, Radha Krishna Hotel: Drinking is great, but good red meat with the drink would be even better.

Bhavini Pant, Campus resident: She sat in an unremarkable corner of the Infinite Corridor, and on overhearing a man whining about red meat suddenly exclaimed, 'What's that? It's past 11 pm and they're still holding hands! Security! Security!'

Kiran Wadhwa, Correspondent, Hindustan Times: And then a nosy journalist heard about the 'holding hands' fiasco, wrote about it in a national newspaper and more chaos followed.

Shridhar Shukla, Chair, IITBAA: But IITians, trained in both the theory and practice of chaos, did not pay any heed and continued holding their own while holding hands.

Manisha Bose, Correspondent, Indian Express: There's some meaning in every chaos and confusion, and the challenge for an IITian is to find that meaning.

Hemali Chhapia, Correspondent, Times of India: And sometimes meaning, on the face of it, may not hold true value; it's hence essential to scratch the surface, look beyond what meets the eye.

Parul Gupta, Bangalore, Alumna, C2002: I think there is no universally applicable meaning or purpose to life, universe and everything - it is for each person to find his own, for me it is to be happy in little moments and little actions.

Sanjiv Sood, Ahmedabad, Alumnus, C1983: Being happy is a matter of choice - choosing your response to whatever life throws at you.

Sudhir Bapat, Director, IITBAA: Strictly speaking, if you choose to respond, you are bound to be unhappy. But yes, being happy is a matter of choice.

Arthur Gillette, lead guitarist, Moriarty: Laughing is the best and most powerful weapon.

Mohit Sharma, Alumnus, C2011: Kya brush kar ke aayi ho kya?

Kumar Divakaran, UAE resident, unsuspecting victim: Ice cream khaogi?

Meena Manoj, PPR Section: Kaunsa flavour hai?

Renu Parab, PPR Section: Kya, kuch khila rahe hain kya, madam?

Madhuri Wankhede, PPR Section: Kis khushi mein?

Madhu Sabnis, Alumna, C1982: Friendship ki khushi mein.

Padmasudha Chandrashekhar, Alumna, C1985: Friendship ki khushi mein tadka daal ho jaaye.

Gauri Gokhale, Alumna, C1982: Tadka daal chodo, Have fun, be together and enjoy life.

Deepak Patil, Director, IITBAA: That is the meaning of life.

Anil Chavan, CEO, Logic systems: Happi-

ness.

Vijay Desai, Alumnus, C1981: Happiness is a mirage.

Revathi Kasturi, Alumna, C1980: Happiness is a state of mind.

Shirish Waghulde, Alumnus, C1981: "So Be It."

Ashwin Doshi, Alumnus, C1981: It doesn't matter.

Sanjiv Wazir, Alumnus, C1981: That was yesterday; today is a new beginning.

Venkatesh, Alumnus, C1981: Those who fail to appreciate the lessons of history are condemned to repeat its mistakes.

Ganapathi Bhat, Alumnus: History is history. You gain wisdom from your own experience. And this karmic cycle continues forever.

Dr Shefali: However, if you are really gaining wisdom, then your karma and experience serve as a ladder to your spiritual growth.

Pillai, Hall manager, H6: I don't like Snakes & Ladders. Let's play Ludo.

R. Vasudevan, Alumnus, C1982: Ludo sucks. Let's play Chinese checkers.

Bhaskaran Srinivas, CEO, *Philips Software:* Nobody can beat the Chinese at playing games.

Soumitra Banerjee, Alumnus, C1982: We should ask Anna Hazare to fast in Beijing.

Jyotirmaya Sharma, Journalist: They don't have a Ram Lila ground in Beijing. Maybe he could rent out Tiananmen Square.

Shyamballi, Security Guard, IITB: Which Ram and which Lila are you talking about? Why are you searching for them in China?

Shashank Shah, Alumnus, C1982: We are searching there because Chinese versions are

cheaper.

Sharatchandra, Alumnus, C2001: The wall is going to crumble one day.

Rahul Chaubey, Director, IITBAA: Why? Did Humpty Dumpty sit on it?

Gaurav Porwal, Alumnus, C2005: Sit on what? On decisions? Then it's the PM, not Humpty.

Post Script:

Whew! We started by asking a question about what colour a chameleon would take. That question remained unanswered, but we believe that the chameleon would blush a deep beetroot red after hearing what 57 people across the globe had to say. India, USA, Indonesia, Dubai — we got replies from them all. Alumni, Deans, Office staff, security guards, bank officials, campus residents, CEOs of companies and even 'outsiders', they all loved the game. As quasi-psychologists, we summarise the broad trend as follows:

The office staff is hung up on food and desserts. A subtle suggestion for a salary hike, perhaps.

Older alumni are philosophical. The HSS courses seem to have had a deeper impact on them.

Younger alumni are wise-crackers (not necessarily wise).

The rest of them are all cool dudes or dudettes.

But the common trait among all of them is the readiness with which each wanted to speak without insisting on knowing the background. Why are we not surprised?

RIP Chameleon.



Parrikar ki Manohar Kahaniya

Humbl(ed) Bee

Change is universal and dynamic. A shy, reserved teenager from a humble background, but with an exceptionally bright mind enters the hallowed halls of IIT and leaves with a degree that stands him in good stead and catapults him into success. Till here, the script might be common for many a student who has passed through IIT Bombay. But more often than not, people change with the new demands imposed by an entity known as success. Lifestyle, accent, pride, position and attitude – all these are up for an overhaul. *Very few people remain exactly what they* were like. Meet Manohar Parrikar, whose initials herald him as MP. Ironically, he has never been an MP but has been a record four-time MLA from Goa's Panjim constituency. Let us re-introduce him as Manohar Gopalkrishna Parrikar. This time around, his acronym is MGP. MGP also denotes Maharashtra Gomantak Party and ironically, Manohar – Manu to his friends – wiped out MGP's bastion in Goa, and got little-known BJP into a ruling position.

A path-breaking Chief Minister and the only IIT alumnus to ever become one, Manu remains exactly the same as he was in 1978, when he left IITB as a certified metallurgical engineer. He wore, and still wears a shirt tucked out over non-khadi trousers, and tops it with chappals. Oops, we meant to say, bottoms it with chappals. He wore that then. He wears it today. He looked like something then. He looks like the same something today. Whether he is meeting Bill Gates or delivering a short, crisp speech that CII honcho Anand Mahindra jot down in bewilderment, Manu wears the same, speaks the same and lives the same – unchanged and simple. A man who traversed Mumbai's streets in an auto-rickshaw to Sahar International Airbort while still a CM. A man who wears an IITB t-shirt, walks from the Guest House to LT lawns, and stands in a queue with a lunch coupon in hand during alumni meets, while issuing instructions to officials for a highway project. But more than his dress code or his demeanour, what has remained unchanged is his value system.

Manu is finicky to a fault about discipline – H4's Madhouse book is replete with incidents touching upon narratives of Manu-punished students, mess-workers, institute employees and even himself for what he considered to be a breach of discipline or a dereliction of duty. He carried this trait with him to the Goa Secretariat 22 years later. Sacking three corrupt ministers from his cabinet was a sure recipe for the collapse of his government, but Manu preferred his H4 learnt discipline to his survival as a CM. This trait has made him an ex-Chief Minister. Few people realise that this particular trait also ensures his status as a future Chief Minister. We caught up with Manu while he is still the Leader of Opposition in the Goa assembly, but knowing the turbu-



lent trends in Goa's politics, we are perhaps writing about the CM of Goa. We hope you enjoy this frank and candid interview with him.

Introduction by HUMBL(ED)BEE

HB: During your tenure as the G-Sec of H4 in 1978, you shot to fame by discovering stolen kitchen merchandise concealed in mess workers' half-rolled lungis. You even recounted this incident in a speech made in Bill Gates' presence during the PAN-IIT meet in USA, and the Madhouse book too touches upon this incident. Would you like to share more with us?

MP: Our monthly mess bills used to be quite high. As a mess coordinator, I decided to investigate the cause and found that there was a lot of pilferage, stealing going on; tucking in onions, potatoes in rolled-up lungis was just one of the methods. Receiving fewer goods while signing for higher quantities was another. A lot of eggs and meat was pilfered through this mechanism and had to be stopped by better accounting and stocktaking practices. And that is what I set out to do.

HB: Again, during your tenure as a G-Sec, the mess workers went on a flash strike just before lunch. It is narrated that when this news reached you, you walked into the kitchen with a big group of students and took over the cooking operation and people claim that H4 served its best meals on that day. The mess workers were forced to call off their strike and sit down to negotiate with you. Do you have any memories of this incident?

MP: Of course, I very clearly remember the strike. I believe that this single incident changed the very course of my career. How can I ever forget this incident? Yes, we all trooped into the kitchen and did what we had to. As far as the taste of meals during our period in IIT is concerned, the less said, the better. *(smiles)*

HB: How can you explain the fact that though you shared a stormy relationship with the mess-workers and a couple of them even tried to harm you physically, most of them considered you their benefactor and often approached you for help?

MP: The situation is exactly same even today. It is probably due to my penchant for discipline. Those who broke discipline were punished but there existed no malice or illwill towards anyone personally, and I would always try to help mess workers by going one step extra, in their time of need.

HB: Do you still keep in touch with them? Do you have any favourites?

MP: Unfortunately no, though I would have loved to. Due to my very tight schedule, I have not been able to keep up with old acquaintances even amongst my friends, leave alone mess workers.

HB: You were also notorious for fining erring students at the drop of a hat. Yet, you remained immensely popular with them and always won all elections with a thumping majority. How do you explain this?

MP: As I mentioned earlier, I was, and still am, a stickler for discipline. It was not just the students; I even fined myself for an irregularity committed by my guest, even if the error was committed unknowingly. For instance, irregularities like forgetting to sign for a meal in the 'Extras' book or carrying a tea cup outside the mess. As far as popularity is concerned, I attribute it to good governance in the mess during my role as a mess coordinator, and keeping mess bills in check. People voted for performance and elected me as the G-Sec.

HB: It is said that during the Emergency, you were involved in a few underground activities. Is this true?

MP: Not really. But when the Emergency was lifted and elections were declared in 1977, I did campaign vigorously for the Janta Party. I was in my 4th year then. I think Girish Bodas from H5 spent a few months in jail during the Emergency. He was detained under MISA, like countless others during that time.

HB: Did you ever imagine that you would get into active politics?

MP: Not at all. Back then, I never thought that fate would take me into active mainstream politics.

HB: BJP was an unknown party in Goa. How did you build it? Leave alone building a party, how did you make it strong enough to rule the state of Goa, which was considered the most unlikely state that would ever patronise the BJP?

MP: You are right. Back in 1991 when I joined the BJP, it had a mere 0.40% vote share in Goa. Today, its vote share is 35%, and this is likely to go up in the upcoming Goa assembly elections. This phenomenal growth was possible due to the immense efforts put in by my colleagues and party workers. Even during my mess coordinator days in H4 at IIT, the success was due to the combined efforts of my council, fellow students and friends. I am fortunate enough to be the face of successful group efforts.

HB: What would you describe as the hallmark of your achievement as the CM of Goa?

MP: Good governance to the extent that even after seven years, people still remember the performance of my government. Time-bound delivery and a strong grievance resolving mechanism, coupled with strong action against the corrupt ensured a more people-friendly and sensitive, responsive, accountable government. Reforms in the education sector, fast delivery of infrastructure and great improvements in finances of the state were some of the highlights that I can look back at with a lot of pride and satisfaction.

HB: You have often credited your IIT education as having served you well in the discharge of your duties as a CM. Can you explain how engineering and state administration can be even remotely connected?

MP: In IIT, we had several HSS courses pertaining to financial management and economics. Apart from that, my experience as a mess coordinator and G-Sec helped me understand human behaviour. It gave me firsthand experience in reducing costs without losing anything on quality. Further, I believe that an engineer is better placed to administer, compared to others since many governance issues involve technology and an ability to analyse a problem and work out a solution.

HB: Can you recollect any memorable incident from your political life?

MP: (laughs) There are several incidents, but this one is easily the most memorable. In 2002, I was to board a flight from Mumbai airport and my Protocol Officer had gone in advance to check me in and collect my boarding pass. When I reached the airport, a police constable refused to let me in without my ticket. In 2002, the police used to guard the airport. Had I used my IIT street-smartness, maybe I would have managed to get in *(laughs again)*.

But I honestly told him that I was the Chief Minister of Goa, and that my Protocol Officer was waiting inside with my boarding pass. The constable did not relent and my flight was to depart soon. Fortunately, my Protocol Officer saw me and came rushing out and managed to get me inside in the nick of time. When the constable was reprimanded for refusing me entry, he mentioned sheepishly that he had seen me alighting from an auto-rickshaw. How could we fault him for disbelieving an auto-rickshaw passenger who claims to be a CM?

HB: What are your future plans? It is rumoured that you are likely to get more active on the national stage. Can you share more with us on that? *MP*: There are no such plans. As of now, I am content with staying on and focusing on Goa.

HB: Why did you refuse to take up president-ship of BJP?

MP: Where is the question of refusal? I was never offered that post. It was just some speculation in the media.

IIT + Hostel 4 = Tiss! + Bana de!

Madan Mohan Rao

ne of the wonders of life is how meanings change with age and place. When I was small, one of the ways my parents would get me to behave was by threatening to put me in a 'hostel', which seemed to be synonymous with 'dungeon'.

However, as I was growing up, I noticed that hostels were not bad at all, such as the ones I saw in NCL or Pune Engineering College. Of course, coming to IIT would forever change and glorify 'hostels' for me!

Hostel 4 was an absolute eye-opener for me. It was the first time I was living away from home and my home-town, Poona (now Pune). Fortunately, Pune was close enough to Bombay (now Mumbai!), so during the first few weeks, 'the Pune brigade' from across various hostels would catch the Friday evening train to Pune, and the Monday morning or Sunday evening train back to Mumbai.

Some of my best memories from those train rides were sitting on the steps of the open doors, and marvelling at the lovely scenery of monsoon rains, clouds, waterfalls and tunnels in the Western Ghats. But that is another story altogether.

H4 opened up an entirely new world of friends for me; the only person in H4 from my Loyola High School days in Pune was Amol (and Chaitan in H8). H4 was also the first time I was ragged, though I can hardly complain that I was mauled and maimed the way some freshies in other parts of the country were. I recall with delight how some of us H4 freshies once went to H3 — and I ragged a hapless H3 freshie, who thought I was an H3 senior and not an H4 freshie!

That memory, of course, stoke up memories of age-old rivalries and shouting matches between H3 and H4, with choice slurs like *censored* and *definitely censored*. Somehow, the neighbouring H5 never got under our H4 skin the way H3 did. I wonder why.

As freshies, we would also try to come up with theories of who would be the most hard-core raggers. Perhaps second year seniors, because it was their first chance to rag anyone? Perhaps final year seniors, because it was their last chance to rag anyone. And as our batch passed on to the second year, it was quite an experience, switching seats and becoming raggers! I do recall ragging Kalra, Madhavan, Jogesh, Sarangpani, Shamim and a bunch of others, but I was hardly a vicious terror.

Madhavan would also end up being nicknamed Mad, like me — and I remember another freshie a few years later who was also called Madan. I was told when I was a freshie that I resembled a senior called Lester, and some seniors would call me Lester Junior!

Eventually, over the semesters, a familiar and delightful routine would set in. Freshie nights, Friday movies, EPs, inter-wing and inter-hostel competitions, the first dismaying tests and exams, hostel or campus elections, winter and summer breaks, and the delight of seeing wing-mates and batchmates again the next semester.

Seniors would eventually exit, and new waves of freshies would join. All this was before the days of email and social media, so goodbyes were usually 'long-term' goodbyes.

Mood Indigo was a terrific annual highlight,

and it was a lovely experience having students from around India stay in H4, and add variety and spice to our life. For a couple of years I was part of the hospitality team, and I am happy to say that one of the out-station students we hosted is still one of my best friends today. Another one of them also became my first 'major' girlfriend (now that is also another story altogether)!

H4 also opened up a new world of animals for me. My parents did not like to keep animals at home (other than me and my brother), so having dogs and cats as pets in the wing and feeding them *bhang* during Holi was quite an experience! Not to mention throwing stones at monkeys, after one of them scratched Monty on the hostel roof. Having H4's Kuki as the campus Wildlife Secy also placed a strong emphasis on the environment; I remember going to Powai Lake not just for boating (what awesome sunsets, perfect for seducing potential girlfriends — see above!) but also to remove water hyacinths.

Some of the unusual features of life in IITB hostels were the distinctions between ghats and 'pseuds', but apparently there are echoes of this in every IIT (and perhaps every college with a strong mix of local and 'westernised' folk). Ironically, many of those patriotic ghats now live in the US, and many of the 'westernised' students are right here in India! Now that really is another story.

Some of the sadder moments were losing some of our hostelites to accidents like drowning in the IIT pool (and later on hearing of post-IIT deaths due to suicide or other ailments). It was also sad to hear of the difficulties some 'Third World' students were experiencing in their countries, but inspiring to hear that they hoped IIT would make a difference in their lives.

As a freshie, I recall an incident where I wrongly guessed two H4 seniors were from

Iran, when they were actually from Iraq. This was at the height of the Iran-Iraq war! The Arab and Iranian students would take campus football games to totally new heights of excellence. It would be great to watch the World Cup with them!

Eventually, I would end up being in that notunusual category of IITians who would spend more time in the hostel than in the department, and for whom getting out of IIT was as tough as getting into IIT!

H4 for me was unique, partly because of the charm of being so close to Vihar Lake, a terrific place to chill out, swim, walk or party at night (especially in Chand Shah). I eventually learnt that it may be nice to get high, but the best high of all is life itself.

H4 was a whole world unto itself. Never mind the World Cup or inter-hostel sports, it was inter-wing sports that people lived and died for. Being in Central Wing Second Floor also made for prime viewing seats in the landing, to watch any game in any field, ranging from football to volleyball. It also was strategically located to dump bucketfuls of water onto unsuspecting 'PGs' on the grounds, a highly rewarding pastime while studying incomprehensible texts!

Even now, 25 years later, some of my fondest memories are of my room-mates. I can proudly say that years after passing out of IIT, I have stayed with my ex-roomies in Canada (Gaitonde) and California (Dabba). Some of my other ex-roomies have assumed largerthan-life proportions, such as Bakul (with whom I would exchange some of the best literature desired by single males). Another ex-roomie, Hash, is now actively promoting 21st century India-China relations, thanks to his Chinese wife! This is, after all, the century of India and China!

Meeting other ex-H4-ites like Monty, Chris,

Sohag, Poing, Pu and Neville regularly (and some occasionally, like swimming champion Kaiwan!) in the US during my grad school days helped keep H4 memories alive through the years. On my other travels, I would bump regularly into Sane (in Singapore) and Makria and Amol (in California).

It is terrific to have H4 buddies right here in Bangalore where I live, such as Tikya. Ironically, I weighed 45 kilos when I joined IIT ('provisionally fit'), and Tikya (Moose) was 90 kilos. Now, I am 90 kilos and Tikya is down to almost 60 kilos. How the fortunes of countries and citizens change with time!

Some of the most creative moments for me at H4 were during the Entertainment Programmes (EPs), especially the one with H10! I took part in a Spanish folk dance, which would put me in good shape years later on salsa dance floors in the US during grad school! Another classic was the Pink Panther routine with Hash, and a phenomenal mirror dance with 'Joe Dude' Tamta, the most immaculately-dressed IITian!

I did not master any musical instruments unfortunately, though we had superb music secretaries and a good collection of LPs in the hostel (I wonder if that Manfred Mann record and Barbara Streisand cassette tape are still there?). But fortunately, I lived just a few doors down from guitarist and vocalist extraordinaire, Rohan and aspiring saxophone maestro Poing.

I owe an invaluable debt of gratitude to my wing-mates like Poing, Sood and Khosla who exposed me to so much superb music, to Jetu and Tony who set the benchmark for Lit activities, to KT for a new vocabulary, and to Mondal for his cynical, sarcastic brand of humour! The signature laughs of Apte, Chauhan and the Samant twins are also part of the H4 DNA, as well as the decibel levels of Kaushik and Elijah. The 'socials' we had with Sophia and Nirmala Niketan would be priceless if captured on YouTube! I have fortunately kept in touch with some of those lovely damsels right till today, and would love to meet some of the other heart-breakers as well. I am sure there are many Bollywood scripts waiting in the wings (literally) in the IIT and H4 stories, a la Chetan Bhagat and *Five Point Someone (3 Idiots)*.

One major summer highlight was the Himankan trek to the Himalayas in 1982, to Pahalgam, Aru, Lidderwat and Chandanwadi in the Kashmir valley. There was a strong H4 contingent, who were a lot of fun and also a major source of support when many of us were afflicted with a mild case of frostbite. The memories of the majestic Himalayan ranges will always be with me. I have also been fortunate enough to see the Alps, Andes and Rockies after passing out of IIT — but believe me, the Himalayas are the most mind-boggling of them all. And I sincerely hope peace returns to the troubled Kashmir valley soon.

As compared to today's world of 360 channels on TV, broadband internet and ubiquitous cellphones, we literally had nothing but each other in our H4 days, and perhaps that strengthened our bonds that much more. There was only one public phone booth for the entire hostel, and I fondly recall the security guard shouting out room numbers ("Two zero ten!" for 210).

Incidentally, we never had a phone at home throughout my childhood and college years. My parents applied for a phone when I joined IIT, and got the connection seven years later, by which time I had finished a master's degree in the US!

