

# Campastimes

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IIT Madras, 15th February, 1963

20 nP.

## VICE-PRESIDENT'S MESSAGE

### BEST WISHES FROM DR. ZAKIR HUSSAIN

New Delhi, Dec. 31, 1962 (*Campastimes News Service*).—India's Vice-President, Dr. Zakir Hussain, today expressed pleasure at the fact that the students of the Indian Institute of Technology, Madras were running a newspaper called *Campastimes*.

In a letter written in an informal manner and couched in friendly terms to T. S. Ananthu, one of your Assistant Editors, he sent his 'best wishes for the success of your newspaper *Campastimes*'.

The Vice-President was kind enough to sign the letter personally.

### Campastimes Interviews

#### DR. K. L. SHRIMALI

New Delhi, January 6, 1963

India's Union Minister for Education, Dr. K. L. Shrimali, declared here today that the best way in which students could help the nation during this period of emergency was by studying more industriously.

IN AN EXCLUSIVE INTERVIEW WITH CAMPASTIMES DR. SHRIMALI EMPHASIZED THE NEED FOR MORE AND BETTER TECHNOLOGISTS IN ORDER TO DEVELOP THE ECONOMIC AND MILITARY POTENTIAL OF THE COUNTRY.

The interview was held in a cordial and informal atmosphere on the lawns of Dr. Shrimali's residence at 20, Ashoka Road.

When our three Assistant Editors were introduced to him, Dr. Shrimali said that he himself had been to the Indian Institute of Technology, Madras and was happy to see students from there at his residence.

#### Admires Campastimes

Dr. Shrimali read the November and December issues of *Campastimes* presented to him by T. S. Ananthu, and complimented the students of the I.I.T. Madras on having taken the initiative of turning out such an excellent newspaper.

At Vikram Rao's request, he readily agreed to answer any questions put forth to him.

The question of the hour, naturally, came first. It was: 'In what way can students in general—and engineering students in particular—be helpful in this national emergency?'

In a very interesting answer, Dr. Shrimali said that more than anything else, technique played a major role in modern warfare. 'Heroism and bravery are assets, no doubt,

but knowledge of technology is absolutely essential. With the invention of modern weapons of war, the need for skilled, trained technologists and engineers has increased considerably,' he said.

#### Study Well

'Therefore,' he continued, 'the best way in which you can help the nation during this period of emergency is by studying well. Study harder, and our defence efforts shall be enhanced.'

Other than this, he called upon students to build up a good physique. He urged them to join the N.C.C. and take part in sports. 'It is necessary for students to get used to arduous work and become physically strong,' he said.

When Vikram Rao drew his attention to reports in today's newspapers quoting Mr. Nehru as saying that conscription would soon be introduced, Dr. Shrimali answered that there was a possibility of introducing conscription though he would not say anything precise about the question.

#### Are there Defects?

When T. S. Ananthu asked what defects there were in the present university students, Dr. Shrimali turned towards him, smiled and quipped, 'Are there any defects in university students?' He said that reports of defects were exaggerated. Students in Indian universities were not worse than students in foreign universities. Many of the students who went abroad, fared much better than students from other countries, and on a number of occasions Indian students topped the list of successful candidates in examinations conducted by foreign universities.

I.I.T.s Contain Cream of Indian Student Society

'For example, do you say that there are defects in the students of the Indian

(Continued on page 12)

### CAMPASTIMES INTERVIEWS DR. C. D. DESHMUKH

New Delhi, January 11, 1963 (*Campastimes News Service*).

The Vice-Chancellor of Delhi University and former Union Finance Minister, Dr. C. D. Deshmukh, called upon students to unite together and prevent factionism from hampering their national defence efforts.

IN AN EXCLUSIVE TAPE-RECORDED INTERVIEW WITH 'CAMPASTIMES', DR. DESHMUKH ALSO DECLARED THAT THEY WOULD BE MAKING A LASTING CONTRIBUTION TO THE DEFENCE EFFORTS IF THEY LEARNT THEIR LESSONS WELL.

