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Indian Institute of Technology MADRAS-36

Seventh Annual Number Phalguna 1887 March 1966

As the year fades away, we can look back with a certain amount of pleasure and a sense of achievement.

The first phase of the Institute was successfully completed. Most of the proposed laboratories were ready for use, thanks to the efforts of the German and Indian staff. The development of the second phase has started off on the right foot. The total foreign aid outlay under the first agreement was 1.8 crores. Collaboration with a consortium of German Universities is necessary at this stage. The Institute has gone ahead with this and already we have had representatives of the Berlin Technical University and the Brunswich Technical University here.

The main workshop buildings are already complete. Work has commenced on the multi-storeyed Administrative Block and on the Central Library. The Campus has also achieved near selfsufficiency with staff houses, a shopping centre, a Primary and a Higher Secondary School. An Olympic size swimming pool and a boat club will give additional recreative facilities.

Of the students, the Institute can well be proud. They have always covered themselves with glory in the past. On the Sports field the performance was consistent though not outstanding, save for our tennis and rowing teams. This year we entered more tournaments than ever before.

* *

In the literary field, IIT reigned supreme. During the literary and cultural week IIT made a clean sweep in all the events and as the Director remarked, "IIT walks in and walks out with the trophy."

In the Academic side, the year saw a number of startling changes, as far as the student was concerned. The examination system was changed a couple of times and the staff and students have as yet to settle down to the new system.

Our first Registrar, Sri R. Natarajan IAS, went back to the State Cadre to take up his new assignment as Administrator of the Sethusamudram Project. He was associated with the Institute from its inception. His popularity can be gaged from the fact that he is almost triumphantly carried on the shoulders of the students (who have nothing to gain from him from the point of view of periodicals and leave) when he comes to the Institute. Sri C. V. Sethunathan succeeded Sri Natarajan. Sri Sethunathan has had considerable experience in the educational field.

This Annual Number has been a fight against time. At one stage, it was thought that there would be no Annual Number owing to lack of time. However, because of the Herculean efforts of Sri V. John of Klein & Peyerl, and Sri Ramabhadran of Sremati Printers, it was possible to bring out the magazine in the space of little over a week. The Editorial Board wishes to thank them for their co-operation and unstinted help. There are others who deserve our thanks; others who have spent much of their energies on this venture. It is not possible to mention any of them by name, because of lack of space.

The response from the members of the Institute has been overwhelming. Despite the short notice, this magazine is bigger than the previous issues. For this all the contributors deserve a pat on the back.

*



Republic Day Address

by Prof. B. Sengupto, Director.

WE are now in the shadow of a series of a calamities, the untimely loss of our late beloved Prime Minister, Shri Lalbahadur Shastri and the tragic air-disaster that happened a few days back with 117 persons on board in which Dr Bhabha, one of the eminent sons of India and the foremost scientist in our land, lost his life prematurely. We are facing a crisis in foreign exchange and some of our projects which had been started are far from reaching a stage of fruition.

At this critical time, the country looks to its youth who by its discipline, devotion to work, punctuality and a sense of pride in its achievements and readiness to do hard work, can overcome these difficulties and bring prosperity, happiness and peace to its Motherland.

I would like to take this opportunity, my young friends, to speak to you about a few things that 1 have observed and heard from the student community in general and from the student community of our Institute in particular. I refer to Discipline, Devotion to Duty, Punctuality, Dignity of Labour and Pride of Achievement.

By Discipline, we mean mental and moral training, orderly behaviour among students, men of the armed services and other members of a community, and a strict observance of rules of conduct on the part of everybody.

A question is often asked as to why there should be compulsory NCC training and why should there be "left, right" all the time. What will be the consequence if we do not attend a Parade or do not attend a Camp? A few cases where students refrained from attending the NCC Camp organised with considerable trouble and expenditure have been brought to my notice. My answer to this will be that programmes for the youth of a country, academic or otherwise, are drawn up by eminent men based on their mature experience and with an eye to the needs of the nation. Rules of conduct are made by organisations and by society from their precious sources of the past and observance of such rules is a bounden duty of an individual if he has to play his part in an organised society, community or group. Punctuality evidently means observance and sticking to appointed time and doing work in good time. A complaint is often heard that there is not much time for work in the Institute due to too many exercises, too many examinations and the like. Yet I find that a considerable number of students find time to go out sight-seeing, attend movies on Saturdays, Sundays and holidays. I find the hostels almost empty when the Institute closes only for half a day. {It is evident that if one programmes one's activities suitably, sufficient time can be found to carry out one's duties to satisfaction.

A doubt arises in some students' minds as to why they should do things which are not connected with their studies directly, the assumption presumably being that manual work is too low for students. The result of such an attitude is the creation of a community of white-collared individuals who are incapable of doing anything constructive. You will appreciate that this state of affairs will not be conducive to the advancement of our country.

Pride of Achievement comes by doing one's work to perfection under the supervision of elders who are qualified to guide you in your studies and other related activities, in the Institute. It is the perseverance to attain a desired goal that can bring joy in the work and ultimately pride in having achieved the target.

I would like to add that real learning leads to humility, real capability leads one to dignity and, above all, these make one learn to respect others. I would specially emphasize that when all of you students are here in an educational Campus it is up to you to keep up to the highest traditions of our time-honoured Gurukula System.

To sum up, this will be my brief message to you on Republic Day:

"Be disciplined, calm and serene. Speak with dignity and respect and bend thine head in humility."

* * *

The Bootlegger

by Alex Phillipos

NARAYAN smiled to himself as he sipped his beer in a corner of the bar. Life was indeed worth living. Everything had gone exactly as he had planned. His trip to Bangalore had been a success in every way. He had concluded a good business deal. He had also wanted to get some liquor to take home and he had got it, not just a little bit, but plenty. He had some friends in the Army and the Air Force stationed at Bangalore, and they had been very obliging in supplying him the good stuff. They got plenty of it in their Officers' Messes at ridiculous prices. Nevertheless, it had cost him a few hundred rupees but Narayan considered it well spent. Now it was all tucked away in his car in a place nobody would ever suspect, and tomorrow he would be in Madras with it. Of course there was the excise inspector's post on the Mysore-Madras border, but that won't be a problem. As he sat there he hoped nobody knew about his plans. Some fellows in the hotel had seen him bringing two packing cases filled with bottles into his room, but that did not matter. The chances of their knowing his intentions and also they being excise inspectors was extremely remote. Still Narayan wished he had used packing cases with "Soap" printed on the outside of "WHITE HORSE FINEST SCOTCH WHISKY."

As he sat there he noticed three people entering the bar. He was, a little surprised to note that one of them had the room next to his at the hotel. The bar was crowded and his was one of the few tables with three empty seats. Narayan watched them approaching with growing annoyance. He wished they would not try to get acquainted with him. They sat down and ordered rum. Narayan was relieved to find that they ignored him completely. Anyhow their conversation seemed a bit interesting.

"Sunil old boy, drink slowly. Enjoy every sip. This may be the last bit of booze that you are going to get for a long time," said one of them.

"Yeah," muttered Sunil, "quite likely. What a rotten thing that they don't allow this stuff in Madras. What's wrong with the chaps there I wonder."

" If only we could get some across ".

"Get some across! No fear! The excise fellows are pretty sharp. You don't want to spend some time in a jail do you?" "That's right, but I don't think they check too much at night. We might hide it somewhere".

"Too risky, There's no place they don't know. Anyhow there is no place to hide it in a Fiat".

Narayan felt vastly superior to these fellows as he heard this. He was going to accomplish exactly what these fellows wanted to do. He had found a place in his Fiat, a good place, which would fool those excise chaps.

"Doesn't matter," one of them went on saying. "We can somehow get a little bit across. I got an idea:"

"What is it?" asked another excitedly.

" It's like this listen ... "

"Shut up you fool," hissed the third fellow, "If you have got an idea keep it to yourself for some time till we get out of here." Then he added in a loud whisper which Narayan heard clearly. "For all you know, this fellow beside us may be an excise chap".

"Then we better take a risk and make a clean breast of it," whispered another, "he has already heard too much. He can easily follow us outside and see our car number and inform the excise chaps. Then we would have a real reception at the border".

"All right, go ahead," muttered the other. "If anything happens it will be your fault."

"Excuse me sir," said the fellow to Narayan with a smile, "we were planning to take some of this stuff over to Madras. I hope you don't mind our asking you a frank quesion. Are you by any chance connected with the excise department."

"Ha, ha, ha '' laughed Narayan, "You fellows are really fortunate that I am not." Then against his better judgement he added, "In fact I am going to do exactly what you want to do, in this very night."

"What," exclaimed one of the three.

"How are you going to do it?" asked another, "we hope you won't mind letting us in on your little secret ".

" Oh, I don't mind, " replied Narayan. He felt important now, seeing the three eager faces looking towards him. "You said you had a Fiat, is it not?"

"Yes, but a Fiat is no good".

"Just listen to me. A Fiat is good enough. There is one place which very few fellows know about." He looked round to make sure nobody else was listening and then added in a low voice. "Take your spare tyre out of the boot and fill the tyre-well with bottles. Use enough sacking to make sure they don't make noise while travelling. As you know the tyre-well has a wooden cover and on top of that comes the floor mat of the foot space. So it is well hidden away."

"But where to keep the spare tyre?" asked one of the others in dismay. "Won't the excise fellows suspect when they see the spare tyre somewhere outside?"

"Oh, that does not matter," replied Narayan, "I am sure that almost no excise fellow knows the proper place to put a spare tyre in a Fiat. They are not that clever. You can just put the spare anywhere else, either on top if you have a carrier, or in the boot itself along with your other luggage. And another precaution is to take a roundabout route. Where are you going?"

" To Madras."

"That's where I am also going. The normal route is via Kolar. But there is a slightly longer but rarely used route via Krishnagiri. I am going to take that one, and I would advise you fellows to do the same. In fact I have never gone that way but I heard it is quite a good route. Only twenty miles or so longer than the Kolar route".

The other three were too surprised to say anything. They just stared at Narayan in admiration. And of course Narayan enjoyed it very much. Finally one of them said, "Thanks a lot sir. This is the best idea we have ever heard. Had it not been for your suggestion, we would never have been able to get the stuff across. Now of course, it is all settled".

"Oh, that's alright," said Narayan as he smiled at them indulgently. "I am always ready to help fellows like you who are in trouble. After all, you see, the experience of an older man is quite useful."

It was getting late and Narayan had other work to do. So after exchanging a few pleasantries, and accepting their profuse thanks, he bade them goodbye. It wasn't every day that a chap got a chance to show his capabilities:

Narayan left Bangalore that evening at about six. The road was good and there was not much traffic. After a short while it became dark. He had been driving for about an hour when he saw the red lamp in the centre of the road. Must be the excise place, he thought. He pulled over to the side of the road and stopped. There was a building a little away from the road and he saw someone coming towards him with a book in his hand. This is it, thought Narayan. Now he moust be calm. or they may get suspicious. The fellow was wearing khaki and as he come near he shone his torch at Narayan and said, "You are entering Madras State and as you know no alcoholic drinks will be permitted unless you have a special permit."

"I don't have anything ".

"Are you sure sir? It is a serious offence to deny it if you have it with you".

"Yes. 1 am sure. Go ahead and search my car if you want, damn it".

At this moment a second khaki clad figure appeared, and he shouted, "What does he say? That he doesn't have anything?"

"Yes sir, that is exactly what he says," replied the first person.

The second person's voice seemed vaguely familar to Narayan. Then with a shock he realised, who it was. It was one of the three people whom he had talked to at the bar. He was an excise inspector. When Narayan recovered from his shock he saw that the fellow was smiling at him in a peculiar way.

"You seem to be a bit surprised, my friend. Probably you did not expect to see us here," said the inspector to Narayan. Then he turned to the fellow who had first met Narayan and said, "Go and call the others from inside. Tell them an old friend has arrived."

Soon two other men appeared from the building. They were both in khaki. Narayan recognised them as the other two of the three he had met in the bar. So they were all excise inspectors. What a fool he was! Narayan cursed his luck and cursed himself for his carelessness.

"You said you had no liquor. Well according to the rules, we are now permitted to confiscate any liquor we find in your car because you have denied it. And of course, we know your secret hiding place. So please hand over the key to the boot, and we will do the needful."

Speechless with rage, Narayan handed over the key and watched them remove his precious cargo. He could not bear to see them do this. So he went up to them and tried to strike a bargain. He said he would pay them handsomely if they would let him keep it. They ignored him. When he saw it was no use he started begging. It was a pitiable sight. When they had removed all the bottles one of them said, "You are begging for a few bottles. Don't you know that according to the rules we are supposed to report you for attempted bootlegging? We are doing you a great favour, as it is, by not reporting you. Anyhow since you have a great liking for liquor we might allow you a small concession. You can come inside our office and have a few drinks with us. But that is all you get. Nothing more".

Narayan suppressed his anger and replied. "I would rather drink with the devil than with you......"

"Well that's alright," said one of the others cheerfully. "We understand your feelings. Now you may carry on; you have got a long way to go."

Narayan got inside, slammed the door and was off. The red light was no longer in the road, probably they had already lifted the boom. It was too dark to see anything. All sorts of thoughts filled his mind as he drove along. But anyhow it was too late to think about it now. Narayan was an optimist at heart. He consoled himself by saying that he was lucky that they did not report him. He might have even ended up in jail. About fifteen minutes later he saw a second red light in the middle of the road. Another excise post? What the hell! How many times do they check, thought Narayan. He pulled over to the side of the road and got out, ready to give the fellows a tongue-lashing for the delay. A khaki dressed person came up and said, "This is the State Excise sir. Have you any liquor? It is prohibited in Madras State."

"Of course not! All what I had has already been taken from me by your fellows a few miles back. How many checkposts do you have along this road? Are you not satisfied with one checking?"

"We have only one post on this roadside. In fact the nearest post is more then a hundred miles away. But it is you.... you said that....."

My most unforgettable Character

by G. Sampath

"The Character of Cordelia" says Dr Bradley "is not a masterpiece of invention or subtlety like that of Cleopatra: yet in its own way it is a orcation as wonderful". Cordelia appears in only four of the twenty-six scenes in King Lear. She speaks - it is hard to believe it—scarcely more than a hundred lines and yet no character in Shakespeare is more absolutely individual or most ineffaceably stamped on the memory of his readers - like an angelic vision of moral loneliness. She haunts our imagination from beginning to end. Everything in her seems to lie beyond our view and affects us in a manner which we feel rather than perceive.

If one tries to sum up her character in one word, the word "restraint" seems most appropriate. Her conduct in the opening scene reveals her self controlling capacity. When Lear asks her,

"What can you say to draw a third more opulent than your sisters?" She replies,

"Nothing my lord."

She cannot heave her heart into her mouth because she is Cordelia. Her self controlling capacity is even more clear in her "asides". She says to herself thus, "What shall Cordelia do. Love and be silent". This fine character of Cordelia is revealed in the conversation between Kent and a gentleman towards the close of the play.

Gentleman :...... ...It seemed she was a queen over her passion, who most rebel like sought to be king over her.

Kent: O, then it moved her.

Gentleman: Not to a rage; patience and sorrow strove Who should express her goodliest. You have seen Sunshine and rain at once; her smiles and tears Were like a better day; those happy smilets That play'd on her ripe lip seem'd not to know What guests were in her eyes; which parted thence As pearls and diamonds dropp'd. In brief sorrow would be a rarity most belov'd, if all Could so become it."

She was calm and self controlled even in the deep anguish of her grief.

The whole character seems to rest upon two sublime principles of human action—the love of truth and the sense of duty. The first part of the play shows us how Cordelia is loved and the second part how she can love. To hear she is the "best object, the argument of his praise, the balm of his age, most best and most dearest." "Lear loved her most and thought to set his rest on her kind nursery." Kent loves her so much that he goes to the extent of pointing out the folly of his master to his notice. Fool loves her so much that he pines away when Cordelia goes to France. Thus she is loved by all the persons in the first part of the play. She loved her father so very dearly that she invades Britain with a French army to save her father from the devilish spirits, Goneril and Regan. Her devotion to her father is made clear enough to her sisters. She says to them thus,

"Ye jewels of our father, with wash'd eyes Cordelia leaves you; I know you what you are; And, like a sister, am most loath to call your faults as they are nam'd. Love well our father. To your professed bosoms I commit him. But, yet, alas, stood I within his grace I would prefer him to a better place."

Here is the power of loving with the strongest, purest devotion, and of inspiring love. She knew that when she shall marry that lord whose hand must take her plight shall carry half her love with him; half her care and duty. She is sure that she shall never marry like her sisters to love her father all.

The modest pride with which she replies to the Duke of Burgundy is admirable.

"Peace be with Burgundy. Since that respects of fortune are his love, I shall not be his wife".

She has the capacity of judging the characters of the persons. Thus she reads her sisters alright.

The courage she displays on the occasion, however, is noteworthy. It needs courage to brave Lear's wrath in the august assembly; and this quality comes to her effortlessly. Rather than competing with her sisters in their flattering speeches and hypocrisy she would suffer the worst. Her strength of character is thus clearly revealed in her firm determination to stand by the truth at all cost. Selflessness, utter selflessness'is the simple secret of Cordelia's character. Though she is by no means always tongue-tied she cannot express her tender emotion, especially, to those persons whom she feels it. In the passage which describes her reception of Kent's letter we are told, "Forth once or twice she heaved the name of 'father' pantingly. Forth, as if it pressed her heart". She takes up arms against her sisters not for her own sake but for the sake of her father. The lines describing the intense of her suffering convey an exquisitely beautiful picture of Cordelia's grief. "Then away she starts to deal with grief alone". When her father recognises her saying that, "For, as I am man, I thank this lady to be my child Cordelia" she replies thus;

"And so I am, I am".

This single utterance reveals her intense love, grief and anxiety. In her speech after her defeat, we notice a calm fortitude and elevation of soul arising from the consciousness of duty and lifting her above all considerations of petty self. She says, "We are not the first who, with the best meaning, have incurr'd the worst". She thinks and fears only for her father. "For thee, oppressed King, am I cast down; Myself could else out-frown false fortune's frown". She could not answer even a single syllable to the last words of her father. Her father speaks to her thus, "No, no, no, no; come let's away to prison, we two alone will sing like birds i' the cage; when thou dost ask me blessing I'll kneel down, and ask of these forgivenness; so we'll live and pray and sing and tell old tales and laugh at gildedb utterflies".

She stands and weeps and goes out with him silent. And we see her alive no more.

When Lear enters with Cordelia dead in his arms we are naturally overwhelmed with grief. At that instant we are left only to silent and to tears. The only consolation if there can be any consolation at all is that Cordelia is so much of a pure spirit that this earth of ours is not good enough for her. The dying Lear gives us a perfect and visible picture of her sweet feminine nature in those few words.

"Her voice was ever soft, gentle and low, an excellent thing in woman".

Thus in so few words has Shakespeare conveyed to us in an interesting manner the subdued pathos and simplicity of Cordelia's character. Her character leaves an unforgettable impression—of angelic beauty, romantic unselfishness and a holy tenderness of heart. Mrs Jameson is very apt in saying that "to Antigone we give our admiration; to Cordelia our tears".

* * *

On Teaching Methods*

by T. Gopichand

TEACHING and learning is mainly a problem of communication between tw persons, the teacher and the taught. Wherever human behaviour is involved, it is necessary to define the objectives and ideal conditions, then only, any discussion is meaningful. Besides definitions and discussions, a matter of equal importance is, how any method works in a real situation and what corrective action is necessary to attain the objectives. The latter could only be arrived at by a critical assessment of behaviour of a given real system. However good a teaching method may be, a given combination of a teacher and student may not be benefitted by it. Whatever may be the method of teaching employed, a given combination of teacher and student may learn. This is however, an extreme condition, where the will of uncompromising individuals dominates and surpasses every material tenet. This essay is devoted to laying down certain ideal conditions and discussing a few suggestions for practice.

Teaching is an art. Learning is the fulfilment of an innate desire to know. For a perfect result of teaching and learning, the two persons—the teacher and the taught—should be personally aware of their responsibilities and should have faith in their ability to achieve their aims. A teaching method can only provide a stimulus to attain a good result, but does not guarantee it.

A teacher is not a text-book. He is not just a widely read person. He is not a machine to give correct answers to set questions. This negative way of starting a definition is deliberately chosen to eliminate some popular misconceptions of a good teacher. A teacher should be an individualist. He should have his own style of teaching. George Bernard Shaw once stated, that if a person has something to say (his own) he sets his own style. So a teaching method, if the above definitions of teacher and teaching are accepted, is a private property of a teacher—nay, it is at the core of all creative work of a teacher.

The above set of definitions are stated to recognise certain limitations to the extent to which a desired result can be achieved, for a prescribed teaching method. In so far, they also help to arrive at corrective actions for any prescribed scheme.

^{*} Presented at a Faculty Association seminar on "Teaching Methods",

Before any suggestions are made to deal with real situations, it is necessary to distinguish between teaching basic principles of a subject to a large number of students for example in undergraduate teaching and teaching at graduate level where the teacher-to-student ratio is high.

It is necessary to recognise that certain pre-requisites and accepted objectives to be attained are to be set forth before recommending a teaching method. So, in what follows, some useful teaching methods for undergraduate and graduate studies are presented.

Undergraduate Teaching

The principle objectives can be stated as to teach the most basic principles of the subject and to inculcate into the mind of the students, to make it a habit to think and to make the subject a part and parcel of his mental outfit. There are two basic ingredients in the above objective, i. e. to inspire a student to love his subject and to provide him with the most basic principles. To inspire a student is not necessary, if the student comes to learn and with a love towards the subject. However, this is the exception rather than the rule in our country. Both of the above-mentioned objectives are challenging problems to a teacher.

The following practice may be helpful to achieve the above objectives :

- 1. The seniormost member of the department should organise and teach the first course in any subject.
- 1. Demonstration lectures in pure sciences are very helpful in inspiring students to learn.
- 3. Intensive viva-voce in practical classes. A lot of experience is necessary, if the viva has to be of any teaching value. A questioning method will teach a student only if the questions are put to provoke or prod a person to think and not if they are of a vindicative nature.

It takes a very, very long time to teach students by ridiculing them or by teasing them about what they do not know.

- A well organised tutorial system where most of the talking is to be done by students to present their doubts.
- 5. Finally, a teacher must be made available for every two or three students for bringing up their problems or doubts once a week. This should be done purely on humanitarian grounds, and can be outside the college hours.

There are two major prerequisites for the teaching methods proposed above. Firstly, courses of a descriptive nature are to be avoided. It is unjust to ask a teacher and a student to do a painstaking job when a course is of purely descriptive nature and as such may or may not require a teacher. For all such courses, it is more beneficial and proper to educate a student by

- 1. providing a museum of articles or equipment or anything which is described in the course,
- to take advantage of audio-visual educational methods like motion pictures and slides,
- 3. to take students for a tour.

The second prerequisite is that a good supply of cheap text-books should be available. Then it would be possible for the teacher to devote his lecture to explain the fundamentals.

Graduate Teaching

While the teaching at undergraduate level is to initiate a student, at the graduate level the emphasis should be on making him a mature individual. He should be taught to tackle problems of more and more difficult nature and as the problems become more difficult, the teacher slowly fades out into the background and will be of help, when it is absolutely necessary.

If such is the objective, the following teaching methods may be helpful:

- 1. The lectures should be such as to promote discussion. If students in graduate classes do not ask logical questions, the classes are bound to be un-educative.
- 2. To allot topics on recent advances and initiate study and discussion in the class room.
- 3. Work involving experimentation should initiate the individual into the art of getting useful information and logical interpretation.
- 4. To allot project work where a student should develop independent ability to organise himself to present a problem and to undertake investigation or in short to develop the thinking faculty to its fullest extent.

There is one prerequisite for the above methods. They are useful if the programme of study is designed to be intensive in nature rather than extensive. Studies of intensive nature only are in conformity with the objectives stated (in the first para of this subsection). To try to cram a little of every conceivable subject at the graduate level would be very harmful to a group of intelligent students.

It is very desirable to note at this juncture, that if graduate studies are to be exciting for the students and teachers, the teacher should have the courage to learn from the students, whenever the situation demands. Everyone, whether he be a student or teacher, should be confident of what he knows and should avoid at all costs to be an introvert trying to worry about what he does not know. Only the supreme authority of a logical argument need be respected.

Summary

An attempt is made to lay down certain ideal conditions and objectives for teaching in general. Certain teaching methods are recommended to fulfil specific objectives for graduate and under graduate studies against a given background of pre-requisites.

Finally in concluding this essay, it is but necessary to mention the status of examination in the above scheme. It is only permitted as a tool for the teacher to assess how much of what he has taught is assimilated by the student. Any other aspect of a given examination system falls outside the scope of this essay.

Choosing Engineering as a Career To-Day

by Bhagaban Das

It is undoubtedly true that career planning is of the greatest importance to-day. This being the arbitrator of one's future destiny careful thought and consideration must be exercised in properly orienting the career at the beginning. This would result in the reduction of losses in time, money, and human talents. Some time ago, engineering profession was considered to be a matter of honour, prestige, and high social status, but engineering activities are continually changing in nature and scope. Hence one should clearly understand what he wants out of life—material success, or opportunity for service, security, or freedom of action, opportunity for leadership, or freedom from responsibility, social prestige, or personal privacy, creative satisfaction or freedom from pressure.

Deciding upon this if one takes up engineering as a career he should visualise the great task he has to implement in order that he may attain the goals of his life.

As engineering is the professional act of applying science to the efficient conversion of natural resources to the benefit of man, This has to be translated into action in reality. Then only can the charm of this noble career be realized.

But unfortunately engineers in our country are not so well placed by and large. They are placed in posts where lesser skilled people could discharge the duties with ease. Slight introspection into the matter would reveal the tremendous waste of labour and human talents, by not properly fitting the person to the job. The intrinsic worth of education that an engineer receives is really great. So naturally greater returns should be expected of an engineer. It may be that in advanced countries, if engineers do their normal duty, it may be a satisfactory return, but in a country like ours something more is to be expected if it is to develop materially and industrially thereby raising the standard of living of the masses.

It is not difficult to pin point where exactly the mistakes lie in the present occurrings in our country, but taking things as they are, an engineering student should realise that it is the day of the survival of the fittest and engineering at present is more of a challenging nature, rather than an easy passage. There is so much to learn and so little time that many hours of concentrated and efficient study are required. It is not only difficult, but it is also so exacting. "Almost right" or "correct except for the decimal point" is not acceptable.

The engineer is engaged in creative, productive and constructive work, whereas the doctors' patients are usually ill and the lawyers' clients are in trouble, the engineer is primarily concerned with healthy growing and productive activities. Then why can't better performance be not exhibited by an engineer?