After passing out of IIT, I managed to score a 'schol' to the US, where I noticed very different kinds of hostels: dorms. A key difference there was gorgeous babes living on the same floor as guys! By an incredible stroke of fate, I had ended up at UMass/Amherst, a famous party school and with a terrific gender ratio — as compared to IIT, which seemed to have a gender ration.

After many years overseas in the US, Brazil and Italy, I returned to India in 1996, and took up a job in Nariman Point in a company started by another IITian from H5 (Rajesh Jain, India's first dotcom crorepati). I attended my first alumni reunion in December 1996, and was so happy with the experience that I have been attending almost every alumni reunion since then. I also visit H4 every year and spend the weekend in the hostel during the reunion.

One of the first guys I met at the first reunion was someone whom I hardly recognised, but he recognised me very well — he told me that when he was a freshie, I had asked him to cog notes for me from someone else's book (the legendary Pandu), because I had missed so many classes! We both laughed so hard, it was amazing!

And so it was with every reunion — I always rediscovered and re-lived parts of my past that were amusing and endearing, and realised that no matter how different we all have become in real life, at the core, we will always be H4-ites. It is terrific also to be allowed to stay in H4 rooms during the alumni weekend, and wake up feeling as if I am in a time warp, transported back 20+ years! Vishnu's canteen has now been augmented by a private caterer who offers Chinese noodles, sandwiches and omelettes till 2 am.

A couple of reunions ago, I was woken up in the H4 room by a knock on the door, by a young lad who turned out to be Sood's son, representing his Ahmedabad college at Mood Indigo!

But I have also been saddened to see the decaying hostel infrastructure, specially seeing

two beds packed into half-rooms, which were just barely enough for one person anyway. Access to the Vihar Lake is also blocked now. An entirely new wing has been added to the hostel, and the eating area in the mess is strangely demarcated by year (freshies, third year students, etc.).

There is internet access in every room now via LAN, and I am confident that H4 probably has one of the best intranet caches of adult content in the world! But there have also been heated debates about whether this online culture is taking away from physical meetings and face-to-face camaraderie.

The creation of an Alumni Relations post in H4 is a fantastic move, and we should all welcome it. The grants given to our selfless mess workers, some of whom have retired and others unfortunately passed away, also merit our highest attention.

Looking back over the decades, one of my proudest moments in H4 was editing the valedictory issue of the hostel magazine *4Word* as LitSec (in fact, I am as much of a Lit guy now, as IT). I began that issue with a simple but powerful quote, and it is fitting that I end this article with that same quote:

In this world, we travellers meet only to part But each leaves behind a memory to break the other's heart.



Madan Mohan Rao

Dr Madanmohan Rao (H4, CSE, 810718) is a consultant and an

author based in Bangalore.

ALASKA

Alaska Ahoy!

"Vegetarian: Another name for a poor hunter" - these words prominently displayed at the entrance welcomed us to our abode one night. It does not take long for the traveller to realise that Alaska is the epitome of 'frontier' civilisation - man in an incessant battle to dominate his environment. Alaska was purchased by America from Czarist Russia in 1867 for a then princely amount of seven million dollars. The rate of two cents an acre for unusable brush land led the state to be tagged as 'Seward's icebox' (after William H. Seward, Andrew Johnson's Secretary of State who negotiated the deal). At the time of the purchase, the state hosted little economic activity beyond the fur trade. Later, the discovery of copper and gold deposits were followed by the inevitable, albeit short-lived Gold Rush.

Agriculture, however, proved to be a singular failure. Land lots were parcelled out to immigrant farmers from the 'lower 48 states', but all efforts to coax bountiful harvests out of the barren soil in the short daytime hours were so unsuccessful, that they had to be quickly abandoned. To this day, most food is hauled from the mainland US and neighbouring Canada. Oil was struck in the Arctic in post-war years. Much wringing of hands about the ecological impact ensured that the oil remained underground, until the stalemate was broken by the Arab oil embargo. The oil pipeline from the Arctic coastline to the all-weather port of Valdez is an 800 mile marvel of engineering, and a reflection of man's ingenuity and commitment to overcome natural odds. Constructing a line to carry hot oil while preventing the permafrost from melting was a challenge. The line also crosses three major earthquake faults, traverses steep gradients and needs to withstand air temperature swings of 180 degrees Fahrenheit throughout the year (Alaska has one of the highest annual differences between minimum and maximum temperatures). The oil pipeline probably rates as the last major engineering construction project in the US, before the field of engineering lost its grip on the imagination of young Americans. The sweat and grime of the physical world is no match to the joy of financial engineering executed in air-conditioned comfort!

Alaska is hunting territory, with most animal species open for being hunted by residents, and to some extent by non-residents. Despite this, we were happy to see the widespread presence of wildlife. The Denali National Park was a veritable feast for the eyes, with bears, moose and caribou. One evening as we were having dinner, we happened to glance outside our remote cottage in the woods. We saw a black bear parked right outside our front door. That was about as close I have ever got from having dinner to becoming it!



Alaska experiences extreme swings in daylight hours across the year, owing to its proximity to the North Pole. Much of the northern part of Alaska is plunged into a period of continuous darkness, when the sun does a no-show for 54 days from 24th November to 18th January. And then in summer, there's more or less uninterrupted daylight. When we visited Alaska in August, it would be 11 pm before it got dark, only to have the sun show up again at around 4 am. The Alaskans we spoke to said they had stopped linking their lives to the fate of the sun. People ate and slept according to their biological cycle.

Human presence in Alaska traces its roots back to migrations across the Bering Strait during the last Ice Age nearly 10,000 years back. Their choosing to stay and brave such a harsh environment is remarkable, and is another example of man's phenomenal capacity to adapt. To protect themselves from the chilling winds and snow as well as numerous bears, they built their communal homes underground with a very narrow entrance. Fishing was the main source of food as there was not much by way of nutrition from plants that they could access. Not surprisingly, legends and myths about bears and fish replace agrarian tales of the tropics. Today, only a few tribes of native Inuits, descendants of those migratory tribes, remain scattered around the state and are working hard to preserve their fast disappearing lifestyle and culture.

I asked the owner of our lodging about how he found himself in Alaska. He narrated an interesting tale. For several years in the 70s, his wife and he had spent the winter months roughing it out in the remote wilderness. His home proudly displayed the stuffed trophies of the wild animals he had shot over the years. A large safe that housed the numerous rifles he possessed was prominently displayed. 'A relapse to the hunter-gatherer mode of existence?', I wondered. The economic boom following the oil pipeline convinced him to drop anchor and settle down in a remote part of the state. On proud display were pictures of him logging the forest, and building his home and the lodge single-handedly. Other Alaskans that we spoke to narrated a similar tale. The draw of a wild, untamed frontier land had proved irresistible to them.

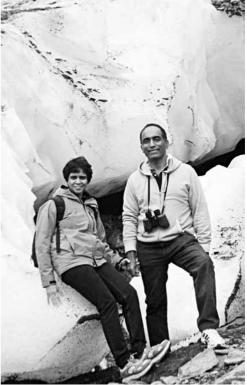
Alaska is glacier country. One sees melting glaciers transporting ice and moraine from mountaintops at every turn. Evidence of global warming is everywhere. Photographs show the rapidly accelerating shrinkage of the glaciers. I sometimes wonder if future generations will get to see only photographic evidence of the existence of glaciers.

Man is a strange animal. During my conversations with Alaskans, stark evidence of the



disappearing glaciers was dismissed with a cold shrug. To think that they are the people whose lifestyles will be the most impacted! The thaw was attributed to a natural climate cycle that has been going on over the ages and hence was of little concern to them. In contrast, Pacific Islanders are the most vocal in pushing for a cut in emissions to stop the rising ocean levels, which will otherwise consign their homes to a watery grave. As our flight departed, I was left bidding farewell to what surely is one of mankind's fastest disappearing frontier terrains. Only time will tell whether it retains its immense beauty, or falls a victim to man's pursuit of technological progress.

Milind Yedkar (Yeddi) (B.Tech, Chemical Engineering 1977, hostel 5), was a magggu during his student days at IIT Bombay but career opportunities took him along different paths right from marketing potato chips to integrated chips. His career has turned him to a die hard Oriental with long stints in China, Japan and now Singapore. At present He is an executive with a Fortune 500 company in Singapore. Milind write regular columns in a host of magazines journals and papers most of which bring out the sinologist in him.





Koli Mil Gaya A Security Guard's Wild Encounter Anil Gidwani

An unassuming man with astute powers of observation, Mr. Koli continues to patrol the IIT campus, often alone at night. He makes note of things with a gimlet eye – things that go unobserved by most people, including visitors. If certain procedures and security installments were improved, he believes they could create a safer and more secure environment for our students, staff, professors and other residents alike

AG: What is your background? When did you join IIT in the capacity of a security inspector?

K: I was initially a temporary Forest Guard from 1971 to 1977. In 1977, I joined BARC, where I remained until 1990. On July 10, 1990 I joined IIT as a security inspector.

AG: I understand you have received awards and certificates during your tenure at IIT. Tell us about some of them.

K: In 1996, I got an award for preventing chlorine gas leakage.

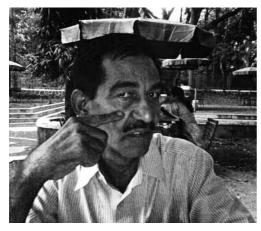
AG: You were mauled by a panther on the campus in 2005. Tell us about what had happened.

K: My boss, N. Vijayakar, told me that a panther had been sighted at 12:30 pm near the Mechanical Engineering Workshop. Mr. Vijayakar instructed me to put nets around the area where the panther was hiding and call the Forest Guard. The panther was hiding in a shed. Under Mr. Vijayakar's supervision, 17 to 18 men, including me, reached the spot and started deploying nets over the shed that the panther was hiding in, (in) preparation for the Forest Guard's arrival.

All of a sudden, the panther climbed the tree next to the shed and sprinted to where I was standing. I was standing at the boundary wall next to a tree at a distance of about 15 feet. All this happened within one second. The panther leapt on me. Before I could react, the panther swiped at my face with its left paw, injuring the right-hand side of my face. I reeled over, losing my balance. Next, it hit out with its right paw, injuring my left eye, which started bleeding profusely. Luckily, I had the net spread in front, between me and the panther, and I had the presence of mind to push at the animal with all my might.

Due to this action, and the commotion of the people standing in the area, the panther stopped attacking me and ran away, but not before tearing the skin off my right shoulder. The panther disappeared, and was last seen around 5 pm in the swimming pool area, but was ultimately never caught.

AG: Where did you receive medical treatment?





K: I was taken to IIT Hospital, which unfortunately did not have an eye surgeon. The general physician, Dr. Ajay Sharma located Dr. Shrikant Patil at Kaushalya Hospital, Thane and I was taken there. My eye was operated upon. The operation was from 8.45 pm to 11.45 pm.

AG: What were your first thoughts when the panther attacked you?

K: My first thought was, 'I will die very soon...' An image of my mother came to my mind. I was resigned to my fate – I had done my duty. At the same time, a thought flashed across my mind that if I survived, I would continue to fight the panther menace on the IIT campus. One of my principal thoughts was, 'it is my duty to protect students at IIT.'

AG: Were you satisfied with the medical treatment provided to you by IIT?

K: Mr. Vijayakar, my supervisor, was very distraught about the whole incident, since he was present at the scene. He did everything to help me. However, I was asked by IIT to sign a form for a medical advance, which is a sort of loan from IIT given to its employees for medical expenses. Subsequently, I settled my medical insurance claim and paid off the loan. The question is: what if the medical expenses had been higher than the amount

reimbursed by IIT? I think the requirement of having to pay a medical advance was quite inappropriate, since it indicated that IIT was setting a ceiling on the amount of medical expenditure that I could incur. I feel that IIT did not fulfill its obligation towards me as an employee, who fought to protect the campus residents and students.

AG: Were you promoted as a result of this incident?

K: No, I was not promoted. In 2008, I was separately promoted to the post of Senior Security Inspector. But I am doing the same kind of work. Even at the age of 59, I was not shifted to administrative work, though I would have liked to be doing that kind of work now. However, I have not expressed this desire explicitly before the institute.

AG: You have been patrolling the campus as usual, six years after the incident. Do you not feel afraid of being attacked again? Do you patrol at night?

K: Yes, I continue to patrol the campus, including during the night shift when panthers are most active. I am not afraid. The safety and security of students is my primary concern, and I have continued to shoulder the responsibility of patrolling even after the incident.

AG: What steps has the institute has taken since 2005 to deal with panther intrusions?

K: Let us remember that the campus is built on an area which is originally the abode of these panthers. We are merely tenants of this area. So perhaps we are intruding, not the panthers!

If I remember correctly, Shri Walke of the Forest Conservation Department had notified the IIT Committee about the need for erecting fencing around the campus much before the attack. But no action was taken till this incident took place! After 2005, a compound jail fencing was erected, which runs past the backside of Hostel 7, past Hostels 12, 13, 14, 4, 1, 2 and 3 till Hillside, all along the IIT boundary.

AG: How about the pipeline? Does it allow panthers to cross over into the campus?

K: The pipeline is now separate from the campus.

AG: Has this incident had a positive effect on our security level against panthers?

K: Yes, it has reduced the number of panthers. However, in my estimate, there are still three panther families on campus.

AG: What else can IIT do to enhance security against the 'intrusion' of panthers?

K: The wastage from hostel kitchens is one of the main factors that attracts stray dogs to the campus. Thus, the number of stray dogs on campus is proliferating. They attract panthers to the campus.

AG: Are students responsible for bringing stray dogs and rearing them as pets?

K: In my opinion, students are not responsible. However, certain students do leave behind their pet dogs after their stay at IIT.

AG: Is redevelopment in the belts around IIT a cause for the increase in the number of panthers on campus?

K: Yes, I do believe the rapid redevelopment in Mulund and Thane is causing an increase in the number of panthers on campus.



Anil Gidwani

Anil Gidwani graduated from IIT with a B.Tech in Electrical engineering

in 1982. Known in his circles as Giddu, he chatted with Mr. R. P. Koli, a Security Officer while on a recent stay in the campus in October this year. Gidwani's choice of his subject is interesting, particularly because on separate accounts, they both rose to an occasion with tremendous courage and perseverance. When his car was towed away illegally and he was levied a fine, Gidwani chose to file a PIL and fought the case on his own. Three laborious years later, the magistrate's court acquitted him of all charges. Mr. Koli was attacked by a panther in 2005, and survived to tell his miraculous tale.

The Green Gandhian

The 39-year-old Tambe is a member of the Indian Forest Service. He is a mechanical engineer from IIT Bombay, a PhD holder from the Wildlife Institute of India, a wildlife photography enthusiast and a long distance runner. For the last three years, he is also the officer-in-charge for the implementation of NREGA (or Mahatma Gandhi National Rural Employment Guarantee Scheme) in Sikkim.

Sandeep Tambe is special secretary, Department of Rural Management & Development, Sikkim. His dedication to the people and his ability to innovate are the most important factors in making Sikkim one of the most successful states in implementing NREGA.

Shere Khan sees me not as a man, but as a creature of the jungle. (Mowgli, the man-cub in *The Jungle Book* explains why his formidable foe gave up his grudge against him in the end.)

Running up the heavily forested Karia Pahari (Black Mountain) after a swim in the Narmada, sweat trickling down his forehead, eight-year-old Sandeep Tambe would often imagine himself as Mowgli from Rudyard Kipling's iconic tale.

The year was 1979 and Tambe was the youngest in the pack, just like the man-cub. His two cousins, two sisters and a bunch of Gond (a local tribe) friends flanked him. To-

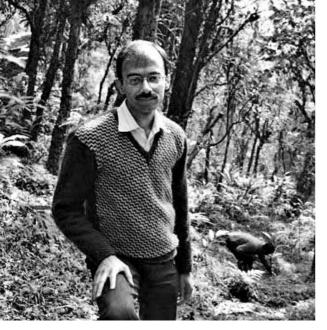
gether they went charging up the hill in their native village of Ramnagar in the Mandla district of Madhya Pradesh — famous for housing the Kanha National Reserve, one of country's foremost tiger sanctuaries and the inspiration for The Jungle Book.

It was a special day. His grandmother had just let him in on a secret — a tiger was rumoured to be in the jungle. Young Tambe was excited. It was only during summer breaks that he could come out of Rourkela, Orissa where his father worked in the SAIL steel plant. Could this be the day he met Shere Khan?

Today, the 39-year-old Tambe is a member of the Indian Forest Service. He is a mechanical engineer from IIT Bombay, a PhD holder from the Wildlife Institute of India, a wildlife photography enthusiast and a long-distance runner. For the last three years, he is also the officer-in-charge for the implementation of NREGA (or Mahatma Gandhi National Rural Employment Guarantee Scheme) in Sikkim. But in many ways, Tambe is still quite like the young Sandeep who saw himself as Mowgli.

The only change is that Tambe now spearheads much bigger packs and has more vicious foes than the imaginary Shere Khan to contend with.

Foes like corruption and indifference: two big reasons why despite being the most



widely acclaimed social welfare scheme in the country, implementation of NREGA — or the lack of it — across most states has disillusioned even the people who campaigned for it.

However, in a recent gathering of activists from across the country in New Delhi, bemoaning the problems afflicting NREGA implementation, no one knew about Sikkim's stellar performance. Neither did they know of the man who made it possible in Sikkim. Perhaps like everyone else they missed spotting Tambe, since from a distance, one only sees the civil servant, a bureaucrat.

But as Tambe nears the end of another routine five-kilometre trek to arrive at a village in the lower reaches of a hill around Gangtok, the Lepchas (the original inhabitants of Sikkim) living in the slopes greet him with such applause that he appears no less than a champion long-distance runner being cheered by the onlookers, as he is about to cross the finishing line.

"The jungle speaks to me because I've learned how to listen."

Tambe left Infosys, where he was working in the US, for a career in the wild. That was in 1994. "I did it because taking care of the forests and wildlife gives me maximum satisfaction and happiness," says Tambe. "One does not need material things to be happy in life. [As a child] I saw them [the Gonds of Madhya Pradesh] work hard right through the day, and then enjoy themselves each evening."

It is no surprise then that even as a special secretary-rank officer — the second-highest rung of bureaucracy in the state — he still does not own a TV or a car. What he does own is a scooter which his wife rides and which has made him famous in his residential colony as, "the husband of the woman who rides the scooter"! But what is a forest officer who loves wildlife doing in the Rural Development Department, implementing NREGA?

"I have come to see [that] there is not much difference between wild animals and poor human beings, since neither can speak for themselves. It gives me immense satisfaction to work for their welfare," he says.

For the villagers, Tambe is an activist in the guise of an officer, who has transformed their lives by the manner in which he has implemented NREGA.

Today Sikkim is ranked second after Tripura in achieving the most important NREGA outcome — providing 100 days of work in a financial year to the rural people. In 2009-2010, Sikkim could achieve 80 days on an average for the wage seekers, with 23% households completing 100 days. This is significantly higher than the national achievement of 54 days. For 2010-2011, this figure is expected to cross 90 days for Sikkim.

> Sourced from article in Forbes India Magazine by Udit Misra

Messy Territory

Humbl(ed)bee

Takat Singh Aslinglji Purohit Dropped out of 6th grade in his native hamlet in Rajasthan's Pali District and like countless others, made his way to Mumbai,

then Bombay, in search of a livelihood. Fate got him to work as a temporary cook in IIT Bombay's Hostel 3 in 1972, or thereabouts. Three years later, Takat Singh was confirmed as a cook of Hostel 4. This was in 1975.

Today, in 2011, 36 years later, Takat Singh is a cook of Hostel 4. Welcome to some bitter truths of life. A spade is a spade and a cook is a cook. The 2,000 or more students he cooked for went on to become scientists, GMs, VPs, CEOs, MDs and even more. He watches year after year, as alumni return to the hostel for a reunion, the once shy, defenceless, hungry student transformed into a tycoon with success oozing out of every pore.

What Takat Singh did not know then is that his chief benefactor would one day become a top policy maker for India, in his capacity as an OSD (Officer on Special Duty) in the Prime Minister's Office during the Atal Behari Vajpayee regime. And his detractor would become a Chief Minister who transformed the state of Goa. In a candid interview with Humbl(ed) Bee, Takat Singh looks back at his 36 long years at Hostel 4 mess, and talks about hopes for the future with alumni initiatives like HATS.

Introduction by HUMBLE(ED)BEE

HB: When did you first come to IIT and what was your pay then?

TS: I may have been around 16 years old when I came to Bombay and first joined H3 as a temporary cook. Two or three years later, I was drafted into H4 in 1975 as a cook. Cooks were paid ₹45 per month then, and helpers were paid ₹35 per month.

HB: Just ₹45 per month? What are the pay-scales now?

TS: I think a new joinee starts with around ₹5-6,000 per month.

HB: How much do you draw now?

TS: About ₹22,000, which includes everything. Take home is much less. The helpers from my time draw about ₹2-300 less. The difference between cooks and helpers has never been significant. If you look at my seniority and the inflation, I would say that my present pay-scale is as measly as the ₹45 I used to earn. Maybe marginally better.

HB: Do you rue the fact that you see students transformed into successful alumni, whereas you have remained a cook for all these 36 years?

TS: Honestly, it does affect us. We are happy to see our old students becoming successful. But we realise that we continue to survive with our limitations after so many years. In these 36 years, my grade has been scaled up only twice. All cooks have the same problem. The helpers' grades have been scaled up thrice.

HB: You used to live in the quarters behind the mess in H4. Where do you live now?