At 11 a.m. the interviewers, Anand Singh Bawa, T. S. Ananthu and M. Vikram Rao, arrived at the Vice-Chancellor's office in the vast and colourful campus of Delhi University. They were cordially welcomed and shown into the Vice-Chancellor's room.

In an affable tone Dr. Deshmukh greeted the interviewers and said that he was glad to learn that the students of I.I.T., Madras were running a newspaper.

He glanced through the copies of *Campastimes* presented to him, and after admiring the photographs in them remarked that Delhi University had conferred an honorary doctorate on President Dr. Heinrich Lübke.

#### Students and Defence

Beginning the interview, Vikram Rao asked: 'In what way can university education be co-ordinated with the defence effort?'

Dr. Deshmukh replied: 'University education to be co-ordinated with the defence effort? Your own Chairman Sir Lakshmanaswami

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## CLASSIFIED DIVERTISEMENTS

**A PURSE** is being collected as Hair-Cut Fund for our over-worked professors and beloved lecturers who cannot spare time to go to Adyar. Liberal contributions, marked **HAIR-CUT FUND**, may be sent to Editor, *Campastimes*.

**A VACANCY** exists in the I.I.T. Library for a special accounts clerk to manage the growing fine-collections. A generous commission of 10% of the total collections per month will be allowed to the special clerk as an additional incentive. Application forms in quadruplicate (available at the office) should reach the Registrar, I.I.T., on or before 15th March. Those who are already in service are not eligible. Foreign service at the expense of the Institute will not be allowed in any case.

—Librarian.

**BACHELOR** with progressive views in the fourth year of B.Tech. course, drawing a home allowance of Rs. 150 plus a merit-cum-means scholarship of Rs. 75 per month, is willing to enter into correspondence with parents (Directors, Professors, Assistant Professors preferred) having eligible daughters. View matrimony. Pass incidental. Sub-sect no bar. Religion no consideration. Please write to Box No. 4342, c/o *Campastimes*.

**CLOSING DOWN SALE!** The I.I.T. Co-operative Store is closing down under orders from the High Court. Goods worth Rs. 20,000 must be cleared by the 30th of March. Rush at once. Prices slashed down by 50%.

—Hon. Secretary.

**CYCLISTS DO NOT RIDE ABREAST!** Keep to your left in the corridor of the Science and Humanities Block. Inserted by the Madras Police in the interests of road safety.

**EXPORT OR PERISH!** English Idioms prepared by the Dept. of Humanities for export. 20 Idioms cost Rs. 10 (12s. or \$ 2). One free Idiom with each order of 100 Idioms. Bulk orders will be considered on favourable terms. Packing and postage free. Write to Sri Janakiraman, Export Officer, Humanities Department, I.I.T.P.O., Madras-36. Note: Foreign orders must be accompanied by 25% advance.

## I.I.T. LIBRARY BOOK-BINDING PROJECT

**GLOBAL** tenders are invited from reputed book-binders to reach target of binding 1,00,000 books in the same dull red cover within 1963. A specimen bound-book to our specifications may be had from the Librarian. The features of the original book should not be distinguishable in any case. Tender forms may be had from the office during working hours.

—Librarian.

**GET** slim the modern American way! No exercises, no dieting, no nothing. Write in full confidence to A. S. Bawa, Kaveri Hostel, I.I.T.P.O., Madras-36.

**LIMITED** autographed editions of *Discovery of Japan* by Prof. R. Krishnamurti, and *Madras, Masala Dosai and Me* by Dr. Nikolaus Klein are expected to be ready by February. Also under preparation: *German without Blood, Sweat and Tears* by Miss 'Z'. Reprints of *On Curves and Contours*, the sensational campusstirring article by Dr. Anantbaraman, are now available. Write for details to *Campastimes* Publications Unlimited.

**ONE** of the elephants of the Gajendra Circle is missing since last Thursday. It is reported that the elephant was seen running amuck and smashing one of the domed lights of the pillar. Will finders please phone to the Security Officer, I.I.T.?