Every successful engineer would know the joy of creation, creation of a new concept, device, process, or procedure out of his own knowledge, thought and experience.

Success in engineering usually requires interest, aptitude and drive; however a deficiency in one characteristic can be compensated for by extra strength in the other two.

If students of engineering guide them-selves along these times and gain technical knowledge, engineering is a wonderful field full of a host of opportunities for exciting satisfying work and a life time career.

* * *

Farewell to Mr R. Natarajan, I.A.S., Registrar. 1st April 1965



Mr Natarajan delivers his farewell address, 'Garland of Memories'



Dr Lakshmanaswamy Mudaliar. Chairman, Board of Governors, presents a memento to Mr R. Natarajan, on 1st April 1965



A gift for Mrs Natarajan from Mrs Sengupto



Mr R. Natarajan, I.A.S., first Registrar being bid farewell

A Garland of Memories

Speech Delivered by Sri R. Natarajau, I. A. s. on 1-4-1965 on the eve of his laying down the Office of Registrar of the I. I. T., Madras.

Padma Vibhushan Dr Mudaliar, Prof. and Mrs Sengupto, Prof. Krishnamurthi, Mr Ramaswamy, staff-colleagues, students, friends, ladies and gentlemen,

Even at the outset, before I say something, by way of reply, I must plead not guilty to the compliments, mostly imaginary, that have been paid to me. These are, usually, not excusable at all, but having reference to the day that we have assembled on—1st April—I think this becomes a little pardonable.

'I cannot sing the old songs, I sang long years ago For heart and voice would fail me

And foolish tears will flow,'-said Challote Bernard on a farewell occasion similar to this. To try to recapture the fleeting loneliness of the fond hours and years that I have spent at this Institute, or to ransom the many sweet memories I have gathered during the last six years that I have been with you is bound to land me in a similar predicament. But I have the high authority of George Santayana that life is not a spectacle or a feast, it is a predicament. Under such circumstances, I will have to go through this predicament which I shall, presently.

"The sun's rim dips; the stars rush out, at one side comes the dark" wrote the poet Coleridge when once describing the sudden descent of darkness on the scene. Without any pretences to being a poet myself, I must confess to a feeling, of mental darkness as the day of my departure from this Institute draws dangerously near — the dreadful day when I have to exchange my dear office room for the visitors' room — I am refering to the morning of the 5th April. Some might ask me what was the silken bond between me and the Institue— that strange and deep affection. They would say that it is the lot of Government servants to leave sweet scenes and familiar faces once in two or three years, for

Theirs is not to make reply Theirs is not to reason why Theirs is but to do and sigh.'

(with apologies to Lord Tennyson for the alteration in the last word)

But my defence and explanation is that you cannot find a pleasanter place or more congenial work spot than our Campus. I have not seen a place which compares even favourably with this. The famous lines of Lord Byron

"There is a pleasure in the painless woods, There is a rapture on the lonely shore, There is society where none inside By the deep sea and music in its roar I love not man the less, but Nature more From these our interviews."

You are all very well aware that I am refering to the Institute campus and the warm waters of the Elliots Beach nearby.

It was the poet Shelley who once wrote, "Life, like a dam of many coloured glass, stains nor writes radiance of eternity.' True, life leaves many memories behind— both good and bad— sometimes sweet, sometimes sour. But my six years stay at this Institute, I must say, has been a garland of golden memories which I am sure has been due to my humble and lucky associations with great minds like those of Dr Mudaliar, our respected Chairman of the Board of Governors, Prof. Sengupto, our Director, my good friend Mr Ramaswamy, the members of the academic staff, and members of the administrative staff.

As I felt and said on the last Institute Day, to work with you, Sir (Dr Mudaliar) is a liberal education by itself. Dr Mudaliar has placed me under a very deep debt of gratitude. I cannot do better than by describing him in the words of the old Testament. 'As a lamb unto my feet and the light unto my path.' As for Prof. Sengupto, I do not really know what to say. It was Louis XIV of France who once said, 'I am the State'. With far greater justification but for his own innate humility Prof. Sengupto might well say, 'I am the Institute'. He has done so much for the Institute.

I have always received the most excellent cooperation from the successive German Consuls at Madras, the German members of the staff at this Institute, the Directors of the Central Leather Research Institute and the A. C. College of Technology and the staff of more institutions as also from the Principal and members of the staff of the Guindy Engineering College.

I cannot forget my friend and colleague the Superintending Engineer. Alladin had at least a lamp to work wonders with. Ramaswamy has been doing it without it. I leave you to judge who is the better of the two. As for my friends, the Professors here, they have always (right from the dynamic and 68 years young Prof. Krishnamurthi and the jovial Dr Koch to the junior most of the junior technical assistants) bucked me and backed me up at every step. Professors like Valluri or Sampath, Nigam or Shastri are crazy after research, if I may use a slightly unparliamentary word. The future of research at this Institute is indeed safe in their hands. I, of course, cannot forget my old friends of administrations—distributed among the academic, the stores, the accounts, the security, the audit and the cash sections. I hope I have not forgotten any one. Their devotion to me has been most exemplary.

Administration is an one man melody. It is a tune of harmony which has to be sung by people acting together, if it is to be effective. If anything has come out of it, quite a big chunk has been due to the wholehearted and excellent cooperation that I have been able to receive from my colleagues in the administration.

I always do like to remember my friends—the student pals of mine. As with friends, we can surely say 'Tell me who your students are? I will tell you what your Institution is.' I have not met a better and more intelligent set of students any where. They have always done their best for their Institute. I would only request them to follow knowledge like a sinking star, for knowledge is the only instrument of production, which is not subjected to the law of diminishing returns. I am sure you will take pride in this Institute; for if we, the staff and students are not proud of our Institute, the others will have neither the time nor the patience to be proud of our Institute.

Before I conclude I must say this. Having missed the opportunity of being enrolled as a student of this Institute in this birth of mine, it is my wish that I should at least in my rebirth become a student of this Institute, preferably without a Joint Entrance Examination. I also wish I must go through the hands of the academic staff members who will all, I expect be given an opportunity to become staff members again, of course in their own respective re-incarnations. I know some of them like Dr Klein, Kuriacose or Khader do not believe in re-incarnations. But it is my prayer to God that they should be given one each, as a special case.

* * *

19

Nature Dwells Secretly.... The Dark Scenery

by Muthukrishnan

I. The rays of the setting sun jell down Oh! they jell down-his might crown, Over at the sky-line the nighty did advance It peeped in, it peeped out, in its glance.

> It soon got dark As the dogs began to bark; Everything seemed on fire around Under the screen, 't was dark and brown.

The Stars will be on the sky soon, With their partner—the glorious moon; Some stars are dim, and some are shining, Behold they are big and tiny.

II. The Trees stretched their banners out, Of all sizes whether thin or stout, They waited for the moon to spout It was an observation of my doubt.

> The leaves spread their fans, for aboon 'twas a reflection of moon; They sing their chorus in bloom,' 'May it last till the edge of doom.

To the moon the flowers pay Their respect of a humble day; By closing their dainty petals, And cracking the cup of sepals.

> Is it their smile respect or sorrow? An unknown secret on every 'morrow;

> > Or they look down to blush, And rise high to sigh;

When the moon is before them And the night on the sky? The people pay their respect too, Creating a link between the two, While the moon like a silvery shoon Removes the gloom and provokes a bloom.

III. The moonlight thro' the green veils, lay Scattered on the turf like chained mails; A solitary beam thro' the glade Was a bright patch in the dark shade.

> It steals through the hedge and skids. A network so fine to make; An unknown thief in the mids— As some one would mistake.

The drooping shadows of the trees Wave in the rustling breeze, Misleading the rays of the moon, As they change their places soon.

> When the moon is on the wave And the glow in the grass Pearls sprent on the grave And the wisp on the morass.

On the shrubbery edge the trees and hill Stood in silence like statues still..... Their reflection in the gleaming floor Was a magnificient scene yet washed ashore.

IV. The goblet thrills the ocean to tide—
A cause which it cannot abide;
The silvery ripple on the bosom wide.
That swings in distress from side to side.

All lives look for joy and mirth. At the gracious heaven 'om the lively earth, The moon and stars of the heaven, Perform a glorious pevan. The falling stars are shooking Their trail behind is a fiery sheen The imatient owls are hooting, Piercing thro' the air screme. The dark clouds hid the silvery chaste. Long before they flew in haste; While each beam like a search light, Emerged out and the moon bright.

V. Oh moon! what does thee aim? What does thee wish or freak? Have you anything to claim. From these objects plain, That something in them you seak?

> We who are in futile strife Entangled in the nets of life Dream of them but in rain Think of things gone and slain

The worm glowing on the mellifeeons blossom Is no dout a pleasant sight; But thine splendour in spring or autumn— A heavenly angel among the, "Candle Lights".

*

Along the sandy beach.....

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At the sky line I perceived When I neared the seashore A livid tint unachieved So far—which grew more and more.

The waves roared in their swelling joy I heard them sing the chorus. On the slope like molten alloy They perculated thro' the sand porons

> The waves came racing And approached the sloping target But many followed, chasing Rolling together and fidget.

Across flew the droplets saline: The waves drew even and I towards then Their taste and aroma better than awine, And the rhyme a gargling fathom.
The west the birds did throng; As ahead of them was the blazing ball

Babbling thro' the air came the even' song Till they announced the night fall.

> As the evening lass stood before the mirror, The waves transverse heavily leapt, She behold her cheeks rose in colour And slowly they became scarlet.

The sea bathed in Crimson And the forthing waves in contrast The beauty was something Winsonie, No better could anything be cast.

> Every nascent streak of surf Was my tempting host Treating me on the sandy turf, As to many along the coast.

My lonely shadow adorned the scene I steed drinking in the air screne; Some branching shell inside the foan I felt, 'The natures gift'—I took it home.

* * *

The Vanavani Primary School

by Father Murphy S. J.

The name was given to it by the Director. It is, I understand, a name that combines 'knowledge' with 'goddess of the forest'. The forest no doubt is swift disappearing, giving place to blocks of houses advertised by a wealth of sanitary pipes. This little school, which held its Olympics early in March by the kindness of the authorities, is already bursting at the seams. It has already reached its maximum strength of 350 with two sections in each of its five classes. It is guite safely co-educational with the girls not yet established as the weaker sex. The staff consists of seventeen members not counting peons and ayahs. Hindi is taught daily in all the classes and Tamil in most. The nursery children have a good sleep in the afternoon, which enables them to be a sweet and fresh nuisance at home. Very recently the ladies and gentlemen of the fifth standard were taken for a picnic to Pulicat where the ride in a boat and the splashing in the sea was perfect heaven, all the more so that they were allowed under excessive supervision to wade up to the knees, though it was not always clear where the knees end and the head begins.

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THE SECOND CONVOCATION

3rd April 1965

Hon'ble Mr M. C. CHAGLA Union Education Minister

delivered the Convocation Address



Dr A. Lakshmanaswamy Mudaliar, Chairman, Board of Governors, receives the Education Minister Mr M. C. Chagla

Right Top Mr Chagla delivering the Convocation Address

Right Bottom Sri Muthukrishnan receiving the President's Medal for standing first among all the branches in the 5-year course.





Basu John Vetteth receives the Governor's Silver Medal for the Best All Rounder from Education Minister, Sri M. C. Chagla



The Chairman, Board of Governors, signs the Register of Degrees

Kumbhakarna - A Kambachithram

by M. G. Srinivasan

K AMBAN has a prominent place amongst the immortal poets of the world. He is honoured by the title "Kavichakravarti". He was well versed in both the classical languages of his age—Tamil and Sanskrit. He delved deep into the great epic Ramayana in the original form by Sage Valmiki. And there arose a desire in his heart that he should bring in the epic to the people of his land in their tongue. The result was a wonderful creation.

"Ramavathara"—for that was the name Kamban gave to his work—is not just a faithful translation of Valmiki's work. Kamban embellished it with his rich imagination wherever there was scope for elaboration. As one reads through the pages of his verse, one gets the same feeling of wonder and joy as when one reads Kalidasa, Shakespeare or Milton. The creative genius of these men is something by which one cannot but be overawed.

As a sample of these epic—poetry, we will see a portion from its closing canto. We will see the advent of Kumbhakarna.

The scene where we meet Kumbhakarna first is the "Hall of Counsels" in the Royal Palace of Lanka. Ravana has assembled all his lieutenants, brothers and sons. He is still smarting from the disgrace of getting his beautiful capital burnt down by a 'mere monkey', even though it has been restored to its full splendour by the divine builder Maya. Now he seeks the opinion of his counsellors on what should be done to avenge the damage wrought by the monkey.

One by one his ministers and deputies rise and speak out. They all generally agree that the two ill equipped men and the army of unarmed monkeys cannot withstand even the slightest onslaught of the mighty Rakshasa army. It is only over the mode of operation that they differ. Not one among them harbours even the trace of a thought about defeat. Now comes Kumbhakarna's turn. Though well known for the long spells of sleep he is most sober when he is awake. He is the first among the counsellors to sharply criticise Ravana for coveting another's wife. He also knows that the 'two weak men' are not mere mortals and that wholesale annihilation of the Rakshasa if certain it battle ensues. First he mocks his brother. "We will steal and confine another's wife. At the same time we would like to be admired by the worlds. We will talk with gusto about honour but go about lusting. And added to these we are now afraid of the inferior humankind. Sure is our victory."

But he also sees that Ravana has reached the point of no return. Accordingly he gives his conclusion :

You have committed an act unworthy of great men.

"You have brought disgrace to our clan. Yet if you return Sita now, we will look ridiculous. Then the only course is to make war upon them and get killed; it is a blameless course too."

> ஆசில் பரதாரம் அடையச் சிறை அடைப்போம் மாசில் புகழ் காதல் உறுவேம் ; வளமைகூரப் பேசுவது மானம் இடை பேணுவது காமம் கூசுவது மானுடரை, தன்று நமகொற்றம் (ஆசில் - குற்றமற்ற, கொற்றம் – வெற்றி) சிட்டர் செயல் செய்தில், குலச்சிறுமை செய்தாய் மட்டவிழ் மகர்க்குழவிணுள் இனி மன்னு விட்டிடுது மேல் எளியம்ஆதும் அவர்வெல்லப் பட்டிடுமேலதுவும் நசு றபழியன்ரூல்.

With this advice, which is finally accepted inspite of Vidhishana's remonstrances. Kumbhakarna retires to his bedchamber and commences along spell of sleep which is going to be the last in his earthly life.

As Kumbhakarna lies in deep sleep things move fast outside. Vibhishana leaves Lanka when he finds that his efforts to save Ravana from following the path of destruction are futile. He goes over to the other shore of the ocean and seeks refuge in Sri Rama. The ocean is bridged by the Vanarasena. Angadha, son of the mighty Vali, tells Ravana to return Sita and save himself. But he chooses war. The two armies meet near Lanka and clash. Some mighty generals of Ravana meet their death. Enraged, Ravana himself sets out to fight, only to be defeated by Rama. As he stands before Rama deprived of all his weapons and his crown. Rama asks him to go back, get himself armed and come to the battle the next day. Ravana returns to his Palace, a very picture of grief, dejection and disgrace. Mahodhara. his minister, consoles him and suggests that Kumbhakarna be sent to the battle the next day. Ravana agrees to this proposal.

We meet Kumbhakarna now in his bed-chamber. A full battallion of armed Rakshasas is sent to wake him up from his death-like sleep. After much thrashing and beating Kumbhakarna awakens. Here at this juncture we come across a stanza well known for its sheer beauty of rhyme and metre, As they awaken Kumbhakarna the impatient Rakshasas sing :

உறங்கு கின்ற கும்ப கன்ன உங்கள் மாய வாழ் வெலாம் இறங்கு கின்ற தின்று காண் எழுந்தி ராய்எ முந்திராய் கறங்கு போல் விற்பி டித்த கால தூதர் கையிலே உறங்கு வாயு றங்கு வாயினிக்கிடந்து றங்குவாய் (கறங்கு – காற்குடி)

Kumbhakarna wakes up. Immediately he eats a hearty meal and drinks pots of wine in quantity proportional only to his heavy sleep. Here Kamban describes the might, stature and size of this giant among the Rakshasas. Informed that Ravana wishes to meet him, he proceeds to his brother's chamber. The brothers meet and embrace. With his own hands Ravana begins to dress Kumbhakarna with armour and other weapons. Probably forgetful of what took place just before he went to sleep. Kumbhakarna enquires of his brother what necessitated his action. Ravanar eplies "Two men and an army of monkeys have come and wrought havoc amidst our ranks. You go and crush them all"

A great sorrow swells up in Kumbhakarna's heart on hearing this. No, he is not afraid of fighting. He the hero who vanquished even Yama, the God of Death in battle, sorrows because he foresees the perishing of his entire race and the decline of their well earned glory. He exclaims: "Has the raging battle already begun: Has not the chaste Janaki yet seen the end of her suffering: Has our fame that has reached earth, come to nought: Has the fall begun :

"Have not you returned Sita to Rama? Alas: you have given your enemies, cause to be happy. Who can protect you when the fruit of all your good deeds has been already lost? Can we — the embodiment of all that is Evil — even dream to conquer Rama, the embodiment of all that is good?

"The mighty monkey who crosssed the ocean just with a loop is besiddes them. Sita has not yet been returned; and Rama still has deadly arrows like the one that cut down the great Vali; and here we are handy targets for them:

If you want to live return Sita and surrender yourself to Rama or collect the entire Rakshasa force and attack the enemy."

> ஆனதோ வெஞ்சமம் அலகில் கற்புடைசீ சானகி துயர் இனம் தவிர்ந்ததில்லேயோ வானமும் வையமும் வளர்ந்த வான்புகழ் போனதோ புருந்ததோ பொன்றங்காலமே

Here we can detect an apparent contradiction in Kumbhakarna's behaviour. It was himself who counselled earlier that fighting was the right course and to return Sita would be a humiliation. But now he is saddened at the folly of Ravana in not sending back Sita to Rama.

The only explanation is that when danger knocks at his door Kumbhakarna is aware, with an intense awarness that was not before that his brother's fall is certain. The overwhelming abundance of love he has for his brother makes him talk of the only possible way to prolong Ravana's life. Yet even now he finally concludes that the other cause of mobilising the entire army and attacking the enemy has to be resorted to.

Ravana is angered by Kumbhakarna's remarks. "Rise: Go back and sleep till the end of the worlds: I did not call you to ask for your advice. To bow and serve the two men and the most of monkeys may suit you and your younger brothers; but never shall I stoop to that state." So saying Ravana orders his own chariot and armour to be brought.

Here the poet shows us a glimpse of Kumbhakarna's greatness. He immediately reacts and says to his brother, "Bear with me, my lord, I will go and fight. I do not say that I will return victorious. The invincible fate compells me to go. If I die in the battle, at least then return Sita. Know that your son Indrajith and your powerful army will all go to pieces struck by the sharp arrows of Rama, King of Lanka: If Rama can overcome me it is certain that he will vanquish you. Hence return Sita if I fail to come back and live long."

Thus Kumbhakarna takes leave of his brother never to meet him again. He does not boast when he says that he is more valiant than Ravana. He is one who has never know cowardliness or fear. Now will see him in the midst of the battle in all his glory and valour.

Kumbhakarna enters the field of battle driving his magnificient chariot. Rama observes his giantly proportions and much impressed asks Vibhishana who he is. The good Vibhishana tells Rama, "He is the younger brother of Ravana and elder brother to me. He goes by the name Kumbhakarna.

"When Lord Vishnu wakes up from his yoga-nidhra the asuras perish in their thousands; and when Kumbhakarna wakes up from his long spell of sleep, devas perish in their thousands. He has defeated Indra, the Lord of Devas, and Yama, the God of death in battle. He has to his credit many a penance and as a result is a recpient of divine boons.

"He wields a trident given to him by the Great God Siva, Nilakanta. When fighting with the devas he has never seen but their back as they, never daring to face him, take to their heels. "He admonished Ravana more than once of the consequences of stealing Sita. But when he saw his brother would not return Sita and 'stood with his honour rooted in dishonour'. He offered to fight for Ravana and has come here now to meet his death."

Hearing this, Sugriva, King of the monkeys, suggests that Kumbhakarna be induced to leave Ravana's side and brought over to Rama's fold. Vibhishana cames forward to accomplish this.

Here is one of the most touching scenes of the epic and Kamban has handled it in his expert way. He now reveals us the true nature of Kumbhakarna. We now see his large-heartedness, his love towards both his brothers, his sense of gratitude to one who brought him up, his immense courage and the indomitable will to fight even when he stands at the door of death and above all his realization that Rama is the Supreme being that has come down to earth to establish the moral law.

Kumbhakarna is informed that his younger brother has come to meet him. He is very happy to see him again. His love for Vibhishana is as great as that for Ravana. Vibhishana comes, falls at his brother's feet and pays abeissance to his elder brother. Kumbhakarna embraces him heartily. He enquires of his brother the reason for his coming all alone. Even before Vibhishana begins to reply, a doubt appears in Kumbhakarna's mind. He suspects that Vitbishana has come back to the Rakshasa fold, to fight on Ravana's side. Contrary to what we expect he does not rejoice at the idea. He is sorry that Vibhishana should return to the doomed ones leaving the compassionate Rama. He begins advising Vibhishana thus. "Brother mine, you had gained a refuge which it is difficult even for the devas to obtain. Why do you come back to us who are only waiting for death? Will you take poison when you have nectar besides?

"I was very happy that the honour of Pulasthya's clanh as been saved by you when you surrendered at the lotus feet of Rama. I am grieved to see you back here amongst us. Rama and Lakshmana will not fail to protect you even at the cost of their own lives. Why then should you come back as if still some traits of our evil caste remains in you?

Dear Vibhishana: When all the Rakshasas are killed, if you too are among them, who is left here to perform our obsequal rites? Please go back to Rama. If at all you should come back to Lanka. come as the King of Lanka when the city is cleansed of all evil by the victorious Rama."

It is now Vibhishana's turn to reply: At the very outset he dispells Kumbhakarna's doubt and also makes his intentions clear. He begins by saying that Rama will be pleased to receive Kumbhakarna if he will seek refuge in him. He continues to say. "I will give you the kingdom of Lanka which Rama has promised me and will wait at your command for ever. At the same time put an end to this cycle of birth and death by giving yourself up to Rama, the Supreme one. There is no better course.

"Great men will not tolerate evil, even if it be their beloved who commit excess. In such a situation they renounce their sinful kinsfolk. Should I, your junior of all the people, teach you, the learned one, of such rules of conduct? Don't you know the precedent of great Parasurama, who did not hesitate even to slay his own mother when she strayed from the path of right conduct?

"Is it not a pity that even the innocent ones should perish just because of association with Ravana, the guilty one? You tried your utmost to wean Ravana away from evil, but failed. Now you are making yourself the laughing stock of devas, your sworn enemies. What can you achieve but be killed and thrown into hell, if you persist in your present course?

"What a barren waste have you made of your life? Even though you have conquered all the worlds by your might, you have not been fortunate enough to rule over them. You have slept off all your youth into oblivion. And to top all this you are going to sacrifice your life for an unworthy cause.

"If only you will come over to Rama, you will have the anathema of your sleepiness cured, and will rule over all the worlds with pomp and glory. Then the offsprings of yours, mine and Ravana will all thrive. Even devas, your deadly foes, will become our friends.

"Rama, the Lord of Vedas, himself took pity on you and out of compassion has sent to me. If you love me, if you have regard for me, please come with me and yield obeisance to Rama."

As Vibhishana waits for Kumbhakarna's reply, Kumbhakarna again embraces Vibhishana and shedding copius tears of sorrow replies. All the inducements Vibhishana offered do not have the slightest effect on Kumbhakarna's determination to fight for Ravana. A deep sense of obligation towards Ravana, the unthinkable impracticability of his serving under men who will slay his brother and pride of his own prowess in battle have made him unmovable. He tells Vibhishana, "After bringing me up with loving care all through my life, Ravana has now sent me here to fight for him. I can never desert him and go to Rama, with my mind set upon gaining a few more year of this battle like life.

"But if you want to please me return to Rama. Returning to Rama befits your nature as dying in battle befits mine. If one's sovereign could be brought over to the path of righteousness, well and good. But when it is not possible, fighting for him and dying before his death are the only right things, one who has enjoyed his hospitality can do.

"Will Ravana, the great hero who had lifted the Kailasa Mountain from off its roots, enter into the abode of Yama, the defeated one, unescorted by his brother when he dies? Vibhishana: I, who has overcome the very God of Death, can never stand with my hands folded in supplication before men. You will see me striking terror and spreading panic amidst the enemies' ranks."

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செம்பிட்டுச் செய்த இஞ்சித் திருநகர்ச் செல்வம்தேறி
வம்பிட்ட தெரியல் எம்முன் உயிர் கொண்ட பகையை வாழ்த்தி
அம்பிட்டுத் துன்னம் கொண்ட புண்ணுடை நெஞ்சோடு ஐய
கும்பிட்டு வாழ்கிலேன்யான், கூற்றையும் ஆடல் கொண்டேன்.
(இஞ்சி – மதில்; வம்பிட்டதெரியல் - மணம் பொருந்திய மாஃல)
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Kumbhakarna finds that Vibhishana is distressed to hear him speak thus. He tries to console him, saying that everything has been predetermined and himself is fated to die.

Now Vibhishana has also come to realize that nothing will induce Kumbhakarna to leave Ravana. He finally takes leave of Kumbhakarna once and for all with a last affectionate embrance and goes back to Rama. Kumbhakarna's eyes dim with tears as he gazes on at this departing brother.

The batte has begun by now. The Rakshasas and the monkeys are fighting fiercely. Kumbhakarna brings his chariot amongst the army of monkeys and single handed he wrings havoc amidst them. He meets in battle the valiant monkeys Nila and Angadha. Even these heroes could not withstand his crushing blows. Then he confronts Hanuman. They throw huge blocks of stones at each other. Hanuman himself withdraws from the combat realising that only Rama can overcome him.

Kumbhakarna, drunk with victory, challenges Rama and Lakshmana to come and restrain him. Meanwhile Lakshmana, with his bow and arrows, is striking terror among the Rakshasas. Kumbhakarna, admiring Lakshmana's skill in archery drives his chariot towards him. Hanuman comes forward to seat Lakshmana on his shoulders while fighting with Kumbhakarna.

Now Lakshmana, brother of Rama, and Kumbhakarna, brother of Ravana, meet face to face. Even the devas assemble to witness their combat. At this moment Kumbhakarna remembers that an old score is yet to be settled between himself and Lakshmana. He recalls to his mind Surpanaka's plight. Enraged, he swears, "As a result of our penances, a lovely sister was born amidst us. You dared to cut her nose and disfigure her, innocent though she was. Now I shall cut down those hands that seized her by the hair. Defend yourself."