TS: We all lived crammed up in the 5-6 quarters that you refer to. We had to leave our families behind in our villages. But about 15 years ago, IIT provided us with some accommodation called MW. It's behind H1. Once I was allotted that accommodation, I shifted my family here. The current accommodation is much better than what we had then. But it is still meager. Just one hall and one kitchen for an entire family.

HB: You were the General Secretary of the IIT Mess Workers Union. Do you have any special memories?

TS: I was active ever since I joined IIT Bombay. We formed an association first, but set up a labour union in 1976. We had elections every year and I served as the General Secretary for about 15-16 years. I am not that active any more.

HB: During your tenure as the Mess Workers' leader, you had a stormy relationship with the institute and also with the students. Ironically, you were at war with your own G-Sec of H4, Manohar Parrikar.

TS: Actually, Manu Parrikar was an excellent man. He was very helpful to me and to all other mess workers. When any of us had a problem, we went to Manu first. I remember that when I needed to fill a form or get a letter written in English, I used to go to Manu's room. His room was always open and he never turned us down ever. I enjoyed good relations with him then, and I continue to maintain good relations with him today. Unfortunately, we had a skirmish on a few issues and we ended up being at loggerheads. But that's a thing of the past. I still hold him with the highest respect today and respected him even before he became a CM.

HB: Despite your stormy relationship with students, there were some who supported you.

TS: Oh, yes. M.G. Rao and Sudheendra Kulkarni were our main supporters. Amongst the G-Secs, Sandhya Gokhale and Revathi Kasturi from H10, Abraham Mathew from H9 and Nitin Borwankar from H5 were our main supporters. Even some who were not office bearers used to visit our rooms and try to provide elementary education to us. Tension with students was occasional and sporadic. By and large, we have had an excellent relationship with students. There has never been a case of any violence. The fact that so many alumni visit us every year, remember us by our names and give us *bakshish* shows that they valued their moments with us.

HB: In your long innings at IIT, do you have any special memories that you treasure?

TS: (thinks and then laughs) Yes, I recollect one. No, make that two. Actually, there are many memories. The first one that comes to mind is the fact that there was student unrest in 1980, and IIT was shut down for a whole month. It was over the issue of the expulsion of four students. It had never happened before, and has never happened since. At the mess, we were uncertain about our future. Of course, the periodic fights we had with Manu are all memorable too. And I now remember some light-hearted moments as well. Bakul Desai was a prankster who raised a false alarm that the mess workers were setting H4 on fire and woke up the entire hostel. For that act, Manu tied him up in front of H4. All this was in fun, but we thought that it was Manu's ploy to discredit us and we experienced some tense moments then. Do vou know what we used to call Manu?

HB: What?

TS: What were the names of two famous mass murderers in Delhi? They were arrested after killing two teenaged siblings. It was a big case in those days. I am not able to recollect their names.

HB: Are you referring to Billa and Ranga? The ones who murdered the Chopra children?

TS: Yes. Yes! That's it. Billa and Ranga. So we had our own joke amongst us. Manu was the only Mess Coordinator who came into the kitchen everyday to check on things. Whenever he would come in, the guy closest to the door would alert us. He would say, *"Yeh Billa Ranga aaya hai."* (Billa Ranga has come.) That would evoke a lot of laughter amongst us.

HB: While things have changed, what seems to have not changed is the quality of mess food. People across all batches are unanimous in running down the taste and the quality of food. What do you think is the reason?

TS: Have you eaten in the mess recently? I don't think you'll complain much now. In those days, cooks were hired randomly, by recommendation of the warden or some staff member. Even someone who had not cooked before in his life could get a job as a cook. And some of the bad cooks could not be re-allotted to helper duty because many of them would be "saab ka aadmi".But you must appreciate that in all these years, we never had a food poisoning case like we had in H13 and H14 recently. That's because they are contract messes. Contractors always look for profits and will recycle surplus food if necessary. But we often wasted three or four kilos of food if it was surplus. To that extent, we have a good record.

HB: You have seen students across 36 batches now. Do you see a difference between the older set and the new ones?

TS: Most certainly. The older set were a very smart lot and very active. The younger guys are relatively quiet and simple. They come, eat their food and disappear into their rooms. I don't see them playing any games like the

older students used to play. I have never seen the carrom board being used. With the older set, we mess workers used to play carrom, volleyball and watch Chaya Geet together on the old black and white TV. No such interaction exists now, though the students are friendly.

HB: What do you think about the HATS initiative?

TS: It is a great initiative. We are touched that alumni are raising funds for our welfare. We continue to struggle in our life and cannot make ends meet. On retirement, we get about ₹three-four lakhs but it is meager. A simple chawl in Powai costs ₹ 30-40 lakhs. People like Dina and More (H4 mess workers) have a difficult life. Old age is a big problem. Dina has to look after his paralysed wife. One lakh rupees donated by alumni goes a long way in mitigating a part of the problem. It is an excellent start by the alumni.

Sometimes, I wonder why the alumni, who haven't been in touch for so many years, come back to us, call us by name and reach out to us with their generosity. We must have done something right to deserve such wonderful alumni. *Name:* Chelakara Ramnath Subramanian, a.k.a. Ramnath Subramanian, a.k.a Rasanath Das

Particulars: Graduated from IIT Bombay with a B.Tech in Civil Engineering. Joined Deloitte as a consultant in America in 2000. Got his MBA at Cornell, started working as an investment banker at the Bank of America in 2006.

Recent career moves: Quit everything and became a monk.

TTB is currently gripped by what is mildly diagnosed as the 'placements fever'. Any student who has recently conquered their world, yet again, by consolidating for themselves a place in a hallowed cubicle of a prestigious firm, would do a definite doubletake when they hear of Ramnath – Rasanath Das' – career. How did this monk sell his Ferrari?

As an investment banker, Das's specialty was the technology, media and telecoms sector and he dealt in mortgage-backed securities. Das had studied this market but remained baffled by it even after he began trading.

As world markets began to crumble in 2007, he found himself working on a merger and acquisition project for Playboy magazine the following year. He felt it was absurd trying to sell sex when the economy was collapsing and people were losing their jobs. "It was not that I hated the industry or the people I worked with," he said. "But I began to see the shallowness in that world. I wanted to be part of something authentic and deep."

In fact, Das was already linked to that 'something'. Since 2007, he had been living in a Hindu monastery in Manhattan's East Village. He had been practicing karma yoga, the Hindu path of service to the divine, for a decade before moving into the monastery in 2007. As part of this active service, he used his \$1, 70,000 annual salary to help finance the monastery. "Living in a monastery was a very strong safety belt. It made sure I kept my inner core," he explained. "That association provided a certain balance to the work environment."



When he quit in late 2008, one Bank of America manager praised his courage, and another said he was making the worst mistake of his life. Das admitted it was hard to give up the perks and prestige of the investment banker's life, but it wasn't what he wanted. "I didn't hate those people but I began to understand what drives them and how much shallowness and suffering there is inside."

Das left Wall Street but not the financial industry. Currently, he serves as the CEO and president of 'The Bhakti Center', a not-forprofit education and cultural centre that provides services in yoga, meditation, vegetarian cooking, art, dance, music and philosophy centred around Bhakti Yoga. He has taught the Bhagvad Gita at universities (Cornell, University of Albany) as well as in various yoga schools. His dissection of the Gita relies upon his erudition on a wide range of topics; from economics, life sciences, history, current events and yoga traditions. He has also been featured as a TEDx speaker in New York City. Das also spent recent Sunday afternoons leading Occupy Wall Street protesters in meditation, until the police cleared their camp at New York's Zuccotti Park this week. Das has been a discreet presence at the protests, leading short sessions at a weekly interfaith service. The 32-year-old monk isn't sure where his next session will be. "I keep my expectations low but at the same time, I keep my enthusiasm high," he says. "I've met so many people who want to make a change. To me, that's very inspiring."

Memoirs from IIT Bombay Black and White Memories from a Colourful Era (1958 -1962) Sudhir Sharma

As a student of the first batch of IIT Bombay, we were in a unique position to be a part of history and also watch the history in making, in which we were the players. I am presenting here my own photographic memoir, with photographs that I had taken during the four years I spent at IITB. The photographs show some events and the campus as it was being built at that time. This does not attempt to be a complete historical record – just photographic memories of some of the events in those four years.

The institute opened in 1958 admitting about 100 students, the best and brightest of India, based on merit from their respective universities or intermediate colleges. As there was no IIT campus, the first year classes were held in SASMIRA's brand new building at Worli. About 50 or 60 students were provided hostel accommodation in Shiva-e-Namah Building at Worli Naka. The remaining students were from Bombay or had relatives whom they could live with. As I was from Bombay, I lived at home during my first year.

Construction of the Main Building at Powai campus started in 1959 after the Foundation laying ceremony by India's first Prime Minister, Pandit Jawaharlal Nehru on 10th March, 1959. Our photographic journey starts with the pictures of that function, with some pictures taken by me and others. This was a very grand function, with everybody partici-

pating and looking forward to the speedy construction of the campus buildings.

In the second year, we all moved to very rudimentary campus buildings. Only one hostel (First Hostel) was constructed for students, a staff hostel was ready and some workshop sheds were constructed, where our classes were held. Some quarters for the staff and faculty were also ready. Of course, by that time, the second batch had also been admitted. Stories of the campus life in the very first year have been told and retold several times by many – some true, and some exaggerated, to develop sympathy for our hard living conditions. However, the stories about snakes wandering in our hotel yards are quite true.

In the same vein, I will tell you my personal experience with the wild life. During my third or fourth year when I was staying in the third hostel, I was stung by a scorpion while going for a walk after dinner on the road towards the Main Building. Some of the friends coming behind me looked to see if it was snake, or something else that had bitten me. After a while we did find a scorpion nearby, relieving me of the anxiety about snake poison. But I was still worried about scorpion poison, and how it would affect me. All the while, the burning sensation in my toe was increasing, and we returned to the hostel immediately. My room was immediately filled with the friends who heard the news. They informed

our resident doctor who showed up in due time, and injected me with some antidote that took care of the pain overnight. Although the doctor had a reputation of being a horse doctor, he did come to me when needed. This was a minor incident but at that time, it seemed like a very big deal!

The campus continued growing in my second and third year, when the second and third hostels were ready to be occupied. In the second year at Powai, that is, my third year at IIT, I moved to the third hostel. I stayed there for the last two years of my life at IIT.

As we moved to our own campus, several extra-curricular activities were being developed, such as sports, a student union, an annual magazine, and so on. In IIT's third year, we published an annual magazine named *Pragati* and held a competition for the best article. *Pragati* was edited by our classmate, Dr Kailash Mishra. In the first issue, my article on rockets and satellites won the first place and in my fourth year, I wrote an article on UFOs after researching about it in books available on the topic, and it also won a prize.

Another tradition that was started was *Wall-paper*, a news magazine in the hostels. I was the editor of *Wallpaper* in the third hostel. It was a kind of notice board, 3' x 4' or so, on which articles of interest, jokes, poems and so on submitted by the hostelites were displayed. After submissions to us, the articles were again handwritten by two talented and artistic classmates, Ramakant Satam and Arshad Siddiqui, before posting them on the board. I do not know if these traditions that we had started continued or not, though the tradition of annual magazines seems to be alive and well at IITB, as shown by the publications of souvenir magazines.

I had written articles in the first two annual magazines that were published in 1960

and 1961 by us at IIT. I feel fortunate to be writing again for an annual magazine called *Fundamatics*. In 2008, several of us first batchmates wrote our thoughts and reflections in the souvenir magazine. There is a feeling of deja vu and coming to a full circle while presenting my memoirs.

Here are some of the pictures that tell the story of our first four years at IITB, from 1958 to 1962.





Laying of Foundation Stone Ceremony on 10th March, 1959 by Pandit Jawaharlal Nehru, India's first Prime <u>Minister</u>

(Top) Arrival of Pt. Nebru at Powai, the future home of IIT Bombay

(left) Volunteer badge worn by students and staff at the function



Pt. Nehru being greeted by Kasturbhai Lalbhai, Chairman, Board of Trustees, IIT Bombay (I'm in the background, extreme right)



Pt. Nehru with Director Brig. S. K. Bose at the wheels (I'm in the background, far left)



Main Building, October 1960



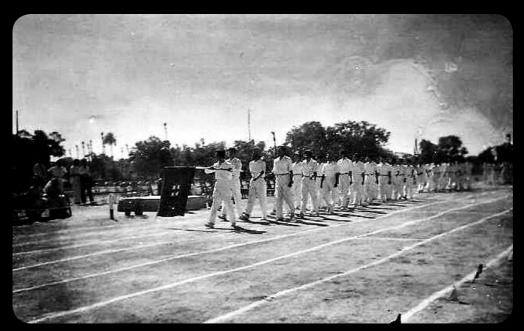
Hostels 1, 2 and 3 as seen from Main Building, October 1960



Hostel 3 Annual Function, February 1961. Welcome Address by Hostel Warden B. S. Chittawadgi, with Director S. K. Bose (centre) and Deputy Director N. R. Kamath (left)



Audience at the hostel annual function



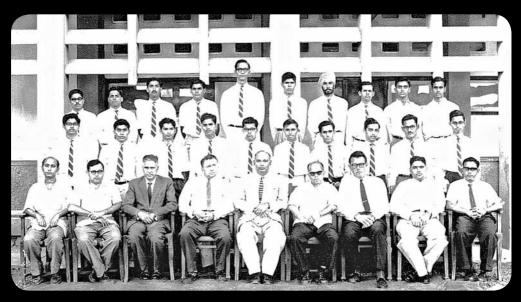
IIT Annual Function and Sports Day, February 1961 Parade of athletes before the games



Tug-of-War, Students vs Faculty Director S. K. Bose watching very anxiously



Sudhir Sharma being awarded First Prize for an article in 'Pragati'



Group Photograph of Final Year Metallurgical Engineering (class of 1962) students with Faculty Members



IIT Annual Function and Sports Day, February 1961 Parade of athletes before the games



First Convocation of IIT Bombay on 22nd December, 1962 India's President Sarvepalli Radhakrishnan giving the Convocation Address



First Row (L-R): P. K. Rao (Meta.), S. Kamat (Civil), Satish Arora (Mech.), Kanti Singhi (Elec.), M. Chitkara (Mech.), B. D. Jethra (Meta.), Krishna Jog (Mech.), H.S. Katial (Meta.), G. D. Apte(Meta.)

Second Row (L-R): D. G. Sastry (Meta.), S. Padmanabhan (Elec.), N. K. Arora (Mech.), D. Rajparia (Mech.), Ajit Badami (Chem.), P. N. Desai (Mech.), N. Krishnan (Meta.), R. M. Satam (Meta.)

Third Row (L-R): O.B. Dias (Meta.), S. Ramanadham (Meta.), A. Kulkarni (Chem.), Prabhat Datta (Mech.), Sudhir Sharma (Meta.), Jugal Tandon (Meta.), Sunil Shah (Chem.), Krishan Khanna (Chem.)

In December 2008, 25 classmates of the first batch had a reunion at the Golden Jubilee celebrations of IIT Bombay. Below is a group photograph of all those who attended the reunion. Many of us were meeting for the first time since graduating in 1962, and for a while, we had a guessing game of identifying each other. It was amazing to realise what 50 years would do to our appearances.

In 2008 and 2009, the first batchmates donated about ₹ 60 lakh to start and sponsor a perpetual Chair in Nanotechnology at IITB, to honour our beloved Dr P. K. Kelkar who was integral in setting up IITB. The Chair has been named 'First Batch Dr P. K. Kelkar Chair for Excellence in Nano Technology'. It was a token of appreciation and a small *guru dakshina* by the students of the First Batch for the education we received at IITB.



Sudhir Sharma

Sudhir Sharma is a 1962 graduate from IIT Bombay with a Masters from Mc-Master University, Canada and a Ph. D.

from Carnegie Mellon University, Pittsburgh, USA. He worked in research and development of steel-making processes at Bethlehem Steel and Praxair, Inc. He has authored or co-authored 35 original research papers and hold five patents in steel-making applications. Sudhir is enjoying his semi-retirement now, spending time with his hobbies travelling and photographing nature and natural phenomena. He lives in New York with his wife Nipun and three sons Rahul, Anshul and Vipul.

Golden Jubilee of Joining the Institute Class of 1967

From IITB67 GJR Team

As we sit down in our armchairs and look back down the vista of years we find ourselves once again entering the portals of our Alma Mater. Young teens entering the pristine campus with a tang of excitement, a whistle on the lips and a pang of apprehension as to what this new stage of life will be like. The first was on account of the stature of IITB being a premier institute of higher learning and the latter because being away from home, far from the city, approachable only by the Institutes bus or one's own means of propulsion and the stories of ragging on the campus sent the creeps.

The monsoons had set in but that day it was hot and humid as we entered the hostel and set up our rooms, met our batch mates – friends, colleagues, comrades, call them what you may, it was the starting of bonding with the new.

Friends, that was all almost 50 years ago and a lot of water and silt has flown into the lakes adjoining IITB. The campus has grown – well to some extent but the density of structures and humans has definitely multiplied many folds; fortunately so has the greenery. Back then one could recognize and recall the names of practically all on the campus; well it's not so any more. The growth has distanced the residents from one another. That's the price one has to pay for so called development – the same way that the rural transforms to the urban. The web or tissue of human inter-action and interrelation gets limited to one's own welkin.

Early January 2010, our brainy Mac got a

brainwave – it's going to be 50 years since we entered IITB. He knew the whereabouts of some and got the rest from IITB AA and made contact. IITB1967 Yahoo Group was formed. A few of us got together at the Malabar Hill Club on 4th June 2010 – Glinka was the host, to chart out how, when and where to have a grand meet. Slowly the molehill of contacts grew to the size of the hill behind IITB – remember the survey sessions in the terrain at its foot.

The Yahoo Group of IITB67 started throbbing very fast and is the most active of the alumni groups. Some of the stuff from that is captured under 'Reminiscences' for those nerds who have stayed off the web. The Yahoo Group helped to re-establish contacts with a wider circle of friends and has rekindled nostalgic memories of time on the campus, the faculty who taught (or were taught lessons by some), the trips to town to see a flick or for other chores, the dips in the lakes, the strolls on the road during the blackout times, the mess strike and many others.

Ours was one of the early batches to pass out from IITB. The 1st Convocation was held in December 1962 when Dr. Sarvepalli Radhakrishnan, President of India was the Chief Guest. We were fortunate to have participated in that. A number of our batch mates have received the Distinguished Alumnus Award from the Institute. All have done well in their chosen fields – some even remote from engineering. However, they all had one thing in common – they all deployed that training of structured analytical analysis and logical thinking to be where they are and give back to society which funded their higher education.

We will all always cherish those years in IITB and the bonds of friendship that were cast then. Let's maintain them, relive them and preserve them.

Thoughts On Second Innings

Dan Mayur

At this stage in life, as I look back, many thoughts crowd my mind randomly – about my career, opportunities missed, health, children, friends, money matters and especially what I am going to do with the rest of my life. I am sure most of you must experience something like this too and this is where we can help each other in terms of views, ideas opinions, experiences and plans.

In recent years, particularly after my retirement, I have been spending a lot of tortured nights wondering "who will cry when I die", other than my family, of course. Will I be remembered at all or will I end up unseen and unknown like something in Thomas Gray's Elegy:

Full many a gem of purest ray serene The dark unfathomed caves of ocean bear Full many a flower is born to blush unseen, And waste its sweetness on the desert air.

It is a fact that most of us who were fortunate to be blessed with excellent education and seemingly with so much potential finally wound up merely as efficient vehicles of making money for some large faceless corporation. I am dogged by questions like "Have I made a real impact on anything or anybody?" The answer is not very flattering. The majority of us do very little besides helping a few family members and accumulating some material wealth. What happens, of course, is you get sucked into the system. You go with the flow. You spend time on and develop skills that have market value. I am very fortunate that I am in excellent health with all parts working on specification as designed. I had a great career in engineering/construction project management where I handled mega projects worth hundreds of millions of dollars leading teams of over two or three hundred people - fighting corporate battles of cost, schedule, profit and loss every day. Nothing esoteric but a lot of real-world challenges and, frequently, much more confrontational than worrying about shear-stress calculation on a rotating disk in non-Newtonian fluids in a 75/25 % nitrogen/helium environment. But at the end, I was very tired of the political battles, somewhat affluent and thoroughly dissatisfied.

It takes a lot of courage to be different, to break out, and to do something that has a direct and immediate impact on others. And you have to do it relatively early on at an appropriate time in life. Certainly, there is risk in it. So most of us take the easier path only to second guess later and worry about what could/should have been. Then, as an engineer worth his salt you begin to rationalize. "Going to a village and teaching a few kids is sexy. It makes news headlines about your great sacrifice. But does it really solve anything? Does it even make a dent compared to the magnitude of the problem? These problems of poverty and education and health and hunger can only be solved systemically by government policy and a country's socio-political system. A professional's best contribution to the society is to be the best engineer, the best researcher, the best doctor that he can be. It is a waste of his talent and education and time to be a helper in the Soup Kitchen. Instead of promoting the Gandhian handloom, an engineer's best contribution is to solve the problems on mega-scale with the help of technology" etc. etc. I do not think that this is a copout but it is a place to hide.

What most of the people in my situation wind up doing is to make charitable contributions here and there to a group like Pratham or the National Blind Association or CARE, UNICEF or the Soldiers' Widows like our good friend Vijay Kulkarni has proposed to us. For those who can afford it, writing a thousand or two thousand dollar check is a good and easy thing to do and it has its value.