**TO LET FOR ADVERTISEMENT.** Under special arrangement with our Publisher, Dr. Klein, we offer space (4 ft. x 4 ft.) for advertisement display on the top of his blue van No. CC 2094. For rates apply to *Campastimes*.

## RECENT TALKS

Under the auspices of the Physics Department, Dr. H. P. Broida of the National Bureau of Standards, Washington, gave two talks on 'Frozen Free Radicals' and 'Flame Temperature by Molecular Spectra'.

The first talk given in the morning dealt with the problem of generation, capture and observation of free radicals. Dr. Broida defined a free radical as a molecule having an unpaired electron spin. Later, he gave methods, illustrated by a colour film, by which free radicals are generated either by bombardment with electrons or just high temperature and also by photolysis. The radicals are then frozen in an inert matrix of solid Argon, at about 4 degrees K obtained by using liquid helium. Dealing next with the identification of the radicals by electron spin resonance and other methods, he went on to say that the inert matrix had very little effect on the spectra, the line widths being quite narrow. Among the things that can be done in the field, Dr. Broida mentioned the possibility of obtaining rocket fuels of high Isp (specific impulse) if means were found to increase the number of free radicals.

In the second talk delivered in the evening, Dr. Broida mentioned that one could define a temperature other than the classical thermodynamic equilibrium temperature. By observing the spectra of Plasmas one could define temperatures corresponding to the equilibrium states of vibration and rotation. Illustrating his talk with beautiful colour slides Dr. Broida explained the effects of mixing gases and the use of supersonic nozzles with their related shock wave phenomena to examine the short time characteristics of afterglow. The shift in wave length of the visible radiation was clearly shown in colour.

A word about the arrangements. They were nothing short of disgraceful. As has been mentioned in earlier issues, the board in room No. 105 is no longer black. This coupled with the fact that the room was darkened for the film and the fact that the lights nearest the board would not work, made the board unfit for use. Hardly a word written on it could be seen. In the afternoon, the combined efforts of Dr. Ramasastri, Prof. Narayanamurthi and others proved fruitless against a screen which insisted on emulating Humpty-Dumpty. The wall was eventually used as the projection screen. Dr. Broida went away with the worst possible impression of the I.I.T.

One hopes that for future talks, better facilities such as a really 'black' blackboard will be provided.

V.S.

## THE INTERNATIONAL SYMPOSIUM ON PROTEIN STRUCTURE AND CRYSTALLOGRAPHY

It was perhaps the first time in the history of this country that so many Nobel Prize winners and F.R.S.s were to be seen together at the International Symposium on Protein Structure and Crystallography held under the auspices of the Physics Department of Madras University from the 14th to the 18th of January, 1963.

This was IT: The top brains from all over the world trying to unlock the secrets of Nature. To paint a coherent picture of the origins of life, starting from fundas!

The opening sessions contained lectures by Sir C. V. Raman and Sir W. L. Bragg. Nobel Laureate M. H. F. Wilkins then gave an account of his work (with Drs. Crick and Watson) on the structure of DNA; the stuff that ultimately decides what our kids will

look like and how they are likely to behave. Later, Prof. G. N. Ramachandran gave details about the triple helical structure of the collagen molecule, the final structure of which was perfected in Madras. A model of this molecule was exhibited along with other crystal structures worked out by Prof. Ramaseshan and others.