Lakshmana gives a curt reply. "I am not well versed in tongue wagging. Let my arrows speak for me"

> பெய்தவத்தினேர் பெண்கொடி எம்முழைப்பீறந்தாள் செய்த குற்றம் ஒன்று இல்லவள் நாசி வெஞ்சினத்தால் கொய்த கொற்றவ மற்று அவள் கூந்தல் தொட்டு சர்த்த கை தலத்திடைக் கிடக்குவன் காக்குதி என்ருன்.

> அல்லினுற் செய்த நிறத்தவன் அணேயது பகர மல்லினுற் செய்த தோளினன் மாற்றங்கள் நும்பால் வில்லினுற் சொல்லின் அல்லது வெந்திறல் வெள்கச் சொல்லினுற் சொலக் கற்றிலம் யாம் எனச் சொன்னுன்.

A fierce battle ensues between them. One by one Lakshmana destroys Kumbhakarna's chariot and cuts down his bow. Having known his brother's plight from swift messengers Ravana sends reinforcements. Lakshmana engages himself with this force and begins slaughtering them wholesale.

Kumbakarna, seeing Lakshmana thus engaged goes to another side of the battle field and clashes with Sugriva. During the fight, when Sugriva searches for a handy hillock to be plucked off and thrown at his adversary, Kumbhakarna throws a deadly spear at Sugriva. As the spear speeds towards its target, Hanuman, noticing it, with an incredible jump reaches for the sky and catching hold of the spear breake it into pieces.

Again Sugriva and Kumbhakarna meet, this time fighting hand to hand. But now Sugriva is tired and grows weak. He faints during the combat. Kumbhakarna lifts Sugriva on to his shoulder and sets out for Lanka with his precious trophy. The helpless monkeys, not daring to prevent him, cry with sorrow. They run and inform Rama of what had happened. Rama, swiftly reaches the gates of Lanka and surrounded the entire town with a literal wall of arrows.

His progress thus impeded Kumbhakarna turns back and sees Rama. He challenges Rama that if he can free Sugriva from his fold he is capable of releasing Sita from Ravana. Rama in turn swears that he shall never wield his bow and arrow any more if he fails to release Sugriva. Immediately following this an arrow released from Ramas' bow strikes Kumbhakarna and blood gushes out of his face. Sugrive wakes up from the faint when the flowing blood wets his face. Seeing that Kumbhakarna is engaged with Rama, without loosing a moment Sugriva bites off his nose and ears and jumping off his shoulders reaches Rama's side. Kumbhakarna is terribly incensed like a wounded beast. Ferocious with anger he begins crushing the monkey foes to his left and right. Rama again confronts him. Rama destroys the entire battalion that Ravana had sent again to support his brother. Now Kumbhakarna stands all alone facing Rama. Rama gives him a chance to go back home for the day and return well armed. Unlike Ravana who previously accepted such an offer, Kumbhakarna rejects it and he will fight alone to his end.

The mortal combat begins. One by one Rama destroys his opponent's armour, trident and spear. As Kumbhakarna reaches for his sword Rama cuts down his right arm. Kumbhakarna still wrings havoc amidst the monkeys with his left hand. Rama cuts that too. With both his arms cut down Kumhakarna moves about crushing the monkeys with his legs. Rama severs his legs also one by one and Kumbhakarna falls on the earth but is still active.

The undaunted Kumbhakarna in the extreme of his rage plucks off a huge block of stone with his teeth and flings it at Rama. Here the poet says that even Rama's hands tremble as he releases his arrow that shatters the rock to pieces.

Suddenly Kumbhakarna realizes that he has come to the journey's end. He calms down and a great sorrow comes over his heart. He is not afraid of death even new but thinks only of Ravana's fate.

In his final moments Kumbhakarna recalls to his mind that Rama is not a mere man and he begins to address him thus. "Lord : you are the scion coming in the line of great Sibi who out of compassion offered his flesh in order to save a dove that took refuge in him. You please protect Vibhishana.

"O, Prime cause : God who has assumed the form of a King. Vibishana though born amidst us knows not our evil ways but follows only the eternal laws of Dharma. Please protect him who sought refuge in you.

"Ravana, ignorant of this his brother's worth and having no seruples will try to destroy him by all possible means. Hence please see that Vibhishana is never separated from you Lakshmana and Hanuman."

> நீதியால் வந்த நெடுந்தரும் நெறியல்லால் சாதியால் வந்த சிறுநெறி அறியான் என்தம்பி ஆதியாய் உண்யடைந்தான் அரசஉருக் கொண்டமைந்த வேதியா இன்னம் உனக் கடைக்கலம் நான் வேண்டினேனே.

Sorrowfully conscious of his disfigurement lastly Kumbhakarna requests Rama to cut off his head and throw it far off into the ocean. Rama grants this his final wish and puts an end to the agony of Kumbhakarna with one arrow.

Thus a brave drama comes to an end.

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33

Oh! Darling

by K. Venkataramani

SHANTHI! Can't you speak a single word to me? After all, what is the mistake on my part? Had I offended you in any manner? If so can't you kindly xecuse me? Why are you so indifferent to me? Won't you generously forgive me for any wrong I may have done to you without my knowledge, and accept the bouquet?

No; you will not speak. I know you are not indifferent to me. My darling, you can not be indifferent to me. You are really generous to pardon me even if I had launched any offence on you. But you can not speak. I know the reason. Shanthi! You had left this dirty world occupied by ungrateful human beings, and proceeded to the abode of angels. But you suffer no loss. But can you imagine how I suffer, how my soul mourns because of separation. Away from you I feel like a fish out of water. But I think you did not know that. Otherwise you would not have left me in this miserable condition.

But now you can not explain to me anything, Shanthi ! because you are imprisoned in a frame.

Shanthi! we lived together only for a very short period. Kāla is really a tyran't for he turns Kāla Chakra, the wheel of time without caring for the feelings of the humble human beings. Those pleasant days had run into the unrecoverable past.

Shanthi ! You had influenced me in every sphere of my activity. You were my guide, companion, adviser, colleague and everything. But for your inspiration I would not have been able to complete my post-doctoral work in States. I hesitated even to apply for the scholarship. It was only after your tireless persuasion that I applied for the scholarship merely to satisfy you. It is really a miracle that I got the scholarship. Everyone said that you were the incarnation of Lakshmi Herself, who entered our house to make our life prosperous.

For both of us separation was a difficult thing to assimilate. But you with your extraordinary presence of mind willingly accepted our separation. God is really merciless. His tool Fate plays its ruthless game only on meek people. Hardly six months after marriage I went to the States leaving you in our motherland. Aias! I returned home after three years, after successfully completing my work, merely to lose you for ever to the devil death. Oh God; You are merciless. You had given me a heart not made of flesh and containing blood, but of steel and containing molten lead. Otherwise, how am I still alive, after giving her as a prey to your cruel deputy Yama? How is it that I have not yet embraced death and am living still?

Shanthi ! I wish that the 'plane which brought home had crashed on some mountain, had fallen and sank in the sea, or crashlanded, killing me. Oh ! my better part, your eternal separation from me is unbearable. But . .. but I am to sustain the pricking fact that you are no more. Darling ! my mother lost her devoted daughter-in-law. She in all her letters tome had written nothing but in praise of you.

I can not get peace of mind anywhere. Wherever I go, the pleasant memories of the past haunt me; the house looks like a desert for me. Our house is always neat. But you added to the neatness of our house liveliness yes; every inch of our house said that it had the fortune of securing your attention. Now... now... though everything is neat, but they lost their attraction. Before the roads of our lives met, I was merely a log of wood; you tried to convert the log of wood into an useful article. Now you, the carpenter stopped your work in the middle. Now I am nothing but saw dust.

I am like a blind man, who, for a short period got vision and once again lost his sight. When I think of those happy evenings in which we played chess or undertook evening walks, discussing all topics from a to z, I can not help but to release a heavy sigh. Now I have nothing but your letters, to console me. Are they mere letters? No; they are classics. But they increase my pain rather than soothe me.

Even temple can not give me consolation. Whenever I go to the Temple of Sri Rama, an incident flashes across my mind. One day we went to Sri Rama's Temple. While returning I enquired "What was your prayer?". You replied "My prayer was, is, will be that we must always be like those divine couple Rama and Sita." I was not able to recognise the dramatic irony in what you said ! Like Sita, you were separated from me for a long time, and were not able to live together for even two months after I returned from America. After Rajyapisheka, Rama was compelled to part from Sita, and Sita plunged hereself into Mother Earth. Alas ! Shanthi! I was the person responsible for your premature death. Oh God ! the scooter accident which swallowed my Shanthi left me unhurt. Why is it that I was left alone? Oh God ! You had not been kind enough to allow me to accompany my beloved Shanthi to the heavens. Shanthi ! now you are no more. Sita left Lava and Kusha. But you left none. But I am alone like Rama. Rama followed his vow, namely not thinking of any other woman except Sita. I will also, as I had been, stick to that vow. Shanthi! in my life I have not given any woman a place in my heart. You occupied my empty heart and enlightened it for short time, and suddenly deserted me. Hereafter my heart will be empty, and dark. No other woman can step into the place you occupied. Now my heart is a Temple without God; flower without scent; veena without strings. I am now an useless machine beyond repair.

But others are not able to understand this. Even your parents want to try to enlighten my life by giving your sister Pushpa in marriage to me. No. I eannot allow such things to happen. Our love is eternal, and free from lust. I am not Shah Jahan and I can not build Taj Mahal in your memory. But my love is pure, and my heart is your monuments. You are to me not wife; you are my Goddess and I am your devotee. I dare not garland your picture. I surrender the garland at your feet. Shanthi! I cannot get Shanthi in this world without you.

Swami Vivekananda a great son of India

by P. Venkatesan

SwAM Vivekananda belongs to the immortal band of those ennobling men who found God in the shrine of man "Where the tiller is tilling the hard ground and where the pathmaker is breaking stones". Like them he felt that the same stream of life running through his veins day and night ran through the whole of God's endless creation. Hence one with them he worked "in Sun and shower, putting off his holy mantle" and casting aside even the thought of "deliverance". For the knew where real deliverance was to be found—not in the panoply of formal rununciation but in the embrace of a thousand bonds of duty and devotion to service of his fellowmen. If today there still survive goodness and grace in the world inspite of mounting racial, religious and idealogical hatred and conflict we owe it not a little to great men like Swami Vivekananda and his master Sri Ramakrishna.

Even before the close of his scholastic career the sudden demise of his father threw the burden of domestic responsibility on Narendra's young shoulders. Faced with the problem of securing livelihood, forced by the abrupt indigence and poverty, Narendranath turned almost an atheist and an agnostic. In his dark moments of despair and dejection he wailed "If only there is a Being by the name of God will all this happen to me? Is there really a God at all and has anyone seen Him?"

At this hour of mental conflict, tossed between belief and disbelief, agnosticism and atheism Narendranath found his way to his master Sri Ramakrishna who with his exalted spiritual vision not only proved the existance of the Almighty but literally conquered the semi-sceptic. Hence forth, Narendranath slowly but critically appreciated and ultimately assimilated the message of his master—the basic unity of all seemingly diverse religions and the secret of worshipping God in the service of man.

After the passing away of Sri Ramakrishna, Vivekananda started on his peregrinations for a quest and discovery of India. He wandered incognito staff in hand and clad in saffron robes through out the length and breadth of India from Kailas to Kanyakumari, sometimes visiting the dilapidated howels of the downtrodden, sometimes resting in the marmoreal mansions of the Maharajas.

In his Sojourns Swamiji saw real India, discovered India-the povertystricken, the misery laden, the superstition - ridden India with her dumb millions wallowing in wretchedness and ignorance, disease and despair, social injustice and indifference.

Swamiji's heart bled. The sight of the suppressed and depressed folk could not be shaken from his mind. He felt that it was a mockery and shame to offer religion to the hungry stomach. In deep sorrow he moved on thinking of the cause of India's decadence and degradation from her glorious past. Was her dethronment from her high pedestal of spiritual leadership due to ignoring the lessons of the past, or caused by their cultural stagnation? Perhaps the ritualistic incrustations corroding the fundamental spiritual unity wrought their downfall.

Towards the end of 1892 when he was at Cape Camorin, our land's end. one night, he swam across the shark-infested strait from the mainland to an island rock which now bears his name. And there, seated on the very last stone of India he meditated for three days on the lot of his country. About him the restless main tossed and stormed and in his mind there was even a greater tempest, But it was only for a while. Soon a great calm descended on him making his mind a mere chamber of silence, vibrant silence. And in that silence, he had the vision of India with her spiritual diversity, her misery with her people completely submerged and steeped in squalor, ignorance and poverty. Tears rolled down his eyes. Clear-eyed Vivekananda saw why India had been thrown from the pinnacle of Glory to the abyss of degradation. The nemises was brought about by their neglect of her moorings in the past. That moment the simple monk was transformed to a great social reformer and master builder of his nation. Then and there he dedicated his life to the miserable down-trodden masses and resolved to consecrate himself to the task of their lot. He made to himself this sublime utterance: "The work of a saint does not lie only in the uplift of his own soul. It today lies in the uplift of the masses. To this task I shall wed '.

He visualised his work on a world-wide basis. India's wealth was however spirirual; it only needed reinforcement with modern scientific ideas. Also it was India's duty to give her spiritual treasures to the nations of the west in return for their material gifts.

The world Parliament of Religions held in Chicago in September 1893 gave Swamiji the idea of a tour abroad. Some of his admirers suggested to him that he should represent Hinduism at the Parliment but Swamiji had other ideas of his own, to collect money for the material uplift of the masses. Whatever it was Vivekananda obeyed the divine call.

In the great audience hall of the Parliament of religions he sat unobtrusively and prayed while others displayed their oratory. His chance came at last. It was the chance of Hinduism and India at large, of India despised by the world. As Swamiji rose his face shone with a glow from within; sheer sincerity, clear and transparent in its purity and universal love, deep and abiding, overflowed from his heart as he uttered those five memorable words that thrilled the world 'Sisters and brothers of America'' The bored audience were electrified. For no one before had spoken to them in words that came out from the depths of his heart. His speech like a tongue of flame fired the souls of the listening throng.

He presented Hinduism as the mother of all religions. He told them how "as the different streams having their sources in different places all mingle their water in the sea, so the different paths which men take through different tendencies, various though they appear. crooked or straight all lead to God' and hence of the folly of all religious bickerings. He wanted them to sweep away the doctrinal differences of philosophical schools. He also told them about the greatness of India's ancient heritage and of the present sufferings of her millions.

Overnight America in its height of materialism accepted his teachings. The papers praised him as the greatest figure in the Parliament of religions and admitted that, after hearing him, Americans saw how foolish it was to send missionaries to his learned nation.

After about two years of stay in America Vivekananda visited England and created in the minds of English-speaking races the love and sympathy which India so direly needed and needs now.

Swamiji returned to India in February 1893. This city of Madras had the first great honour of receiving him. Swamiji emphasied in his lectures here and as in those from Colombo to Almora that "in India religion forms the centre, the key-note of the whole music of national life". But it was a man-making character-ennobling Godward-taking religion he wanted us to follow. He gave the twin ideals of strenghth and service to cherish. He then disclosed his "plan of campaign" of starting institutions to train young men as preachers in India and abroad.

Towards the close of 1898 Swamiji assembled at Calcutta his disciples, lay and monastic, eastern and western and formed them into a order. Hailing them

When I. I. T. is Petticoated

by T. N. Vijay Reddy

FVER since the world began woman has always deceived man, that is, till now. Here, the young women of India are deceiving themselves in not joining I.I.T. Madras in large and uncontrallable numbers. Why the romance of its six hundred acres of sylvan landscape, the fragrance and perfume of its laboratories and forests, the light adventure of travel on its highways, the daredevil of its motor cyclists, the speed of its Volkswagens and omnibuses, the charm of its avenues, the aromas from its cuisines, the bustle of its days and the secret of its nights, the wisdom of its teachers, the brilliance of its students, and if none of these appeal, the eligibility of its two thousand odd bachelors has not whetted the imagination of the college going girls in our country, is beyond human prudence but well within the I. O. that a woman can scrape out. Is it because the girls of today worry too much about their latest fashions, the tight sarees and high blouses, and are oblivious to the real excellences of life? Or have they not heard of this fascinating square mile? Or having heard, are there not any girls to aspire to live in such a haven? Or having aspired, do they not possess the means to attempt?

Where else does Troy Donahue turn up assiduously every Saturday night, wearing his blood red cardigan and navy blue jeans and serenade an audience and not a single ooh nor ah is heard? There is not a girl in India who will grant Troy the salvation for which he has been singing his guts out ever since I came here. Where else are imported drainpipes and second skin trousers worn along with Jodhpuris and dhothis with such meticulous fastidiousness, only to be dirtied by the layers of dust on the desks in the class room, only to be worn out on the dhobi ghats of Velacheri, unseen by eyes that were meant to see them.

A great fallacy of mankind is that it is called by that name for after all it is the womankind which perpetuates mankind. Unlike amœba the human race is bisexual. The implications of its being so are not just physiological, nor just concerned with the natural and apparent purpose of such a division of species. The enthusiasm of the intellect, the calm of the spirit, the comfort and completeness of one's mundane existence are immeasurably impeded if the environment of habitation is not natural. The separation of the two sexes for any length of time in any pocket of humanity is unnatural. The absence of one of them creates, in the habits, in the mentality, in the thoughts and words of the other a lacuna not easily definable, not immediately obvious. The grown ups, most of them, think that men students clamour for the presence of the fairer sex in their vicinity only to whistle at them, only to pose for them; even if they should, why not?

Men or women, living by themselves, without normal contact with the other are shut off to certain instincts, to certain topics of conversation, to certain actions and reactions, to certain comedies and tragedies, all adding up to a set of very interesting and enriching experiences in that period of life. By and large, as Higgins says we are a magnificient sex, even a fantastic sex, but we are so only because there is another sex to be compared to. But in I. I. T. we can neither compare nor contrast nor outshine another sex for we make the only one that roams the woods of I. I. T. Bob Hope writes from Alaska that the G. I.s there were so hard up for dames that one G. I. was going steady with his tattoo. Now, we in I. I. T. being Indians are more fatalistic, being students of science improvise and innovate, being the products of the periodical system (the most benign third degree in the world) suffer the insufferable stoically. Not that there are no weakenings among them. Every Saturday caravans set out by foot, by two wheelers and by four wheelers to varied destinations; but then, all to one destination, to seek delight in that scent, that sound, that touch.

I wonder what the students of I. I. T. will be called when fin response to this expose girls from all nooks of India, in all shades, in all lengths, weights, etc., rush to I. I. T. as insects rush to light, with the difference that they will be rushing not towards self-immolation like the insects but into a state of exalted existence. The entity 'I. I. Tians' will have to be changed because the beings from Mars are called 'Martians' in comic books and they have only one sex. Since the male population will be in the minority, we could be called "I. I. Teves" or 'I. I. Tonorinas' (form senorina) and the degree offered could not remain Bachelor of Technology. I don't envy the Senate, trying to conciliate the uncompromisable. I only hope they will keep in mind the predicament they will put our pop singers, the B. Techs in, if B. Tech. was changed to something not nearly masculine in its implication. Some protective measures would have to be taken in the interests of the minority male phase. Places should be reserved for them in buses, class rooms etc., and in the sympathies and charities of those in a position to dispense them, lecturers for example. A limit should placed on the percentage utilization of spare time(?) for cramming, because a girl can cram in half an hour what a boy takes an hour to understand. What a girl understands in one hour is negligible. A limit should be enforced on the number of pages filled in exams and the interspacing of words and sentences should be standardised and listed in DIN tables. The last measure is necessary because the girls are great ones for spinning long and poignat yarns and some of our younger examiners untrained in these matters, may fail for them.

With the changing tastes and aptitude of the studentship, minor changes in the syllabi are imminent. Embroidery and knitting will be offered as an alternative to those third and fourth year electricals who find circuits confusing. The basic principles underlying these subjects are afterall identical. The present staff, it seems, can cope with any such slight changes in the subjects they teach. The chemicals will drop 'process equipment design' and take up a lab, based study of 'The uses and abuses of cosmetics and deodorants.' The electricals will continue with measurements but the subject will never be the same again. The aeronautics department will allot out of the existing resources, the space, time and know-how for the training of high tensile strength air hostesses for service under Indian conditions. The newly acquired subsonic windtunnel may prove inadequate to test these ultrasonic air sirens. The recently completed steam lab. will undertake research on 'The production of non-scalding steam for use in Turkish baths,' Experts from France and Japan may be needed. The humanities department will organize seminars on such topics as "The emotional and social problems involved in cutting a plum cake into an odd number of pieces." The N. C. C. building will be taken over by the Y. W. C. A.

I am already feeling nostalgic about the good old days when I. I. T. ate and slept and talked and lived stag, when one could utter a four uttered banality and not feel guilty of leaving behind a dozen blushed faces, when one could whistle in bliss into free air and not be mistaken for a Romeo, when one could walk into the open air theater in a three week new night suit and not worry about attracting any opinions or looks that mattered. Gone are the days when a haircut was needed only when the dandruff became too heavy to bear, when a Silver Gillette could be made to last well through a term, when one bath could keep you acceptable in society through half a week. Gone or the days of bed to classroom via breakfast in four and a half minutes.

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Random Reflections

by V. J. R. Asirvatham

HELLO folks! This is Job the Dreamer wishing you all a good day. The programme is new and fantastic and is entitled "Random Reflections," the out come of a series of dreams. The other day I was trying to remember some Metallurgy and all that I could get in focus was a long tube and at the other end satof all people - Marconi, and he happened to be tampering with something. Well this was something to arouse my curiosity and I was all at once swept into the world of wireless. Radios to the right of me. TV sets to the left, transistors of all magnitudes and shapes. Well, this made me think next of the benefits the world has received on account of the use of wireless. Drifting back to reality you hear.

"There was an old woman who swallowed a fly I don't know why she swallowed the fly Perhaps she'll die".

or "Mashed Potatoes" and "Landings on the moon". Mashed Potatoes makes you think of the variety of potatoes that exist and what a lot they mean to the world's hungry millions. And regarding landings on the moon I guess the boys are right. Already Luna IX has achieved a 50 ft. landing on the moon and if I read right there are indications of gold streaks on the moon's surface. The moon is still and has been through the ages a thing of mystery. Were we to look at the moon on a full-moon night, we would see that it was not for fun that lunar crafts were developed. And after all the moon is but a tiny speck in the universe. Have you ever looked up on a summer night at the vast mantle of space glittering with so many myriad starss. And have you never felt how small man seems? And does it not indicate to you that there is some strange power "that turns the handle of this idle show?" And while we are still in this 'moony' state how wonderful it is to hear that men are able to travel in space and that one day in the near future rocket-ships will replace aeroplanes.

And talking of aeroplanes, we definitely have come a long way from Wilbur and Oryille Wright's planes to supersonic jets and multistage rockets.

Now coming back to mashed potatoes, we find that it is quite a common dish. And I am sure any chef will know of umpteen methods to prepare mashed potatoes, and potatoes are generally round or elliptical. This makes me think of all things of this particular shape. The first picture that flashes before me is the 'O' of Giotto and (I beg your pardon) - the new hit in town: OSS 117. And the endless assortment of circles and spheres, bowls and balls and globes.

Balls can be used in ever so many ways. You hear P.S.K. shouting out -"He's bowled" and you picture a green patch of grass and cricket teams and of course the red cricket ball. Soccer, golf, hockey, table tennis are games in which a ball is used.

Bowls can always take up your time— I guess you know when Not that I am asking you to go to a porcelain shop or a government museum and peer at the wonderful collection of bowls. You just break a bowl accidentally and try collecting the broken pieces. And bowls do remind us of our ever present poverty problem. Hundreds and hundreds roam about the streets begging for a few paise.

And globes do take up our attention for sometime. There in the classroom, the teacher explains to the students the wonderful world we live in. What a varity of races, colours and creeds. And one of the blessings of the modern age is that transport is fast and efficient thus enabling people from different parts of the globe to visit and exchange ideas and gifts with each other. We in India have the good fortune to meet so many kinds of people who help us in some way to solve so many of the problems which confront us.

And this naturally leads us next to consider the wonderful phenomenon of the earth's rotation on its own axis and next its revolution around the Sun. What master-minded people like Kepler must have had in order to plot out the course of the earth's rotation so very long ago. And does this not next lead us to consider that fact that there is so much of space in the universe us to allow systems like ours to operate without the fear of collisions. Mummy catches Susan gazing happily into the sky with a mysterious look onher face. "What happened? asks mother. And Susan replies, "I saw a shooting star and believe it or not, I was thinking of daffodils". "Lucky girl, I do hope you get your wish granted says Mother. And there superstition still holds mankind in chains even though we profess to have reached a higher level in civilization.

Peering into the earliest mists of time we find the first men cowering and hiding from the enveloping clouds of superstition and ignorance. Religion, customs, totems and spells arise in an endeavour to ward off the strange things that occur. Time flows on and the fish reaches up to breathe. This is the case today. Science has helped a great deal to overcome traditional myths and superstitions. What a lot we owe to science and technology. If not for science were would we find trains, motor-cars, trams, aeroplanes, motor-bikes and the age-old push-cart? Where would we be able to manufacture pins, needles, components of various machines in mass production? And would we ever have heard of condensers, diodes, triodes, cathode rays and what not? And electronic computers and giant cranes and ships and submarines? And who would have heard of Laser beams, radium, atomic energy, nuclear fission, liquid fuel, Jodrell Bank, Cape Kennedy, radar, power-stations and ever so many things? And modern medicine has come a long way from sawing off infected limbs and mumbo jumbo spells to anæsthetics, disinfectants, surgery and has made great headway in the struggle against diseases like cancer and leprosy which have plagued man ever since he fell into the water and got a cold or could not hunt his food and died of malnutrition and starvation. And the wonderful new branches like biochemistry and others which go into the very structure of life and will soon be able to predict the sex of a child in a mother's womb.

Science has helped also in a great measure to further education. Illiteracy has long been the cause of the dead end of certain civilizations and now we can with pride read and write and express ourselves and understand each other in a common language. And languages have developed from the sign language of the Red Indians and the early Aryans to the great languages of to-day— Chinese, English, Hindustani, Cerman, French and so on. We in India have certainly progressed from open-air classes under trees to lectures in fine modern buildings in his institutes.

I fancy I hear music, and you can be sure it is dear old Gopal playing his accordian to the tune "All I want is a room somewhere" and what's more, over and over again non-stop for two hours at a stretch. I am sure that you will agree that it is the zenith of bliss to live in our wing in Godavari Hostel.