And if Lady Luck has smiled on you in the truly bizarre technology bonanza of Silicon Valley of the past decade, you wake up one day to find the software system you were toying with is worth 500 million dollars to some devotee of the "greater fool theory" so you cash out and may be donate a 100 million to your alma mater. That is great and certainly useful but it is still very easy to do. I think the best gift and the most valuable is the gift of your personal time to any worthy cause like our own Kesav Nori is doing with his work on adult literacy. We should be very proud of him.

It is interesting to see how the lives of our graduating class have evolved in the past 45 years after starting at the same point and with essentially the same tools. The spectrum is incredibly wide in terms of personal development, professional achievement,

social impact and wealth creation. Being in the group of our 1967 IIT graduating class and communicating with our batch mates has been very revealing. Several people whom I did not know very well during the IIT days have reached out to me and have become good cyber-friends writing often on areas of common interest like travel, politics and literature. It has been good to renew all these contacts. Human bonding, an important part of our Mission, has an unexpected appeal as one gets older.

In modern times, when 65 is the new 50, one must have a passion and a dedication to embark on the Second Inning in life. That is good for health and that is good for sanity. The Hindu philosophy and the principles of Yoga are based on mind/body integration. While we are all getting old and will inevitably develop illnesses of one kind or another, it is possible to fend some of them off by being involved in a cause, leading a purposeful life. We can wallow in sob stories of cancers and heart attacks or we can take a positive view of the years to come and what might we be doing to leave this world better behind us.

Looking at the Triiton website, it is clear that Ravi has embarked on a great Second Inning that combines his technical expertise and experience with a purposeful and satisfying activity of mentoring young professionals. This will bring him handsome rewards undoubtedly more satisfying than any corporate work. In this arena, I am struggling along without making a full and satisfactory use of the time and energy I still have. I donate to many charities as I can. I was involved as a charter member of an Entrepreneurs' Group in Houston started by some Indian colleagues. Its idea - promotion of innovation and entrepreneurship - is great but in America money gets into everything big time; and we are Indians who excel at in-fighting, so I quit. I am a financial planner on the

side so I have been helping pro bono several elderly people with their financial plans and end-of-life money matters; and we – mainly my wife - have taken care of several students in Maharashtra for their high school and college education expenses. But this is all very small potatoes and certainly nothing to brag about.

I do think of Robert Frost's wonderful lines often:

The woods are lovely, dark and deep, But I have promises to keep, And miles to go before I sleep, And miles to go before I sleep.

Finally, I have come to realize that in reality you have very little control over what you are and what you actually get to do in life. I have now come full circle on this. As a product of a typical middle class religious Hindu family I was brought up to believe in fate, luck, deities and blessings. Then, as an iconoclastic student of science, it was all about hard work, and intelligence and ability "to do any thing". While that may all be true, it probably accounts for no more than ten to twenty percent of the outcome. The rest is pure luck, being at the right time in the right place, as Malcolm Gladwell illustrates with so many real life examples in his excellent book "The Outliers". I have come back to believing in the Hindu Philosophy of Karma, luck, fate whatever one chooses to call it as T. S. Eliot observed:

"We shall not cease from exploration, and the end of all exploring will be to arrive where we started, and know the place for the first time."

Reminiscences

Hi Folks,

I thought I'll kick off this topic by reproducing verbatim a deeply touching message from our member Kesav Nori from Hyderabad, India.

Ravimohan

"IIT Bombay taught me that I needed to think for myself. The teacher I remember most for instilling this in me was Prof. M S Kamath. I believe he lives in Pune and hope he is well. He was a terror during exams, as were several others in Viva Voces in Labs in the afternoon at the EE Department. Though it seemed so dismal then, it did toughen us to meet the challenges of professional life. Otherwise, I wafted through IIT B, passing exams on the way. My Masters at IIT K made me appreciate academics and completely changed me. Next I was in TIFR for nearly 7.5 years, at IIT K as a Faculty for 3 years, at CMU as a Visiting Faculty for a couple of years, and 26 years with TCS R&D. All through this TCS stint, I have been an Adjunct Faculty Member at Pune Univ., IIT B, and most recently at IIIT Hyderabad. I have moved around mostly in Computing, but the last 6 years I spent learning Systems Engineering, Systems Thinking and Societal Systems.

I now live in Hyderabad. My son joined Intel (R&D?) in Bangalore last year. He has an M.Tech. from our Alma Mater and my daughter is presently in England finishing her Masters in a variant of Literature, called Film and Literature. I retired last year and am teaching at IIIT Hyderabad, mostly elective topics."

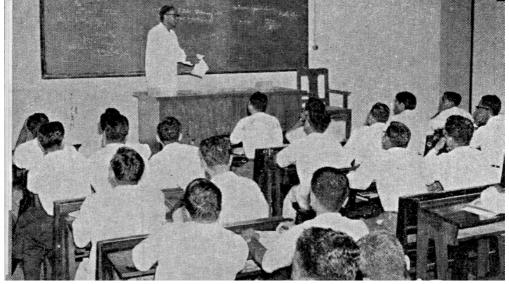
Kesav

Regarding Faculty that influenced

It was interesting for Nori to remember MS Kamath (more popularly nick-named as 'Homo Kamath' for which there were any number of funny explanations but I will let those pass).

It is not very well known that Prof MS Kamath was an ardent fan of Indian classical music and was also a good singer. But he never sang at IIT functions. On a rare occasion, after a lot of persuasion, he sang one number and was wildly cheered.

Talking of Kamaths, who can forget Prof. N.R.Kamath, who taught us 'History of Technology' in the first year. I think that subject was removed from IIT Syllabus after he stopped teaching it. Prof. Kamath was probably the wittiest man walking the Main Corridor on his daily trudge from the Chem. Dept to the Main Building where his Deputy Director's Office was located. His wife was a Czech and they lived at an apartment in Sion. One hears that Prof. Kamath's PhD thesis was reduced to ashes in a fire during the Sec-



ond World War. He as well his wife passed away several years ago.

Jitendra Bhatia

A couple of years after graduation I was setting up a plant at Thane Belapur Road. As part of the technology development I had ordered a small pilot plant. We had a schedule to keep, but unfortunately there was a strike in the fabricators shop and our schedule was in peril of going haywire.

I remembered IITB had some Reactors in S_2 bay. I approached Prof. Kamath for help. He obliged, first by dictating a letter to himself, its reply, getting it typed and giving me permission to carry back the reactor to my premises, on loan, all in a matter of a couple of hours.

Thanks to him we were able to stick to our timetable. Thorough Guru and Gurumaa were Prof. and Mrs Kamath. I take this opportunity to pay my respects to both most lovely people I had occasion to meet in life.

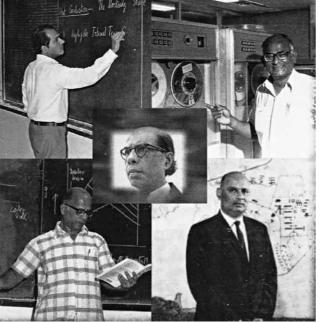
Dipak Himatsingka (Glinka)

My memory of MS involves two vivas mine and Pradhan's. I cannot claim a failsafe memory any more but Pradhan was shit scared and MS asked him what the matter was. "Everyone says that Homo is a terror" was the reply that elicited one of the loudest laughs and "Is that what they call me?" Then it was my turn. I do not remember the question but I remember my struggles." V=IR, I=V/R and R=V/I. So how can I know what to hold constant?" "You don't know what our supply is?" "How do I find out?" "You will come to my office and give me the answer next week." He was indeed very kind but he got us to learn what was necessary.

The barrier between students and faculty and students was almost absent for anyone who tried to interact with the faculty. A string of names comes to mind right away. Murty (Electricity), Swamidasan (Logic), Somasundaram & Ramaswami (Metrology), De (Production), Chaturvedi (Strength of Materials), KPK Nair (Industrial), Athani (Electrical), Padalia (Physics), Billa Rao (Differential Equations) are all among those with whom I had no trouble developing personal relations even though the distance between faculty and student was always maintained. The absence of a barrier did not translate to an absence of a differential respect. But I could always visit them for a chat or for help that went beyond coursework.

Vinay Pandit

Amongst the faculty I remember Prof Murthy who taught Physics from Peck (?) From North Western University. I had an occasion to visit the very same school (Kellogg Bus School) and despite the beautiful hostel for



visitors located on banks of Lake Michigan, I could not sleep as I had nightmares trying to solve problems from Peck.

Prof Murty was excellent and reminded me of a stern Col from the Gestapo. He also pronounced every vowel and consonant.

Jayant Pendharkar

The teacher who inspired me the most was Professor N R Kamath. The framework of critical thinking he hammered into our heads (First scientific, then technical, then economic, and then everything else) still serves me well as I teach Process Design to bright young minds at UC Berkeley.

He had a keen sense of what was practical and what was not. He advised me on my home paper of designing a process for making carbon disulfide. I had prepared a novel design, with a large fancy reactor. When I took it to him, he praised me first, and then very mildly suggested that I check on who could build such a thing, and at what cost. When I started looking around, I found, to my dismay, that even the largest foundry in India at that time (Mahindra and Mahindra) could not fabricate it in one piece. So I ended up with making it in two pieces!

Surprisingly enough, when I went to see him

in 1971, he still remembered the subject of my home paper.

I would like to add a minor correction to Jitendra Bhatia's comment that Prof. M S Kamath never sang in IIT. I remember a function in the big auditorium next to the main building one time when someone asked him to sing, and he gave us a perfect rendition of Sarangaa Teri Yaad Mein.

Ravi Upadhye

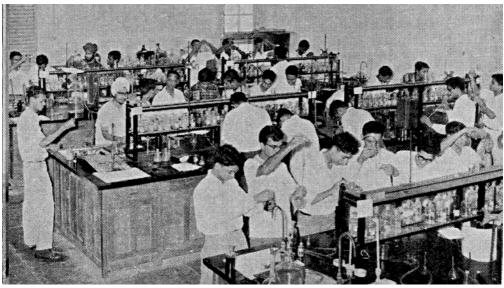
http://www.alumni. iitb.ac.in/ profiles/ profIsaac. htm

Hi Kesav. Thank you very much for the link to the article by Prof. Isaac on himself. I really enjoyed reading it and learning more about him. I am still trying to picture Bedford/Kamath/ Isaac version of My Fair Lady, particularly Prof. Isaac as Eliza!

It is nostalgic to read the names of our profs and fellow students. The one prof I remember most is Prof. Isaac who was my advisor in the final project. He was a big guy, and I don't mean only academically. He towered over most students, and certainly myself. It seems that recently he worked with NIIT in some capacity. One of the NIIT folks mentioned that Prof. Isaac still has the booming voice and a very firm handshake. Despite being his student, I could not enter the small building that housed the MInsk2 computer!

Vikas Sahasrabudhe

The legendary stories of the larger-than-life persona of Prof. NRK are well-documented. He was a true giant among intellectual dwarfs. Outside of the Chemical Engineering faculty, I was most impressed by, and my best memories are of, two teachers in particular. The first is that of Yum Yun Yell (as in M. N. L.) Gopalan with his unmatched passion and intensity in teaching calculus. He was a friendly and exceedingly religious man. I



and Netravali frequently went to his room in the Staff Hostel, invariably finding him deeply immersed in some Puja ritual before coming out apologizing and then helping us without regard for his personal time. The other teacher I remember and respect most was Prof. A. M. Mehta for his professionalism and clarity of concepts. His systematic approach in articulating the IUPAC nomenclature of organic chemicals helped establish "fundas" that have lasted a life-time.

Dan Mayur

Sorry guys, it is MNG not MNLG, see link below to one of his research papers in Mathematics from 1980's: http://www.informaworld.com/smpp/content~content=a776434 846&db=all

Ravimohan

While we are on Yeses, Yems and Yens of Prof Gopalan, I remember a very subtle incidence. During one of his class, quite a number of us were cross talking showing disinterest in what he was teaching. Suddenly Prof Gopalan climbed down the dais and started paving up and down the corridors between the benches. With his head down, eyes popping out in a search under the benches, he was murmuring something which was hardly audible. The class became very quiet and worried. One of us had courage to ask Sir, is there any problem? Prof. Gopalan continued murmuring I have lost something! Have lost it! And then little louder he said, I have lost ... "The Silence."

Avinash Kulkarni

Welcome Message From The Organizing Committee Of The Class Of 1976 Jade Reunion

The organizing committee, which has been working behind the scenes the last few months to make this JADE REUN-ION a success, conveys its gratitude to all of you for having left your pressing personal priorities behind, to join us in a few days of camaraderie and cavalier roistering, and also thank those who have joined their spouses as well.

For me personally, acceding to the desire of Dipak Sheth, Satish Kini and the others, to take charge of the editing end of matters, has been a learning as well as humbling experience. Years of neglect and atrophy had rendered my sense of humour nearly defunct, but the renewed association of batchmates and their spontaneous ingenuity made me reconnect with my (destructive) abilities just as in the Ramayana, Hanumanji was reminded of his special gifts by Jambavan the bear king, leading to the burning and destruction of Lanka, and dire consequences for Ravana. I strongly suspect that I have been seized by the collar, jerked roughly out of my somnolence, and, borrowing liberally from Potty's lexicon, violently and forcefully propelled to higher altitudes by the unhindered and vigorous use of limbs (not mine) which are more customarily known to be used for perambulation.

Some of us seem to have a spiritual connection with the Egyptian in AS-TERIX THE LEGIONARY, who speaks only in hieroglyphics, and, after having spent many years in the army of Julius Caesar and having partaken in quite a few battles, is still clueless about where he is, and informs his soldier colleagues thru his faithful interpreter, that all this fun and games reminds him of the time he was in the army ! Among his various adventures, he wanders into the royal tent in the midst of battle, whistling softly under his breath and with both hands in his pockets, he stumbles upon *Julius Caesar poring over large maps* with his seniormost generals, in deep discussions on war strategy, and innocently asks the big boy himself, friendly like, if he could help him locate the tent where some of the boys have set up a little card game. Caesar is quite zapped and speechless for a few minutes, which enables our Egyptian friend to drift away nonchalantly, still whistling, and hence safe from the apoplectic wrath of Iulius Caesar.

Since we do not know how many of us will be around or mobile enough to join during our gold reunion which might happen in 2021 (ten years from now), it is time we took stock, shook down our hair (showing commendable foresight, I have dispensed with a comb or brush since I don't remember when) and get to know one another yet again, from a new perspective, enlivened and energized by the vicissitudes and experiences of time. Anil Padhye is not the only one who has mellowed like a highland scotch. Among our variegated batchmates, we find more than a few whose maturation and spirited lifestyle exemplifies the finer aspects of aging, pun intended.

The organizing boys of our batch have lined up a program which includes pretty serious stuff about 'giving back' something of what we have gained since having passed these hallowed portals. We must convince our fellow mate Harshwardhan Gupta that the education received at IIT was not so bad after all, and we must compel him to desist from his intention of going round the campus, and repeating "Stand back ! Stand back ! It's all false ! It's all false !", like Ahmed, the elderly night watchman, who went round and round the deserted and desolate palace, and kept repeating these words, in Khudito Paashaan (the Hungry Stones), from the pen of Tagore.

Replacing Potty as chief 'scrubber' of a batch of rambunctious, cantankerous, weather hardened alumni was a daunting prospect. In the last many weeks, I have gone down the road so far that some of my spiritually inclined associates might frown and perhaps strongly recommend a refresher course for me to regain my lost equilibrium, and also get a clean tonsure to return to normalcy.

My only concern in the editing process was that, given the proclivity of some to use colorful or pictorial expletives and epithets, in memory of hostel life, especially when they are interacting with or writing about each other, there should be no element of inappropriateness or usage of words considered improper in genteel circles. I rejoice to state that not a single inappropriate word or phrase was used by anyone, indicating the maturescence and sophistication of our batchmates. If any contribution has been dropped, it would have been only because of the dearth of printing space. Besides, my personal commitment to laissez faire is only exceeded by my love of masterful inactivity. Readers can experience the spectrum of creative socially relevant views and the dizzying heights attained by our batchmates, which come through in their writings. *The editorial policy has been strictly* hands off, and hence non censorial.

Before I keep on and on, and send you all off to the land of Nod, let's raise a toast :

God bless the golden boys and girls of the batch of '76ers If we aren't careful, some couldn't be identified from old pictures The pride of our youth and hopeful exuberance The dreams and aspirations of naïve ebullience All flowered and maturated into great achievers and fixers ! Regards and God Bless ! Au revoir ! Till we meet again !

Gautam Saha

On behalf of the Organizing committee of the Class of '76, Jade reunion.

Let's Get Involved In India's Transformation

Atul Vijaykar

"Breathes there a man with soul so dead Who never to himself hath said This is my own, my native land ?"

I had heard my parents recite these lines by the Scottish poet Sir Walter Scott many a time when I was a school boy. Now 40+ years later, they resonate much deeper ! Many of us (IITB batch of '76) have reached the stage in our lives where we have largely fulfilled our responsibilities to our immediate families and now feel the urge to contribute to the development of our broader family which is our motherland.

We have some glowing examples of IITB alumni who are already doing so: Nandan Nilekani and Jairam Ramesh who have ventured into the challenging realm of public administration / politics; Kanwal Rekhi and Shailesh J Mehta have funded the School of IT and the School of Management at IITB; our very own Gautam Barua who has been effective in his role as Director of IIT Guwahati, and Satish Kini who has recently taken on the responsibilities as the Chief Operating Officer of the PanIIT Alumni's Nation Building Mission.

Clearly, there are many ways of getting involved in India's development (I myself am currently in the process of figuring out how best to do so and for those of you who are interested, I would suggest that Satish Kini is an excellent resource / guide). I do believe, between the slowdown in national economic growth and the faltering momentum of Shri Anna Hazare's anti corruption crusade, India is at a strategic inflection point. Hence, it is critical that we get involved, individually and collectively, to help accelerate political, economic and social reform towards prosperity, justice, fairness and harmony in India.

We should use the opportunity of this 35 year jade reunion to dedicate ourselves to the cause of nation building, aside from the usual *gupshup* and nostalgic wanderings down memory lane.

Let us heed the call of Mother India as sung by Nargis towards the end of the film *Jaagte Raho:*

" Jaago mohan pyare, jaago Navayug choome, nain tihaire Jaago IITian pyare!"



Atul Vijaykar

A Few Memoirs From The Lost World

Rajaram Desai

In Fluid Mechanics lab, we were assigned the task of dissembling a water pump and assembling it again. With geniuses like Potty, Uday and Gautam in our group, we finished the job in no time but found to our astonishment that many small parts were still left out. While we were wondering how we could create mass out of nothing, it was Nimish who came to our rescue by dropping all those parts in the hole of the pump outlet which promptly swallowed all that mass just like a black hole absorbs light.

Organic Chemistry lab was rarely visited by many of our group members as most of us believed that there was hardly anything left in that field of study to be experimentally proven. The well documented facts preserved by many generations of students always came handy during examinations with slight variation of numbers and graphs. Once, a long time after the start of the semester, I went to the lab and found a fair, stout and stern faced figure wearing glasses, standing in my way, who shot at me, with an

irritated look in his eyes, "Who are you?" Having no prior encounter with him, I spontaneously shot back, "Who are you?" It is a no brainer that he made me understand who he was in a manner that I would never forget. His name was Dr. Shaligram, in charge of Organic Chemistry lab for our class, popularly known as 'Shaggy' among the student community. In the first two years, our love for sports and other extracurricular activities overshadowed all other activities. We used to play badminton in the Gymkhana at odd hours, and go for swimming at the Municipal pool in Ghatkopar near the Odeon cinema. Our frantic search for the swimming pool on our first visit had become a treasure hunt for us. In such situations, our friend and guide, Avinash Sabnis would always lead the way. His love and pride of Hindi, our national language, was very well known among his friends. His quotes during those days are immortal. When we were all lost, Avinash bravely came forward and asked a middle aged man, " Suno, woh pohoneka talao kidhar hai?" Encouraged by his successful use of Hindi as a great communicating tool, on another occasion, he snapped at a security man at the Gymkhana who was preventing us from entering the badminton court at 3 am by saying : " gur gur kyan kar raha hai, sidha bolo na io bolneka".

One of the events that really got us excited was the Treasure Hunt. We had little idea what it was going to be like and hence we just formed our group ad hoc from among the friends and walked into the huge crowd awaiting the first clue from the organizers. When the first clue was announced the group started dispersing in all directions and we stood there dumbstruck, as if we had lost our prized wicket on the very first ball. The clue was "Becky's biblical bridegroom". It was only after a couple of years later that we could find the connection between the clue and Dr. Issac.

In a feat of inspiration from the popular TV program 'Guide', Dilip Banhatti and myself had decided to put together 'Hostel Chitrawani', a Marathi weekly newsletter listing hostel events in a funny and entertaining manner. We used to put the handwritten newsletter neatly written by Dilip in his beautiful handwriting on the H8 notice board. It was quite popular at that time and people used to crowd round it, to get a 'bite' of it or two before or after breakfast on Monday mornings.

Some of the popular shows I remember are: Lambya Gokhale will demonstrate 'gurgling' at midnight. A title 'Gulnya Gokhale' will be awarded to him. One Rang Panchmi day, Lambya will be given a 'Holy Bath' by all the hostel mates. There will be wrestling show between Mr. Kantilal Gandhi and Dr. M C Dwivedi, Kantilal will demonstrate the power of 'bhang' during this show. Mr. Correa will act as Bhagwan Shankara with a real snake around his neck. Mr. Pradeep Anand will stage his famous experimental play. Nimish will demonstrate the use of a tickler instead of coins to make phone calls from the hostel phone. Lambya Gokhale will talk about 'The round robin algorithm for multiple round reuse of underwear'. A talk by B.S. Sanyal on 'Why morality is a complex subject'. An interview with Dr. Jog on the topic "The future of the English language and Humanities is in vour hand".