This correspondent had the opportunity to listen to a Nobel Prize winner. Dr. S. Ochoa (a Spaniard now domiciled in America) received the 1959 award for medicine along with Dr. Arthur Kornberg. His lecture was devoted to the much debated genetic code. Specifically, Dr. Ochoa dealt with the employment of synthetic polynucleotides to 'crack' the genetic code. It has been shown that the molecule of DNA (deoxyribonucleic acid), the substance in the nucleus of the cell that controls the synthesis of amino acids and, in the long run, hereditary characteristics, is made up of two backbone strands in the form of a double helix composed of alternate sugar and phosphate groups. Attached to each sugar is one of four 'bases' which has a complementary base on the other strand joined by hydrogen bonds. The way in which these four bases (adenine, guanine, thymine and cytosine) are arranged in the helix, ultimately, determines the composition of the amino acid. Numerous experiments seem to indicate that each group of three bases determines one amino acid. There are only about twenty of these acids, and it turns out that this kind of triplet code gives sixty-four possibilities. Dr. Ochoa went on to give an account of how the use of synthetic polynucleotides helped to reveal the correspondence between each amino acid and its 'director', namely the sequence of three bases. The fact that there are only twenty bases out of the possible sixty-four showed clearly that the 'code' was degenerate and the possibility of it being a combination of triplet-doublet was not ruled out.

Altogether, it was an exhilarating experience to listen to a person who had reached the highest level of scientific distinction. Dr. Ochoa's lecture, apart from its technical content, revealed (in part) what it takes to be a Nobel Prize winner: curiosity, scepticism, patience and a profound respect for Nature.

Other lectures included two by Prof. Ramaseshan on crystallography. From the precious little of the symposium that this correspondent saw, one can say that it served a very useful purpose in bringing together the top men in the brand-new field of genetics, an interdisciplinary involving physics, chemistry, biology and even the abstruse field of mathematical probability. Finally, it would be a good idea for this Institute to hold a symposium on the latest problems in engineering involving people who know what they are talking about!

V. S.

## Irradiated Zinc Oxide

The lecture delivered by Dr. J. C. Kuriacose on 25th January 1963, for the Chemistry Seminar was on the conversion of isopropyl alcohol to acetone on *Irradiated Zinc Oxide*.

The speaker observed that irradiated suspensions of Zinc Oxide containing isopropyl alcohol form acetone and hydrogen peroxide in the presence of an adequate concentration of Oxygen. In aqueous solutions containing greater than 1M alcohol, the initial quantum yields could be enhanced by varying the light intensity and the temperature. The peroxide concentration reaches a limiting value under all conditions, but the acetone accumulates indefinitely. The products obtained are the result of direct surface reactions as well as reactions of radicals in the liquid phase. It is postulated that the energy of radiation absorbed (approximately 80 k.cals) gives rise to an active form of Oxygen, most probably, an excited molecular Oxygen, which initiates both the surface and liquid phase reactions.



## GUESS WHAT! (ALL IN JEST)

It was born with a key-chain welded to IT's middle finger. The key-chain is ever active—twirling perpetually. Think of IT and it looms up like an apparition into view, with a 'Cheesy' grin, a timely twirl accompanied by a nod and a blink and crown's it all by grunting 'Hi! Gents!' in its most impressive voice. (There goes its grin again).

IT's eyesight is rather poor and hence the lenses. Rumour goes that spectacles are to be replaced by 'contacts'. Not only is this in keeping with the times, but is also believed, in this case, to be an aid to IT's beauty or in more familiar terms, IT's 'killing' capacity:

'Grim aces IT makes  
to express distaste,  
When in this plight  
IT's an ape alright.'

so said someone of this little creature whom one would fail to notice if one's not looking for IT. It has the misfortune of being remarkably short and, IT is being thus, packed as IT were to a high degree of compaction. This causes IT some embarrassment when IT takes the floor at a teenage dance in the capital. This feeling, however, is soon overcome when IT is in the arms of the females of IT's species gaily executing the 'Lamba' (IT's own version).

IT performs the Lamba with an uncanny grace impossible to describe and, one learns from reliable sources, that IT was requested to demonstrate it before a highly appreciative audience in Delhi on April Fool's Day.

This little story explains the authoritative manner IT assumes when the subject 'Music' or 'Dance' is approached.

As coolant is to the cutting tool, so is ice-cream to this creature. The ice cream is obtained by fair means or foul and when IT does BUY them, the tender scene enacted reminds one of Romeo and Juliet. IT (Juliet) takes ample precautions to see that IT is not being spied upon and having bolted the door firmly from inside, IT steps out into the balcony in a very romantic mood. The choobar man below (Romeo) flashes a most disarming smile and IT is won over. An exchange of cash for kind takes place after which satiated IT creeps back into shell again, taking precautions to see that IT is not discovered with IT's prized possession. What happens thereafter is a mystery yet to be unravelled.