All at once, I see before me a whole succession of poets, painters, musicians andpoliticians. The first is a very short man. He must be either Lal Bahadur Shastri or Winston Churchill. What great parts both these men have played when their countries needed them most! And I next have in focus Galileo and his telescope. And Copernicus and Tycho Brake and Isaac Newton spiv by. Abraham Lincoln holds a black Negro slave by the hand and behind him rages the Battle of Gettysburg. Nelson and Napoleon pass by on the Trafalgar and the island of St. Helena. And there emerge Bismark and Garibaldi and Lenin and Trotsky, and vanishing are Tzars and feudal Kingdoms. And I see a very black picture next and agony and destruction in the wake and the Serpent of Time has swallowed world War I. Mahatma Gandhi appears and with him comes into history the theories of non-violence and ahimsa. India achieves independence. And the world has passed through six sad years of war and destruction once again. When will humanity—suffering humanity learn? I could go on and with my dreams but I guess you must be tired and I ask my tired reader to take this cum grano salis. By the way, I was reading a book of information and this is obviously the result. For after all, we must have time to relax as life is but an empty dream" and dreamers sure do belong to life also.

My Girl Hildegund

Heavenly grace mingled with, Innocence on your lovely face, Reaves me all in a dither! Pesperately I clutch at my heart, Fre it flys away, never to come hither. Good heart, let us not you and I part for, Hniversally it is known. No mortal can be shown, half as beautiful as my Hilda, Forget her.

-Arvind Johari



Institute Day

4th April 1965



Mr M. Bhaktavatslam, Chief Minister, Madras, presents Entertainment Trophy to Saraswathi Hostel representative



Hari Khatha — IIT Style



Prof. Dr Rouvé proposes the vote of thanks on the 6th Institute Day

An Evening at the Shopping Centre

by Saktikumar

Time: 5 p.m.

Place: Kapali Book Centre

A chap with a pretty serious face (perfected after weeks of practice) comes in and says:

'Say, have you got Maleev and Hartman?'

'No, sir, but I will get you one next Monday.'

'You have been saying this for the past month. You think you can really get it?'

'Yessir! Definitely on Manday.'

Along comes another chap, virtually empties the rack and finally picks up a book a copy of which, in all probability, was lying on the counter and askse 'How much?'

'Rs 8.64, Sir, after discount.'

'All right, keep a copy for me. I will collect it tomorrow.'

A more enterprising type is the guy who departs with the book promising payment next week and will return the book after making use of it for the periodical held that week, saying it's either too elementary or too advanced.

Now comes a pretty indignant bounder, shouting, 'What you! When ar, you going to start sending the newspaper to my room?'

' Definitely from tomorrow sir.'

Apparently satisfied the customer leaves.

Now we hear a bloke asking the fellow at the counter *sotto voce* (apparently explained by the presence of a lecturer)

'Have you stopped getting Parades?'

'Yessir, not available.'

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Time: 5-35 p.m.

Place: The Tailor's

A red-faced fellow with one of his pants shorter than the others snaps at the tailor: 'What have you done to my pants? lasked you to make the bottom fourteen and you have made it seventeen?'

'That's all right sir, I'll make it O. K. in a minute.'

(So saying he tugs at the stitches along the seams and the pants come apart.) In exactly eight minutes he has made the necessary alteration but the customer is none too pleased with the fast work for he suddenly flares up, shouting, 'Who asked you to make pleats on my pants? I want them pleatless.'

The imperturbable tailor offers to de-pleat the pants and does so incredibyl fast. Still not satisfied, the customer departs with a grunt, numbling (quite audibly) to himself, 'Dash it ! I shall ask Deen (the alteration specialist at Velacheri) to alter the pants.'

Time : 5-55 p.m.

Place: Adyar Bakery

A bloke looking like a still from an old gangster film of the forties, comes in. He is perspiring profusely and wearing pants so tight, that, had they been just a wee bit tighter they would have been inside him, and makes his way to the ice-box and pulls out bottle after bottle until he has found his particular brand of drink. In the process he causes a few ounces of butter to melt by mere application of force. The proprietor in total disagreement that IITians will be IITians shouts, 'Can't you take out a bottle without destroying my entire stock of butter?'

The recipient of this rebuke not too confident of matching wits with the fellow, remarks in an aside to his friend (a slightly magnified version of himself):

'This dashed so and so doesn't know how to stack his stuff and yells at us. Let's sabotage him one day, what say ?'

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Thus you see everywhere in the Shopping Centre, the customer adopts a holier-than-thou attitude towards the shop owners and this status quo will be maintained because the latter doesn't dare get on the wrong side of the customer, or so the average IITian fondly believes.

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Matrimonial Prospects of a Graduate

by M. Venkateswara Rao

IMMEDIATELY after graduation, one seeks decent employment and then contemplates upon matrimonial prospects. In general, both placement and matrimony undoubtedly lead to material prosperity. These two events may be considered as the two very important turning-points in the life of a graduate and introduces entirely novel problems in the process of his psychological adjustment.

A graduate's life is full of interviews. Based on the material advancement of life, these can be classified into two categories.

- 1. Interviews which lead to placement, and
- 2. Interviews with matrimony in view.

Though both of them involve identical human factors in many respects, the latter category of interviews, I feel, needs some clarification.

When a boy has not yet been emotionally involved in any sort of romantic experiences which would lead to marriage, (you know, marriage, as an ideal, is the end of a romance!) it is customary for his parents or the elders of the family to fix up a matrimonial alliance for him. After considering the factors like physical appeal, compatibility of character, and such social considerations as suitability of rank and occupation and of economic benefits on both sides the elders usually arrange a rendezvous between the boy and the girl. It is nothing but an interview situation in which freedom of personal choice is predominant. The boy continually stares at the girl with penetrating glances, putting her out of the countenance, and the girl takes the first curious glance at the boy and usually keeps her head bowed for the rest of the interview, profusely blushing while answering questions.

If both of them like each other, then the rest is a straight-forward comedy; if they don't, it would just be the first af a series of such experiences.

In spite of the legal restrictions on the dowry-system in India, a great majority of marriages inevitably involves transfer of dowry from the side of bride to that of the bridegroom in one form or the other. Under the prevalent condition of the Indian societies, engineering graduates, I think, have the highest cash-value in the matrimonial market. In general, the value of the dowry a girl fetches is inversely proportional to her beauty. In other words, very beautiful girls may not be expected to fetch any dowry at all, whereas uncouth girls have to pay a heavy penalty in the form of dowry (for their ugliness?)

After becoming a Bachelor of Technology, I decided to put an end to my bachelorhood. I have had the pleasant experience of having interviews with two different girls at two different places. The first girl was moderately beautiful, moderately educated and the dowry offered was also moderate. The alliance was cancelled because the girl has been found to be slightly older than myself?

The second girl was more beautiful and better educated than the first; but the dowry offered was not very handsome. The alliance was cancelled because the girl has a dyspeptic personality !

After being fed up with such procedure of bride-selection, I gave an advertisement in a popular newspaper which runs as follows:

"A fresh engineering graduate with very broad views seeks an educated bride preferably below 20. She should be the only daughter of a very rich man. Beauty of the girl and the properties of her father are the main conciderations."

No response so far !

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In Defence of the Punster

by G. Govindarajan

PUNNING or "quibbling" as it is called, has always been dubbed as the meanest form of wit". Some of the Virtuosi of the 16th and 17th centuries opened that enly the worst person would resort to punning. If by the application "worst" is meant the most far fetched and startling then many puns suit the superlative to a T. It is necessarily assumed that the term "worst persons" does not refer to incondite vagabonds and ruffians, upon whom the "toga virilis" never sits gracefully.

Thomas Hood was a postmaster in this "genteel" form of humour. It was his forte and few scholars of his age had any bon mots for him. This has more out of sheer spite and the traditional green eyed monster called jealousy than as if to ward off derogation of the Kings English.

The pun has been described as a pistol let off at the ear rather than a feather to tickle the intellect. This, in one sense, is time because a load report is certainly needed to jerk into activity the docile but viturperative critic who blurs ten sides of a pun trying to denounce the inunitable punster.

The pun, by itself, is something more exquisite and subtler than the in flated finical rhapsodies of most writers. There is much more wit and humour in the pun than in a barrel full of monkeys. An Oxford Scholar, meeting a porter who was carrying a hare through the streets, accords him with this extraordinary question "Prither. friend, is it thy own hare or a wig?" The pun, as is quite evident, is upon the word "have". Imagine the scene as it would have transpired—the put inquiring look of the Oxford Scholar, the desponding looks of the porter as he scratches his head to find a reason why such a scion of learned gentry should condescend to speak to him—Michelangelo would have captured the spirit on the canvas.

"No noose is good news" cackled the condemned jester as the hangman's rope descended upon his neck. This story is probably known to you all. An assurance from the jester that he would resort to punching no more would have prevented his treading the path to the point of no return. Yet the split second repartee of the jester shows his indomitable spirit. He dies with a pun on his lips. The pun is so whimsical, yet so pertinent but unfortunately fatal. The pun is far removed from the labyrinthine windings of monotonous after dinner speakers—those nibbling pickpockets of your patience as well as your time. There is the famous pun of the Sextar. The person told the sexton and the sexton toll'd the bell. The pun is requisitely good, deplorably bad and so braken in its pretentions that it is due to this contrasted ludicrousness that makes the pun a classic. The affrontive quality of the primitive inquiry is invidiously transferred to the derivative in the implied satire.

Critics avow that puns are over exaggerated and it essentially is a question of hunting and winding it through all possible ambages of similar sounds. They feel that the punster ought to be repressed. 'Suffiandimus erats,' as Augustus put it. The punster does not loose his unique quality even in the battle field. The great Napoleon Bonaparte was defeated in the battle of Waterloo. One of his generals remarked to him on the outcome of the battle "Napoleon, born a parti." This means in French, Napoleon, good has left. The pun on the conquerors name awes us. The gravity of the situation, the ignominious defeat starring the French soldiers do not appeal to the general whose *faux pas* comes misplaced humour.

"An ambassador is a man who lies abroad for the good of his country." This well known quotation of Samuel Johnson is an example of a pun which wounds. It casts aspersions on the ability on the diplomat. During Samuel Johnson's time, there was a man called Else who let out rooms at exorbitant rents. One such room was the meeting place of the scholars in Johnson's time. Johnson hearing of the landlord's advice accosted him and said "you are a cheat." The landlord protested but Samuel Johnson added insult to injuvy by saying. "I once again say that you are a cheat, a hypocratic, swindler and a blood sucking leech. You are nothing else." The pun lies in the name of the landlord "Elsc."

Punsters appear to be the black sheep of the English literary stock. At parties, the much (un) sought after-dinner-speaker adopting • "more sinned againg than sinning altitude" tries to tick off his adversaries, namely the punning humanitarians, with cut Astraean allusions. A rather puffed-up literacy type seeing a punster in a party wanted to humiliate him in presence of the other social higher ups. He went to the punster and said, "I have heard stories about your punning ability. Can you pun any word I suggest?"

The notorious punster pained him with this rejoinder. "Pon your word, I will."

He had seized upon the word "upon" and punned it. It was clearly the case of the "biter bit".

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The Ways of I. I. T.

Situated near the sanctuary of deer, This IIT is indeed very queer.

It has a Campus huge and vast, Where the builldings are coming up very fast.

Hostels here are shaped geometrically, Within which students mug mechanically.

Known for its length is the HS Block, Where majority of students go and flock.

Workshop is students' headache in 1st year, After which, they are tired, lost all cheer.

Periodicals are IIT students' main fear, And shiver when its name they hear.

Periodicals are students' Achilles' heel, Name of which make students' reel.

Cs and Ds are the talk of the day, Since periodicals are graded this way.

Periodicals here are indeed very unique, Where students employ new copying techniques.

Saturday afternoons students contemplate sadly, Why in periodicals they fared so badly.

The brain is strained right through the day, But during evening games and brawn has its say.

Have you ever seen 11T by night, All students cramming will be a wonderful sight.

There is some entertainment on Sunday night, When students' spirit is carefree and light. If you happen to see an IIT lad, You may wonder why he is dressed so bad.

This is due to 'Americanisation' in IIT vogue, Which makes him look more like a rogue.

Mess bills in IIT have a wonderful property, Of always increasing and tending to infinity.

Buses here break the barrier of sound, And are sure to beat "Moss" by a round.

Seniors thought ragging was indispensable and dear, But it has died for "disciplinary action" fear.

If Higgins heard IITians in English converse, He will with English seek divorce.

Those "Ya's" and "Yars" are harsh to hear, That it will surely move Higgins to tears.

In NCC parade after a hard day, Students march in their own queer way.

NCC is Madras IIT's greatest fake, Students attend only for attendance sake.

Common sense doesn't appeal to IITian brains, They know only to calculate stresses and strains.

Every IITian can think he is clever and great, But has flopped due to fluctations of fate.

Students here are measured in "grades," That will decide their future "trades."

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After coming into IIT many students wonder, Whether they have made more serious a blunder.

If you can survive in IIT five long years, You can face odds in life without any fears.

> by O. M. N. (Out of My Nut)

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'DULL LIFE'

by

S. GNANCHANDRA of IIT, Madras

This entry won the first prize in the Inter-Collegiate Painting Competition

The Royal Tiger from Pataudi

by R. Natarajan, I.A.S.

 \mathbf{A} T a time when the very atmosphere is stuffily suffused with republican ideas and socialism is the first fashion, it has been given to the Nawab of Pataudi, nicknamed the "Tiger" for his lightning reflexes and lethal sinuousness on the field, to restore regality to Indian cricket. Time was when Indian cricket was synonymous with royalty-a game hallowed by incandescent names such as Prince Ranjitsinhii, the Nawab of Pataudi (Sr.) and Prince Duleepsinhii. The native states were the classic cradle of Indian cricket. The Maharaia of Patiala and the Jam Saheb of Nawanagar brought out the leading lights of English and Australian cricket to the country while the Maharajkumar of Vizianagaram skippered the Indian team to England in 1936. True to royal patronage, Indian cricket had an aristocratic strain-Mushtaq, Amarnath or Amar Singh thought of even Test cricket as a great game where gallantry had a place but not as a war of attrition where aggression bore the accent. When they were on the field, it was the Knights of the Round Table jousting, with jests aplenty but no jealousy.

But these ugly days of utilitarianism and leaden levelling down hardly provide the atmosphere for such a sensitive plant as Indian cricket to prosper. Grace and style have bowed out of the cricket stage and in their place stand supreme, statistics and records. Style is not the man and it is only the number of runs on the score board that matter. If democracy is counting of heads, batsmanship is counting of runs. Even Umrigar was utilitarian.

It was at such a time of cricket poverty that Mansur Ali, the Nawab of Pataudi, leapt on to the Indian scene like a royal tiger. His father, the late Nawab Iftikar Ali Khan of Pataudi, had imbibed the ethereal elegance of Frank Wolley, his mentor, and scored a century on his first appearance for England against Australia. In the few years that were given to him to spend in the cause of Indian cricket, he endowed it with authority and an English sense of the game. But his greatest contribution to Indian cricket was his son, Mansur.

Mansur succeeded to the captaincy of the National eleven by right as he did to the Pataudi gadi. But even before that, he had sounded the battle bugle and charged Dexter's Englishmen with an avid, audacious century in the fifth test at Madras. Lock and Allen, Smith and Knight all bore the brunt of Pataudi's bludgeoning blade. His breathtaking century did, indeed, set the pace for India's magnificent win over England under the captaincy of Contractor.

He did not fulfil all his promise when he accompanied Contractor's ill-fated team to the West Indies. But, then, none fulfilled himself on the Carribean circuit except, perhaps, Durrani.

But when Mike Smith and his M.C.C. team came over to India, Pataudi became the skipper. He celebrated his captaincy with a capping double century at Delhi, a truly memorable knock, studded with shots scintillating like shooting stars, to borrow an expression from Neville Cardus. The Test series was drawn but Pataudi had done his brilliant bit for enlivening it.

Bobby Simpson found Pataudi and his band in a magnificiently militant mood, when the Australians toured next. In the first test at Madras, India actually, led Australia on the first innings, thanks to Pataudi's coruscant century though they let the match slip through their fingers subsequently. But at Bombay when the bugle sounded again in the second Test, Pataudi made no mistake. Like Horatius, he defended the bridge and paved the way for victory which Borde clinched. Calcutta also brought out the best in Pataudi though it was rained off ultimately.

Amidst all these stately scores and scenic triumphs, there is something that has always stood out about Pataudi. As captain, he brought a fresh and uninhibited approach to the game and took the slightest gamble, if only to infuse some spirit and the dash of a derring-do to the languishing game of today.

As a fielder at cover point, he is a marvel. With the silken sinuousness of a tiger, he used to pounce on every ball with precision and despatch it to the wicket-keeper post haste, with his best compliments. His low-trajectory throw was unerring, while no batsman could give a catch to him and survive the story.

But it is as a batsman that Pataudi reigns supreme. He bestrides the Indian cricketing scene like a Colossus. For a slight, youthful player with only one eye functioning, the vigour and power of his stroke play are beyond imagination. His strokes are propelled as if from a high powered rocket; the noise is thunderous and one gets the impression that the Son of Jupiter is on

the field. Pataudi's forte is his uncanny ability to lift the ball over heads of fieldsmen-the surest invitation to suicide as the text books would say. Yet it was an art practised by the old maestros. Wolley or Victor Trumper practised the art assiduously and were living legends in their time for the pleasure they gave to the spectator. The fetish that the ball must be kept to the ground at all costs is a morbid modern concept, which has made the game arid. Pataudi is never afraid to jump out to the bowler and loft the ball, in his own inimitable, lovely way, over the untenanted parts of the field, though he and every spectator present know that the slightest mistake would be fatal. But time and again. Mansur does it, scores rapidly and makes the game more fascinating for it. As has, succinctly, been summed up "He is not the one to suffer his innings. He must play it on his own terms or not at all; he is perfectly willing to surrender it. He will not wait for the runs to come to him, for his conception of the art of batsmanship is more vigorous, less hindered by modern concepts. He has no place in a war of attrition. When the Nawab is at the wicket, one may easily imagine the field as Ashby-de-la-Zouche, where the knights joust.' It may be a brief moment, but it must be a glorious one.

Indian cricket does, indeed, owe much to the royal Tiger from Pataudi.

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Protection to an accused under the Constitution

by S. Srikant

I^T is invariably common with a lay man on the street to dub any person who is alleged to have committed a particular offence as the perpetrator of it and the person indicted for murder is oftener than not addressed as a 'murderer' long before the trial takes place or arguments heard, much less the judgment delivered. In law, however, he is only an 'accused person' and it will always be presumed that he is innocent until the contrary is proved beyond all reasonable doubt by the prosecution; and it is its duty to prove the *mens rea* and the *actus reus* or the guilty intention and the guilty act required for a particular crime, and this is the golden thread seen throughout the web of criminal jurisprudence. Such an accused person is afforded under the Constitution certain fundamental rights and this article enumerates what those rights are, and the circumstances in which and the conditions whereby they could be availed of by the accused.

To quote Article 20 of the Constitution *ipsissima verba*: "No person shall be convicted of any offence except for violation of a law in force at the time of the commission of the act charged as an offence, nor be subjected to a penalty greater than that which might have been inflicted under the law in force at the time of commission of the offence; 2. No person shall be prosecuted and punished for the same offence more than once and 3. No person accused of any offence shall be compelled to be a witness against himself".

The right secured by clause (I) just quoted corresponds to the provis ons against ex post facto laws of the United States Constitution which declares in substance that no ex post facto laws shall be passed. An ex post facto law is a law which comes into operation after the offence has been committed and which alters the situation of the accused to his disadvantage. It is a law which voided and punished what had been lawful when done. An act that was innocent when done cannot be made criminal by a subsequent legislation; or a lesser crime when done cannot be made graver and more aggravated by a subsequent enactment; or the punishment awarded to an offence prior to legislation cannot be enhanced by an Ordinance passed after the commission of that offence. A law, therefore, under this provision, cannot be applied to facts which are prior in date to the law itself. What is prohibited here is conviction and sentence under an expost facto law and not the trial of the offence. A procedure for trial different from the one at the time of the commission of the offence or a court different from the one at the time at which the offence was committed cannot be held unconstitutional.

To illustrate, if a particular offence that carried a sentence of, say, two years' rigorous imprisonment under the penal laws of a state when passed, is considered graver and consequently the State Legislature enhances the punishment to, say, five years, the accused indicted of the offence under the old laws would not be liable to the increased penalty, as he gets protected under this Article. A law that operates retrospectively to the advantage of the accused does not, however, come within the prohibition of this clause.

In a Calcutta case, a law of 1946 provided for penalty for taking premium on house rent. Under the 1950 law, a prosecution was provided for the offence. It was held that the land lord could not be prosecuted under the legislation passed in 1950 for the premium taken by him while the law of 1946 was actually in force.

The incorporation of this provision in the Constitution is in consonance with the fundamental principle of natural justice that the law shall be known before an individual is to suffer for its infraction. "There can be no doubt", observed Justice Jagannadhadas in a Supreme Court case, "as to the paramount importance of the principle that ex post facto laws which retrospectively create offences and punish them are bad as being highly inequitable and unjust."

The second constitutional protection that an accused enjoys is that he will not be prosecuted and punished for the same offence more than once. This is the plea of Autre fois Convict (or formerly convicted) as known to the British jurisprudence or the plea of 'Double Jeopardy' as known to the United States' Constitution. This is grounded on the common law maxim "Nemo debet bis vexari', meaning that no one shall be twice vexed for the same cause. The American Constitution postulates that no person shall be subject for the same offence to be twice put in jeopardy of life or limb. The enunciation of this provision is not something new to India, as this principle has already been recognised and enacted in the General Clauses Act and in the Criminal Procedure Code, which, in fact, formed the background of this fundamental guarantee to an accused under the Constitution. To claim protection under this clause, there should have been not only a prosecution, but punishment in the first instance in order to operate as a bar to a second prosecution and punishment for the same offence. Further, the prosecution and punishment should have been before a Court of law of competent jurisdiction or a judicial tribunal, and mere administrative inquiries and departmental punishments will not deter action being taken before the law courts for the same offence.

In a Supreme Court case, an ICS Officer, by accepting illegal gratifications and valuable things, showed some undue favours to certain companies in the matter of issue of import and export licences that were issued on his recommendations and thus abused his position as a puplic servant in the discharge of his duties. The matter was inquired into under the Public Servants (Inquiries) Act and the Officer was eventually dismissed. Subsequently he was charge-sheeted for offences under the Indian Penal Code and the Prevention of Corruption Act. The accused pleaded 'double jeopardy' as he had already been punished by being dismissed from service. The plea was repelled and it was held that a dismissal resulting from an inquiry under the Public Servants (Inquires) Act was not prosecution and punishment.

In another interesting case, the accused, an Indian, on arrival at the Santa Cruz air port in Bombay, failed to declare that he had brought in gold with him. But on search it was found that he was carrying gold in contravention of the government notification. The Customs authorities thereupon took action against him under the Sea Customs Act and confiscated the contraband. Sometime later, a complaint was filed in the court of the Chief Presidency Magistrate, Bombay, charging the accused with having committed an offence under the Foreign Exchange Regulation Act. Rejecting the plea of duplicated prosecution and punishment, the Court held that the Sea Customs Authority was not a judicial tribunal and the adjudging of confiscation or the increased rate of duty or penalty under the provisions of the Sea Customs Act did not constitute a judgment or order of a court or a judicial tribunal necessary for the purpose of supporting the plea of double jeopardy. The proceedings before the Sea Customs Authorities were not 'prosecution', nor did the order of confiscation constitute a punishment inflicted by a court or a judicial tribunal on the accused.

In a Calcutta case, a land lord was fined by the Rent Controller for his illegal act of not allowing the tenant to use a privy and a water tap. A subsequnt prosecution in a criminal court under the Rent Control Act on the same facts was held to be ultra vires of the constitutional safeguard afforded to an accused under Art. 20 (2).

Two or more distinct offences in a single transaction can, however, be tried and punished separately and there is no constitutional taboo for this. Where an accused was found in possession of a stolen revolver without licence, it was held that there was no legal bar to his being charged and convicted for two offences, one under the Penal Code and the other under the Arms Act, as the offences were distinct and separate.

The third fundamental right guaranteed to an accused is based on the old common law maxim that no man is bound to accuse himself. This is what is known under the United States Constitution as the prohibition against self-incrimination or testimonial compulsion. An accused can fall back upon this privilege if as a witness he is cross-examined to reveal incredibility and infamy and it will be well within his rights to refuse to answer that which tends to incriminate him. The two requisites for claiming protection under this constitutional right are: (i) the individual concerned must be a person accused of an offence and (ii) he must be compelled to be a witness against himself. In a case where the accused was called upon to produce the money which he was alleged to have offered as a bribe to the Police Officer for purposes of identification of money, it was held that there was no testimonial compulsion exercised on the person, because he could have refused to comply with the demand of the police officer investigating the case.

In another Supreme Court Case, an organised attempt was made from the inception of a company to embezzle its funds and to declare it to be running on loss. The share-holders were concealed of the true state of affairs of the Company by false accounts with fictitious entries and false balance sheets being submitted to them. Various dishonest and fraudulent transactions were disclosed. A warrant was issued for search and seizure of the voluminous mass of fictitious records and files. The question arose whether the search warrant was unconstitutional and hence illegal on the ground that in effect it was tantamount to compelled production of evidence. This contention of the accused was overruled for the reason that the documents were siezed not on account of any compulsion used on the accused person.

Where a woman was vaginally examined by a lady doctor with the reluctant consent of the woman and upon examination it was found that she had very recently given birth to a child and subsequently the woman admitted to the doctor that she did so give birth to a child and that she threw the new born baby through the ventilator, the evidence of the doctor who examined the women as the result of her examination was held to be admissible against the woman in her trial under the Penal Code for murder and was not hit by Art. 20 (3) since the woman at the time of the examination by the doctor was not accused of any offence.

In a Madras case, a notice to an accused to show cause against search of his premises for certain incriminating documents was held to be an indirect way of compelling an accused to produce the documents and that the notice was therefore ultra vires of Art. 20 (3). Taking of the thumb impression while under arrest for comparison is also a prohibition under this clause.

This prohibition against self-incrimination has, to a substantial extent, been recognised in the criminal administration of justice in this country by incorporation into various Statutes like the Criminal Procedure Code, the Indian Evidence Act and the Indian Oaths Act. As put by an eminent jurist, "So long as the presumption of innocence remains a part of our legal system, evidence against an accused should come from sources other than the accused himself".