Rajaram Desai H8, Chemical Engineering '76

Game, Set And Match

Shirish Potnis aka Potty

No, no, I am not umpiring a tennis match at Wimbledon, nor am I referring to the trilogy from that master of international spy fiction, Len Deighton, comprising Berlin Game, Mexico Set and London Match. I report generally on more down to earth matters.

The large room was silent with resentment. The visages of those sitting around the table bore eloquent testimony to the turmoil which was seething just below the surface. "What the deuce do they mean?" said R K Khanna (72) with 30 years behind him as the head of All India Lawn Tennis Association. They can't just shunt us to the tram lines just because we are over 70", volleyed he.

"Not only are you over 70 but you have been there for more than 12 years. That's a double fault", said someone. RKK glared at him. "Don't you dare have such lowly passing shots at me" he brought his fist down on the table, his arm replicating an overhead smash which Bill Tilden, RKK's idol, would have been proud of.

"What about me?" wailed the Chief of Archery. "Pensioned off at 70 and to think Guru Dronacharya was 105 when he fought the battle of Mahabharata, that too as the commander in chief !" "And think. 25 % of administrative posts to go to sportsmen. What do these guys know about sports anyway?" "What a pity" agreed the Chief of Judo Federation. "Thrown out without lifting a finger !" "TKO", declared the Chief of Boxing Federation.

"But where is our colleague from the Agriculture Ministry?" (the Honourable Sri Sharad Pawar) asked the Judo Federation Chief. "He is either harvesting some big scam, I mean field, or he has managed to convince the Sports Minister to lay off BCCI (Board of Control for Cricket in India) and restrict his attention to the other sports bodies. If you realize, his entire coterie managing various cricket associations in the country is absent in this meeting."

"It's just not cricket" thundered RKK. "there are two sides out there and one of them is not playing cricket". He had just finished reading about the infamous Bodyline Series in Australia played out in the (nineteen) thirties.

"Our only solace is that the RTI (Right to Information Act) will not be able to question the selection of the players. We can all continue our practice of spotting hidden talent in our sons, daughters, nephews and nieces without any charlatans questioning our judgment, or choose to back the experience of old war horses from our home towns over the untested youngsters from other regions."

"How we miss our chief of Olympics committee, SK (Suresh Kalmadi, who is now lodged in the high security Tihar Jail) ! " "I am sure he would have thought of something. Why not have him in on a Video conference call from Tihar. I am sure the Tihar warden can arrange it the next time he has tea and biscuits with SK."

"And where is our high-flying Heavy Industries Minister who heads the Football Association?" queried someone. "Seems he has gone to Kolkata. I overheard him saying that he had some Messi situation (a friendly game in Kolkata recently in which the Argentinian Messi took part)."

"What can we do now? Think everyone" "is there any way to butter up the sports minister in any way? "I don't think there is much scope. He has enough Maken himself."

(Ajay Maken is the current Union Sports Minster).

At that moment walks in the team from BCCI, led by the Chief of the ICC in person, (Sharad Pawar, and also current Union Agriculture Minister), followed by Vilasrao Deshmukh, Prafull Patel, Lalu Prasad Yaday, Rajiv Shukla, Arun Jaitley and other politicians of different hues, their political differences forgotten to counter the new threat to their very existence. The Chief is wearing pads and is twirling a cricket bat in his hands like the legendary Bhima brandishing his mace. Vilasrao (Deshmukh, the new President of the Mumbai Cricket Association) is swirling a shiny new cricket ball in his hands, very much in the fashion of Shane Warne whom he had watched very often from the AC box at Wankhede. All the new comers are wearing huge smiles as they enter the room.

There is pin drop silence in the room. Everyone is perplexed as to why the new entrants are smiling . "Gentlemen! " said the Chief of ICC, "Your problem is solved." "We shall yet defeat the evil makenations of our Sports Minister." The Agriculture Minister took a long pause. One could feel the drama in the air. "Elementary, my dear sirs" began the wily old fox, "What you see in front of you is the newly formed Indian cricket team."

The perplexed silence in the room could not have been more palpable.

"Let me explain, my dear friends and fellow sportsmen", began the Chief. "As you realize, there is no age limit for the players and our right to select the team is absolute. No Decision Review System here. So we have decided to select all our Board members to represent India. Now there should be no objection from any quarters about us retaining control of the associations we run."

"Yeay !!!' the roar that went around the room would have done an IIT reunion proud. "We knew we could depend upon him" said someone tearfully. "But what happens to the performance of the team? There was a Doubting Thomas somewhere. Maybe all is not lost. "Well, we can't lose worse than 0 - 4, can we?" came the retort from the wily Baron of Baramati.

Ed's note : explanations within brackets have been provided by the editors in order that certain deliveries from Potty don't rise higher than shoulder height and can be easily negotiated by the foreigner fellow batsmen who are not so cricket savvy or India savvy.

The Great Indian Gifts

Bokya (aka Madhav Bokil)

The other day my next door neighbor's 10 year old son asked me, "Uncle (I better get used to this one and that too, fast !) do you know Shankar Dev ?" I said, "Of course I know Shankar Dev. He is our company driver. But what about him? Has he been caught again selling petrol to Taxi drivers?" "No, No. Not that Shankar. I am talking about God. Shankar, who stays on Kailash Parbat!". " Yes I have not met him but I do know that God. In fact as a child, every Monday, I used to accompany my mother to his temple. (Till date I do not know why one is not allowed to have complete Pradakshina (parikrama) of the temple but have to come back from ³/₄ th of it and then reach the same spot in a reverse direction. I am sure there would be some very lengthy explanation for it. But not now !) " So What about him ?" I asked.

"Do you know why he burnt Madan, the God of Kama".

Mumbling a few words, I just excused myself and walked off. But then it dawned on me that in fact, our God Shankar has done a great favour to all of MANKIND by doing so. The trouble is, we ourselves do not know it and have thus not advertised it well to the world. So here it is for all of you to understand and then to act as good carriers of the message to every corner of the world.

But before that let me give you some background !

The kingdom of Heaven was or is ruled by a God-king Indra and being a very liberal God

himself, he had allowed the Heaven-society also to be very liberal. Many a Gods had officially married but many had live-in relationships. The God-kids born out of these wed locks or other relationships were treated at par and nobody used to inquire or worry about telling father's name at the time of admissions to the God-schools.

Madan was one such God-kid. Born to a very loving (obviously, otherwise he wouldn't have been born !) God-Father and God-Mother. Madan had a very normal childhood. He was a very obedient God-kid and used to drink his morning Amrit without any fuss or without any flavour additives. But everything changed as soon as Madan entered Adulthood. (Even though Gods do not follow our known life cycle and do not die unless they wish to, they do enter adulthood and stay there permanently i.e. never get old. All that Amrit you know. It makes you stay young, wrinkle free, no marks.....are you jealous ? Wait. The sad part is even the god women also drink it hence vou are stuck with the same God-woman till eternity ! I know, you would now pity them !)

As soon as Madan entered adulthood, each and every God-woman, except those pativratas started noticing him, approaching him ! You see ! God had made Madan very handsome, very very handsome. Sorry. Since Madan was God himself, I should say, he himself made himself very handsome !

His rise in Heaven kingdom's politics was meteoric. Soon he was made a minister and was handed over the portfolio of Kama, only thing he was good at. (With all the Apsaras and all other god-women recommending Madan's candidature, Indra had no other choice but to accept it to avoid staying alone without Apsaras for the rest of his life-I mean eternity).

So Madan became the God of Kama. He was a very serious worker. His main work was, err...you know what ! So everyday he used to take home a beautiful blonde or redhead and announce "Honey! I have got some work home" and used to close his bedroom door with signs of "Do not disturb" or "Do disturb and join" depending on his mood and the stock of Amrit left in the house. These WERE his WORK-FILES. He also 'handled' some paperwork, which he kept in his files. His had a touring job and he used to travel to every corner of the universe in search of new WORK-FILES and their details (likes, dislikes, preferences, positions) in his files.

Soon other gods sensed trouble. (Normally these God-kind are slow on this one like our police force and reach the site of distress when it is too late.) This time they sensed it ahead of the actual trouble itself. With the handsomeness of Madan, all the god-women had started neglecting our other good Gods and were always after Madan for S.....L FAVOURS! Some of these good Gods tried by going to Madan with photographs of some Apsaras and requested him to spare these Apsaras for other Gods. But Madan was of the opinion that let these Apsaras decide for themselves. (Now you know that problems in our today's society are so deep rooted. Freedom, choice for womankind ? So these distressed Gods went to Shankar, but Shankar did not admit their petition saying, "so far Madan has not troubled me so I cannot punish him".

One day Madan was on a tour of Kailash Parvat. He was carrying some files and searching for some new WORK-FILES. His eyes fell on an Apsara called Aishwarya. Aishwarya was busy doing some acting and dancing sequences of her 'item numbers' for Shankar (Lal?) festival. She had not seen Madan. So Madan invited the angel boys. One of them volunteered. Madan handed him the special, pink-coloured, love arrow with the best scent sprayed on it. The angel boy went ahead and delivered the arrow on Shankar himself. (this angel boy had weak eye sight, remember ?) Shankar was under Yogadhyana thinking about the whole universe, (not like you and me who only think about taking paneer home in the evening to please our wives) Shankar was furious. He opened his third eye (a mystery Darwin has not been able to comment on) and burned Madan.

(While getting burnt Madan threw away the files in his hands. Later on, Vatsyayan, a Indian Rishi (luckily not a Chinese traveler! these Chinese travellers are a pain for young kids as they travel everywhere, enjoy themselves, write about these travels and the poor kids are forced to study it. Remember Confucius ! Absolutely unfair !) visited that place and found those half burnt files. He rewrote them, filled them with some imagination of his own, where the matter was totally burnt, and compiled them in a book titled "Kamasutra". Some Hollywood producers later made a film "what women like" and missed the point totally. One American writer Mario Puzzo also twisted the meaning of God-Father and made a lot of money. A Bollywood producer then made a movie called 'God Mother and did not make any money. See! Feminist attitude does not always pay !)

Message to the world: Thank God (our god) that Madan is burnt and there is now a fair distribution of the fairer lot. Read the book 'Kamasutra' and thank India for these double gifts.

Epilogue : 'Kamasutra' was an all time bestseller. Mr. Vatsyayana died as a very rich man. Since the original writer Mr. Madan was dead and had no 'official' family, Mr. Vatsyayana did not need to pay royalties to anyone.



Madhav Bokil '76

Vivek Borkar And His Chinese Dhobi

Gautam Saha H3, Chemical Engineering '76

Part I – The Matter Of The Collars

Vivek Borkar is well known in certain circles, one of which is the group of hostelites and colleagues from hostel 3. Over the years, his scholarship and erudition have grown exponentially. His research has moved into more and more esoteric areas. But his politeness and decency has remained, unlike many of his tribe who accompany their professorship with tantrums and idiosyncrasies. His relationships with others are based more on "correctness" rather than on practical expediencies. A case in point is his relationship with his Chinese dhobi.

Vivek Borkar first met his Chinese dhobi one Chinese new year's day, when the latter had made special "chow mein" and had carried round bowlfuls of the same to his potential customers in the plush housing colony that Vivek resides in. On being asked what his name was, the Chinaman replied "chow mein". Since Vivek's mind was simultaneously engrossed in some complex algorithm, he did not pay particular attention to the man's reply. But later reflections making him ponder on the improbability of there being such a name, he asked the man again a few days later. This time the man did not exactly reply "chow mein", but said something which sounded similar to "chow mein". After a few more attempts to question the man, Vivek simply gave up, assuming that his knowledge

(or ignorance) of the man's name did not matter at all. In the meantime, Mrs Borkar had installed this Chinaman as the family's daily dhobi and istriwallah.

The Chinaman washed Vivek's clothes well. But being an ethnic Chinaman, he was used to Chinese collars more than the conventional collars we are all used to. A lifetime of ironing Chinese collars had induced and habituated the Chinaman to treat all collars the same way. Hence the unintended victim was Vivek's shirt collars. What with having to contend with crushed and disfigured collars everyday, Vivek's morale was being hammered with regularity, till he was reduced to a state of despondency. Several attempts to redress the situation fell on deaf ears since the Chinaman did not change his ways.

One day, mutual friend Satish Kini decided to call upon Vivek, to discuss a highly technical point, with momentous and far reaching consequences for communications technology. Satish met Vivek at just such a moment of the latter's despondency. He was immediately solicitious, and initiated the following conversation :

SATISH : What's up Vivek ? Why the crushed look ? Had an accident ?

VIVEK : (in deep despondency) No yaar. It's my collars that are getting crushed day after day. *SATISH* : What ? Still having violent disagreements with the missus after so many years of marriage ?

VIVEK : Its not that, yaar. It's the Chinese dhobi who is ruining my collars.

SATISH : What are you doing about it ? Why don't you tell him ?

VIVEK : I have already written three letters to him. There does not seem to be any response.

SATISH : (mouth agape) What do you mean, written ? Did you write in Marathi or in English ?

VIVEK : In English. I did not think that he would read Marathi, even though he is presently residing in Mumbai.

SATISH : Why don't you just shout at him ?

VIVEK : That's just not done. The man may be offended. I thought writing a letter might be more polite and the correct thing to do.

SATISH : (very curious now) Do you have a copy of at least one of those letters ?

VIVEK: Yes, I have the copies here, meticulously filed in my filing cabinet.

One of the letters is reproduced below

BY COURIER MR CHOW MEIN (Chinese dhobi) Dhobi's Chawl Behind Navy Nagar Colaba, Mumbai 400 005

Dear Mr Chow Mein,

It is with great regret that I have to draw your attention to the state of my collars of late.

My collars are just not done right. They are folded at the wrong place, crushed, and in

many ways, mutilated out of recognition. I would remind you to see the way other dhobis and istriwallahs iron collars, so that you are fully apprised about the proper operating procedure required for attending to collars.

I am deeply grieved that in spite of several written reminders, there does not appear to be any positive response from your end. Meanwhile all my collars have been crushed out of recognition, and in consequence, almost all my shirts have been ruined due to your negligence and inattention.

I strongly urge you correct the way you are ironing my collars, so that I do not have to suffer the indignity of going out with well washed shirts but with crushed collars. Many persons have already started giving me odd looks.

It appears that my previous letters to you have not received the seriousness and attention that they deserve.

If there is no improvement in the quality of your work, I might have to deduct from your monthly bill. And if the situation still does not improve, I might be constrained to have to discontinue your services permanently, with the mandatory legally applicable notice period, which please note.

Your's sincerely,

(signed)

(Dr) Vivek Borkar TIFR, Mumbai

SATISH : Are you telling me that you actually sent the Chinaman this letter ?

VIVEK: Yes. Shouldn't I have ?

SATISH : Man, you're crazy. Would he understand this letter ? Does he read English ?

VIVEK : Then what should I have done ?

SATISH : You should have just yelled at him.

VIVEK: But what do I yell ?

SATISH : Just yell : DEM COLLARS NO GOOD !

VIVEK : What are you saying ? Would he understand ?

SATISH: He will jolly well understand.

VIVEK: I really do not think so.

SATISH : Let's ask Mrs Borkar (who has just entered the room). Madam, how should you complain to the Chinese dhobi ?

MRS BORKAR : Complain ? You just yell at him.

VIVEK: Okay, but what does one yell ?

MRS BORKAR : DEM COLLARS NO GOOD !

VIVEK : Satish, do you think that you can do this for me.

SATISH : Certainly, if you say so.

It is on record that after Satish Kini's forceful intervention, the Chinese dhobi cum istriwallah soon mended his ways, and Vivek Borkar goes about with his collars in place and his head held high. If only Vivek Borkar had listened to the wise counsel of his wife earlier, instead of dictating officious letters to his secretary, he might have been saved a lot of chagrin and despondency, not to mention a large number of crushed collars.

Part Ii – The Matter Of The Purple Socks

The Borkars are an ideal couple. Mr and Mrs Borkar are pointed out at public functions as "that ideal couple". Outwardly they seem very much like one soul in two bodies. But underneath the surface, there are strong undercurrents. Underneath his simplicity and undemanding demeanour, Vivek possesses a streak of adamancy which sometimes drives Mrs Borkar, underneath her calm exterior, to frustration and desperation.

The other day, Vivek spotted a pair of purple socks at the supermarket. He immediately took a fancy to them. Not only did he buy them over the strong objections of Mrs Borkar, but he also insisted on wearing them to bed every evening, as they matched well with his pyjamas, he said. This did not go down well with the missus. It was like adding insult to injury. Vivek was impervious to her pleadings, her objections, her vociferous threats. He said nothing would induce him to part with his precious purple socks.

There was a noticeable impasse for a few days. Vivek tried his level best to persuade his madam that a small pair of purple socks should not come between them. That he would make amends in other ways, provided that she gave up her objections to his purple socks. But, as she remarked, if he can be adamant, so can she also. Two can play at the game. For a few days, the matter lingered at the uncomfortable "status quo" zone, with none of the partners recapitulating. While Vivek insisted on wearing his purple socks to bed, there was a frigid indifference from madam. She ignored whatever he told her as if she had not heard anything at all.

But as events unfolded, even the best of brains is no match for feminine wile. One fine day, Vivek observed that Mrs Borkar was much more cheerful than ever and had a song on her lips. Hoping that she had now forgotten and forgiven the matter of the purple socks, Vivek's heart was considerably lightened now that madam had forsaken her coolness towards him. He therefore proceeded to go to bed with a light heart and a song on his lips. But as he prepared for bed, he was anguished to find that the purple socks were missing. Repeated enquiries made to madam fell on deaf ears. Vivek was forced

to spend the night without his beloved purple socks. Vivek was greatly grieved. The fact that all these days he had missed out on his madam's affections due to the presence of the purple socks had not yet occurred to him.

After having spent a partly sleepless night on account of the missing purple socks, Vivek left for work next morning, and met his Chinese dhobi on the landing, who smiled broadly at him, flashing all his teeth.

CHINESE DHOBI: Good morning, sah. Thank you very much, sah.

VIVEK: Good morning, my man.

CHINESE DHOBI: You are very kind, sah, for giving me your purple socks.

VIVEK : What ? I gave you my purple socks ?

CHINESE DHOBI: Madam gave dem to me yesterday. Thank you sah. Very kind sah.

VIVEK: (with clenched teeth): you are welcome, my good man.

Vivek, with all his genius and skill to solve complex mathematical algorithms, is no match for the wile and craft of the opposite sex. He is today a sadder but wiser man.

* Vivek Borkar was the all India topper at JEE 1971 and is currently chair professor IITB.



Gautam Saha H3, Chemical Engineering '76

A Journey On The Road Less Travelled

Rajaram Desai H8, Chemical Engineering '76

I shall be telling this with a sigh Somewhere ages and ages hence: Two roads diverged in a wood, and I I took the one less travelled by, And that has made all the difference

-Robert Frost

During IIT days when my friends and colleagues were busy preparing for GRE with a goal of landing in the US for higher studies, my mind was rambling in the countryside yearning for an experience with the life of the common people. Soon after graduation, an opportunity knocked on my door when Dr. Uday Bhawalkar, our friend, hostel mate and a three year senior (who later became famous for his work on vermiculture) invited me to work in a starch factory in a small village in Dhulia district of Maharashtra. On the one hand, I was excited about it because we would get a challenging opportunity to develop a starch gluten separator as a substitute for the imported one, since the company had run into an import license issue at a crucial time during the commissioning of the factory. But I was more excited because I had heard a lot that some IITans and some middle class intellectuals had started working among the adivasis in that area. Some names like Kumar Shiralkar and Bharat Patankar had become a legend in some intellectual sections. During those times, I came in contact with many folks from different ideological shades

working at the grass root level and learnt a lot about their path breaking activities. It was a great coincidence that my friend and one of the IITians who had devoted a year of his life to work among adivasis, Achyut Godbole, was to become my boss when I had started working in IT. It was here that I also got an opportunity to participate in an election campaign against a landlord who had set up a private army that was used against adivasis in the year 1977, when the Janata wave was sweeping across the country. In a closely held contest, we were very happy that he was defeated.

After coming back to Mumbai, I started working in a trade union. At that time, persons like Dr. Vivek Monteiro, a CalTech graduate in Theoretical Physics who had left TIFR to become a full time trade union activist, were heroes among the progressive sections of youth. I started working with a small group consisting mainly of IITans and we were able to win a path breaking legal battle for unorganized workers under the direction of my long time friend and group mate, Colin Gonsalves, an IITan turned a brilliant lawyer, with the help of a team of dedicated activists that we had built together over the years. I still remember the dramatic turn of events when we were busy preparing for our case while my ten month old son was hospitalized for a severe gastro enteric infection and my

return to the hospital only after obtaining a stay order from the Industrial court the next day. A book written by me on workers' education was published at the hands of Justice Chandrashekhar Dharmadhikari, an independence movement activist, Gandhian scholar and author, a lawyer and former high court judge. He was kind enough to write the preface to this book. As part of the educational work on some social issues like Water Conservation in rural areas, I had actively participated in a documentary film made by TISS on the pioneering work of the Magsaysay award winner, Vilasrao Salunkhe.