IT has been faithfully serving IT's class as representative of the Film club for over a year. IT's services in this respect are appreciated very much and will be of great value if only IT does not act exactly as the Secretary wants IT to.

'What's on this week?' one ventures to ask. 'I don't know,' IT replies, 'ask Kapur!' 'Why are we charged when there is no Film show?' 'Don't know, ask Kapur!' IT has in this connection been given good advice:—

Don't be a coward,  
Don't be a fool,  
Speak your will, don't be backward,  
For doing your duty is not being a tool.

This was received with the usual grimace and an 'Oakay, Oakay Yar!'

IT's only pals are a notable Lawrencian (ask Shivery about it) and a noticeable Xian (Matn Menon, the guardian angel). In the presence of these two you can see IT in IT's true nature but once outside this protective circle IT's actions and words change in alarming proportions especially in the presence of the more seasoned members of the hostel.

With IT acting is a passion or so it seems for we hear from reliable sources that IT makes IT a point to be present at the auditions which of late, we have seen, are held frequently.

When IT first arrived IT was quite dense. IT would not take hints and though told in all politeness that it was extremely fine weather for a walk IT would feign to be disinterested in that vocation.

An ardent tennis enthusiast, IT tried IT's very best to acquire a complimentary season ticket from one of our friends but failed in the attempt. 'Better luck next time' we say 'don't be disheartened'. What follows? The twirl, a grimace and an 'Oakay Yar!'

This energetic young gallant is sometimes thrown into a fit of lethargy. For instance, when IT's pop came to visit IT during class hours IT was nowhere to be found. Mr. Ekambaram searched even under the carpentry benches but still had no luck whatsoever. IT had not come to class that afternoon. We would not like to go into the details of the 'firing' that followed. Thank God a strongly worded love letter from the authorities was not there to add fuel to the fire.

P.S. We bring to your notice a recent poster (issued during Dassehra holidays) by the Sheriff of Bangy containing particulars of a certain H.M.T. Watch found missing. The description given suits IT perfectly. Police dog Nair (IPS 1.062/61) was summoned. It picked up the trail at a chemist's in Bangy and has arrived here in hot pursuit. The 'Hoodlum Precest' has also arrived to extract a speedy confession.

Those still in doubt, please refer to page 15.

## THE ELIXIR OF LIFE

The panacea for human ills and hardships. The grand elliptical, pentacurial nervous cordial Nectar. Indicated for: Headache, toothache, stomachache, pain in the heart and pain in the ear. Acts local irritant/emollient, corrosive/non-corrosive appetizer.

When applied over the forehead for headache, layers of skin peel off. The affected or damaged tissue by which headache is caused is also peeled off.

Toothache is relieved when a drop is introduced by boring a hole in the jaw over the affected tooth. As a result of this, the damaged tooth drops down. Alternatively, when all these teeth are pulled out brush the gum with this. Teeth spring up like mushrooms in a wet area. It should not be applied over the face lest 24 hours service of paintstaking labour cannot take off the beard.

It stimulates the heart when beautiful blossoms are seen. It is a friend in need and a cheerful consort when question papers are given or when the grades are announced or when the progress report has reached your house before you could return from there after the vacation. (Usually students had the advantage of returning to the hostel when the grade sheet reached home. Unfortunately, this time it may accompany them as a guest to their homes.

It is a useful companion to lecturers when they find something derogatory about themselves written on the board, or when they fumble in a formula.

Its effect on the car-drum needs no explanation. It is a boon to the students that they cannot hear what the lecturer shouts (may be boring) and to the lecturers when the students shout:

'Time up' or 'so much for to-day'.