Thus we find under our Constitution that even a person accused of a crime enjoys three important fundamental rights—the right to demand that he could not be proceeded against ex post facto laws, the, right to plead double jeopardy when he is prosecuted and punished for the same offence twice over and the right to refuse to be a witness against himself. These fundamental guarantees, along with others incorporated under Part III of our Constitution are advisedly put beyond the control of the State and they protect our rights and liberties against the States' possible encroachment and arbitrary invasions. The fundamental rights are above the vicissitudes of political controversy and are beyond the reach of the road-roller majorities and they are, as it were, restrictions or limitations on the three processes of government—executive, legislative and judicial. As observed by Madison, who played a prominent role in the framing of the First Amendment of the United States Constitution, the fundamental rights are secured "not by laws paramount to prerogative but by Constitutions paramount to laws".



"ANTITHESIS"

By V. PRAKASAM College of Engineering, Guindy

This entry won the First Prize in the Inter-Collegiate Photographic Competition

Chem - Gems

Hydrophobic Acid

H^{YDROPHOBIC} acid is a rare compound found in small quantities in steak. It was originally detected in a sample of toothpaste indicating its presence by dissolving the rear teeth forming a six-molar solution of calcium sexidentate.

Hydrophobic acid dissociates readily into hydrogn ions and phobate ions POBO₈. Chelation of the ion with acrolein forms acrophobia, a compound which tends to jump off from high places. Reaction of the phobate ion with the philate ion PHILaO₈—causes violent reaction. Stand back and duck state that the report of this reaction caused a big boom in their business followed by a rapid expansion.

Over and Dover report the isolation of 0.00 gram of hydrophobic acid by extraction of 50,001 pancares with maple syrup. This was later, however, identified as Krypton uranyl denteride Kr U D. Dover who devoted 30 years of his scientific life to this extraction still stoutly maintains that he obtained hydrophobic acid. "Impositive," he shouted. "Keep those electrons away from me."

Hydrophobic acid has only one application to physical chemistry, a plot of revolution against the government giving a solution which remains hanging.

1. J. Bull Chem. Soc 38, 470, 8972 (1952)

- 2. J. Ch. Ph. D. Th. Pl. Gr. 4822 (1931)
- 2. A chemistry Lecturer started his class with the following equation.

The point he drove home was the paradox often created by the use of common nomenclature to express chemical reactions. Translated, the above equation reads.

Quicklime+silver-+Lime+Quicksilver.

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express his thoughts, opens out his mouth in a prodigious yawn. The process goes on until finally any outsider who happens to enter the class room is amazed at the scene, wondering why a single student put on a platform should have so many lecturers talking to him at the same time. As this goes on inside the class room, another group of finite beings saunters up along the corridor for the simple reason they had a hour free. To them what goes on inside a class room is far less interesting than the most recent expose on a popular film star. which they are discussing. Of course everybody tries to keep his voice low, but since everybody tries to speak at the same time the effect is cumulative and electric. For no reason, one of them goes gay and whistles, rether out or tune, a well known hit. As the group just passes by, the people inside the class room forget their differences and turn to look in awe and admiration. But that is just a passing phase, for they begin all over again. Now, if only you try to talk of obligations here, you surely will not get anywhere. Fraved tempers also are definitely of no use in such a context and are certain to worsen the situation. After some time you just learn to live with these things.

The set-up is somewhat different in any one our music concerts. The audience is a very typical group of finite beings. There are those who are drawn to the performance by the sheer musical talent of the singer. Then there are also others. Customs merely demanded their presence at the concert. They come usually from the higher social strata. It is all the same for these beings whether the musician is talented or it is somebody making his debut. To them nods and smiles and shaking hands with acquaintances are far more important than the fare served. The final cruel touch comes of course, when some VIP, whose presence again custom demanded, makes his appearance, invariably late to the performance. All these beings stand up in utter reverence, greet him with folded hands and forced grins forgetting for the moment the effect they produce on the performer as well as on those who are there to appreciate the fare offered. The VIP, for his part, knows full well that only by coming late, he will get such standing attention in a sitting audience. Then again there are those, who bring along their kids, for is it not cruel to leave the tiny tots at home, when they themselves are out for enjoyment? Now, any group of kids is certainly gregarious. They lose little time in starting their antics, with the result that their caretakers prefer to enjoy this side show rather than the performance itself. Those who are really listening or the obligations to them are totally forgotten. Then there is the late comer to the performance who is also very individualistic in his approach towards the whole. He walks in, still very much on the lookout for the best seat in his class in the crowded hall, for has he not paid for it? He usually finds an isolated seat in the middle of a row and go there he must, whether it be in the middle of a piece or not. He pushes along

unmindful of the gasps of agony escaping the lips of those, whose 'feet he just trampled upon. Under such trying circumstances, one is never sure of his obligations to others or vice versa.

The set-up assumes its most magnificient proportions on one of our city roads: Even the most sophisticated experimental equipment is not capable of providing such an infinite parameter variation. The group at any time on the street, again consists of finite beings in our accepted sense, of pedestrians, cyclists, scooterwalas and motorists. Stray cattle or dogs are not included here, since they do not conform to the definition of finite beings. They, however are to be treated as ever-present random factors, whose effect can never be eliminated, it seems. Here again it is almost impossible to come to a solution of the problem, for this is what happens. The pedestrians know that pavements are there for walking, but the road could also be used with equal facility for the same purpose. But at the back of his mind the pedestrian has a nagging feeling: that after all, what he is doing is no quite correct. This feeling exhibits itself rather suddenly in his scuttling off across the road, casting neither a look to the right nor to the left, but perhaps with the very good intention of hurrying on to the opposite pavement. However, it is the frequency of such occurrences that is really maddening. If there happen to be two of them together, still the same tendency is to be seen, only when one of them decides to cross over, the other decides to linger on but scuttles off the next moment. Meanwhile the one who took the first step thinks of joining his companion back again. This naturally leaves the motorist the only possibility of driving straight on, swerving to the right or left rendered impossible by the above process. Talking of left and right, it is said that ours is one of the few countries that still drives " left." One fleeting moment on the road may very nearly convince you that we have long ago changed over to driving on the right. But this is purely illusion, for the next moment everybody seems to keep on to his "left." This results in a mirage like shifting of the free space available for overtaking, now to the right, now to the left. The motorist does not therefore know which way he is going to overtake the car in front. But when he does overtake, he is himself surprised by another motorist who materialises from nowhere to overtake him as well as the vehicle he is overtaking, all at the same time. The whole thing is of course further complicated by the cyclists, who, all of them, seem to possess all of the most difficult feints and body swerves. Such movements as our cyclists are capable of, when only transferred to the hockey field will decidedly assure us of the Olympic title for a long time to come. If you ask them, they point to the pothole ridden roads and say that the necessity of keeping their tyres and tubes intact forced them to learn all the tricks. How can one think of obligations under such circumstances ? That there is not even the time to think of such an 'The Lord dwells in the heart of all beings who are mounted on the automaton of this body, causing them by his illusive power to revolve according to their action.'

Having known this, the enlightened being views happiness and misery alike, friends and foes without any reservation or distinction.

> सम दुःख सुखश्वस्थः समलोष्ठाक्षमकाश्चनः । तुल्यप्रियाऽप्रियो धीरः तुल्यनिन्दात्म संस्तुतिः ॥ मानापमानयोस्तुल्यः तुल्यो मित्रारि पक्षयोः ।सर्वारम्भपरित्यामि गुणातीतः सउच्यते ॥

He has reached the tranquillity of mind wherefrom he sees all as the all pervading one. i. e. he sees little distinction between himself and the Ultimate Reality. His mind has neither the passion for virtue nor the abhorance of the vice. Because, he keeps his mind from both extremes and views with the same imperturbable equanimity.

After all, as Hamlet says 'for there is nothing either good or bad, but thinking makes it so.' The man with the stable mind realizes the fallacy enveloping these supposed good and bad deeds and keeps aloof as water on a lotus leaf. The Lord says,

> यदा संहरतेचायं कूर्मोङ्ग।नीव सर्वश्रः । इन्द्रियाणीन्द्रियार्थेभ्यः तखप्रज्ञा प्रतिष्ठिता ॥

'When like a tortoise which draws in its limbs from all directions, he withdraws his senses from the sense-objects, his mind has become stable.'

This attitude in every individual is most desirable and implicit, not on ty from the stand point that he achieves a pass-port to the celestial regions on ineffable joy and unalloyed delight, which may seem to any common man just an elusive charm of a ring of smoke, or again the transluscent glamour of a soap bubble that floats along merrily in the gentle breeze that blows, but this attitude will help him carry on his daily routine in the most pleasant way, without any undue desires leading to subsequent disappointments and tendencies which take the slightest opportunity of a man's weakness of conscience to get the better of himself and seek his ruination. May be, this attitude may not increase his social stature or improve his monetary position, but it certainly will teach him to be contented with what he is and what he has, and spend his lifetime in a useful way without making a burden of himself to the human society.



Steam Laboratory being inaugurated



The Director, Prof. B. Sengupto greets Lord Fenner-Brockway, Labour Peer 31-12-1965

Visitors from German Universities



Registar and Director, with Prof. Dr P. Hilbig, Pro-Rector, German Technical University and Prof. Westphal, Director, Academic Foreign Relations Office They were at IIT, Madras between 8th and 11th Dec. 1966



Prof. Dr K. Gerke, Rector, Technical University, Brunswick standing on left. He visited the Institute between 13th and 18th Feb. 1966

unmindful of the gasps of agony escaping the lips of those, whose 'feet he just trampled upon. Under such trying circumstances, one is never sure of his obligations to others or vice versa.

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If we extend a little more, we see that the problem of obligations can be formulated quite easily whatever be the locale. It is just like looking at a lake from different altitudes, its position never varying, only its aspect changing relatively to the position from which you look at it. As long as our approach to a group remains individualistic, no solution to the problem seems possible. If we gear up our faculties to thinking about others also, we shall perhaps be one step nearer to the solution.

Our Literary Week

Five evenings—crowded with delight, Evenings free of the Periodical blight, Thunderous clapping and vociferous cheers— Often marred by 'boos' and jeers.

Packed in a room which for a sardine is small, The audience grew restive and began to bawl. As the air grew warm and rather stale, The interest of the audience grew wan and pale.

When our teams was on, the audience was quiet, But when the others came on, it became a riot. Oh staunch I. I. Tians, it just isnt cricket, To keep the bougets sand dish out the briquets.

There is a saying wise and true, That you can't eat your cake and keep it too, But that's just what you do the I. I. Tian way, When you win the prize but give it away.

But over, alas, are those evenings bright, The jail door clangs, shut out the light, With hoarse throats and spirits low, To periodicals' dectates we again bow.

-R. K. Prakash

The Advaita Philosophy in Bhagavat Gita

by V. Ranganathan

ALL the different religious paths with their countless schools of philosophy lead to the same ultimate Reality, i. e. self realization or the knowledge of the Supreme. One may wonder why I connect the two terms, apparently with a glaring contrast in the meaning, but they are one and the same. For, the highest schools of thought have evolved that knowing oneself is the altimate goal of man. The famous temple, Parthenon, of the Greek God 'Athene' bears the inscription "Man know thyself." This is the quintessence of philosophy that our forebears have evolved after troubles and turmoils in a period of intellectual vacuum. This is the greatest legacy that our ancestors have bequeathed us. The Vedic hymn area the (Tatwamasi) bears sufficient and unmistakable testimony to this fact.

That to know that the individual soul is nothing but the ultimate Reality and the true knowledge is only the realization of this phenomenal merger of the individual soul with the Supreme soul is the only attainment of true knowledge. As the Lord says in Bhagavat Gita,

क्षेत्रक्षेत्रज्ञयोर्ज्ञानं यत्तत्ज्ञानं मतं मम।

'It is the knowledge of Matter and Spirit that I consider true knowledge."

The whole text and substance of Advaita Vedanta lies on this firm foundation. There are no two separate beings as God and man distinctively. (Prakruthi and Purusha).

The man who attains this state of mind is called रियतप्रझ: and he, having merged with the Supreme, does not see things to be different. He sees the all pervading God in every act of his, and in every form that he encounters. As Lord says,

ईश्वरः सर्वभूतानां इद्वेझेर्जुन तिष्ठति । आमयन् सर्वभूतानि यन्त्रारूढानि मायया ॥

'The Lord dwells in the heart of all beings who are mounted on the automaton of this body, causing them by his illusive power to revolve according to their action.'

Having known this, the enlightened being views happiness and misery alike, friends and foes without any reservation or distinction.

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After all, as Hamlet says 'for there is nothing either good or bad, but thinking makes it so.' The man with the stable mind realizes the fallacy enveloping these supposed good and bad deeds and keeps aloof as water on a lotus leaf. The Lord says,

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* * *

The Cycle

by Alex Phillipos

Moot. Chand was a Lower Division Clerk in one of the Offices in Delhi, and like most of his colleagues he had one ambition in life—to possess a cycle. That great day had arrived and Mool Chand was the happiest man in the world. He and his wife had saved the money in small amounts for a long period, going through many hardships but now that they had the cycle everything was alright. Soon after leaving the office, Mool Chand had gone to the dealer with the money and got his cycle. The first thing he did after buying it was to have his initials painted on the rear mudguard. This was for easy identification; too many people had new cycles these days. On reaching home he carefully cleaned and oiled it. Then he hurriedly had a bath and put on his best clothes. This was a day for celebration. He should go and show his cycle to his friends. So far, the only people who knew that he had brought a new cycle was the dealer and his wife.

There was a small coffee house near his house to which Mool Chand and his friends frequently went. Till now he had always walked the distance, but to-day he was going there on his own cycle. As he pedalled along he tried to imagine the reactions of his friends as he announced to them that he had brought a new cycle. Deepak the quiet, good-natured fellow would smile and congratulate him. Prakash the humorist of the lot would probably create a joke. And of course the flat jovial sardar Rup Singh would pat him on the back saying. "Shabash! Mool Chand", and ask him to order coffee for all of them. Then soon after that all of them would come out to admire his cycle. Mool Chand's mind was so filled with these thoughts that when he reached the coffee house he forgot to lock his cycle - on the very first occasion when there was a necessity to do so. He simply left it outside by the side of the road.

To his disappointment he saw that he was too early. None of his friends, had arrived. After sitting inside for a few minutes he went outside. He preferred waiting outside rather than sitting alone inside. Then he got a shock. His cycle was not there. It was gone, stolen! Mool Chand ran into the road and looked up and down wildly to see if he could find anybody pedalling away furiously on a new cycle. No, there was nobody. But how could it be stolen, thought Mool Chand with tears in his eyes. Had he not locked it? To reassure himself that it was locked he put his hand into his pocket to take out the key. He got his second shock when he realised that it was not there. He had forgotten to lock his cycle, his new cycle; his most precious possession! Oh how could this great misfortune fall upon him! He spent the next few minutes crying, not knowing what to do.

After a while, when he had got better control of himself, walked to the nearest Police Station. There he reported the theft. The Police Constable on duty took down all the particulars and said, "you can come here a few days later, and we can tell you if we have found anything. Of course, I can tell you that your chances of getting it back are almost nil. Fellows who don't know how to take care of their cycles, have no business owing them !"

Needless to say, all this did not improve poor Mool Chand's plight. As he walked home he felt as sad and dejected as he had felt happy only a short while ago. But he had to face up to it. He told himself that there was no point crying over spilt milk. The main problem now was telling his wife the bad news. It would hit her badly. She had gone about the house with shabby clothes for a long time and made numerous other sacrifices so that her husband might save enough money for the cycle. Mool Chand decided to postpone the matter till he could think up a good story. His wife would never forgive him if he told her that it was stolen because he did not lock it. So as soon as he reached home he said in as normal a voice as possible, "The cycle got punctured and I have left it at Moti's shop to get it repaired".

"Why could not Moti repair it at once?" She asked,

"There was no light. Anyway don't worry, he has a good rolling shutter, nobody could break in and take it away at night," said Mool Chand, adding, in fact it is safer there than in our house."

That seemed to satisfy her.

But Mool Chand could not forget the cycle that night, however hard he tried. He felt worse about it in the morning. In the office it was no better. So many of his friends had cycles, yet not one of them had lost his cycle by theft. In fact some of his friends never even bothered to lock, their cycles when they same to the office. He had seen unlocked cycles in the large cycle-stand outside the office many times. To make matters worse he got a scolding from the Head Clerk.

"You better watch out Mool Chand," said the Head Clerk, "or you will be in trouble. This is the third time I have caught you day dreaming today while the others are all hard at work. You come late almost every day, you You are shabbily dressed and today you are not interested in your work; you are definitely not a credit to our department. Unless you change your habits, you wont be getting a promotion for a long time".

It was all because of the cycle, thought Mool Chand bitterly. He had not bought any new clothes for a long time because he was saving up for it. And if he had lost it, he would be coming to office comfortably on time every day, instead of walking that long distance.

The more he thought of it, the more bitter he became. Why should he suffer like this? What wrong had he done to be punished by the Gods in such a manner? It was unfair. Slowly his bitterness and sorrow turned to anger. By God, he would set things right! But how? How could he get the cycle back? Only that could set everything right. Suddenly he got an idea. If someone could steal his cycle why could he not steal someone else's? It was so easy. Of course, not from the office but from somewhere else. He became intoxicated with the idea; and ignored the voice of conscience which warned him of the possible consequences. He was crazed with one thought now-he must get a cycle by hook or by crook-today.

His thoughts were absolutely unchanged as he strode out of the office in the evening. In fact he was determined to steal a cycle, and to hell with the consequences. He was confident that if others could get away with his cycle he could get away with someone elses. As he walked home he kept a sharp lookout for any unlocked cycles. But he had no luck. All the cycle were locked. As he neared home he became more desperate. More over it was getting dark. As he neared home he took a round about route, one which would take him a few extra furlongs, but one which offered greater opportunities for stealing a cycle. He looked everywhere around him, no luck, there was no unlocked cycle to be seen. Terribly disappointed he turned homewards. On the way he passed the little coffee house that he knew so well. Through the open door he could see his friends inside laughing and merrymaking. He should have been there enjoying life, instead of looking for a cycle to steal. with them. It was then that he saw it. An unlocked cycle leaning against the wall! He went closer and checked. Yes it was unlocked! He eould quietly take it away. A few quick glances around told him that nobody was watching. As quietly as possible he removed the cycle from the wall; mounted it, and rode away.

Only when he was on his way, did he realise what he had done. He was a thief. If he was caught he would be sent to prison: his family would be disgraced and all sorts of things could happen. The sudden realisation of the terrible consequences made him slow down; All sorts of doubts came to his mind now His neighbours would see him with a cycle and how could he keep a straight face as he showed it to them. There was always the possibility that the owner lived in the same neighbourhood—after all the coffee shop was not far from his home. In that case, sooner or later the owner would see the cycle and recognise it. And the worst thing was that his wife would easily find out, either she would recognise it as a different cycle or even otherwise he could not keep a secret from her for long. She would not approve of theft. He had to face up to the odds against him. After all it was not too late. He could return the cycle, hoping that nobody saw him doing it. With a heavy heart Mool Chand turned and went back to the coffee shop.

Just as he reached the shop and got down, his friends came out of the door, For a moment they stood still in surprise on seeing him; then they all came running towards him laughing and shouting.

"Where were you Mool Chand? We were looking for you" said one of them.

"The dealer told me yesterday that you brought a new cycle. Why did you not turn up yesterday," said another.

"Why do you run away from us after buying a new cycle?"

Mool Chand did not say a word. Now everybody will know what he had done. It was all over for him. He had a look of utter despair on his face. But his friends did not look at him, they were looking at the cycle and admiring it.

"You better get a cushion for your wife, or she wont be able to sit on the carrier" said someone and they all laughed. Then somebody noticed that Mool Chand was not joining in the fun.

"You are behaving in a strange manner Mool Chand! In fact if anybody saw you they may say that you stole the cycle".

"Yes". said Mool Chand in a small voice, "it is not my cycle. I have come to put it back".

"Now stop all this pretending," said someone, "we can see your initials at the back. Yes you fool, don't try to look surprised we can see your initials". For a moment Mool Chand was stunned. But he went round to check up. He could not believe his eyes. His initials were there ! It was his cycle ! It was too good to be true. While his friends watched him in amazement Mool Chand checked the cycle number. Yes, it was his. No doubt about it. When he calmed down he realised what had happed. The coffee houses proprietor's son had placed the cycle against the wall fow where he had left it, in order to make room for more cycles. He had seen him doing it to other cycles before.

"And now that you have finished your little act, Mool Chand, you could give us all a treat", said one of his friends, after all it is not everyday that you by a new cycle".

* * *

Our N. C. C. Camp

by S. Ramajayam

To begin at the beginning, let me make it clear that by the above title, I mean the camp at Agatam, for the E.M.E. cadets and not either of the other two camps. During the two weeks, we cadets had a good experience of the 'discipline' of army life. We had already had tastes of 'military organisation' during our Parades in IIT. We were steeped in it in camp.

The 'preparation', as the officers choose to call the issue of a pair of shorts too big for the among us, and a pair of kids too small for even the average foot size, was done two days before we left for Bangalore. The doctor who was to in us and the train which was to bring us our blankets were suspiciously absconding. Obviously, they had eloped. We were allowed to bring our own luggage. This made the job of counting them worse. Every time, we counted them, they showed an increase in number, even luggage multiplies fast in India. At the Central Station, conflicting orders were given-'Board the Mail on Platform 4' When this was being done, some bright soul found out that we had tickets only fo thepassenger and so we got the order 'Shift the luggage to Platform 5'. Twentyfour kitbags were shoved in one, and we carried enough such kitbags for all our cadets, to be supplied in camp!

We landed at Bangalore cant, having a sleepless night, overstiffed in the compartments. The Army seems to disperse of the unnecessarily tough gents by sending them to the N.C.C. The cadets were made to stand in the sun and the under officer was made to report the strength about five times. The VIP was not satisfied the first time because the dressing was not proper, the next time because he wanted the armed cadets in front and the next time probably because some cadet had hit a mosquito which sat on his nose. (Even at our barracks we found these mosquitos a very well trained set. The came in squadrons and unlike their breathren at Madras, did not hesitate to attack any exposed bit of our bodies at night, even our palms). The cadets were then made to march the distance from cantonment to camp—a distance of five to six miles.

A Mysore Unit was also camping at the same spot. These lucky cadets had canteen where they could spend their spare hours. I do not quite understand the logic of it, but this canteen was declared out of bounds for us. So was the Army Canteen, which was a little further off. We were happy, however, that at least the Officers did not make the lavatories out of bounds! The 1st EME company, of the college of Engineering, Guindy, arrived a couple of days after we did. There were only eighty of them we were two hundred (and most of them were the so called volunteers from the first year. They swanked about the dining hall, in whites, with a tie which they had been forced to buy and a green Jersey. We were consoled when these white parts turned several shades of grey, and finally black, towards the last day of camp.)

There is a basic similarity in civilian and army life. This is that both institutions believe in having small units attacking daily problems. There is also a basic difference. In army life, the VIP's want a detailed description of how the problems have been attacked. They believe in suiting circumstances to ideas. At six thirty in the morning they went to know where each cadet is. Again their curiosity is to be satisfied at eight O' clock. The job is not as easy as it sounds. The section commander has to trace twenty year old boys, full of spirits, (obtained from friends in Bangalore). Some may have sheaked to the canteen 'others may have succeeded in convincing themselves that they need a bath badly. The latter point of course, is highly hypothetical, because we not only had few bathrooms, we had fewer lavatories. Editor, it is lucky, both for you and for your friends, that you did not attend this camp.

One can expect a rough life in camp, but not unnecessary meanness and unreasonableness on the part of authority. A couple of cadets were given six hours night duty as punishment for having had a cup of coffee at the Mysorean Unit Canteen. (The Underofficer who nabbed these culprits evidently had no business hanging around there. He had probably finished his daily raid on the canteen a lion's share of Pakodas, cakes and coffee. I have myself seen him at it.) The cadets, after their punishment and barely two hours sleep in the morning, were ordered to report for P.T. at 6.30—I am sorry Major—0630 hours. Well, you might say as our under officer did, that this is punishment. There is, however, a limit to human endurance and ability and this under officer was being unreasonable only because the next higher authority was acting mean. It is a chain reaction. The unfortunate cadet however, has none to find in his turn.

Five cadets were made to stand for eleven hours at a stretch because our commanding officer had announced on Parade that he had decided to have twenty four hour shifts. Quite a few cadets had heard him. And reader I have to collect all my guts to let out that the same man on being informed that the cadets were unable to stand it, *denied* having given any such order. This is Democracy for you. This (dis)organization's wheels are turned by the whims and fancies of impressive looking men. The Dhobi took fiendish delight in mixing up our uniforms. True to its name for unreasonableness, the cadets are expected to wear 'PAKKA UNIFORMS' every day on Parade (No overalls were supplied and those of us who worked a little got grease on our pants in the workshops.) One morning I saw our family size under officer trying to squeeze into an economy size pant. He told me truefully that-he had written what's call three S's on his what's pant. Someone had swiped them. We found in time that the dhobi had sent them to one of the cadets sections. Had we been a second too late, Seargent Roy would have cut them a little shorter and thus bagged them – for he too is built on lines similar to our under officer's though he is somewhat shorter.

Our happier hours were spent in the workshops. We were able to learn something about automobiles. The authorities wanted us to spend so many hours in each shop, but they were not bothered if these could be spent profitably or not. For instance we were supposed to watch a group of men winding armatures for one whole day! We had, therefore, a lot of spare time. The thorn in the rose bush was that when officers came around we had to salute. The first problem was to recognize if they were officers. The second problem was to do this before they passed by. We must have expressed our sympathies for Vijayaraghavan, whose reactions are always late. He often used to salute minutes after the colonel had passed by, throwing the approaching Lance Naik into a state of bewilderment!

A few logicians amongst us wanted to know why we must salute men whom we had never seen before, simply because he (or in one case she) had three stars. It was perfectly all right, said one, if we knew the man, and paid him our repects. N.C.C, and logic, these logicians found out to their discomfort, are miles apart. These captains and colonels, (we fail to see why again,) lost their shirts over such a meanly thing as the cadet's salute, I mean the loss of it, and I doubled to complain to our officer commanding. One reflects that it is lucky that civilian officials don't go about wearing placards and demanding these so called 'curtsies' and other formalities.

I once saw our respected under officer fine a cadet smoking in uniform. I must mention here that the cadet did not have his beret on. Shortly after, I saw him request a seargeant to take his beret off while having his cigarette. Why this difference? Oh well, as our logicians discovered by bitter experience, N.C.C, and Logic are miles apart. No wonder at the entrance to our camp, we had this never forgettable piece on a board 'EME CAMP N.C.C.' (Non co-operative chaos?)

. . .



Above :

Maj. Gen. Virendra Singh, Director General, NCC, inspects the parade on 14th December 1965



Right : Tank Attack demonstration with air support



German University Students who visited the Institute



Part of the Indiana University Jazz Team in the Institute

Towards Comfort

by P. S. K.