The next few years, we worked with nomadic and denotified tribes under the leadership of Prof Motiraj Rathod from Aurangabad. The denotified tribes were those tribes that were branded as criminal tribes by birth under the Criminal Tribes act enacted during the British regime, and they were subjected to inhuman treatment. Although the act was repealed in 1952, the stigma attached to these tribes continued and they were subjected to harassment and persecution at the hands of police and the state machinery. One of the major milestones was a huge colorful morcha of tribals organized in Mumbai. A manifesto of demands was presented to the Governor of Maharashtra and a writ petition was filed in the Mumbai High Court. Here again Colin's brilliant presentation of the case won substantial relief from the Mumbai High Court. It was valued so much by the members of the tribes that many of them carried a framed copy of the judgment with them and showed it to the police if any attempts were made to arrest them merely on suspicion. Simultaneously, at our request, TISS made documentary film called 'Tanda' (caravan) with active participation by many of us to make the larger society aware of the problems faced by these tribes.

The continuation of these efforts later culmi-

nated in two major initiatives in later years.

One was a trust for the development of nomadic and denotified tribes, and learning and experience with the life of these tribals. Our grand vision was to develop a mini university for these tribes. Apart from opening opportunities for academic development, the vision was to provide a place to preserve their rich cultural tradition, and to develop traditional talents and skills, by providing technological upgrades. The latter named Lokjeevan Vikas Prathishthan was focused more on identifying and nurturing of talents by creative intervention in the education system, by providing technological inputs to make education more relevant to real life with a special emphasis on IT enablement of the student population from remote areas, and belonging to down trodden sections of society.

Here again ongoing support, contributions and active participation from many friends yielded valuable learning. Among them were Rajendra Gokhale, an IITan and a software professional, Prof Vandana Bhagwat, an educationist and founder member of Aksharnadan, an experimental school in Pune recognized at the national level for creating an alternate model of primary and secondary school education that fosters creativity, all round growth and overall personality development of children, and Ashok Saswadkar, a grass root level activist working among adivasis for more than 30 years.

The long journey along this less travelled road had taken me and my family far away from the ground realities. There was a rude awakening to the fact that even after twenty years of graduation from a premier institute in the country I still could not own my house in the city of Mumbai. The practical problems faced by the family had been neglected and hence I had to take a new avatar of an IT consultant that landed me in the US. After

working in IT and spending a few years both in India and the US, I have now reached the cross roads again. This time I am yet to make up my mind to work for a cause as against working for a living.

At this juncture I recollect another poem by Robert Frost that had left a great influence on Jawahar Lal Nehru. It is said that India's first PM carried a paper on his desk with the following lines of this poem :

The woods are lovely, dark, and deep, But I have promises to keep, And miles to go, before I sleep, And miles to go before I sleep.

At this time my vision enfolds all those unfulfilled dreams yet to be fulfilled, and I see myself day dreaming all the time. Only time will tell what the future holds for me.

Ed's note : Pretty impressive. One needs guts and a deep and abiding sense of values to get off the trodden path.

One Way To Get High

Anil Padhye H3, Mechanical Engineering '76

The title of this article, written in the alumni section of a University magazine, is likely to get the attention of some of the neurons of our classmates – those which are still intact 35 years later. In preview, I believe there is only one way of getting high, and that is "on life".

Just ponder on how the odds have favored us being here to celebrate the Jade Reunion. It is almost miraculous. Our being here means that every single one of our forebears on the female and male side had found a mate, attractive enough, healthy enough and old enough, to reproduce. ("Forebears" is politically correct, instead of "forefathers" !). This streak of good fortune of our forebears has continued for the past 2+ billion years, in spite of the untold number of diseases, droughts, floods, earthquakes, volcanoes and the hundreds of wars fought, as the evolution of life as we know it, continued.

In the continuum of history, it behooves us to ponder and appreciate how fortunate we are to be alive at this point in history. Maslow's hierarchy postulated that physiological needs of food, water, clothing, shelter and sex are fundamental needs. All of these (yes all !) are available in large varieties, quantities and affordability, from Mumbai to Montreal and Calcutta (Kolkata) to Chile for a wide swath of the world population – wider than at any point in history. In our productive lifetimes (say age 18 onwards), social mobility and economic mobility rose considerably, and both are still rising all over the world. Witness the rising numbers of Indian, Chinese, Latin American and Asian millionaires and billionaires in the reported rankings. The BSE Sensex closed 1990 at 1,027 and twenty years later in 2010 closed at 20,509, which is a compound growth of 15.9% per annum, without dividends - growth rates that none of us would have bet on at our 1976 convocation. Social mobility is also growing everywhere, even in economically developed countries – the election of a black American President is no singularity, but part of an evolution, even in America, where blacks were not allowed to vote in some states as late as 1964.

Such economic and social mobility has led to a reasonably stable world during our working careers, allowing our graduating class to act upon career and non-career opportunities that came our way. Large scale externalities beyond our control were generally absent (or in low amounts) during the sweet spot of our careers (say ages 25-50) and so allowed us to develop careers, interests and hobbies that added to our general well being.

We also enjoyed a wind at our back in the fact that we IIT classmates have won the" lottery of the womb" - we were born into good families, with encouraging parents. We were endowed with a good mind, good health and living in a good country which was democratic and nurtured intellectual, cultural and artistic development. And our country, society and family allowed us to do whatever we wanted to do. The circumstances and opportunities given to us were ours to use (or lose). Even small changes to any of the societal and family factors would have resulted in big changes in outcomes. We did not suffer the angst expressed by an Egyptian woman when commenting on the 30 year rule of Hosni Mubarak, who said "I am 60 but have lived for only 30 years". How sad !

Having worked a large number of years in the healthcare industry, I believe that one cannot discount the advances in health care in our lifetimes that have contributed to the role of longevity as a contributor to our well being. While some of our classmates have departed prematurely due to accidents and / or health issues, the vast majority of us enjoy generally good to excellent health - some scaling 18,000 feet mountains as late as last month. The 400 trillion cells in our body have generally worked well for most of us for the past 56 to 60 years (about half a million hours), and counting. The scientific discoveries of just the past decade are truly astounding, especially with the sequencing of the human genome. The DNA sequence of any two individuals is 99.6 % identical, yes 99.6 %, regardless of which parts of the world they came from. So your DNA sequence is 99.6 % similar to the billionaires of Bombay (Mumbai) and Bollywood stars, and your driver and jhaadoowala. So much for Royal blood. There is true meaning to the phrase "we have more that unites us than divides us". What will be the impact on societal thinking, when more is known and widely accepted about the human genome? It can only lead to a rethinking of the artificial manmade constructs of castes and race (and

socioeconomic divides ?).

In summary, cheers to the wonderful hand dealt to all of us classmates, to a great future and to the best days ahead of us.



Anil Padhye H3, Mechanical Engineering '76

Sour Education For The Crème Of The Nation

Harshwardhan Gupta H5, Mech '76

This article originated from a growing sense of dissatisfaction with my education at IIT. When I look at it after a year and a half from the big-bad-world-outside, I feel that there is indeed something cockeyed about both the method and the content of our system (I am not talking about evaluation).

Let's examine our education system on the industrial philosophy of efficiency and result-orientedness. What is put in - Combinatorial Theory, Radiant Energy Conversion, Commonwealth Fiction, Finite Element Methods, Symmetries In Physics... etc., etc., etc. ad-nauseam. And what is retained? A handful of principles of engineering, science and humanities! And even then, there is a gaping feeling that one didn't learn what was really needed - human relations, motivating people, administration, industrial law, planning, designing, costing, problem formulation, troubleshooting; and above all, work ethics, original thinking, and a feel of the profession. All these "remaining" things are "taught" by the big-bad-world-outside within a year. So now, who is the more efficient teacher of the two?

And if the industry itself is really a better teacher then what are we proud of? Just think! Which enterprise doesn't try to minimize the wastage of time, effort and material and maximize the returns, quality and quantity wise? None of course, except ours! Let's have a peep into this mysterious little factory where, as in Alice's Wonderland, everybody has to run very fast in order to stand where he is!

Islands And Lagoons

Let's go through a class in drawing. Here is a place functioning exactly like an ITI class for draftsmen, but it is supposed to turn out technologists! Does it make sense for a 16-year-old kid to pretend for four semesters that he is aiming for a career in draftsmanship proper, and also for a career in maths proper, physics proper and chemistry proper at the same time? Does it make sense really? Perhaps it does. But isn't the real problem to foster understanding of drawing as a means of communication for the technologist, so that he can interpret, modify and create designs and ideas? And if that was the real problem, is stressing so much on geometry, line work and machining symbols the only way? Shouldn't related things like circuit drafting, piping drafting, graphics, legibility, sense of proportion, geodesy and navigation be mentioned at least? We are taught drawing for the sake of drawing, maths for the sake of maths, but never anything for the sake of technology or of social good. So finally, we become a six-digit number who is 3.80% draftsman, 9.44% mathematician, 9.01% physicist, 11.6% human (!?) 0.21% lathe-operator (milling machine not allowed) and q.s. similar hotchpotch. We are certainly not technologists who think on their own without "reference books" and connect problems in one field to solutions in another. Ask any alumnus. This insulated approach (of the staff in general) is the first problem. I will suggest the solution later on.

The House Of Plenty

Lets now examine the result rather than the process – what is retained, what should be retained, what is lost and what is not taught at all and has to be learnt in the big-badworld-outside? How much wood would a woodchuck chuck... It's quite a riddle, isn't it? How many of our educators have even once pondered over this?

At IIT, most of what is learnt is invariably forgotten in no time. This is so because of three reasons: first- the relevance (to our society and profession), use, and relative value of the information is not known: second- the sheer volume of the this dead information is too much to retain for the already harassed brain; and third- an emotional attachment to the profession is never developed and therefore the "education" never really penetrates below the surface to become ingrained as "engineering sense". There may be countless arguments about re-learning being easier than learning afresh but we are talking of education, not training as in a military school. Training consists of learning information and skills, which can be forgotten and relearnt. Education is about understanding relationships and developing a responsible attitude towards one's profession and society. These things can't be forgotten provided they are developed in the first place! Where does our system inject all this into our blood? This pumping-in of outdated and useless information at a high rate and the absence of ways of integrating and using it is the second problem. Concepts like interchangeability,

obsolescence, doing more and more with less and less, cost of error, value engineering, preventive maintenance, automation and mechanization to relieve human misery, and social responsibilities of technologists - which form the basis of our industrial era are virtually unknown to us. After dispatch from the 'House of Plenty', we arrive at the personnel office on the first day like a big computer whose arith/logic unit has never been designed at all. All that arrives is a vast memory bank and an awe-inspiring filing/ retrieval system, whose percentage efficiency is said to be 10 times the CPI.

Teaching more is a case of law of diminishing returns - our educators will do well to remember this every morning and at bedtime. And unfortunately (or fortunately ?), the courses, which have the most glorious, intellectual, fashionable, glamorous and challenging image amongst the staff and students, are generally the ones that are most quickly forgotten once they are over. Please ponder over this!

Solving Problems: The Ladder To Heaven ?

Riddle: What's the difference between 'solving problems' and 'problem solving'? Answer: Before B.Tech. and after B.Tech. life!

The real job of the technologist is not to solve problems but to formulate solvable problems out of a mess. In the industry (or anywhere in life for that matter) no problem is ever offered to you at 8.30 am on cyclostyled sheets to be quickly solved before 9.30 sharp without help. Alas! Problem formulation is never taught to us. One resuscitation to the dying intellect is given in the form of the B.Tech. project, but then it is too late! The lack of experience in original thinking lands every project in dusty cupboards and every homepaperwala into repeated fits of exasperation, numbness and loss of direction throughout the fifth year. And sterile problems will never produce fertile brains!

In our profession, one's performance is judged not by the correctness but by the effectiveness of his solutions. Also pristine logic, which is so glorified in IIT, doesn't always work in real life because logic depends on assumptions, which are always incomplete and inaccurate in real life. Except in undergrad maths and mathematical sciences, there is no unique solution to any problems. Only project work (not assignments) gives a scope for formulating open ended realistic problems, generating alternate solutions and evaluating them, as versus classroom teaching which traditionally insists on unique solutions to non existent idealized problems. This outmoded concept of self-study-andevaluation cycle is the third problem bogging us.

Students tend to disagree only with the when and how much of the evaluation, and not with the how and what of it, let alone the contents of courses. So all the staff - student debates on evaluation methods become management - trade union meetings where both parties haggle over small inconsequential issues and invariably forget the whole perspective.

Ammonia Print For Escape Route

How does one change all this then ? I outlined three major but interrelated problems. The solutions are as follows: A word of caution here: all these solutions are closely interlinked and should not be considered in isolation.

First problem is the insulated approach of the staff and planners towards the course. This insulation can be broken by a) sending staff members from all departments for practical training in the industry for a month every two years, b) asking staff members to take

courses in motivation, teaching methods, students psychology, use and preparation of teaching aids, etc. Specialists cannot produce generalists. They will only produce part-time specialists at best. And a technologist is a generalist, please! And c) while teaching a subject, about half the time should be spent on explaining the uses, relevance and overlap with other fields rather than exulting in its beauties and intricacies. The most mathematically grandiose techniques are very often not the most useful ones, even in future ! Such exultation is indulged even in down-toearth subjects like industrial engineering and statistics! And this is exactly what turns off most of the students. We have come IIT to become bachelors of technology, not bachelors of beauty and grandeur of engineering sciences. It is very necessary to appreciate their beauty but one has got to use them too, for the good of society !

Pumping in of redundant information and there being no way to integrate it, is the second problem. This should be tackled as follows: The course contents should be reduced to a bare minimum. Excess information rots the useful part also. This is going to be tough, because every course content is close to the heart of the instructor, and asking him to cut it down to bare necessary principles can be very emotionally disturbing indeed ! But the maths teacher has got to realize that he is not producing mathematicians. The chemistry teacher has got to realize that he is not producing chemists, and so on for everybody. I think the only people who can provide a relevant and impartial answer, as to what to cut down, are the alumni. It will be very difficult to get an organized, detailed and unbiased feedback from them but one has got to make an honest attempt ! And lectures are not the only way to teach. Even in school, they take you out in the garden to teach botany ! But reducing course contents is not all. The

traditional layout - first teaching science, than engineering and then commonsense should be reversed, or at least these things should be taught simultaneously. Who remembers his chemistry now? And shouldn't psychology, sociology, basic industrial processes and materials, creative design, model making and ergonomics be taught in the first year ? Our way of teaching engineering has originated in industrialized nations where the fresh students already have enough technical general knowledge since they live in highly industrialized societies. Such is not the case here. We are not a technologically advanced nation. So first, the freshman must be initiated in the ways of the industry and technology and only then can anything sophisticated be taught to him and retained by him. Come to think of it, how many of us can repair our fans and bikes ?

Hence, the freshers should be sent for practical training right after the first semester, so that they come to know what they don't know, and will have to learn on their own. Also, works visits should be arranged for all five years. At least the freshers are more curious than their elders and just for that reason they will make the best out of it and enjoy it. Please let them experience the feel of machines, factories, design offices, construction sites and such like before you launch them in to the two-alphabet three-digit orbit, MA101 onwards.

The third problem I outlined is the outmoded self-study – evaluation cycle. I feel very strongly that project work should be given right from first year onwards. This has to be done as the next stage after minimization of course contents and evaluation of computing and filing / retrieval skills. If a student is emotionally uninvolved in a subject, he will study only those portions that are evaluated. So, in reality, the evaluation system decides what and how he studies, rather than the curriculum or method of teaching.

Also, this excess information I talked about, takes up a lot of time and energy to swallow and regurgitate, and just this esophageal process completely exhausts the students, and no time, energy or willingness is left for any real, involved self study and original thinking. So after minimizing the course contents, the "liberated" time and energy of the staff and students should be utilized in project-work related to real needs right from first day onwards, and these must always be individual projects. They can be: exercises in creativity, model-making, self-study-and-seminars, making audio-visual material for theory subjects, social surveys, market surveys, machinery maintenance and overhaul, working with staff members on real projects, etc., etc. And "guides" should properly motivate the students rather than stand guard over them and use them for their own purposes. And the whole of fifth year should be allotted to integrated project work - no courses at all.

All this is indeed very difficult and may even sound utopian, but such methods are followed in many European and American institutions that WE ARE SO EAGER TO COPY ANYWAY.

Ed's note : This article appeared in *Technik*, Jan '78 issue – and should be viewed in that context. In case readers feel the situation has not changed much since then, it speaks volumes for the writer's acumen and situational awareness



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The Great Indian Balancing Trick Healthcare For All By 2020 Satish Kini H3, Mechanical Engineering '76

I am often asked how I can be so critical about the current state of Healthcare in India and yet be so upbeat and committed to pursuing the Honorable Dr APJ Abdul Kalam's vision of "Healthcare for All by 2020".

I would like to transport you back to the summer of 1990. The Indian economy, which today boasts of Foreign Exchange (FE) reserves of over USD 320 billion, was on the brink of bankruptcy. Our FE reserve was scraping the bottom at USD 0.6 billion which was enough to cover just 3 weeks of essential imports. The govt of the day was forced to airlift 67 tons of Indian gold reserves to IMF to raise an emergency loan of USD 2.2 Billion. India had lost all credibility on the international stage.

At the peak of this national mood of shame and despondency, in an article in a business daily, I had severely criticized our inability to look beyond traditional exports to generate FE revenues. Instead I suggested that India had a great opportunity in sunrise industries such as software exports and tourism. They had the potential to generate not only FE but also gainful employment for our educated. But this can happen only if we dare to break away from old mindsets and innovate. You must remember that in 1990, the software exports business was in its infancy with less than ₹ 25-30 crores in revenue. Nobody had even heard of Infosys except the friends and families of the promoters. My prediction of a flourishing software exports business crossing 10,000 crores by the year 2000 employing over 200,000 engineers did not go down well with the cynics. The letters to the editor accused me of fantasizing and indulging in grandiose visions.

But my faith in India and Indians was more than justified. Narayanamurthy & Nandan Nilekani (Infosys), Azim Premji (Wipro), F C Kohli & Ramadorai (TCS), and many others lead from the front, with customer centric business strategies and ethical practices, and a focus on innovations in business & delivery models involving people empowerment, quality processes, and use of technology. The single biggest innovation of the IT industry was the use of Information & Communication Technologies and dramatically reengineered processes to enable remote outsourcing, thus making it possible for lakhs of skilled Indians to work on overseas projects without having to travel abroad.

March 2000 saw Indian software exports crossing 12,000 crores (US\$ 3 billion) with US & European customers asking for more. Just 10 years later, by March 2010, the IT / BPO revenues crossed a staggering ₹ 3,00,000 crores (US\$ 70billion) employing 2.2 million skilled manpower. By 2020, it is estimated to cross US\$ 250 billion employing 7.5million people, accounting for 25% of the country's exports and contributing to 6.5 % of GDP of a resurgent India.

To zoom from 0 to USD 250 billion in just 30 years, is the stuff economists and planners can only dream off. You may ask ... what has the success of IT / BPO sector got to do with Healthcare ? There is nothing common between the two. Which is absolutely true.

I have deliberately taken this analogy as it has many lessons for professionals in Healthcare who are concerned about the abysmal state of healthcare in India, and are committed to do something about it rather than just moan about the system and its vested interests, and go back to business as usual.

Despite the current hype about a booming Healthcare sector in India, I personally believe that, as an industry, it is in no better state than the Indian economy was way back in 1990. I also believe that the medical fraternity and policy makers in India are in a time warp and need to urgently shake out of their apathy. As India had to in 1990, the healthcare industry needs to make a clean break from the past and embark on a path of innovation, if it has to meet the goal of universal healthcare by 2020.

Let us first examine the Indian Health indicators as they exist today.

While statistically India has progressed well

Health Indicator	India 1950	India 2006	USA 2006	Сніла 2006
Life Expectancy at birth	37yrs	63yrs	75yrs	71yrs
Infant mortality per 1000 live births	146	56	7	20
Mortality rate per 1 lac live births	750	540	14	56

Table 1

on basic health indicators during the last 60 years since Independence (see Table 1), it lags very much behind other developed and emerging BRIC economies .

In the World Health Organization's rankings of National Healthcare Delivery Systems , India finds itself a very lowly 112 along with sub Saharan countries and even behind Bangladesh which is at position 88 !

35 % of our population has no access to essential drugs while 45 % of our children under 5 years of age are malnourished. 3 % of the population slide under the below poverty line every year due to the crushing burden of healthcare costs. There are many more indictors which paint a very grim picture of healthcare in India.

Now let us look at the how we are faring on the resources front. The tables below provide a snapshot of healthcare resources in India and how it compares with other countries.

Parameters per 1000 population	USA	Global	Europe	India
Physicians	1.94	3.2	1.23	0.5
Nurses	4.88	7.43	2.56	0.7
Hospital beds	2.5	6.4	4.0	0.8

Table 2

While the resources in Table 2 seem to be quite large in absolute terms, when seen in the light of international norms (see Table 3) for acceptable level of healthcare services , it throws up huge demand-supply gaps. It is further skewed by the India- Bharat imbalance .

What is more shocking to learn is that almost 70-75% of the above resources are concentrated in Urban India where 360 million (30%) of the 1.20 billion population reside. Leaving only 25-30% of these inadequate resources for 840 million population resid-

ing in rural and remote India (also known as Bharat). 98% of all medical specialists in India are available only in metros and state capitals.

To meet these yawning gaps, we are told by the healthcare pundits that we will require an additional 1.5 million doctors, 2.5 million nurses and 1.2 million hospital beds to meet demands. All this translates into an investment of USD 80 billion !

The figure of USD 80 billion explains why Healthcare Funds are going ballistic about Indian prospects.