It has got the digestive power of even our hostel Chappathis which are directly coming from C.L.R.I. Laboratory with the proper seal. (I recollect that the Director of C.L.R.I. had once said that this kind of leather is not at all available anywhere in India.) Its digestive power is so much that it usually digests the stomach itself and leaves no trace. We do not have the opportunity of consulting our Doctor to get Codopyrin or Elkosin. General efficiency: The particular company which produces this, has donated 100 gross of 4 oz bottles to National Defence Fund. Rumour has it that heavy casualties on the enemy side are mainly due to this Elixir which our jawans leave in the outposts that the Chinese have captured.

On taking a dose of it, it paves an easy passage to the cemetery.

For further details, contact the 'Ghost of Kaveri Hostel'.

K. NARAYANAN.

## MISSING!

TWO deer with white spots remain unclaimed in the pound. Will the owners kindly contact the Security Officer with the necessary fines?

UNSOLD copies of *Campastimes* are being auctioned on the last day of every month at 5 p.m. at Dr. Klein's room and not at Kaveri Hostel as mentioned earlier—Editor, *Campastimes*.

WANT to earn in your leisure time? Take up a lucrative agency of *Campastimes* in unrepresented areas of the world. For details write to Editor, *Campastimes*. Only a few vacancies left!

WANTED a baby-sitter for a staff Lecturer having two unruly and rather leaky babies, on Sundays and other holidays. Students of I B.Tech. or M.Sc. classes, of either sex, preferred. Apply at once to Box No. 4343, c/o *Campastimes*.

WANTED experienced persons to assist Dr. Klein in translating a German-English Dictionary into an English-German Dictionary under the new Indo-German agreement. Apply, stating your qualifications, to the Editor, *Campastimes*.

## CLASSIFIED

### DIVERTISEMENTS

50 nP. per line

"UMBRA"

## NOTIFICATION

AS the prices of postage stamps are likely to go up soon, all members of the I.I.T. Campus are advised to stock them in sufficient quantities for their future use.

—Postmaster, I.I.T.P.O.

## FOUND!

A 'T-square remains unclaimed in the Humanities Department Room for the last two months. Will owners please form an orderly queue, at 12.30 in the lunch break interval, by the entrance?

## WARNING

### Poetic Licence

IT has come to my notice that many persons in the campus of the Institute are indulging in poetry and committing verses without previous permission from the authorities. A Poetic Licence may be had from the office of Assistant Registrar (Academic) on payment of Rs. 5 per quarter.

—Registrar.

## CIRCULAR

THE cancellation of the scheduled trip of the Institute Omnibus stands cancelled.

(Sd.) Asst. Registrar.

## NOTICE

THIS is to inform the general public that I shall no longer be held responsible for any further debts incurred by Sri Morarji Dasai—U. B. Rau, 8 First Cross Road, I.I.T.P.O., Madras-36.

## REWARD Rs. 100!

WANTED, dead or alive, the engineer who designed the staircase in the D-type blocks of the Staff quarters.

—A six-footer.

## NOTICE

### To whomsoever it may Concern

It may be kindly noted by all concerned that I am the Secretary of the I.I.T. FACULTY ASSOCIATION and not FAULTY ASSOCIATION as printed in the last issue of *Campastimes*—M. C. Gupta.

## Know Your Future

Prof. Futura, the world-renowned astro-palmist, is now camping at Velacheri for the benefit of the residents of Taramani, Velacheri and Guindy. Students may consult him on their problems of the head and heart and members of staff may consult him on their chances of confirmation and promotion.

Three questions Rs. 2.

Reading of your full period in the campus Rs. 5.

Life reading Rs. 15.

**Excellent references** Dr. Klein says, 'Prof. Futura astounded me by predicting the growing success of *Campastimes* when everyone expected us to close down.'

Mr. Bawa says, 'Ever since we began to consult you on the auspicious dates for our monthly publication, I have received no complaints from our esteemed readers.'

Mr. T. S. Ananthu: 'I never used to believe in astrology and other allied hocus-pocus. But Prof. Futura achieved the impossible by predicting the exact date on which the Open Air Theatre started to sink rivalling the relics of ancient Roman amphitheatres.'