E VER since his evolution, man has been taking every possible stride towards comfort. In the various parts of the world, the idea of comfort was the chiefest of man's ideas. In the industrious West, man made an attempt to attain comfort through his industrial knowledge, technology and engineering, devising new methods and inventing processes that made his burden of labour easier. But in the philosophical East man's first idea was on meditation. While the West tried to raise the means to meet the wants, the East tried to reduce the wants, to suit the means. Anyway, man's steps towards comfort are substatial.

In the process of inventing, man's curious and peculiar mind developed patents that would really soothe him, if they are made use of with kindness and tolerance, the very basis of humanitarian qualities. But, man's selfishness and arrogance gaining the upperhand, such inventions will seal him once and for all intowilderness. Everyone of us is only too familiar with the results of Fermi's chain atomic reactions.

But the Orientals in their march towards comfort have found out a path that never leads to destruction. Their methods do not involve dangerous inversions. The very application of Oriental thoughts and philosophy is the subduing of man's vices.

In its glittering progress along the vast field of science, engineering and technology—its short-cut for comfortable living, when all goes well—the West has captured the minds of the East. Men in the East are eager to possess the ample pages of untold knowledge in the fields of science and technology. But none can be sure about the application of such knowledge for the sole perpose of humane construction. They are equally liable to apply such knowledge to unworthy ends and contribute liberally to the fading out of humanity.

The Orientals have decided to look upon science as their only benefactor for, no one can stop or alter the stride of science. But, real comfort at present is so far away that a single spark may turn into a huge fire and burn everything. Man has succeeded only in snatching his own fate from the nourishing hands of nature but only with a possibility of healing himself. Man's comfort now lies only on his determination to strike no spark. We have nothing to do except to hope that all goes well. We will have to trust only man and wish that he is not subdued by his inborn vices, such as selfishness and arrogance, so that he remains always tolerant and humane.

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Electronics in the Service of Man

by Zakria Sait

IN our lives to-day we are sorrounded by the manifestations of the age of "electronics". Antennas are in the field of vision everywhere: television antennas on our roofs, whips on our automobiles, microwave relays on our bills, radar scanners on our ships. Electronics has given us the the freedom and the ease with which we talk to each other over great distances; it has provided us with radio, television, telegraph records and sound motion pictures which relieve us of our cares and worries and entertain the mind. Without the help of radar air transportion would-be immensely difficult. Whenever rockets are launched into space, electronic facilities are available for communication and control. Less conspicuous visually but equally pervasive throughout modern life are the electronic information-processing techniques of which the high-speed digital computer is an outstanding example. In the present article a few elements from the field of electronics have been picked up and their fuctions in the service of making have been briefly described.

Electronic Brain (Computers)

A few years ago it was a fiction that a machine could solve a problem it was asked. But it turned out to be a fact when in 1940 electronic computers began appearing. Indeed, it is a marvellous discovery in the field of electronics. This machine has the capacity to read a problem, work it out and answer it correctly and accurately. Besides addition and substraction it can solve many difficult problems in Mathematics and Physics rapidly. Its functions varies from predicting the results of an election or an examination to charting the orbit of a satellite; from composing music to translating a scientific treatise from English into Russian or any other language; from playing chess to forecasting weather. The main difference between a human mind and a computer is that the human brain can do creative thinking and make decisions which can never be achieved with the help of a computer.

Radar Techniques

Radar plays an important part not only as a reliable guide for pilots and navigators, but also serves as a very useful weapon during wars. No one could
say what would have been the fate of Britain, had she not invented and possessed short-wave radar to help during World War II. With the use of appropriate weapons it could shoot down enemy aircraft, destroy submarines and spoil machinery and manpower just with the help of very short radio waves.

It can identify and track moving objects. It can help an aircraft to land safely at an airport during nights and can also control an aircraft automatically without the help of a pilot. Ships on the ocean, equipped with radar are safe from collision with other ships. It can also provide all the necessary requirements for an accurate system of navigation.

Industrial Electronics and Automation

Electronics finds wide application in industries. Electronic controls of the mechanical gadgets have solved many a problem concerning quality and rate of production. The recent advances in the field of automation have almost succeeded in replacing man by machine. Despite the fact that there was no man on the space-ships which went towards the moon the people on the earth obtained as much information as was desired such as weather-flight condition, cosmic radiation etc. Special electronic controls are being used in machines as protection devices. The power-supply system can be safely and economically controlled by automatic devices from any particular place. Recently Britain has developed an eletronically controlled watch which shows time in hours and minutes with the help of illuminated digits and is absolutely free from any moving parts.

Transistor

The discovery of the the transistor is a landmak in the history of mankind. This fantastic discovery has enabled us to make a powerful pocket-radio and to accommodate a high-power small transmitter on man-made satellites and space vehicles. The remarkable properties of semi-conductors create new possibilities in different fields of Engineering. With the help of these miniaturized transistors it has been possible for us to build up compact computers and telephonic exchanges saving a lot of space with improvement in performance.

Radio, Television and Telegraphy

One of the magnificent wonders of science ts the invention of wireless telegraphy. Today in the twinkling of an eye messages can be flashed aeross thousands of miles. Wireless telegraphy has been put to use both as a means of information and recreation. Wireless transmitting stations have been set up in all parts of the world. A modern orator therefore addresses millions of men not knowing in which remote village his voice will be heard. During the war radio was used for propaganda purposes.

Yet another contribution in the field of electronics is the invention of radio photo techniques by which it is possible to transmit and receive photos across any distance. The underlying principle is that the photo is divided into a number of parts and transmitted one by one, and all these parts are received in proper sequence so that the original photo is reproduced.

More wonderful than this is the discovery of television which can transmit pictures at the rate of 30 per second so that the movement appears continuous to our eyes and its entertainment values are retained. It can transmit and receive not only black and white pictures but also coloured ones with the help of colour televisions. These pictures are carried from one place to another by what are called radio waves which are picked up by the television receiver, and original pictures are reproduced.

It was natural that in its early years, television should have been used mostly for entertainment. But it is far more than a toy and can be used for education and enlightenment. It can teach people to know and understand each other and help nations to break down the barriers that divide them.

Teleprinter

This is a wonderful telecommunication device rendering tremendous services to mankind. Letters typed from a particular station are carried either through a transmission line or the wireless medium and are finally received on a receiver which is also a typewriter in combination with a few automatic controls This has been of tremendous help to the news agencies and airports which flash messages from one corner of the world to the other.

Conclusion

This is not all that could be achieved with the help of electronics. These are but a dim revelation of the boundless future that is ahead of us. We have been able to receive radio waves from other planets also. As the science of electronics and telecommunication advances we will be able to know more and more about the universe with the help of radiowaves. I hope this article would do well to spur you, to lure you, to dream great dreams and then to awaken the firm resolution to achieve these dreams. It may not be long before everyone wears a tiny walky-talky as casually as he wears a wrist-watch today.

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A Room to Let

by 'Veer'

E VER since I got employed here, my geographical knowledge continues to increase. Once when my search for a room extended for well over three months. I knew almost all parts of the city of Madras by heart. By reading newspapers regularly over a long period, my general knowledge had, no doubt, increased but I was very much disappointed about my inability to get a room. After all, you cannot spend your entire life staying in a hotel. Moreover, I believe that the developing circumstances which may ultimately help you to break the monotony of bachelor life come up better if you reside in a house (or in a portion of it) than elsewhere, When I was almost forced to give up cursing my own rottenluck, I happened to notice an ad. in the newspaper. It read, 'Well furnished, mosaic floored, bath attached room, monthly, for gents.'

The location suited me fine. In fact, it was very near my office. But there was some difference of opinion between my financial conditions and the words 'mosaic floored.' But it was worth a try anyway, the reason being that anyone who doesn't have to spend much on M.S.T.D. buses can easily become a millionaire by the time he retires from the office. I left my office early that evening and my room at about 5 O'clock just giving the houseowner enough time to be at home, back from his office. Keeping my fingers crossed all the time in the bus increased the number of my admirers tremendously. But my needs are always more important than these characters' silly looks and I just tried to forget their very presence.

Promptly at 5-45 p.m. I was knocking at the door of the aforesaid house. I was allowed in and within about fifteen minutes' time I was engaged in an informal conversation with that gentleman. The preliminary conversation boiled down to two important facts. (i) the rent was little above my estimation and (ii) the Madras Medical College had the honour of training a student from that particular house, who happened to be the daughter of Mr. T. (the houseowner). By this time, the central theme of the second important fact entered the house and I was introduced to her. 'Smashing,' I thought, but merely managed to say, 'How do you do, Miss?' Pleasant conversation lasted for some time. Slowly we were getting down to business. Mr. T.: Before you come to our house, Mr Raghavan, I would like to have a frank talk with you. I may deviate into what may be none of my business but I need facts. I hope you would co-operate with me. (Cheerfully I agreed.) I would like to tell you that I am not bargaining about the rent, and if that is agreed to, I would like to admit that this is one of the C.I.T. houses.

This, without any obstruction, gave me a terrific shock. The newspapers some days back had informed the readers that most dangerous cracks continued to develop in C.I.T. buildings, but the Housing Board authorities attributed this to the adjustable nature of the soil. I was one of the guys who was laughing about the whole affair. I realised that the time had just come to change my feelings. 'But how does it matter,' I thought 'as long as we all live in the same house?' Also why should I unnecessarily spoil one man's chances of increasing his monthly earnings by seventy rupees which ultimately increases his standard of living? I sincerely felt that this was my foremost duty to the nation at an acute time like the existing one. But telling this to Mr T. may not be very diplomatic. So, with a nervous laugh, I said, 'I understand your feelings Sir ! But these cases are exceptionally few. And more-over, you see, my life line is very strong and I am not expected to have any accident before I am 75.'

Mr. T's sense of appreciation of what he thought was very funny almost blasted my eardrums.

' [like you very much, Mr Raghavan,' he said.

' Feelings are mutual, Sir, ' I bluffed.

It was my turn to be frank. He started asking questions, He asked me about my forefathers, about my qualification, my salary etc. etc. Then he wanted to know the power of my glasses, whether I often get headaches, why I am not fat enough for my age and so on. After undergoing such a mental torture, I really got irritated when he asked me whether I suffer from somnambulism. I wanted to tell him that slavery has been abolished throughout the world and hence my health conditions need not worry him so much. But this was just an impulse. It is not difficult for a level-headed person of my calibre to realise that this answer would wreck all my chances. So, I looked surprised and said, 'Whatever made you think so, Sir ? I have no traces of it.'

Then he wanted to know whether I smoke. 'Yes sir' I agreed, 'but I will take care not to give you any trouble.' 'Tut, tut! Mr Raghavan, I am afraid you have traces of pneumonoultramicroscopicsilicovolcanoconiosis,' (a lung disease). I remember I felt dizzy, and I could hear a sound which is normally heard when a human body in a horizontal position meets the ground. When I regained my conciousness, Mr T. congratulated me and said that he had decided to let me become a tenant of the house. I even forgot the pain, for a moment, the bump in my forehead gave. Later on I came to know that while I was unconscious the daughter had argued with her father in my favour.

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It is now one year since I got employed and my father-in-law has left Madras for good. I am now looking for a person who wishes to have 'a well furnished, mosaic floored bath attached room.'

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Music in Technology Land

by T. Varadarajan

What has Technology to do with music? Why—a lot !, though music is not in the curriculum for the B. Tech. course, as far as the student is concerned; and though they don't have a sabha in the campus, as far as the staff are concerned—the former need not study music and the latter need not bother to become members of the sabha.

However, it was just like a periodical-test announcement for the students, that the staff-members all of a sudden got an invitation (of course along with the enrolment form) for the inauguration of the **Kathyayini Sangeetha Sabha** on Saturday the 29th January. The invitation said that there would be a solo violin recital by Prof. Krishnan on that occasion and that children below 12 years were not allowed. Since there was no risk involved in attending this free performance and being able to satisfy the age-limit, I decided to go to the Community Hall.

According to normal conventions, such functions—specially a music sabha's performance—should start at least half-an-hour behind schedule. The explanation often given is that the musicians will arrive late since they know that it will take some time for the people to assemble in a sizeable number. Similarly, the audience feel that they can come a bit late, as the performance is no doubt going to start late.

So, I went to the hall just at the appropriate time (as I thought) i.e., 5-30 p.m. but to my surprise, the proceedings had already begun, only ten minutes behind schedule. When I entered the hall, Musiri Subramaniya Iyer was speaking, giving his blessings to the Sabha. I have heard him speak a number of occasions and he is one of the wittiest speakers I have heard. I could smell the sandal paste and rose petals offered at the entrance. The formal opening speech had earlier been made by Mr T. Viswanatha Iyer of Mylapore and the Kathyayini Sangeetha Sabha was born in the presence of Lord Rama and his consorts who were silent witnesses in the picture kept on the platform, and the distinguished audience. There was a mild stir when Prof. Krishnamurthi announced 'We are going to hear Prof. Krishnan sing; let us hear him speak.' However, Prof. Krishnan managed and spoke in the Kamaraj-fashion—a few words in the lowest sthayi possible. As a musician he welcomed the opening of such Sabhas.

Next, the performance began. The concert was not from the main stage, but from a very low-improvised plateform in the middle of the hall. I think that the audience sitting on the chair and the artistes were kept on the same level, perhaps with the idea that the audience must feel one with the artiste and vice-versa.

During the course of the concert, I noticed a few things which are familiar at all such occasions and some which were not. Here are a few samples in each category:

Common :

(1) People were comming in even at about 7 p.m. when the proceedings were half-way through.

(2) Similarly, people were also going out in the middle—the lady member first standing up in her chair, looking for her husband and the respective husband standing up at the other side, and nodding his head in approval (no other go) to her proposal to leave and following her.

(3) Whisper-like talks among each other on all topics except music, the speaker assuming it did not attract anybody else's attention.

(4) The Secretary's leather bag. A word about the Secretary and his famous bag. All of us know that the Secretary of a Sabha must carry in his armpit a leather bag. But here, I was confused as to who was the Secretary, as at one stage, I saw Prof. Krishnamurthi keeping that bag with him and at another stage, Mr T. V. Kuppuswamy carrying it. However, somebody next to me kindly confirmed that the Secretary must be only Mr T. V. Kuppuswamy, because Prof. Krishnamurthi being the President of the Temple Committee could not be the Secretary also. The man to my left immediately reacted with the following words: 'See what a tall and big representation of the Humanities Dept in this Sabha '!.

While the Humanities Dept had been so amply represented. I wondered whether the other Departments have any connection with music all. I was very much satisfied when I found the following:

Physics: The wide spectrum of the artiste's *kalpana* and *sanchara* which takes the audience to unknown worlds and the magnetic effect the musician produces on you.

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- Chemistry: Soda, which is inevtable for the musicians in between the many items.
- Mathematics: Permutation, combination and many difficult and different calculations employed in the *thalas swaras*, etc.
- Civil Engg: The Ghatam is made of clay.
- Elec. Engg: Mike, loud speakers, lights, fans, etc.
- Mech Engg: During kutcheri, at times, don't we feel as though the violinist is working on a cutting machine and the Mridangist or the Kanjira-player on a shaping machine?
- Chem. Engg: Pepper often swallowed by the vocalist during a concert to give a soothing effect to the vocal machinery.
- Metallurgy: The thambura, violin, veena, etc. have got strings.
- Applied Mech.: The vibration-effect (of small earth-quake intensity) coming out of an amateur Mridangam player
- (5) Prof. Krsihnan started with Vathapi Ganapathim Bajeham.

Uncommon .

- (1) The ladies were, at times, not found talking.
- (2) Combination of chairs and carpets in the hall.

This arrangement perhaps was to provide for both *dhotied* and *trousered* people. However, the carpets did not, somehow, attract the *dhotied* men with the reesult that except for a few friends of the artistes on the stage, all sat *into*' the armed cane chairs. It is not known if any of the Parkinson's Laws was attributed to this kind of human behaviour at social gatherings. When I asked one gentleman, why he could not sit in the front, he said: When I fecl like going out in the middle, I feel it embarrassing to get up and walk out attacting everybody's attention—chair is easier'. It will not be a surprise if at the next performance, all gents chose to wear pants so that they can excuse themseelves from sitting on the carpet. I am sure that this carpet arrangement have been made only by the engineering unit staff (I found the superintending engineer inviting people to sit on the carpet). After all, we all know that an engineer cannt make a hall without the carpet area. Whatever may be the idea behind the blend, it not at all encouraging for the *vidwans* on the stage, as they will not definitely give them any inspiration.

(3) People did not go out during the Thani Avarthanam thinking that it is the interval'.

(5) One of the artistes taking leave of the audience in the middle of the performance.

(5) No pan-shop (with cool-drinks) was ovailable outside.

Prof. Krishnan gave a good performance as usual. It looked at one stage like the National Programme of the All-India Radio—I mean the applause following each of the pieces. The accompanying artistes drew appreciation specially during entharo mahanubhavulu and later during thani avarthanam. sankarabharanam was main raga of the evening. The raga-malika that followed seemed to be a bit long, but on the whole it was a wonderful performance by Prof. Krishnan.

In spite of the restriction on the 'below-12 year-olds' I saw a few boys going here and there (I later came to know that they were helper engaged in the arrangment, etc. and not invitees). At one stage, looking at Vinayakaramane (*Ghatam*) I wondered if he was over 12 years. Somebody said that age limit doesn't apply to artistes. Anyway members may be well-advised to keep one attested copy (by a Magistrate or a Gazetted Officer) of their proof age in their pockets for inspection.

Sometime later, an Asst. Professor getting in the row before me asked me to 'take care of his seat' as he was going out for the next half-an-hour. When asked for details he revealed 'My wife is standing outside with the baby; the agreement is that I shall be inside for half-an-hour and then go out to take over the baby so that the next half-an-hour can be hers, etc.'

Prof. Krishnamurthi while proposing the vote of thanks described the hall as 'very beautiful.' All agreed with the compliment paid to the hall except for the 'echo' aspect of it. Music being so closely connected with Technology as has been proved earlier, the organisers may well seek the help of the technologists and engineers to see if Mr Echo can be branded 'below 12 years' so that he is not allowed inside the hall.

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Why I Like Solitude

by Y. Visweswara Rao

I put the same question several times to myself and I could not make out any cogent answer. But, all the more, it is true, I like solitude.

Actually, humanity can broadly be divided into those who love solitude and those who cannot pass even a single moment unless they have some one to empty their hearts to. Or it may be that the same person may at one time feel like shrinking into himself and at another time desire to escape from a feeling of loneliness to be a part of the milling multitude on the street. But one thing is certain, people who are confirmed addicts of solitude live in splendid isolation even in the midst of a throng.

'Single is each being born, Single it dies! Single it enjoys, The Neward Virtues'.

Indeed! How pregnant and significant these are! In the case of persons tike me these lines breathe a special significance. It is a melancholy but inevitable truth in my career. God, it appears, has singled me out by making me clubfooted.

This deformity of mine has always made me feel embarrassed among the people. I have been feeling this sense of solitude right from my childhood. I have always been afraid of people. How the strange looks of people, I distinctly remember used to bewilder me—the looks of scorn and ridicule which used to flash in their eyes as they noticed my deformity. I often avoided going to the crowded places and mass gatherings. Nor did I mix with the children of my own age, and who cared for such deformed companion I as after all ?

I used to stand alone in the balcony staring enviously at the gay groups of children, all chiriping with glee, like bird with its wings cut off, would watch the covey of of other well feathered birds flying hither and thither with a sweet twitter. An overwhelming passion would bubble up in my mind to join their little company. Lonliness appeared like a great curse to me. But nothing could help.

Then time passed on and little by little I got used to this loneliness. In fact I used to derive an indefined pleasure out of it.

And now.....! Solitude is my most pleasant and favourite feeling. No more a curse, but a bliss. Often I prefer to lie down on the grassy bed in a lonely corner of my courtyard, under a minosa tree, enjoying the fragmant shower of the silky petals of the delicate flowers. The wind whispers a rustling secret into the leafy ears of the tree. I like to find myself along in the company of nature, who have singled me out from the company of people. Nobody is there to remind me of the reality. No more am I aware of my deformity and I feel the joy of self forgetfulness.

This queer of mine was attributed to my arrogance and narrow mindedness. But alas! I could not help it. 'A lonely man is an unnatural man'—there is a saying. But mine is a glaring exception to this rule. Never am I so my own self than when I am alone. Solitude kindles a new spirit in me. Neither can I read, nor think unless I am alone. My mind begins to spread its beautiful wings and my spirit flies in air. It delves into the deep vale of the past and takes a heavenly flight upon the mountains of future, towering up across the blue sky of life.

I lose myself in the thought and recall the memories of the past. They form up in my mind. The whole panorama of my past life is framed up before me. But when I lose myself in the silken wood of memories, back flows the tide of time. Past seems to be present before me. The silence around me pregnant with memories is dumbly eloquent to me. This silence soothes my heart which is hurt by the society.

Never can I get more peace and tranquility of mind or inspiration than when I am alone. When, I lie in solitude the past and future present themselves before my inward eye. A great pleasure, and enlivening cheer is concealed behind this eloquent silence of solitude. It is no wonder then, if I love this solitude. What, then, do I care if the world is dissatisfied with me? What do I care if the world looks upon me with scorn or ridicule?

I shall only sing,

"Let me live unseen unknown, This unlamented let me die."

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Buzz in Buses

by B. C.

"TRAVELLING in a bus is one of the greatest pleasures in the world," I happened to remark to my friend. He at once retorted, "What! Are you a Stoic? If the nerve-racking sounds and liver-pulling-out joltings give you pleasure then your skin must be made of buffalo or hippopotamus hide." If only people were to put up with the frequent jolts and bumps of the bus, then they would be rewarded with some of the most amusing pieces of conversation. Practicalminded people would at once say, "Well, Mister, tell me, how to get into the bus first and then we can come to other things!"

'Look here,' 1 say, 'I am least worried whether you get into the bus or not. If you are lucky enough to get into the bus, that too, after a few cracked bones and crumpled dress less the purse which is now being fingered gently by the light-fingered gentry, then you will be rewarded with a fine, amusing conversation.'

Here are some of the typical pieces of conversation carried on in buses.

'He is like Oliver, wanting more and more.' A literature student perhaps—the thought enters your mind. But you are wrong. You would have never guessed what the above statements meant until you turned round and saw a man of Picwickian proportions sitting a few seats behind you.

'He ought to buy two tickets,' murmurs another, one who is not gifted with enough flesh even to cover his protruding bones. It has been said that fat people are mostly docile but it must also be said that they are ones who are laughed at always.

'You see, sir. I was travelling to Tirupati, I never felt so uncomfortable. You know, Tirupati temple is on a hill and to reach the place the bus-driver has to negotiate many hair-pin bends. It is very dangerous, yet the bus driver managed it so safely. But look here now. This is a perfectly straight road, yet the bus is jolting. My stomach seems to be coming out now. These bus-drivers are wretched devils in disguise. No wonder the buses are in disrepair so often.'

This long-winded speech is being given by a bespectacled man of fifty to his friend sitting next to him. The critic stops his comments to insert a wad of betel leaves into his mouth and then continues. As for politics you can hear many garbled versions of the day-to-day happenings in the country. The five-year plans, prices of food-stuffs and the affair of Sheikh Abdullah—these topics find favour with the passengers.

'If I were the prime minister of India, I would cage the lion,' says a lower division clerk and turning round, surveys the bus to see if anyone is smiling at his apt usage of words. A sly one murmurs, 'He cannot even become the prime minister's peon.' Diametrically opposite views are given about politics and in the heated argument that ensues many get trapped, even those who do not know who the president or prime minister is. Arguments and counter-arguments are given and the bus becomes a mobile parliament. The entreatries of the conductor are brushed aside and the passengers continue. The conductor shouts 'Parrys' and immediately a hushed silence comes over the bus. The heated debators get down and what is left is exactly nothing. The 'Parliament' becomes a bus again and politics vanishes into thin air.

The recent increase in the bus fares in Madras has come in for a lot of banging. Perhaps the most sarcastic comment was this: 'Sir, I have only two rupees. It is not enough for travelling by bus. It would be much better if we take a taxi. It is cheaper and also more comfortable.' This was said by one person to his friend while waiting at the bus stop.

The periodic checks by the ticket inspectors are viewed with disfavour by the public. I once happened to be sitting next to a man who gave vent to his anger at the intrusion of a ticket inspector. He said to me, 'The city is going to the dogs nowadays. Who are these ticket checkers? Are we not all law-abiding people? Why should they suspect us? Who will hesitate to pay a measly ten paise coin?'

Just then the ticket inspector approached him and asked him to show his ticket. The so-called moralist made great pretence of searching for the 'lost' ticket and looked into his valise, his coat and his pant pocket. How could a nonexistent ticket be found on his person? The ticket inspector fined him and after that the 'moralist' did not look at me, let alone lecture on the pros and cons of ticket checking. I could not help laughing for I knew that when he had got into thebus at an earlier stop, he had not troubled to get himself a ticket.

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The Great Detective

by "Mystic"

THE mail train from Kumbakonam screeched its way through the dark night, pulling behind it seven odd carriages. All the compartments were relatively quiet except for one particular compartment where in the harsh grating voice of one individual only could be heard.

The compartment in question which interests us was crowded. To say it was just crowded would be grossly inaccurate for the compartment was packed like a tin of sardines. Also the passengers travelling in that carriage represented a cross-section of the country. There was a merchant from Nellore, two or three Banias from Bombay along with their heavily veiled womenfolk, a few betel-chewing pundits from Madras and a horde of children. The only person in the carriage who was dressed in a long flowing pant and slack was a Madrasi and he now seemed to be the cynosure of all eyes. Not that he represented something modern but because the people in the carriage were attracted by his yackety-yackety speech. His speech was every now and then punctuated by wild gesticulations.

Our hero (incidentally, his name was Krishnan) was a gawky youth with prominent cheekbones and sloping forehead. He looked like an escaped lunatic from Kilpauk, his dishevelled hair and round spectacles adding glamour to his personality. He was nonetheless groomed well and the terry-cotton pant he wore had already been subjected to minute inspections by the co-passengers. To cap it all, he wore a gaudy coloured shirt filled with pictures of animals which even a three-year-old would't dream of wearing outside. A neatly folded kerchief managed to peep out of his pocket which was so huge that it could have easily held two large rabbits.