The per capita healthcare spend in India at USD 35 is probably the lowest in the world. In 2010, the total healthcare spend was reported to be USD 42 billion which is a shade over 4 % of the GDP. Of this, only 20 % (0.8% of GDP) is spent by govt / public sector, while 80 % is spent in the unregulated private sector. By 2020, it is estimated that the healthcare spend will zoom to USD 280 billion representing 7.5% of GDP even as the population swells to 1.30 billion. And Govt expects to triple its outlay for healthcare from 0.8% of GDP to approx 2.5%.

This exponential growth in just 10 years and the belief that healthcare is a recession proof sector does present very exciting opportunities for investors. What I am NOT questioning is the Return on Investment (ROI) potential of investment in healthcare. But what I am seriously questioning is the viability of conventional approach and persistence with traditional delivery and business models to meet the objectives of providing healthcare to all by 2020.

The urban population of India is estimated to grow from the current 360 million (30% of 1.15 billion) to 520 million (40% of 1.30 billion) by 2020. The purchasing power of an urban Indian is 8-10 times of that of a rural Indian. So it is a no brainer that Urban India will attract most of this USD 280 billion investment, and hog the available healthcare resources of the country to convert this potential business into profits. But that will still leave 760 millions in rural India (ie. Bharat) out in the cold; totally dependent on Healthcare services from govt sector and NGOs, and at the mercy of unregulated private sector and unscrupulous quacks.

Ironically, we also have the extreme example of the US which spends USD 2.5 trillion for just 310 million Americans, accounting for 17% of the US GDP. This works out to a staggering USD 8047 per person. Despite huge healthcare spends, a majority of Americans believe that their healthcare sucks. This only proves that just spending huge amounts of money on healthcare without changing old, outdated, inefficient and wasteful methods cannot solve the problem.

The healthcare sector in India in 2010 is faced with a very similar situation as our country's FE position was in 1990. Let us assume that we can attract investment of USD 80 billion to build capacity of additional 1.2 million hospital beds as projected. Can we produce 1.5 million doctors and the 2.5 million nurses as projected? Because this would require setting up 600 additional medical colleges and 1500 nursing schools... an impossible task.

If we continue to accept the western norms of productivity and existing processes for delivering healthcare, we will end up in a vicious cost spiral like the US and/or continue to justify our criminal neglect of the millions in poor Bharat. In every symposium on healthcare, we hear at least one speaker who talks of a looming crisis and total breakdown. In my opinion, Bharat has been in a state of crisis for so long, we will have to redefine crisis. When India speaks of looming crisis, what we are really worried about is the crisis spilling over into our own back yard.

It is therefore high time for national and state level policy makers, medical fraternity and educationists and technologists to come together and chart a dramatically different path for Indian healthcare on a war footing. A path which incorporates cross functional collaboration and innovation. A path which embraces the latest advances in medical sciences and at the same time retains all that is valuable in traditional Indian healthcare systems. A path which envisages innovative processes and medical devices and ICT technologies which takes healthcare to the people rather than people struggling to find healthcare when needed. And finally, a path where healthcare goes beyond doctors and nurses and hospital beds as key resources and conceives and creates a new breed of mobile paramedics with digital medical devices who will interface with the medical fraternity through telemedicine processes on one hand and healthcare consumers on the other.

The cartoon by my fellow IITian Ali Baqri alongside gives a simplistic depiction of how this great Indian Balancing Trick of "Healthcare for All by 2020" can be achieved by a combination of adding new resources and shifting the fulcrum. The details of this great Indian Balancing Trick is a separate topic by itself, which I hope to release as a book in 2012.

Ed's note : Satish Kini is one of the foremost and most prominent guys in the IT management sector from the 'based in India group'. He is COO of the nation building projects of the PAN IIT alumni, India chapter; he is also founder and former chief mentor of '21st Century Health Management Solutions'. Also note that the author refers to rural India by the term 'Bharat'.



Satish Kini H3, Mechanical Engineering '76

The Sublimation Of Work

Gautam Saha H3, Chemical Engineering '76

The need to sublimate individual work for ultimate personal satisfaction and happiness

Many a times, we wonder "what bit of good have I done today ?" After all, everything said and done, life is pretty mechanical and also largely material. We follow the same working routines day after day, year in and year out, in whatever profession or calling we have chosen for ourselves, or had been pushed into or drifted into by the compulsions of need, convenience, location, education, ambition, or just innate personal proclivities. At times, to break the monotony, we go to a movie, or to the club or wherever we hope to find some pleasureable moments. Some of us have developed hobbies or inclinations which find expression in creative endeavours. But after the break or the holiday, we are back to the grind, in a manner of speaking.

Does this kind of "mechanical life" satisfy us emotionally ? Do we feel fulfilled in entirety ? Does the attainment of personal material milestones really endows us with permanent happiness or just plain contentment ? Is man's intricate constitution and construction 'designed' in a manner that just the fulfillment of his rudimentary or more sophisticated material needs provides him with lifelong happiness ? Is life only the sum total of eating, sleeping, mating and defending ? If that is indeed so, then perhaps we might take satisfaction from the fact that man, being a social animal, is much more sophisticated than the other animals and smaller or lesser beings with whom we share this planet, and that we, as representative of man, have managed to wrest a greater portion of the resources of this planet for our own welfare, comforts, lifestyle and 'sophistication'. We might even be tempted to repeat what George Orwell said in 'Animal Farm' : "all animals are equal but some animals are more equal than others".

Some of us have been subconsciously or consciously involved in voluntary honorary service to our immediate communities, groups, clubs, NGOs, humans or other creatures in distress, whatever, in our quest to do what we perceive will give us greater personal and emotional satisfaction than what we might get if we just focused only on meeting our own personal milestones for material needs, by pursuing our own professional or business goals, for profit. This is sublimation, in which a person attains greater satisfaction in goals which go beyond himself and enjoins sympathetic consideration for others, charity, nobility of thought, and a broader vision which sees one's true happiness in the fulfillment of aspirations which go beyond one's personal 'interests'. And it is this sublimation which leads man towards his ultimate happiness and contentment in this material life.

Let us see what the Srimad Bhagavad – Gita (18.37 to 39) says about happiness :

"That which in the beginning may be just like poison but at the end is just like nectar and which awakens one to self-realization is happiness in the mode of goodness (satt gunn). That happiness which is derived from contact of the senses with their objects and which appears like nectar at first, but poison at the end, is of the nature of passion (rajah gunn).

And that happiness which is blind to self-realization, which is delusion from beginning to end and which arises from sleep, laziness and illusion is said to be of the nature of ignorance (tamah gunn)."

Happiness in tamah gunn or rajah gunn is fleeting and unsustainable, as it leads, by definition, to misery.

The importance of ideals beyond one's own self interest

In his story "How much land does a man need ?", the great Russian thinker and writer Leo Tolstoy has shown very poignantly that at the end of this life, a man needs a patch of land just 6 feet by 2 feet, where he can be put to rest. Even though such a statement could be considered by some as gauche or insensitive, it is very telling of our own realities and a reminder of the 'final destination' in this life, as well as an opportunity to question ourselves about our own dearly held assumptions and plans for the future.

The Srimad Bhagavad - Gita (18.05) states :

"Acts of sacrifice, charity and penance are not to be given up but should be performed. Indeed, sacrifice, charity and penance purify even the great souls".

The process of sublimation involves ceasing one's endeavours for personal gain and transforming the same endeavours to reach for a goal which entails a benefit to "others", those who are less fortunate, less accomplished or lesser endowed than us.

The Srimad Bhagavad – Gita further states (18.11 and 12):

"It is indeed impossible for an embodied being to give up all activities. Therefore it is said that he who renounces the fruits of action is one who has truly renounced.

For one who is not renounced, the threefold fruits of action - desirable, undesirable and mixed - accrue after death. But those who are in the renounced order of life have no such results to suffer or enjoy."

Materially speaking thus, it is in our own interest to sublimate our activities and renounce the fruits of our endeavour, which clearly points the way to charity or charitable work. Lord Krishna states in the Srimad Bhagavad – Gita (16.10 and 11) :

"The demoniac, taking shelter of insatiable lust, pride and false prestige, and being thus illusioned, are always sworn to unclean work, attracted by the impermanent. They believe that to gratify the senses unto the end of life is the prime necessity of human civilization. Thus there is no end to their anxiety."

While on the subject of sankhya yoga, (6.01 and 02), the Lord states :

"One who is unattached to the fruits of his work and who works as if he is obligated, is in the renounced order of life, and he is the true mystic - not he who lights no fire and performs no work. What is called renunciation is the same as yoga, or linking oneself with the Supreme, for no one can become a yogi unless he renounces the desire for sense gratification."

Those uninitiated into the spiritual knowledge of the Srimad Bhagavad - Gita might consider Arjuna as a very gifted and talented warrior (like Bruce Lee or Dara Singh or an Indiana Jones of ancient times), who 'killed' so many enemies on the battlefield. But in reality, Arjuna was fighting for a cause beyond his own personal needs or wants. In fact he came into the battlefield very reluctantly and initially refused to pick up his weapons. His eventual entry into the battle was an act of yoga, which went beyond consideration of his own feelings or likings. To say that he was a warrior merely 'fighting' in the battlefield would be superfluous. He was a true yogi who was convinced by what Lord Krishna had stated in (18.7 to

9):

"Prescribed duties should never be renounced. If, by illusion, one gives up his prescribed duties, such renunciation is said to be in the mode of ignorance (tamah gunn). Anyone who gives up prescribed duties as troublesome, or out of fear, is said to be in the mode of passion (rajah gunn). Such action never leads to the elevation of renunciation.

But he who performs his prescribed duty only because it ought to be done, and renounces all attachment to the fruit - his renunciation is of the nature of goodness (satt gunn), O Arjuna."

Arjuna automatically becomes a role model for those amongst us who have certain cherished ideals, and have mountains of difficulties to overcome (including the limitations of our own thinking) before attaining significant breakthroughs or success.

What is the impact an individual can engender in his chosen area of work ?

One may ask, out of the multitude of individuals who do voluntary charitable work for a cause beyond the fulfillment of their own personal needs, what contribution can one individual make, that will make a significant difference to society, one's country, etc. ? To use a cliché, it is the little drops of water which create a large body of water such as the ocean. Little by little, individual endeavour, when pursued with sincerity and commitment, creates giant systems and eventually transforms whole communities or countries (which provides the satisfaction and happiness for which an individual volunteers his time, efforts, money, etc;). When Professor Muhammad Yunus, of Chittagong University, initiated his research project for delivery of micro credit to the most backward sections of Bangladeshi society in 1976, namely widows and poor single women with children in tow, little did

he realize then that the Grameen Bank, which he had founded, would become the role model and initiator of similar models in other developing countries such as India, and would transform Bangladesh's rural landscape in such a way that would earn him a Nobel Prize in later years. His subsequent removal from the chairmanship of the bank was a sordid affair, which reminds us that while we should provide support and leadership, and should work hard to create and sustain organizations, when those organizations attain maturity, we should hand over and move on in renunciation, and not try to hold on, which in any case would not be an act of charity, and which would be the cause of our own subsequent unhappiness or anguish.

The whole idea is to practise charity for a worthy or noble cause and not for one's self aggrandizement. According to the Srimad Bhagavad – Gita (17.20 to 22):

"That gift which is given out of duty, at the proper time and place, to a worthy person, and without expectation of return, is considered to be charity in the mode of goodness (satt gunn). But charity performed with the expectation of some return, or with a desire for fruitive results, or in a grudging mood, is said to be charity in the mode of passion (rajah gunn). And charity performed at an improper place and time and given to unworthy persons without respect and with contempt, is charity in the mode of ignorance (tamah gunn)."

Hence the Srimad Bhagavad – Gita, the crown jewel of India's spiritual wisdom, and spoken by Lord Krishna Himself, openly advocates and fully endorses charity in its noblest form (in satt gunn).



Gautam Saha H3, Chemical Engineering '76

A Salute To The Batch Of 1976!

Gautam Saha H3, Chemical Engineering'76

Here's a toast to the batch of seventy six

Of elites, intellectuals and eggheads, a ready mix Spread out in all nooks and crannies of the world The ever smiling lot, time weathered and gnarled

All young lads of fiftyeight to sixty some Grandfathers some, and nannies some Directors some and Chairmen some Tired some, retired some, and still working some

There's not much time to stand and stare No time to loiter but the lawns to pare Given errands around the house, must comply If not, kiss your dinner goodbye

A little longer to get out of bed A little longer to clear your head A little longer to read thru the paper A little longer to change grandson's diaper

A little longer to recognize voices A little longer to exercise choices A little longer to park the car A little longer to walk that far

A little longer to make that call A little longer to get up from a fall A little longer to recall faces A little longer to reach distant places

Addicted to the missus as a simple matter of expedience Any other course will be just plain inconvenience Lassitude has put in place boundaries and fences To pursue the path of least resistances Your friends of old were there around you On a plate did destiny give them to you When you mingle with the chums of your batch Forget all, raise your glass, and down the hatch

Each chum was someone very real and very special A dearth of time did not enable you to see him in real Life forced you to run and partake of the material race You now need to exercise the grey cells just to remember that face

Just like ships passing in the night A hoot, a salute, and you disappear into the night Each ship a separate course Each life a dynamic, living force

Each life a saga of hopes, dreams, fulfillment or sorrow Passing on our genes to the torchbearers of tomorrow Tomorrow's citizens will inherit all our experiences and lessons All our virtues, values, aspirations and fashions

As the gentle pink rays of dawn bring their promise of a new day The promise of tomorrow is to see the same things in a better way To bring a smile and cheer to a forlorn face A small kindness to a child who is lost in the race

To bring forth wonder back into our lives And see the Lord's infinite goodness in our lives To thank him for all his mercies and kindnesses And ask him to bless others with hugs and kisses

As the dying sun's golden ray Announces the end to another day As autumnal leaves rustle underfoot Here's to the batch of '76 a great big salute !



Gautam Saha H3, Chemical Engineering '76

Do It Now, Instead

Sushil Rathi

When I m Dead, Ur Tears May Flow, But I Wont Know, Cry 4 Me Now, Instead..

When I m Dead, U ll Send Flowers, But I Wont See, Send them Now, Instead..

When I m Dead, U ll Say Words Of Praise,

But I Wont Hear, Praise Me Now, Instead..

When I m Dead, U ll 4get My Faults, But I Wont Know,

4get them Now, INSTEAD !!

Just Call Me

Sushil Rathi

If some day you are sad or want to cry Just call me, don't ask why I might not bring a smile to you But I can cry with you !

If some day you want to run away Just call me, we'll find a way I don't promise to stop for you But I might run away with you !

If some day you don't want to listen to anyone Just call me, it might not sound much fun I promise to be there in your sight And I promise to be very very quiet !

And, if some day you call me And there is no answer from me Come fast to see me, will you ? Perhaps I am in need of you !



Sushil Rathi H5, Chemical Engineering '76

My India Of Tomorrow

Gautam Saha H3, Chemical Engineering '76

I dream of tomorrow Not with foreboding or sorrow But with hope for betterment and light Though prospects may not look so bright

We shall overcome India's woes With determination and an ardour bellicose With firmness and gentleness And toughness and tenacity no less

Tomorrow belongs to the optimist From pollution's foggy mist From the artesian wells of chemicals From the chimneys of particle dispersals

Nature will find a way as always The Lord's energies are mysterious His will prevails at every moment Though we might feel helpless and impotent

Civilizations do not arise from imperialistic propensities Or giant structures, bridges, palaces, malls or megacities Civilizations grow from cultural tradition and learning And man's quest for excellence and spiritual yearning

India is known for her spiritual and cultural soft power Having given to the world every kind and colour of human flower India's beautiful flowers have the world adorned Millions have gone hither and thither and all around India resides in the hope in our hearts In her bazaars and colourful handcarts India lives in her sages and great saints In her artists and poets and human giants

For the human capital which will stand the test And prove to the world who are the best As long as there is compassion and love and hope The billion plus will learn and live and cope

And teach the world a thing or two Without meeting any Waterloo Setting new frontiers in enterprise and spirituality Beyond the farthest limits of man's ability

Material opulence and mental peace Are the bedrock of the human populace India has both and will produce even more With enough to spare and hand out evermore !



Gautam Saha H3, Chemical Engineering '76

आलू भरी ह

अरुण कौल हॉस्टेल ४

आलू भरी हैं ये बी मेस की राहें कोई उनसे कह दे की बैंगन पकाएें

भीडी भुला दी मटर छोड थी है आलू ने इनकी कमर तोड दी है कहीं से ज़रासा टमाटर मंगाएं कोई उनसे कह दे की बैंगन पकाएं आलू भरी है ये मेस की राहें

गाजर मटर में भी आलू यहांपर कॅबेजमें आलू और पालकमें आलू आलू में गोभी कहाँ है बताएं कोई उनसे कह दे की बैंगन पकाएं आलू भरी है ये मेस की राहें



राजेंदुर गाडगीळ

नीले रंगसे , बॉल पॉइंट कलमसे, जर्नल तूने रोज़ लखिायें कैसें बताऊं, कीस कीस तरहसे पल पल मुझे तू सतायें तेरे ही क्लासरूममें सोया रहा मैं , तेरी ही लॅब से भागा तेरे सबमशिनमें उलझा रहा मैं, जैसे की माला में धागा

हां हां ... मॅथ्स और फीजक्सि , फ्लुइड मेकॅनक्सि, कैसा ये थर्ड इयर

करना होगा थर्ड इयर हमें कई कई बार

हां हां ... कॉगगि कयिा, पकडा गया तो क्या होगा हाल करना होगा थर्ड इयर हमें कई कई बार

मंडे या चुस्डे , वेन्सडे या थर्सडे, तू रोज़ हॉस्पकिो आये जतिना ही जाये तू दूर हमसे, उतने ही हम पास आये रजसि्ट्रारने रोका , प्रोफेसरने टोका , हॉस्पीने हसकर पुकारा मेड सर्ट तेरा , लेके लयि मै , तर आया सबसे कनिारा हां हां ... कतिने ये क्वझिस्, कतिने ये क्लास टेस्ट्स, टेन्शन्स हमें है हज़ार

लेना होगा मेड सर्ट हमें कई कई बार

पथ्थर का आटा, आलू बटाटा, तू क्यों हमें रोज़ खलिाये जतिना ही खाउँ , RK में जाउँ, जॉण्डसि हमें तू दलिाये सुबह बटाटा, शामको बटाटा, दनिमें चार बार बटाटा हा हां ... कैसा ये मेस बलि, कैसा ये खाना, इनका मेल कैसे ज़माना खाना होगा यहीं हमें कई कई बार Imagine Guru Dutt after working for few months in the Software Industry would make a movie "Software Ke Phool" and include the following song:

ये डॉक्यूमेंट, ये मीटींग्जस् , फीचर्स की दुनयाि

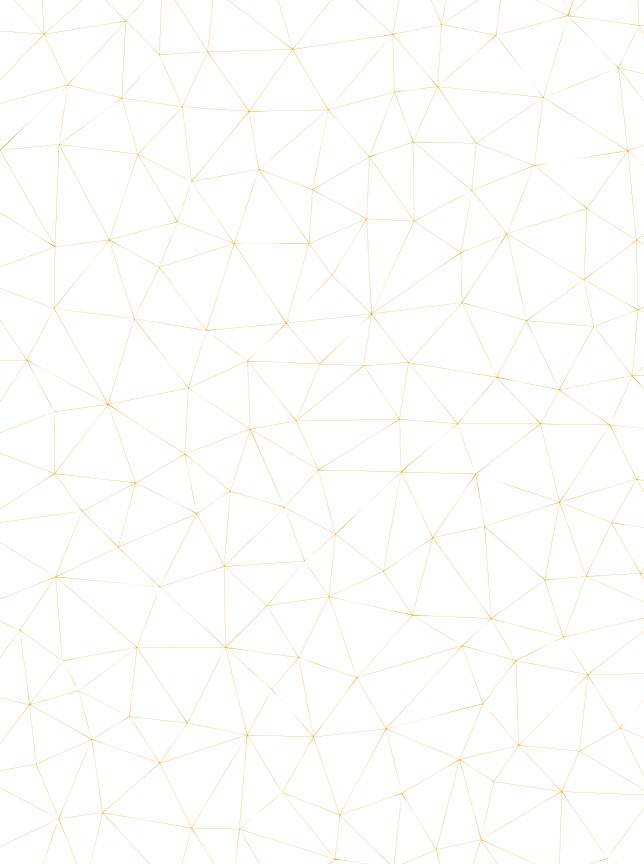
- ये इंसानके दुष्मन कर्सरकी दुनया
- ये डेंडलाइंस के भूके,मॅंनेजमेंट की दुनया
- ये प्रॉडक्ट अगर बन भी जाए तो क्या है

यहाँ एक खीलोना है प्रोग्रामर की हस्ती ये बस्ती है मुर्दा बग-फीक्सर की बस्ती यहाँपर तो रेझेस है , इन्फुलेशन से सस्ती ये रवि्हू अगर हो भी जाएं तो क्या है

हर एक कीबोर्ड घायल , हर एक लॉग-इन् एयासी एक्सेल में उलझन वनिवर्ड में उदासी ये ऑफीस है या आलम-ए मायक्रोसॉफ्ट की ये रलीज़ अगर हो भी जाये तो क्या है ?