As indicated earlier, our colourful personality was the only person who was talking in the comparament. He managed to keep the Tamil knowing listeners engrossed in his extempore (for it was in Tamil that our hero was talking and every now and then earned a smile for his efforts. He was telling to his neighbour, the ricemerchant from Nellore, "You see, sir, I know the tricks employed by the criminals. I am a detective working on my own. Not an amateur, mind you. Let that not make you think that I am a novice. I know how the light fingered gentry make your purses disappear before your very eyes, I know how robbers get into the house and I know how the murderers try to conceal their clues. If I am allowed to go further I may also tell you that I know where the Police Department goes wrong while tracking criminals." He turned round to survey the effect of his harangue. There were no indications to make him feel disheartened, there were no murmurs or any sly talk of his being a bore. Our Hercule Poirot, for that's what he considered himself to be, if not something more than that worthy detective. "Hmm, I see that you are all astounded, amazed to hear me speak thus. I can sense that each one of you is eager to know of my exploits. No, sirs, nothing doing. My adventures, perhaps you will read in my memoirs which I think I will write after I retire from this hazardous occupation. My exploits, will not be revealed now, for it would put to shame Poirot, Perry Mason, or as a matter of fact, even the great F.B.I." A young man in his twenties who sat in a corner chuckled merrily at the boastful detective. He instantly shut up and did not chuckle when Krishnan, the detective looked at him searchingly with stern eyes.

Krishnan looked around once more and said, "See my stare can outstare even that of an owl. The stony look in my eyes has made several accused cough up their crimes. If criminals were asked to choose between taking a lie-detector test and facing my stony stare certainly they would choose the former. If any......" He was interrupted in the middle of the speech.

A tap on the shoulder made him turn around. It was a Lalajee whose excessive love for fat revealed by his ample proportioned body who now made the Punditji sitting next to him very uncomfortable. "Mishter, aap kya kahte hain? Muje bee batha low." It was the Lalajee speaking and the heavy accent with which he spoke made the detective slightly ruffled. The detective smiled, the same cynical smile. He obviously understood Hindi. He started all over again, going over the same story he had related to the Tamilians, more in fear of the Lalajee's huge proportions. Soon the Lalajee and his group were full of appreciation of the long-winded speech made by the bony detective from Madras.

The train stopped at a small station so that the engine could be filled with water. Krishnan looked out of the carriage and scanned the wayside station for something interesting or something out of the way. In the illumination provided by a solitary lamp, he saw two unshaven, haggard characters walking towards his earriage. Krishnan walked back to the bench and took his seat near the rice merchant. The two dishevelled characters entered the carriage and peeped inside. Finding no place to sit they took their positions near the door. Our detective raised a thoughtful eyebrow. Turning to the rice merchant he said in a low tone, "Those two are no good characters by their very appearance. They must be thugs, ex-conivcts. We must safeguard ourselves: They look so dirty and horrible."

The rice merchant looked into the detective's eyes through his spectacles. The lights above the bench made the glass glint and reflect the yellow rays "You must not say so. They may be poor agriculturists or workmen." Suddenly the lights in the carriage went out. Our detective heard shuffling of feet near him. It was exactly a minute and a half before the lights came on. The rice merchant was not in his place. Krishnan instantly got up from his place. "All of your remain in you places," he said in a harsh tone, "The rice merchant has been kidnapped. It is quite obvious that the thugs must have kidnapped the rich rice merchant".

Krishnan took a few steps back, keeping the passengers rooted to the ground. He looked at the carriage entrance. No, the thugs were not in their place near the carriage entrance. Krishnan said in menacing tone to the people there,

"There is something afoot on this train. The merchant is missing. I am going to pull the chain".

Krishnan went forward and caught of the chain handle. He was about to pull it when a sudden cry of "Stop" made him leave the handle. He turned around and was astonished to find the rice merchant standing behind him hale and hearty.

"That you"? A strange cry escaped from the detective's lips. He stared at the walls of the carriage for sometime as if he were bewitched.

"Did they not kidnap you? Did they not relieve you of your money? How did the thugs....." His voice trailed off when he saw the two unshaven characters smoking *beedis* and chatting in a loud manner. The detecive scratched his head in a very thoughtful manner and queried, "Then they did not kidnap you?"

"Kidnap?" It was now the turn of the merchant to scratch his head. He said in a very astonished tone, "I just went to the bathroom to wash my face and those two persons standing there smoking *beedis* followed me to the bathroom to wait for their turn. The light in the compartment must have gone out due to some loose contact or other". He stopped his explanation and began to guffaw loudly. The other people in the carriage having got wind of the funny situation, began to laugh loudly, making, of course, pert comments on the great "detective's" provess.

Our great "Poirct" was, needless to say, slumped on his seat unconscious. And that saved him a lot of trouble because the irreverent comments made by his co-passengers would have certainly crushed his ego.

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The Deserted Fane

by P. Venkatesan

B^Y the time I had reached the ridge I found an ominous change had come over nature. Dark masses of clouds had appeared from nowhere and filled the entire sky blackening it as it were and behind this blackness the sun had vanished. It was too risky to go further and I decided to return to the hotel before the tempest would break and night close round me in the waste.

So I set out retracing my steps at a run taking advantage of the downward slope of the path when there came a flash of lightning followed by a distant roll of thunder which lasted several seconds sending a cold shiver through my body. It was as if the sky had suddenly split and let go its supressed fury.

The rain that followed continued to pour in cats and dogs. In a few minutes I was drenched to the skin. Thus caught in the pelting rain and biting cold, I frantically searched for some shelter and by good luck I saw by the light of the flash of lightning a big banyan tree not very far from where I was standing.

I ran towards the tree to shelter under its spreading branches. The rain still pelted me from all sides and the cold wind bit into my bones. All sense of direction was now lost. I was entombed in thick blackness of night, clouds and rain and of dripping foliage. To move from that spot seemed folly yet how dreadful to remain there standing on the sodden earth, and in that awful blackness all round! The intense physical discomfort and the anguish of having to stay there for how long I didn't know made me regret having come to the place at all. I desperately prayed that the rain would stop and I would be allowed to get back to my hotel and enjoy the warm comfort of my bed.

Then suddenly I saw some light appear at a distance. A glimmering dot of red. My joy knew no bounds at this sight and my feelings were akin to those of a captain of a vessel who sees the flash of the lighthouse after he had lost his bearing in a stormy sea.

Instantly I directed my steps in the direction of the light and after stumbling over many unseen objects I reached the place with aching feet and eyes half blind and numb for sleep. I knew then that it was the ruins of a small deserted fane. It promised shelter and some companionship. With hopeful heart I entered wondering what welcome I would get.

I had hardly crossed the threshold when I saw inside a frail worn man sitting by the side of fire. He appeared to be all expectant and eagerly awaiting someone at any moment. As he heard the sound of my foot-steps he lifted his head anxiously and looked at me. There were signs of welcome in his look no doubt, but more than that he seemed to be searching his mind. Then suddenly the man spoke in a low feeble voice. "So you have come at last. I was certain you would, particularly today. It may sound queer to you", he added after a little hesitation, "But it is true all the same".

He then moved a little aside and beckoned me by raising his hand to come and take my seat beside him. With uncertain steps I made my way towards him and sat down. He gestured and said it was better I took off my wet clothes. He put more dried sticks on the fire and made it burn brighter.

I began warming my hands when he got up and fetched me a mountain fig and a mug of water to drink. Wondering what the outcome would be (for my thoughts ran to the story of the Procrustean Bed), I started to eat, occasionaly glancing in the direction of my host. Was it safe to be alone with him? He seemed a little queer for he never once looked at me after the initial few words. Anyway I had no choice left.

My fears, however, proved groundless. The man was harmless. I was now feeling comfortably warm and wished my companion would be more sociable. He seemed to sense my desire. Looking up at me he said, "Now you will tell me what news you bring of her". His words came tumbling, trembling in eagerness and his sullen sunken eyes sparkled a while with a tense desire.

To say I was surprised is to make an understatement. My face must have betrayed my amazement. For the man leaned a little towards me and whispered in my ear, "Leela is her name". As he uttered the name the very music of it had gone into his being for he smiled. And that smile of his suddenly made me slip back in memory a full five years.

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I had just returned from my foreign study and was enjoying a vacation in this hilly place. It was my practice then to frequent the small Bhavani temle at the top of the hill. The temple was in ruins and no one offered worship there. The place was therefore not much frequented and it was a pleasant surprise to me to see a young girl come there daily and wait rather long. I soon surmised that she was waiting for someone to come who, however, failed to show himself because of my presence. Though the unsophisticated charming little maid used to interest me immensly, I stopped frequenting the place believing that it was a crime to stand in the way of two lovers.

The girl was Leela and the man, Narayan by name, was a local teacher. He was quite handsome then and on the threshold of golden youth. When I thought of that comely youth, now at the deserted fane all life drained from him, tears started trickling down my cheeks without my knowledge. I could never believe that a mere five years could bring so much difference in one's looks!

Oh what a thing is frustration!

Every day at even fall they used to meet and chat to their hearts' content. One day as I went past the ruins I heard the murmur of their voices.

"Do you really love me, as much as you profess to; dear?" she queried eagerly as if to rehear the "One reality from his own mouth, to which he replied, "Love you? Aye, ask of the muskrose if it loves the morning light". "If so", she half whispered coyly. In answer he gathered the bashful virgin in his arms in a warm loving embrace and their secret laughter tittered round the place. Thus they met frequently and their love grew. But human society is a heinously envious circle. It cannot either lessen the misery of many or stand the happiness of a fortunate few. People got tired of the tacit love affair of Leela and my friend they began to talk losely about them.

Leela's parents were annoyed. They hence forbade her meeting Narayan. He was afterall a school-teacher. They had plans to marry her into a rich family.

The marriage took place soon and school-teacher Narayan became the butt of ridicule. The schock and shame of it all had affected his mind and he he started wandering about like one mad.

It was a strange coincidence that I should meet him there in the dilapidated shrine after five years. The passage of time though not long, the feeling and frustration had made him a ghost of his former self. The world outside was dead to him.

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Now he shook me to wake me up from my reverie and recall my wandering thoughts and breathed again the name.

I looked up into his face that burned before me with eyes aflame and told him of how I had met her, and her little daughter and of the heaven of happiness she was in. And as I spoke of her well-being his quivering spirit drank the news it had thirsted for so long. For a flashing moment, life gleamed in his ghostly eyes and then slowly sank like glooming light.

"And so she was happy when you saw her last", he said as if to reaffirm, and I was glad to say 'yes' at which his halfclosed eyes turned to mine expressing thankfulness.

The fire had burned out by now but the rain continued still. Suddenly there was a flash and clap of thunder and a portion of the ceiling came crashing down. I iumped aside and saved myself but my companion was crushed under a stone and he fell face downwards on the dying embers of the fire he had lighted there.

Soon the rain stopped and I started on my way back towards the hotel. Next morning I made enquiries about Leela and I learned that she was really happy and was living nearby.

I felt a strong desire to see her. Was it fate that had dragged me to the deserted fane? If so what was the part it desired me to play in this drama of life?

A pretty little curly-haired girl greeted me as I knocked at the door of Leela's house. There was no need to ask who she was. She was an exact picture of Leela as I had seen her long before. "Mummy, there is a gentleman here to see you' she called.

Leela came to the door. She had not changed much. I greeted her. She recognised me in an instant. I felt not a little relieved but whatever should I say? I stammered a few commonplace things and then I asked if I could have a few words with her in private.

Having intuitively grasped the situation she led me into the parlour. Summoning up all my tact I told her of my previous night's encounter and my meeting Narayan in the deserted fane and his sudden tragic end.

She heard me in tense silence but suddenly her self-composure gave way and tears started rolling down her cheeks. I could see that she had loved him.

"I am sorry to hear the sad news" She said regaining her self-control." "Perhaps it was all God's will," she added after a pause, "Who can doubt the wisdom of Providence?"

"Yes", I answered, though I wondered within myself what she meant by it. Did she refer to the fate of the school teacher Narayan, or her own marriage which turned out to be happy though at first it was against her wish, or both as proofs of Providential Wisdom?

Love

by G. Sampath

L ove is the greatest thing in this world. Without love this world will be a very dull and sorry place to live in. St Paul, a disciple of Jesus, in his epistle to the Corinthians, has written a whole chapter about love. (I Corinth, Chapter 13). He first contrasts it with other worthy things such as eloquence, prophecy, knowledge, faith and martyrdom and says that love is greater than all these. He then analyses love and says that it is made up of patience, kindness, generosity, humility, absence of pride, courtesy, unselfishness, good temper, gentleness, guilelessness, sincerity, faith, hope and charity. He says that love never fails. It is eternal and enduring. In character building, faith is the foundation, hope is the superstructure and love is the crowning piece, the finishing touch. Pity, mercy and forgiveness are the mainfestation of love.

We must all love one another. Love is the link of life. It produces unity. We all know that "Union is strength". Union is the result of co-operation. Without cooperation we cannot get on in this world. It is love that produces cooperation. Cooperation can be found only among people who love one another. Therefore love is very necessary in life.

It is this love and unity that God teaches us to learn in our families. We develop love in our homes; parents love their children and serve them. The children love their parents and serve them. Sisters and brothers love each other and serve each other. All this service is selfless service, born of love. It is this love between the members of the family that makes the home happy.

First we learn to love our close relatives. Then we learn to love our friends. Gradually, we learn to love our neighbours. Finally we have to learn to love mankind as a whole. Love among relatives makes the home happy. Love among friends makes the circle of friends happy. Love among neighbours makes society happy. Love among mankind as a whole will make the world happy. We can compare the world to a big machine. We know that in a machine, to make the wheels go round smoothly, oil is used. Now, the lubricant that makes the world-machinery run smoothly is love.

It is love of man to others that makes him do social service work. Social service is not done for getting money. It is a labour of love, undertaken with-

out any hope of personal gain. Many of us know the story of Abu Ben Adhem. He loved and therefore served his fellowmen. He was rewarded with the distinction of being the first and foremost among those whom love of God had blessed. In Mahabharatha one of the focal characters is Yudhishtira who was famous for his justice and mercy. When he went to heaven, a dog also accompanied him, But it was not allowed to enter heaven. Yudhishtira said that unless the dog was admitted, he would not enter heaven. It was love that made him say that. Buddha had said that he will not attain Nirvana till even a single soul remained to be saved. It was love that made him say that. Lord Krishna said that, for protecting good people, for destroying evil, and for establishing righteousness on earth, he was born again and again in this World. It was love that made him say that. It was love that made Jesus Christ pray for his enemies and murderers. "Holy Father. forgive them. They know not what they do". Christ's life was love in action. By his love he revealed the perfect character of God. "GOD IS LOVE" The essence of Christ's teaching is "Love thy neighbour as thyself. Love your enemies. Bless them that curse you. Do good to them that hate you. Pray for those that despise you and persecute you". Jesus conquered the World, only because of his all-embracing love. In our own life time we have seen how Mahatma Gandhi lived a pure and perfect life like Jesus. He also has conquered the world through love. Love is undoubtedly the greatest thing in the World. There is no higher force in the Universe than Love. For "GOD IS LOVE".

The poet Samuel Taylor Coleridge ends his poem "The rhyme of the Ancient Mariner" with this verse.

"He prayeth well; who loveth well All things both great and small He prayeth best who loveth best Both man and bird and beast".

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Making of a Hero

by Charanjit Singh

THE sky had turned coppery; the time was about six thirty in the evening. It was summer and it was good to be alive and kicking. The air turned cool with the setting sun and it was the ideal time to be out and playing. Didn't they say you had to be in before it was dark? Well they could hardly afford to yell at you if the twilight lasted till a quarter to eight: and you slipped in sheepishly at eight and quietly took your place on the kitchen floor to get your bite of dinner, Yes, the kitchen floor; because, if Pitaji had been yielding enough to eat off a table, then he wouldn't have bothered what time we got in.

I was watching the sunset from the roof, the breeze was more apparent there. I had finished my studies those insipid calculus problems, those interminable pages of engineering chemistry. I leaned over the parapet wall to see what was going on in the street. It was a one way street. O! pardon me, a blind alley, and at this time of the evening the careful observer can always see a few misguided pedestrians ruefully shaking their heads at the wall that rose across the street for no apparent reason, and then turning away with a scowl. A voluble few shook their fists and cursed the town planners and their ancestors in a manner that left no doubt regarding their pedigree. On the whole it was a pretty interesting sight.

It was dark in the alley and my eyes took quite some time to adjust to the murk. A few children were playing there, and among them I could make out my brother Mukand. They were moodily kicking at the littered mango guthlis, for want of something better to do. Their voices were subdued; they had run out of ideas for making mischief and were truly bored.

Suddenly a voice cried out, "There goes the cat."

A childish chorus took up the cry, "Manno Billi, Manno Billi, pussy cat." There was a confusion of voices while the children chattered over this fresh avenue for the outlet of their energies.

A meek voice spoke hesitatingly "Let's catch it and teach it some tricks." That would be brother Mukand. He always had a gentle, peaceful approach to all fresh prospects and opportunities. A doubtful pair of voices assented weakly, "Yes yes, let us teach it some tricks." A silence. A few mutterings of indecision, while the cat poked around the gutter to look for a chance tit-bit.

Then like a slap came Rajiv's voice. "I say, let's kill the bloody badmash." There was a babble of excited voices at this totally fresh proposal.

"Wh...Wh...Why should we kill it?" stuttered Mukand.

"Well..." there was a pause while the bully looked for an excuse. "Well it is a bad cat," he said triumphantly.

"Bad cat, bad cat," came the chorus.

The cat was poking among the dustbins now. It was one of those lean looking strays, weak and pathetic.

"Yes, we should kill it, it killed out chickens," came another rowdy voices.

"How do you know it is same one?" asked Mukand appealingly.

"It is," was the short obstinate reply.

"Well, even if it is not let us just stone it for the fun of it," chipped in Gullu. This moderate sentence satisfied the riff-raff, they chorused assent and gathered stones and odd pieces of bricks. Mukand stood by quietly not knowing what to do. The cat stood next to the wall, the wall that ran across the street, the wall that was very high, the top of which was lost among the high strung washing lines during the day time.

While the precision of an artillery barrage, the stones, the brickbats, the mango guthlis flew, there was a sharphowl from the cat. It tried to scramble up the wall. Probably it was too high, or the cat was took weak; but, she came slithering down. She tried to run out of the alley but there was a ring of tight lipped youngsters ready to apprehend her escape.

The cat went back to the wall, then climbed a dustbin, thinking it would be safe there. She made a perfect target sitting on it. Once again the missiles were hurled. There was a cry of anguish both from Mukand and the cat. Mukand, the gentle Mukand, couldn't stand it any longer. He rushed to the cat and made a grab for it. The barrage hadn't stopped. Mukand got hit a number of times. I saw him shake his head as if to shake off the pain. The excited, angered cat scratched his face, thinking that he had come to harm her too. He held the cat next to him and ran out of the cordon of the cat-teasing hooligans. They lended him a few kicks for having robbed them of their pleasure. I didn't go down to help him! I felt this was the most important chapter of his education...to stand up and oppose public opinion, to stand fast and fight for his covictions. Tomorrow he would no longer be shy and reserved, because he had to-day learnt the lesson.

Half way down the alley he released the fighting fuming cat. By the light of the corner lamp I saw it vanish into the main street crowd. Mukand came in quietly, not snivelling as was usual after he got hurt, but with an odd kind confidence of calm in his face. He went to sleep without having his dinner, groaning just a little due to his bruised condition.

It was morning, the rosy summer dawn. I got up rather early. Mukand lay tossing and turning in his sleep. By his pillow sat the mangy little creature, the cat he had rescued. She licked his face to heal the scratches she had made herself. My mother got up to shoo the cat away, but she didn't understand. I stopped my mother from doing so. We both sat down and watched. The hero rested, his admirer nursed.

* * *

Red Letter Days

by Vijay G.

I^T was urgent. I went to see the Registrar about it. He asked me to sit down and before I could say anything, he said,

"You are the seventh boy to ask for an exemption from the N.C.C. camp. What are you going to tell me?"

"Sir I..... I."

"Well I'll save you the trouble. Are any of your sisters getting married?

"No Sir. I have no sisters".

"Any of your brothers going foreign?"

"They are already in foreign, Sir".

"Any of your grandparents, uncles, aunts or yourself sick?

"No sir, Yes Sir".

"What?"

"No Sir."

"Then what earthly reason are you going to give me for missing camp?"

The four walls in the Registrar's room are white.

"I am in fourth year, Sir," I muttered and before any more questions could be asked, I backed out.

When I came out I realised that now I just had to attend camp. I went home and told my aunt about it.

"Oh," she said, "You had better write home and tell them not to expect you the day after to-morrow". I felt like a drowning man who din't have a straw to hold on. Have you ever tried joining the Army, Navy and Air Force at the same time. Well, that's how I felt. I packed up my effects and reported at Narmada Hostel that fateful evening of the 18th December 1965. 1965 had been ever so nice to me all along. Boys, now I know there are two things you can't trust, dames and 1965.

Before I tell you something about ihe camp I had better familiarise you with a few things in advance.

- 1. GUARDS A guard doesn't smoke while he is on duty and he does not allow unauthorised persons inside the camp. After "Lights out" he is the O.C.
- 2. RETREAT Usually at 2200 hrs, that is the time when you got to see that no sergeant sees the light in your room.
- 2200 hrs, don't ask me what that is. It is not on my watch. But there is a theory which says that after 12 comes 13 and after 24 we have
 0. Simple? Sorry.
- 4. REVEILLE: That' is the time when it is dark and chilly outside. There is the shrill note of the bugle. You sit up in bed and start wondering if you should be sick for the day.
- 5. O.C: No, you are wrong, it is officer commanding.

Some people have all the luck in the world. Some don't. I belong to the signals coy. You ask any signals guy what he did during the camp. The first thing he is likely to tell you about is that on the 26th of December he went out for a route march starting at 2300 hrs. walked 15 miles and reached back camp at 03.30 hrs on the 27th, carrying shovels, picks and .303 rifles. That, ladies and gentlemen, was one of the 14 days we spent in camp.

Ever seen pictures? I mean pictures like Surrender Hell. Longest Day etc.? Saw those soldiers crawling up the beach. Take it from me, buddy, they are doing it all wrong. We signal guys ought to know it. We attacked the water tank next to the Ladies club so many times.

By the way, you might be interested in two important points you would do well to remember. Whatever the operation. Attack. Advance to contact. DEFENCE OR WITHDRAWAL. (ordinary)

Do not obstruct the path of the enemy bullet.

Do not be in the line of vision of your Officer.

Among other things, we went to the range and fired from 100 and 200 yards. Here I discovered a fundamental law in optics - physics - the distance between yourself and the target, provided you are on the range. That is to say... well no point getting confused now. You might have a periodical tomorrow.

8. One day we went to the docks, the telephone exchange and Police Wireless H. You know something? Madras State is divided into five zones for wireless convenience. We could'nt have lunch or tea that day for we started at 06.30 hrs and came back at 18.30 hrs. Pretty early for dinner I must say.

The camp ended on the 1st of January. The 18 years I have lived on the face of this Earth, I have never received a better New Year Greetings.

I reached home, intact.

P.S.: We also practised on a few wireless sets (RT & CW) no. 22.48 and 62 (all trans-receivers). Mose code RT procedure, value theory etc.



The Institute te Gymkhanen a

Committee Reports and News

The Institute Gymkhana Committees



MAIN COMMITTEE

Sitting L. to R.: Mr Ramaswamy Prof. P. C. Varghese (President) Prof. B. Sengupto (Director) Prof. Dr Rouve Mr Ebert

Standing PTIs

Absent: Dr Klein, Dr Venkateswarlu Mr L. Paul (Genl. Secretary), Auditor Prof. S. Sampath

Sitting :

V. Venkatesan (Secretary, Literary Committee) Prof P.C. Varghese (President) Lionel Paul Jen ral Secretary) Anand Swaminadhan (Secretary, Sport Committee)

Standing:

S. M. Krishnan (Secretary, Entertainment Committee) Gautam Mahajan (Editor, Campastimes & Institute Mag azine) R. Jaikumar (Secretary, Publications Committee) Mr Menon (Secretary, External Relations Committee) Anil Shenoy (Secretary, Fine Arts Committee)





SPORTS & GAMES COMMITTEE

Sitting (L-R) K. K. Batra Anand Swaminadhan (Secretary) Prof. P. C. Varghese (President) Lionel Paul

Standing (L · R) R. Jagadish B. Thomas R. Neelamehgam Srikant

Absent : A. Hameed, K. S. Vasan



LITERARY COMMITTE

- Sinting : Shukla Venkatesan (Secretary) Prof. Varghese (President) Shankar
- Standing: Lokanathan K. V. Ramasarma Mahendroo
- Absent : Sudarsan M. G. Subramaniam Dr Klein M. V. S. Sarma

ENTERTAINMENT COMMITTEE

Sitting : S.V. I

S. V. Ramesh S. M. Krishnan (Secretary) Prof. Varghese (President) Dr Rouve Vardarajan

Standing :

A. Swaminadhan Gill Ramana H. Seth Charanjit Singh Subramanian





FINE ARTS COMMITTEE

Sitting: A. K. Shenoy (Secretary) Prof. Varghese (President) Mr Ebert D. P. Sharma

Standing: A. Jain C. Shankar Kumar V. C. Jacob R. K. Maitra A. Saha

Absent : I. Ray



PUBLICATIONS COMMITTEE

Sitting :	R. Jaikumar (Secretary) Prof. Varghese (President) M. John Kuriyan M. Vijaykumar
Standing:	S. Vasudevan M. Rao M. Menon Gautam Mahajan (Editor, Campastimes)
Absent :	S. Bukht, Prof. Sampath A. Lahiri, M. G. V. Mannat P. Sudarsan



SOCIAL SERVICE & EXTERNAL RELATIONS COMMITTEE

- Sitting : M. Menon (Secretary) Prof. Varghese (Staff Advisor and President, Institute Gymkhana) V. Saigal
- Standing : B. Sreeramchandramurthy C. S. Sastry
- Absent : P. Sudarsan, S. Ramamurthy

Reports

Institute Gymkhana General Committee

by Lional Paul, General Secretary

THE activities of the Institute Gymkhana started with the usual "swearing in" ceremony over which Dr Koch presided. For the benefit of non I.I.T. readers, the Institute Gymkhana handles all the extra curricular activities of the students.

This year, as in other years, we had our usual quota of Committees and committee members – a new feature however was the formation of the External Affairs and Social Service Sub-committee which consisted of all the class representatives.

Most of our star performers having passed out, one would normally have expected a lean year for I.I.T., at least as far as extra-curricular activities were considered. But as it turned out, the blanks left in the various teams were more than adequately filled up. Our quiz team carried on their good work by winning practically all the Inter-Collegiate competitions in the city and the Group discussion team once again established its clear cut superiority in Madras. The Debating teams, not to be outdone went on a spree and succeeded in winning three team trophies in the space of four days, with a lot of individual prizes thrown in.

In the field of entertainment too we have had our fair share of laurels. Our Institute Orchestra the Beat-x proved their worth by winning the Judges Trophy in the Inter Collegiate Musical Knockout competition and our variety entertainment team did well to be placed first in the Inter-collegiate entertainment competition conducted by our Institute.

The success of our sports teams has also been significant. Our rowing team did well to win the Inter collegiate fours event and the Stanley cup for tennis singles returned to I.I.T. for the second successive year. Our athletics team has developed into a well balanced one and they did creditably well to finish second to the strong Y.M.C.A. contingent in the Buck Memorial Athletic Meet, and our Inter collegiate Meet for the Director's Trophy.

Mention must be made of the fine manner in which the literary and cultural week, the science fair and the open athletic meet were conducted. The success of

these were dependent to a large extent on the amount of work put in by the various committees. A word of praise for the Editiorial Board of *Campastimes*. *Campastimes* has maintained, if not bettered, its fine standard of previous years and it is fast proving to be truly inter-collegiate in its circulation.

Two notable omissions in the list of activities this year are the inter I.I.T. meet and the youth festival, both of which were called off due to the National Emergency.

In conclusion, I must thank our Director, Registrar and the Gymkhana President for the whole hearted encouragement given to the students. I would also like to thank the staff advisors of the various committees and the committee members for the fine manner in which the activities have been conducted this year, thereby upholding the traditions of our Institute.

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Sports Committee

THIS year as in other years we entered teams in the Madras Inter Collegiate leagues, in football, hockey, tennis, cricket, volleyball and basketball. Our performances, though not excellent, were good enough to keep I.I.T's name alive in the sports world of Madras. In Tennis, we once again lost to the Engineering College, Guindy but had the satisfaction of seeing Lionel Paul whip their ace Dinesh K. Shah. Lionel Paul went on to win the Stanley Cup for Tennis singles for the second successive year in the Bertram tournament beating university players, Inderjit, Muthu and Lakshmanan in the quarters and semi finals respectively and accounting for an up and coming youngster, Anand Amrithraj, in straight sets in the finals.

In the other games I would like to dwell on cricket for a second. Though there was no trophy to our credit I would like to point out that our team held the mighty Engineering College, Guindy to a draw — the only team to have done so in the past three years. I hope that next year we achieve greater heights by beating Guindy. In hockey we reached the semi finals of the Jain College tournament The team also entered the YMCA tournament.

We sent a table-tennis team and basketball team for the Bertram, but met with no success. We also entered a ball badminton team in YMCA tournament,
This year we sent a regular athletic team for the Buck memorial Meet and managed to secure second place to YMCA college. Special mention must be made of Ranjit Puri, R.M. Nair, Thomas Victor, George Verghese, Joshi Paul and Anand Swaminadhan. Our own Inter Collegiate Athletic meet for the Director's trophy went off quite well with six outside colleges. We got the second place after YMCA. There was a tough fight for the Gerhard Fischer trophy for the individual championship between Joachim of Loyola College and Zackriah of Presidency college. Joachim won the coveted trophy.

Three new games have been introduced in the Inter hostel competitions. They are carroms, chess and tennikoit. The enthusiasm shown in these games clearly shows that it was a good idea to include them. The General Championship for the Schroeter Cup has developed into a two way fight between Tapti Hostel and Krishna Hostel. The holders Cauvery were in the running but are out of the picture now.

Two Inter I.I.T. records and 9 Inter Hostel records went over board in this years Annual sports meet. The two inter I.I.T. records were in the 1500 & 5000 both to Joshi Paul. However he didn't better his own 1500 m record of 4 m 28 sec. set last year. The Institute records created were in the 100 metres and 200 meters by George Verghese, 400 m, 800 m and 5000 m by Joshi Paul, 110 m hurdles by Anand Swaminadhan and in 4×100 m relay, 4×400 m relay and $4 \times$ medley relay all three to Tapti Hostel. The championship, as expected, was won by Tapti Hostel, with Anand Swaminadhan of Cauvery winning the Individual championship.

Ebenezer Sargunar won the senior sculls and the pairs in the recently conducted Regatta at the Boat Club. He represented the Boat Club. M.C. Murthy won the Maiden sculls and his crew consisting of IITians won the Junior fours.

Chess: Three of our players represented I.I.T. in the Loyola College Chess Tournament. B.B. Kamdar and S.G. Deshpande reached the quarter final stages, where they were eliminated.

-Anand Swaminadhan

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The Literary Committee

THE year under review has been a remarkable success from the point of view of Literary activities. Our Institute debators have scaled heights that have never before been reached and we have now one of the best teams in the south. This year our Institute team represented by R. Shankar and Ashok Kacker annexed the Gordon Mathews cup for the inter-collegiate debate held at the Madras Christian College in February. The same students also won the Junior Chamber of Commerce Shield, beating Law College. R. Shankar was adjudged the best speaker. The same team was placed first in the All India Debate held in the Literary week and this time Ashok Kacker won the first individual prize. Another Institute team represented by Caius Camillus and Madhusudan Menon won the inter-collegiate trophy for debating held at the Madras Institute of Technology. Both of them secured individual prizes.

The Institute Quiz team represented by V. Venkatesan, M. C. Murthy, R. Neelamegham and Alex Philiphos has won many laurels both at home and abroad. The Institute team consisting of V. Venkatesan and R. Neelamegahm won the Saturday Evening Club shield for the third successive year in this and also in the Quiz conducted by the Engineering College, Guindy. V. Venkatesan won the second individual prize. The team also emerged triumphant in the series of Quizes conducted by AIR.

Group discussion has so far been patently IITian but now other colleges have rapidly caught the infection—The standard of Group Discussion witnessed at the Literary Week was of a high order and in future our team needs to work harder to remain at the top. Particularly the standard of Group Discussion of the ladies' colleges, the Women's Christian College and the S. I. E. T. college is indeed very good, probably because they have the biological advantage which professor Higgins so eloquently decried. Our Institute team which has remained undefeated this year must step up its efforts to prevent shields from straying into strange lands in futute. The Institute team is at present represented by Prem Babu, B. B. Kamdar, V. Srinivasan, C. Camillus and Ashok Kacker.

The Literary Week held in February this year was an unprecedented success and the high standards of literary and cultural performances witnessed then has evoked praise from all quarters. In all the Literary competitions held in the Literary Week, the Institute came first. The Institute trophy for All India Debate went to the Loyola college, The Dr Klein's Trophy for German Recitation to IIT, the Group Discussion Trophy to W. C. C., and the Quiz trophy to the A. C. College of Technology, Madras.

A notable feature of this year is that both the Debating and the Quiz teams have had an 100% success.

No report will be complete without a few words of thanks to those who have helped the committee in the past and have promised to do so in the future. The Director, the Registrar and the President of the Institute Gymkhana have extended all possible help to us. The staff members particularly those in the Humanities Department, have taken an increasing interest in the activities of the committee. A special mention of Prof. Krishnamurthy and Dr Klein is necessary in this connection. They have spared no pains to make this year an eventful one.

Finally a word of praise to those volunteers who have worked very hard for the committee. The excellent manner in which the Literary Week was conducted is due to the unstinted cooperation of these people—people who work behind the scenes and people whose names may perhaps ever find a mention. The students have also taken interest in the committee and in the Literary Week and average of 800 people turned up every day.

As we close down the shop for the year we have great satisfaction that this has been a truly remarkable year—one that will long be cherished in the annals of the Institute as a year of achievement and progress.

-V. Venkatesan, Secretary

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Music, Entertainment & Film Committee

AT the outset it was decided that the Music, Entertainment & Film Committee shortly known as Entertainment Committee should be as active as the tight schedule of studies would permit. Our fears as to the lack of participation were realised when no entries other than that of the Beat-X were received for a proposed evening of variety entertainment which was planned on a grand scale. This was so not because we lack talented men but because these talented men (after days of tiring work), I hope, preferred being entertained by others. A similar experience was met with while selecting our team for the inter-Collegiate Entertainment Competition, conducted by us, for Prof. R. G. Narayanamurthy's trophy. Practically nobody turned up for the first selection. Another was inevitable. Many responded to the "Mayday - Mayday" call and our team was selected and finalised at about 1 P.M. on the day of our performance: After all this, we were adjudged the 'best team' making a clean sweep for us in the Fourth Literary and Cultural Week. As it was decided this year that I.I.T. would take part on this competition only to fight for a place and not for the trophy, the trophy was presented to the second best team, S.I.E.T. Women's College. Of the four prizes for outstanding individual performances, the best acting prize went to Madras Christian College, the best-dance prize to Women's Polytechnic, while I.I.T.'s Goofy alias Gopal Ramachandran and the Beat-X's Jayaraman got the best-vocal and best-instrumental prizes, respectively.

Unfortunately the Youth Festival and the Inter-I.I.T. Meet (Athletic & Cultural) were cancelled this year due to the National Emergency.

For the first time, I.I.T. participated in the intercollegiate Dramatic Competition conducted by the College of Engineering, Guindy. We staged a Tamil play, 'Pushpalatha'.

Our Institute Quartet, the Beat-X proved their mettle at the Musical Knock-Out where they walked away with the Judges' Prize for the best orchestra. At present they are in considerable demand throughout the city.

This year we had more shows by foreign artists than previously. Among the more memorable was the charming puppet show by the noted German puppeteer, Mr. Dennebogh.

The U.S.I.S. sponsored renditions of the original sound-tracks of "My Fair Lady" and "The sound of Music" proved extremely popular, perhaps more so because of Mr. Francis P. Coward's assuring side comments. A sextet from the Indiana University Jazz Ensemble thrilled an appreciative audience for over an hour. They in turn professed to be thrilled by the warm reception they were given.

The fact that this year the U.S.I.S. regularly put on film shows twice a month at the Open-Air Theatre, also desetves mention. Our regular film shows too continue as usual. As many as six films a month have been shown, though the usual periodicity is one a week.

There will be more glamour in the future. Steps are being taken by the President of the Gymkhana to arrange for a well-equipped music-room. A 35 mm projector and screen have also been sanctioned. A team has already visited the Open-Air Theatre, and a report on the feasibility of arranging 35 mm shows these has been submitted.

The thought of having a closed auditorium unfortunātely has not taken proper shape as yet. The President of the Gymkhana is thinking on the lines of having a dome over the Open-Air Theatre.

This report is being submitted much in advance of the Inter-Hostel Entertainment Competition for the trophy presented by the Engineering Unit. Organiing a variety entertainment programme on Institute Day is also our committee's responsibility. These functions promise to go off well just as all the other functions have, with the able guidence and support of Dr. G. Rouve, Staff Adviser of our Committee, Prof. P. C. Varghese, the President of the Gymkhana and the co-operation of all the members of the Committee. The committee owes a deep debt of gratitude to Dr N. Klein and Dr V. Anantharaman for their unstinted cooperation whenever they were asked for help or advice.

-S. M. Krishnan

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Fine Arts Committee

A series of committee meetings ensued. It was decided to convince the authorities higher up, of the need for a dark room and an arts studio. Soon, rooms were sanctioned, both for the studio and the dark room. But, the matter rested there. The problem was money. The art studio of course, wasn't much of a problem, but oh! well, the dark room !! At the time of writing, the dark room is still in the dark. The cellar room in Narmada Hostel will function as the studio. The superintending engineer is presumably getting the joint fitted and cleaned up.

Came October 15th, and it suddenly dawned on us, that it was just a week to Divali. Divali cards may not be a bad idea! A lot of running around and general activity followed. The cards came out just in time, and sold like, you know what,—hot cakes.

The approach of terminal examinations, cast a cloud on the committee's activity, but this was not for long. Hardly had the examinations ended, when pat came a suggestion—say, let's have a sketching competition. The course of action to be taken up, was to organize, announce, and drive the students to the competition. Though the student response wasn't exemplary, a number of good entries did come in.

A fitting end to an eventful year, it was felt, would be a science fair. This promised to involve a great deal of organization and required considerable unity in the committee. However, it was worth the gamble. Months in advance, notices were sent out, requesting students for projects. As expected, the response was tame. An intercollegiate photographic competition was also proposed, This naturally meant running around to city colleges to collect entries, while one lost valuable attendance at home. But for Herr Ebert's unstinting help, and the maximum utilization of workshop resources, the Fair would have been impossible to set up. In a matter of days, all the preliminary preparations and shifting was over. A few late nights were spent in decorations, and the Science Fair was ready to open. The crowds that came were tremendous. So much so, it became necessary to supply throat lozenges to all loud mouthed volunteers! The literary and cultural week, featuring the Science Fair, was a grand finale to a very successful year for the Fine Arts Committee.

-A. K. Shenoy

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Publications Committee

THE only committee that has had to keep on its toes throughout the year is the Publications Committee, which, without sounding too boastful can claim this unique honour. Little need be said in proof of it. The regular publications of the five issues of *Campastimes* and the publication of the seventh annual number of the magazine should suffice.

While we are still at this topic of publications, we might remind the readers that committee has undertaken to bring out a supplement to *Campastimes*, which has a special emphasis on Science and Technology.

The Committe, under the fine guidance of the publisher Prof. Sampath and Dr Klien not only succeeded in bringing out the issues on time but was also able to maintain the high standard set up by our previous committee. Mr Gautam Mahajan's hard and persistent work as the Editor of both *Campastimes* and the Institute Magazine deserves high credit.

The special feature of our publications (quite unlike previous ones) is that all the articles have been contributed solely by the boys themselves. However, we hope that more co-operation from staff members will be forthcoming for the future issues.

Having stated this much, I think it is about time we closed shop. But before we actually do so, we would like to thank the various presses for their close cooperation, and also the numerous other persons who have helped out with our publication work and whose name, if we were to mention, would fill up an entire page.

-R. Jaikumar

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Rowing Team which beat the Madras University Fours to clinch the President's Shield Mahendroo, Sirpal, Ebenezer & Prem Babu



Lionel Paul: Our tennis ace bags Stanley Cup again



IIT Marches Past



INTER COLLEGIATE SPORTS MEET FOR DIRECTOR'S TROPHY

Nair : to greater distances

Just Over ! Zackria of Presidency



Chief guest, Mr P. Achutha Menon, former Ambassador to West Germany speaking



Bravo: Joachim of Loyola claims the Gerhard Fischer Trophy for individuals

Institute Sports Day



Staff Vs. Students Tug of war Students won!!



Lionel Paul receives a trophy from Mrs Sathe



Victory! Victory!



Girls Race



Annalnd Symainithadhan winimer off the Individual Championship

LITERARY & CULTURAL WEEK



Mrs Rouve judging the photographic Competition



The W. C. C. Group Discussion Team: a strong point



Group Discussion Judges all alert: Prof. Krishnamurthi, Father Murphy, Col. Paul



The Valedictory Function: Prof. Varghese welcomes the guests



Mr S. K. Chettur, the chief guest



Lokanathan reads Literary Committee Report



Kacker : deserving winner of the All India Debate



The Winners of Inter Collegiate German Recitation Competition



Kumari Uma of Women's Polytechnic who won the individual prize for dancing



Venkatesan does it again: Inter-Collegiate Quiz Winner!



Trophies galore!



Triumphant Group Discussion team: Camillus, Kacker, Prem Babu, Kamdar, S. Vasudevan

External Relations and Social Service Committee

THIS committee was started this year. The usual practice was to assign all the class representives of the Institute Gymkhana to some of the other committees but this year it has decided to start a new committee which takes care of the jobs which do not come under the jurisdiction of any of the other committees. Two of the most emphatic of these types of jobs were to get people from outside the Institute for same function or the other and to carry on social service activities inside the Campus.

Previously I. I. T. used to maintain a distant relationship with the other city colleges. Very many meetings of the Madras city colleges student committees were not attended by any representative from our Institute. The popularity of I. I. T. was steadily coming down and reached its lowest during last year's anti-Hindi agitation. But this year with adequate representative by the members of the external relations and social service committee in most of the city colleges' student body meetings, others have came to understand us much better and we have been accepted into the student fold of Madras. The members of the committee did quite a lot of work in recruiting volunteers and reception commitee members for the functions in our Institute and this is no small measure to the success of all the functions.

On the Social service side the committee was kept busy during the days of emergency collecting money for the wounded Jawans and their families. The total amount from the various hostels came to Rs. 2,843.38. In addition to this, quite a large sum was collected from the staff of the Institute. There were two more defence collections and a collection for the Red Cross. The students must be congratulated in the way they unstintingly contributed to these causes.

The external relations and social service committee took up the job of getting recruits for the building of the Institute swimming pool. Most of the concreting was to be done by our students and volunteers used to report for work on Sunday mornings for a couple of hours. The N.C.C. cadets used to do the work on week days. Unfortunately due to unavoidable reasons, work on the swimming pool had to be stopped. It is hoped that the pool would be ready next year.

The committee has Dr Varghese as the staff advisor and the committee is indebted to him for his ready help at all times. The nature of the various activities of the committee are such that it is not apparent they have gone a long way in contributing to the success of the very many activities of the Institute.

—M. Menon

Institute Gymkhana Activities

*

1965 — 1966

- 3-8-65 Gymkhana Elections.
- 4-8-65 Exhibition of the works and creations of Walter Gropius
- 16-8-65 Lecture on Samarasa Suddha Sanmargam by Shri N. Giridhari Prasad.
- 20-8-65 Inauguration of Institute Gymkhana by Dr Koch.
- 1-9-65 Inter Hostel Quiz.
- 14-9-65 Bharathi Day.
- 15-9-65 Annual Essay Competition.
- 18-9-65 Exhibition football match between the German sailors and I.I.T. team.
- 28--9-65 Annual Debate.
- 11-10-65 German students visit.
- $20-10-65 \\ 21-10-65$ Puppet show.
- 28-10-65 Participated in N. S. O. contest-Consolation prize won by Szi P. S. Padmanabhan.
- 30-10-65 Recorded Music from "My Fair Lady" by the USIS.
- 3-11-65 Participated in Inter Collegiate Oratorial contest conducted by the Saturday Evening Club.
- 4-11--65 Won the Inter collegiate quiz competition conducted by the Saturday Even Club.

20-11--65 Participated in inter collegiate variety entertainment competition conducted by Q. M. College.

- 7-12-65 Participated in Inter Collegiate Art Festival conducted by Engineering College, Guindy.
- 13-12-65 Lecture by Capt. A. V. Rajagopal on "Will Sabotage Succeed-Will India take it lying down".
- 16-12---65 Lecture by Dr Jaeckel on "Revolutions and Social Changes in Modern Europe."
- 25-1--66 Recorded music from "My Fair Lady."
- 26-1---66 Institute orchestra team participated in the musical knock out programme organised by Student Times at the Music Academy and won the Judges Prize.
- 27-1--66 Annual Group Discussion. Winners: Saraswathi Hostel Team, Runners-up Krishna.
- 3-2---66 Participated in Buck festival Hockey tournament and athletics.
- 5-2-66 Participated in relay race in MCC sports day.
- 12-2-66 13-2-66 Inter collegiate athletics for Director's Trophy.
- 16-2-66 Music programme arranged by the U.S. I.S.
- 17-2-66 Annual quiz compon.
- 18-2--66 Lecture on "Some ideas on studies in Germany" by Professor Dr Gerke, Professor of the Technical University of Brunswick.
- 19-2-66 Particpated in the Lions Club of Meenambakkam.
- 20---2---66 Participated in the inter collegiate debate conducted by the Madras Institute of Technology and won the Rolling Trophy.
- 21-2-66 All India Inter collegiate debate for Institute trophy.
- 22-3-66 Inter collegiate German recitation for Dr Klein's Trophy.
 - Participated in Inter collegiate debate conducted by the Madras Christian College and won the Gorden Mathews cup.
- 23-2-66 Inter collegiate group discussion for Professor M. V. C. Sastry's Trophy.
- 24-2-66 Inter collegiate quiz for Rao Bahadur Ramachandra Iyer's trophy.
- 25-2-66 Inter Collegiate Photographic Competition for Prof. Koch's Trophy. Inter collegiate entertainment competition for Prof. Narayanamurthy's trophy. Prize distribution day.
- 27-2-66 Institute Annual sports.
- **3-3-66** Won Junior Chamber of Commerce shield for Debating at S.I.E.T. College.

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Special Features

1. The Second Convocation: was held on the 3rd of April 1965, when Shri M. C. Chagla, Union Education Minister delivered the Convocation address: Out of 122 students who took the B. Tech. degree examination, 115 came out successfully and were awarded diplomas with as many as 76 securing 1st class.

2. Inauguration of the Machine Tool Laboratory of the Mechanical Engineering Department: It is noteworthy that this Laboratory has been equipped with the most modern type of machines, lathes such as High Speed Lathe with stepless drive, Copying Lathes, Horizontal Drilling and Milling Machine, Twistdrill, Grinding Machine etc. All these machines are completely instrumented for study of machine characteristics, vibrations, tool performances and research work upon machine tools. The machines that are expected in the near future include a Spark Erosion Machine, one Ultrasonic Machine etc. Research work is being undertaken in metal cutting, cutting of tools and machine tools.

3. Inauguration of the Steam Laboratory: In view of the possibility of new thermal and nuclear power stations being set up in this part of the country and the subsequent importance of studies in heat power stations, the commissioning of the Steam Laboratory this year can be said to be a landmark in the development of the Institute. The Steam Laboratory now commissioned can be said to be one of the most advanced laboratories in this field. It is the intention to take in post-graduates and research workers in this field from now, since the commissioning is over.

4. The Analog Computer: which was commissioned in the beginning of 1965 is playing its full part as a teaching aid of great value. From this year, full use is being made of this valuable equipment gifted by the United States of America through the good offices of "Tools for Freedom", a non-Government American Institute in New York that works for the objective of assisting technical education in Africa, Asia and Latin America.

5. The Liquid Nitrogen Plant: has been commissioned just recently. The Plant, imported from Holland was supplied and erected by M/s. Philips India Limited, Madras. This commissioning is a welcome starting point for research work in all Departments where low temperature techniques are involved.

6. The erection of machines in the Hydraulic Machines Laboratory is fast nearing completion with 2 German erectors working continuously for the same.

7. Two modern vertical Pulsators for fatigue testing of Metal Components for the Department of Metallurgy were erected by a German Engineer and have been commissioned.

8. Work in Hydraulic Laboratory in the Civil Engineering Department, specially regarding Tilting Flumes is under rapid progress and is expected to be completed in the very near future.

Buildings. 1. A new building at a cost of Rs. 5.8 lakhs to house the different units of the N. C. C. has been completed. It was inaugurated by Major General Virendra Singh, Director-General, N.C.C. on the 14th December 1965. The Institute is happy that at a time when N. C. C. activities are very essential, during the Emergency of the country, it has been possible for the Institute to give the N.C.C. organization the very best facilities available in Madras and possibly in the whole of India.

2. A new hospital building at a cost of about Rs. 2.23 lakhs has been completed.

3. To house the Metrology Laboratory, a new block has been constructed. This building will be utilised both for Shop measurement work as also for fine measurement required for standardisation of instrument and gauges. This laboratory is suitably air-conditioned for these purposes.

4. Work has been started on the Administration Block and the Central Library Block.

New Indo-Gcrman Agreement

The term of the first Indo-German Agreement for 5 years being over, the second Indo-Germen Agreement for further collaboration between the Government of the Federal Republic of Germany and the Government of India for the further development of the Indian Institute of Technology, Madras is being concluded. This marks a very important stage in the development of the Institute in that the agreement provides for the following :

1. Provision of the requisite number of German Professors, Senior Scientific Assistants, Visiting Professors and Foremen for a period of 5 years for the further development of the Institute and for the establishment of the further laboratories in the Institute with adequate facilities for teaching and research.

- 2. Award of 60 Scholarships for training in Germany in various fields for Senior Indian Teachers, Junior Teachers and Technicians.
- 3. Supply of further equipment for the development of 25 specialised Laboratories.

Our country is much indebted to the Government of the Federal Republic of Germany for this great encouragement for the advancement of technical education in our country.

* * *

Distinguished Visitors to

I. I. T. Madras

- 23-- 2--65 Miss Mary Olm Stead, First Secretary, American Embassy, New Delhi
- 8- 3-65 Dr A. G. Smirnov, Friendship University, Moscow
- 20- 3-65 His Excellency Mr Kurt Georg Kiesinger, Chief Minister of Badan Wuerttemberg, West Germany and Dr Rudolf Kisel, Honorary Consul-General of India, Stuttgart, West Germany and Dr Rudolf Kisel, Honorary Consul-General of India, Stuttgart, West Germany.
- 22- 3-65 Prof. Patterson, Director of Research, Institute of Metallurgy, University of Aachen, West Germany.
- 12- 4-65 German Parliamentary Delegation (Messrs. Atzenroth, Knorr, Wittmer-Eigenbrodt, Rauhaus, Kahn-Ackermann and Freyh)
- 12- 4-65 Mr V. S. Karmali, Minister for Education, Goa.
- 29-5-65 Air Commodore S. A. Hussain, Director of Training, Air Headquarters, New Delhi
- 10-6-65 Mr Mallam Sheby Abubakkar Daura, Provincial Secretary for Education, Nigeria
- 27- 6-65 Mr Casimir Rakowski, Associate Professor of Technology, State University, New York
- 27- 6-65 Mr N. Srinivasan, Industrial Adviser, Government of India, New Delhi
- 6-- 7--65 Mrs Chandrasekhar, Deputy Minister for Social Security, New Delhi

- 27-- 7--65 The Education Commission, Government of India, consisting of Dr T. Sen. Rector, Jadavpur University, Calcutta, Prof. A. R. Prest, Manchester University, England and Prof. M. V. Mathur, Head of the Dept. of Economics and Public Administration, Rajasthan University
- 28-7-65 Mr Scholtens, Representative of the Netherlands Government
- 9- 8-65 Mr A. V. Ramanujam, Principal, Government Polytechnic, Kota.
- 29-11-65 Mr Helmut Biermann, German Federal Railways, Bonn
- 30-11-65 Mr Joseph N. Greene, Jr, Minister-Counsellor, Embassy of the United States of America, New Delhi.
- Sth to 11th
 Prof. Dr P. Hilbig, Pro-Rector, Technical University, Berlin and

 Dec. 65
 Mr Westphal, Director, Academic Foreign Relations Office,

 Technical University, Berlin
- 12-12---65 Dean Robert S. Green, Programme Leader, Kanpur-Indo-American Programme, Indian Institute of Technology, Kanpur
- 31-12-65 Lord Fenner Brockway, United Kingdom
- 10-- 1--66 Miss M. E. Schmitz, German Academic Exchange Service, Bad Godesberg
- 19— 1—66 Prof. K. Smulikowski and Prof. I. Malecki, Polish Academic of Sciences, Warsaw
- 19-1-66 Prof. A. S. Khatchiian, and Prof. V. N. Mastachenko, Russian Professors, Indian Institute of Technology, Bombay
- 5-2-66 Mr A. K. Robertson, Ministry of Overseas Development, London
- 9- 2-66 Dr Hessberger, German Academic Exchange Service, New Delhi
- 13th to 18th Prof. Dr K. Gerke, Rector, Technical University, Braunsweig, Feb. 66 West Germany

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