जलो दो इसे, फूंक डालो ये मॉनीटर मेरे सामनेसे हटा डालो ये मोडेम तुम्हारा है ये तुम ही सम्हालो ये कॉम्पुटर

> Madhav Bokil '76





With best wishes



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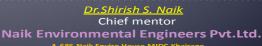
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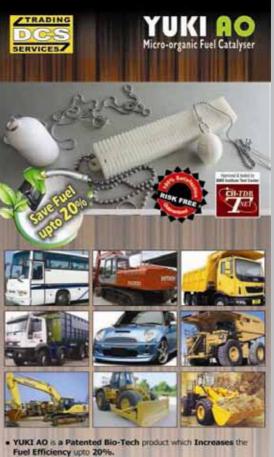
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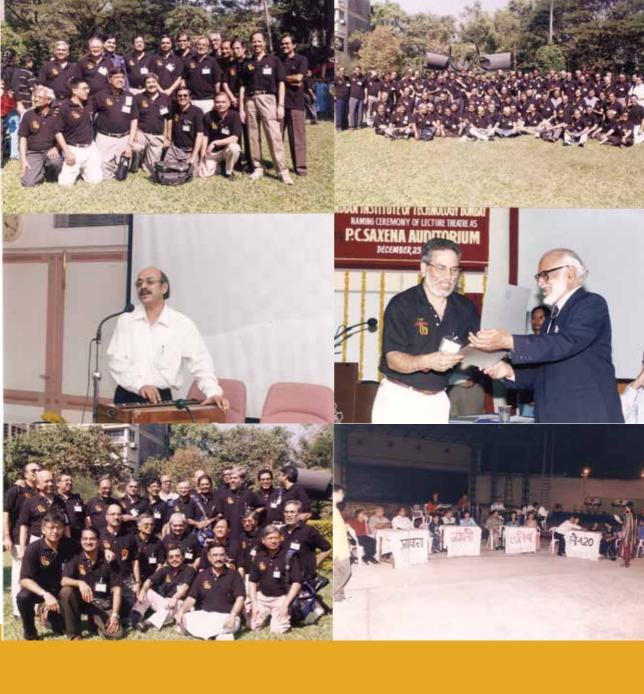
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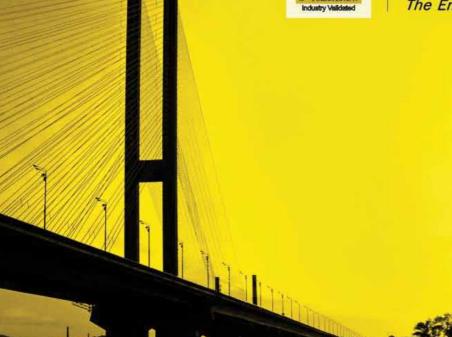
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Board of Directors? *Know them better*

In its 10th avatar as a Section 25 company, the IIT Bombay Alumni Association (IIT-BAA) has become a beehive of activities — organising multiple reunions, events, networking opportunities, running several high-impact initiatives, overseeing many more and above all, keeping the alumni engaged in various ways. To make this possible, a board (not bored) of directors is in place that liaises with an overworked office staff.

Looking at them makes you marvel these guys. Are they masochists who like to torture themselves with impossible deadlines? Do they have a fetish for baldness that they keep tearing their hair at board meetings? Hassled and harangued, pushed and pilloried, exhausted and exhumed, these guys carry on, nevertheless, for the love of their alma mater. Only sometimes, a post-meeting reward is a lunch dish of aloo-mutter.

You know some of them. You've heard of some of them. In this section, we give you a sneak preview of the guys who could volunteer themselves in any suicide squad. Know your board well, and you'll never be bored again.

Introduction by Mumblebee



Shridhar Shukla, DSA: C83, EE, H3, Pune, professorturned-tech-entrepreneur. IITBAA's Chair, who tables motions and agendas. Skipper who

runs a tight ship. Primarily responsible for IITBHF liaison and setting up the Advisory Council. Assists in creating master process documents, SARC, ASMP, Alumni Students Meet, campaigns, Give One. His preferred language of communication: Powerpoint presentations. Is partial to bullet points. Though not a civil engineer (but very proper and civil), he specialises in building bridges, including conference call bridges.



Milind Gokhale, DSA: C81, CE, H7, Mumbai, OSD (Officer on Special Duty) with Dean IPS at IITB. Longest serving veteran. Founder CEO of

IITBAA and past Chair. Primary responsibility: Faculty liaison, Facilities for AA, Soneri Bagh. Current OSD who has been with AA since its DOS days. 'Mild' contained in his first name and 'goal' contained in his last, Milind Yashwant Gokhale sometimes refers to himself as MY Gokhale, and many people claim the same: "He is my Gokhale."



Bakul Desai, DSA: C82, ChE, H4, Hyderabad, Entrepreneur. Resident fundraiser, trouble shooter, problem solver, extraordinaire. A man of

ideas and a seemingly inexhaustible source of energy and enthusiasm, Bakul 'Bakbak' Desai is a 24/7 machine with an elephantine memory and unmatched passion for IITB and its alumni. A leader from the trenches, he is the champion behind YFA, HATS and co-author of the book Madhouse - True stories of the inmates of H4, IITB. Involved in fundraising, PR, the web team and almost all aspects of AA's activities. Routinely writes long emails after 2 am, referring to cc's received years ago. Does not sleep.



Sanjay Jain, DSA: C87 & 88, CSE,

H3, Bangalore, IT professional. If you search for him at Google, you may not find him since he no longer

works there. He now has a unique identity at UIDAI. Dedicated Bangalore Chapter activist, who weaves a web for webteam India as his primary responsibility. Polite and softspoken, despite being from H3.



Sudhir Bapat: C81 & '83, EE, H4, Pune, IT entrepreneur. 52 year-old without a single white hair, thanks to his yoga institute. Crafty gymnast. Chased a queen on the carrom board while a student, but now chases deadlines and handles intricacies associated with the hugely successful Financial Aid Programme, i.e. FAP. FAP is a loan programme, and Sudhir is its lone captain on the BoD.



Deepak Patil, DSA: C77, '79 & '85, Aero, H4, Bangalorean-turned-Alibag-ean, IT professional. Bald and bold. Stud who wears ear-studs.

Involved with H4 HATS, H4 Madhouse book project. Primarily responsible for the Give One fund-raising campaign and the current co- chair of GO IITB 2011. Assists in chapter liaison, co-promotion, fund raising campaigns. His motto: If you do not Give One, I'll give you two.



Hemant Patel, DSA: C79, ChemE, H7, Delawarean-turned-Texan-turning-Barodian, DuPonter. Is woken up by his dog at 4 am and he then wakes up all HATS volunteers.

HSP is like high-speed petrol, primarily responsible for HATS, MHMH, STARS. Manages to launch initiatives with the best acronyms. Assists in identifying 10 new initiatives for IITBAA.



Sameer Desai : C92 & '95, ChemE, H6, Mumbai, multifaceted. BTech, MTech, MBA and now aspiring for PhD. Wants to

engage as a full-time volunteer. Baby on the

board, leading the task of identifying 10 new initiatives. Assists in office functions, event organisation and outreach events. Went by the nickname Sabad, but that's not so bad.



Vinay Karle, DSA : C96, Civil, H5, New York, Financial expert. Never bored with boards. Sits on the boards of IITBHF, IITBAA and is the presi-

dent of GNY chapter and on the GO-IITB fundraising team. Responsible for PAN-IIT liaison, chapter liaison and co-promotion, and assists with HF connection and digital media. Manages to keep the webteam active with the number of events he hosts in New York. In all a great host, and a great dost to many.



Akshay Mishra :

C02, EE, H1, Mumbai, IT entrepreneur. IT whizkid. Prone to using swearwords like 12dBi antenna and a Ubiquiti Wi-Fi Bullet. Language of

communication: PHP, LAMP, UNIX, Googleapps, et al. Webteamer who is modernising the office and e-enabling all operations. Volunteers for iRace and other events.



Rahul Chaubey:

C99, ChemE, H4, Bangaloreanturned-Hyderabadi, IT entrepreneur. Chaubey, but not chubby. Specialist in chapter liaison

and mentorship programmes. Opened a new chapter in his career while opening IITBAA chapters elsewhere. Staunch supporter of

Freshies Nite, VKC.



Aliasgar Contractor: C73 & '78, Chemistry, H9, Mumbai, Dean Alumni & Corporate Relations, IITB. Proactive Dean ACR who does not

believe in ACRimony, but in harmony. Takes decisions at the speed of light. Responsive and level-headed. Keeps the board laughing with his droll humour. Liaises between alumni and the institute. Involved with and aware of all aspects of alumni activity.



Urjit Yajnik : C80, Physics, H9, Mumbai, Dean Student Affairs, IITB. Recently rejoined the board in his new avatar as DOSA (non-edible variety).

Championed Powai Lake project for C80, and is keen about the Soneri Bagh project. Liaison between the board and students.

Mihir Patel: Still a student. Institute Alumni Secretary. Head of Student Alumni Relations Cell. Hunt him first when you have to hunt for student volunteers, callathons, HATS organising, MHMH, ASMP, SAM website redesigning, and any activity which needs student support.



Shirish Potnis:

C76, ChemE, H3, Mumbai, Financial Consultant, CEO of IITBAA. Responsible for board meetings, financial planning and

control, compliance and audits, Sports meets,



Outreach events, creating master process documents, Accounts, Benevolent Fund. Assists with automating office functions, PR amongst alumni and IIT. Carries the nickname Potty which he cannot shake off. Special talents include writing humourous stories, anecdotes and emails. Difficult task when you are saddled with the high-tension job of running IITBAA.



Damayanti Bhattacharya: COO of IITBAA. Livewire who gives pleasant shocks. Incurable workaholic. Handles office functions, PR amongst alumni

and IITB, all events, reunions & Alumni Day, projects like RFWF, web presence and mailers, magazines, souvenirs, reports, digital media as her main functions and assists with board meetings, HATS, MHMH, STARS, Benevolent Fund, Honour roll, volunteer force, PAN-IIT liaison, SARC, ASMP, Press. Chink in her armour: prone to typos and has a missing 'm' key in her laptop keyboard.

Glossary of Acronyms: HATS (Hostel Alumni Team Stewardship Programme), DSA (Distinguished Service Awardee), MHMH (Make Hostel My Home), STARS (Student Achievement in Research and Scholarship), SARC (Student Alumni Relations Cell), ASMP (Alumni Student Mentorship Programme), SAM (Student Alumni Meet), VKC (Village Knowledge Center), YFA (Young Faculty Awards), OSD (Officer on Special Duty), Dean ACR (Alumni and Corporate Relations), FAP (Financial Aid Programme).

Servicing the Alma Mater IITBAA Programs at a Glance

Young Faculty Awards (YFA): YFA was set up with a vision to attract top-notch young faculty to IIT Bombay and nurture their development in supporting IIT Bombay's "Tryst with Excellence" and continued global technological leadership. It provides a joining bonus for new faculty which has helped attract talented faculty to the Institute. From a Class of 82 legacy project within 3 years of its operation, YFA has now become a universal all-IIT project supported by C80, C82, C83, C84 and C85. As a special birthday gift for the third anniversary of YFA, the joining bonus has also been increased to ₹ 4 lakhs. No other IIT has a similar program in operation. In the words of Prof Devang Khakhar, Director IIT Bombay YFA "... is a definite bonus for all new faculty joining IIT Bombay and in the long run will be a key to maintaining the competitive edge of IIT Bombay". Current Fund inflow level is at ₹6.4 crores and there have been over 86 new hires that have resulted in a significant change in the faculty map of IIT Bombay.





Hostel Alumni Team Stewardship Program (HATS): HATS is an important alumnidriven initiative that attempts to reconnect alumni to their old hostels in order to contribute directly to its betterment and welfare in infrastructure and also to assist old mess workers and the general well-being of the hostel in manifold ways. The program was initiated in 2006 with hostel 7 followed by hostel 4 in 2009 and in FY 2010-11 was extended to encompass 10 hostels (H-1 to H-10) in the Institute. On Alumni Day this year, HATS was launched in all the hostels at hostel level gala reunion events between alumni, students and mess workers. 269 donors world-wide have donated ₹1.15 crores for HATS which have been deployed in improving hostel infrastructure by installing a state-of-the-art new gym (Hostel 4), installing new bookshelves, designed by

D Uday Kumar, (Hostel 7) and purchase of equipments like digital camera, musical instruments, Home Theatre and Projector (Hostel 2). The Mess Workers Incentive Fund has supported almost 200 mess workers who have either retired or spent more than 25 years in service.

Financial Aid Program: Financial Aid Program (FAP): Launched at the end of July 2007 as a legacy project of Class of 81, FAP has grown much beyond its original scope and size and is the preferred scholarship program for students on the campus today; enjoying a high degree of trust, support and visibility. The loan scholarship administered by IITBAA at the behest of the Alumni Scholarship Foundation is essentially a loan given by past students (alumni) of the Institute to its present students, who repay it back with a nominal interest (8%) for the benefit of the future students. FAP primarily provides support for tuition and mess fees and students start repaying their loans after they graduate from the institute. In the four years of its operation, the program has assisted over 500 needy students with a total disbursal of over ₹1.7 crores. Applications are received at the IITBAA office throughout the year.



Soneri Bagh Project: A C84 initiative which the Association is helping alumni administer;

Soneri Bagh is a unique eco conservation project protecting the ecology and habitat of the Soneri Bagh area along the Powai Lake. It is home to numerous rare flora and fauna in the WWF conservation list and a birdwatchers' and nature lovers' paradise.

Vilas Karnik Grant Scholarship Program: Vilas Karnik Needy Student Fund is initiated by 1964 B.Tech Joining Batch. Fund has been created to provide grant funding to needy poor / lower-middle income B.Tech students to meet deficit in funding of mess bill/ tuition fees. The candidates for the scholarship are selected on the basis of family income level, socio-economic background, and lack of ready access to other source of funds and family circumstances. The beneficiary student is asked to give an "honour" undertaking that as and when able, he will refund the money received with some added donation, on voluntary basis. In FY 2010-11 an amount of ₹ 42,750/- has been disbursed to 5 students.

Retired Faculty Wellness Fund: Initiated in October 2010 by the Class of 1984 as a token of their Gurudakshina, this program provides supplementary medical insurance from ICICI Lombard to retired faculty of IIT Bombay. At present 217 lives including retired faculty, their spouses as well as spouses of deceased faculties who retired prior to 2003 and were not covered under Post-Retirement Medical Scheme of IIT Bombay are covered under this program. In the inaugural year in the first 6 months as many as 17 claims were filed all of which have been reimbursed.

Innovations: Every year, the Pune Chaper of IIT Bombay Alumni Association organizes Innovations, an annual event to showcase novel ideas in practice originating from science and technology. It allows the innovators to present their innovations to expert leaders from industry, government, media



and investor community, providing them with access to people and organizations that will potentially help them grow their ideas and concepts into successful business ventures. In the past, innovations in the form of processes, products and applications from varied fields such as medicine, agriculture, mechanical/electronic/chemical technology, IT products, etc. have been showcased. The event has already established its brand and is now considered a pre-eminent Innovations event in India. From 2011, Innovation has tied up with the Centre for Innovation Incubation and Entrepreneurship (CIIE) at IIM Ahmedabad, as a strategic partner.

Benevolent Fund

"I needed 1 lakh for an emergency operation which my Papa had to undergo after he suffered a major heart attack. Our family was not able to arrange such an amount on our own. I called IITBAA from my home and they responded very quickly and deposited the money in my account. My Papa had a successful operation and now he is well. I will always remain indebted to IITBAA and all the other contributors to this Benevolent Fund. This fund has been created with a very noble purpose and I hope and pray that it keeps on growing so that many more people can be helped"

-A student beneficiary

Benevolent Fund provides financial assistance to help persons associated with the Indian Institute of Technology, Bombay, at present or in the past, and their families to tide over emergencies such as unexpected crisis or major downturns causing undue hardships in their lives. The Fund is in the 3rd year of its operations and has helped out 12 such cases so far. The Association is looking forward to supporting more and more people in their time of difficulty through supplementing their financial needs and needs your help and support to do so. To know more about this fund and donate please visit: www.iitbombay.org/ initiatives/iitbaa-benevolent-fund/home

Give One for IIT Bombay: A unique fundraising program launched by IITBAA, Give One that makes it possible for every alumnus to express his/her gratitude to IITB with planned, periodic contributions. As the name itself suggests the project aims that alumni should give at least 1% of their annual income towards supporting IIT Bombay be it towards his/her hostel, Institute development, faculty/staff, department, or student development or any other listed initiative of choice. Last Two years in a rare gesture of giving back to their alma mater, over 50% of the graduating class of 2010 and 2011 have pledged 1% of their annual salary to the Institute on their Convocation Day. Since then senior alumni who have graduated earlier have also joined the program and IITBAA has also developed an online donation portal to support this initiative.

Village Knowledge Centre:

In 2005, the IIT Bombay Alumni Association, Bangalore Chapter had sponsored and established a Village Knowledge Center (VKC) in Ittamadu Village, Bidadi Taluka in partnership with the Panchayat and the Department of Panchayat Raj and Rural Development (DPAR), Government of Karnataka. The project was originally started by the Bangalore Chapter in response to the vision document outlined by then President Abdul Kalaam. Today these centres create benefits to the villages by:

- Encouraging the reading habit thereby increasing literacy in rural India.
- Educating children and adult about computers and internet
- Providing access to e-Government services to the villages
- Provide other services (e.g. internet banking, booking tickets & reservations)

The VKC has now been functioning successfully for the last six years and is now "owned" and managed by the Panchayat itself. This initial success of the VKC has encouraged the Ittamadu Panchayat to request a further expansion of the VKC's. They have also requested us to set up additional VKCs in the neighbouring villages that make up the Panchayat. One additional VKC had already been set up in Melgopahalli. Now the Panchayat of Melgopahalli, has also evinced keen interest and has requested us to help them set up at least 5 more VKCs in their villages.



Shreyas Navare C'08, SJMSOM, H-13

Shreyas Navare: (C'08, SJMSOM, H-13), Mumbai, Senior Manager,

Marketing and Corporate Communications at a private bank. He freelances as a Editorial Cartoonist for Hindustan Times. He has covered elections in 6 Indian states through the eyes of a cartoonist on behalf of HT. Shreyas has held many cartoon exhibitions, two of which were inaugurated by Dr. A. P. J. Abdul Kalam. His first solo international cartoon exhibition was held recently at Bangkok.



Anand Prahlad C'07, IDC, H-8

Anand Prahlad is an independent graphic designer and artist. When not design-

ing books, magazines, corporate identities or illustrating, he is an active gardener, culinary expert and amateur musician.

He runs www.thenewvitruvianman.com, where he writes and illustrates articles on design, gastronomy and music.

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Thank You

Jaya Joshi, for your PROfessional help. We benefitted immensely from your experience, wry wisdom and dry humour. Thank you also, for letting a little beehive buzz and flourish under the branches of a verdant Raintree.

~Vini, for proofs, edits, late nights and more. We tried our best to confuse you with differing versions, multi-coloured changes, lengthy paragraphs and American spellings. Yet you — and your glasses — managed to stay afloat.

Shreyas Navare, for your caricatures, demanded by our cartoon network (also known as the beehive) at the last minute. You put in your international award-winning cartooning skills to draw some bees, cartoons, caricatures for us, and for that we will always be beeholden to you.

Anand Prahlad, for the design, layout and the artwork in Fundamatics. You had no idea how chaotic the beehive is. You got stung wildly and repeatedly, and bravely battled our thick-headedness, converging nap-times and diverging documents with panache.

Advertisers — make Fundamatics a habit and you'll sell well. Fortunately, the beeditors cannot scissor your content. We invite you to take advantage.

Contributors, most of whom were real darlings, some of whom were surreal. We had to twist a few arms and indulge a few delusions — looks like we were effective. We asked for a 100 pages, and you pleasantly surprised us with 200.

Board of Directors, IITBAA. You seriously believed that we could pull this off in such a short time. Either you were utterly mad or butterly hopeful — whichever it was, it was your belief and faith in us that made all the difference.

Laptops, mobile phones, coffee cups, alarm clocks, cushions, interesting fonts, you-can-do-it playlists, understanding spouses and assorted gadgets. We need not say more.

And you, dear reader, for giving us a reason to keep going. You must have liked Fundamatics enough to have reached till this page. We promise you more every quarter.

Future contributors — in anticipation of what you will send us. We will try our best to set impossible deadlines, cut and snip what you write and expect you to be nice about it. Strangely, it seems to be thrilling and gratifying too — give it a shot.

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Greetings to all IITB Alumni from Prof. Viney Kirpal ! You may remember me as a Professor of English and HoD of HSS from 1974-97. After retiring from IITB, I started the GREAT (Global Research Education and Training) Foundation with GKPK Singh, of IITB C'73. Great Foundation focuses on under-privileged children in Pune.

About a 1000 children from nine schools in Pune get GREAT Foundation's support their parents are in no position to give. We provide materials and developmental input with a focus on common weaknesses. We wish to cover all of the 6000 students. In 2012-13, we plan an "Employability Skills for School Leavers" program of spoken English, personality development, and interviewing skills to cover the drop-outs.

We have planned a budget of ₹20 lac. GREAT Foundation survives on the generosity of donors like you. We thank you for your support and count on your donations in the future. All donations are eligible for 80G tax benefits.

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- Reached more than 3,50,000 students.
- Appreciated by noted scientist and former President of India, Hon. Dr. A. P. J. Abdul Kalam.
- Published eight editions of Student's FUEL career guide.
- Selected as one of Asia's 100 most inspiring ventures by Foundation For Youth Social Entrepreneurship (FYSE), Beijing, China.
- Signed MOU with Software Exporters' Association Of Pune (SEAP) for collaboration on Ahead Of Times and other youth programs.
- Team is highly passionate & motivated to work in development sector.
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