Mr. Randhawa, 'It is my confirmed belief that Prof. Futura is the wonder-man of our times.'

### Prof. Futura's Predictions for 1963

\* The new year will see an unexpected wild scramble for quarters among members of the staff. Many will get married to get a better type of flat.

\* Among those who are most likely to get married in the year are all the Assistant Wardens of the Hostels including Mr. Subramanyam.

\* Dr. Klein will get a new ear in the middle of the year and write off his present junk in favour of the Editorial Student Board of *Campastimes*.

\* The foundation-stone of a new Women's Hostel—to be named fittingly with a masculine river-name (Brahmaputra)—will be laid by a visiting West German dignitary. Miss Ziauddin is most likely to be the Warden of the Hostel.

\* In the month of August 1963, there may be a partial boycott by the readers of *Campastimes* at the instigation of some rival publication. Mr. Bawa will meet the crisis by buying all the copies himself.

\* The middle of the new year will see 400 fresh entrants of whom 60 are likely to be women. Our boys are expected to turn up at the classes and workshops with neat dresses and clean-shaven faces.

\* Mahesh's Go-Kart will develop a crack in the middle and separate itself into two scooters in the month of March.

\* On the day of his lavish house-warming ceremony following his entry into the campus Dr. Klein is likely to make a dramatic announcement. As the stars indicate, he will probably make some stunning offer to attract more students to his German classes. Free coffee and refreshments to the students who attend German classes till the end of the hour; his old van, as is where is, to the best student of the year in German; or, may be, a free lifetime subscription to *Campastimes*.

\* Food prices and A. S. Bawa are likely to suffer from further inflation in 1963. Whereas the former may fluctuate, the latter will show a steady upward trend.

\* Automatic signals will be installed at the Gajendra Circle to cope with increased traffic in the new Academic year.

\* In the Staff Race for over 40 the first prize may be knocked off by Dr. Vairanapillai.

\* *Campastimes* will come of age with the Printing Press with Colour Process likely to be gifted by the Bonn Government.

\*\*\* On the whole the year is likely to be one of moderate prosperity for the IITians. Newly married bachelors will be slow to take to campus life, but oldsters who have

dug themselves in, will be looking out to hook in more bachelors. The students need have no cause to fear the Ladies' Club to be formed in the latter half of the year, unless they happen to prowl around the staff quarters after 10.30 at night. Charms and talismans can be given by Prof. Futura to those who have any cause for anxiety.

Prof. Futura will leave the campus on 15th March.

'UMBRA.'

## On Conceit

Conceited people are not liked by anybody except by themselves. In fact, it is the only way conceit can be defined.

But the world at large makes a great mistake in disliking conceited people simply because they are conceited. A close examination of this dislike will reveal that the reason for it is jealousy. That we cannot match the other's conceit, because we do not have the backing for it. Great people are humble, but all humble people are not great. Why is humility a virtue? Simply because it is cheap. It is the simplest thing to maintain a position of one-upmanship with a humble person. That is why we like him. If one is treated as an intellectual equal, one automatically resents it. This is especially so, if there is considerable age difference between the people concerned.

All one has to do to be branded as a conceited person is to mention a few successes. Do people ever consider the fact that a conceited person, more than anybody else, is after the true nature of things? He is the only person who accepts facts—all facts, including the one that he is a better man. Merely because he has a tendency to put the cards on the table, is no reason for people to dislike him. If he is good at sport, he will mention it as a fact, to give a trivial example. Why dislike him for it? If you are not such a good sport; so what? Your dislike is a clear indication of your jealousy and cowardice. You cannot face facts. If you could—you would accept the fact, the truth, the existence of another's superiority and you will not only try to match his powers but also get a certain amount of satisfaction from the knowledge that you too, are superior to the common masses in a particular field. Maybe superior in being humble!

A conceited person will also realize that he is unhappy, but he will accept it as a fact; a consequence of his striving to be superior in some way to the rest. He will wait patiently for the day when his conceit would have paid off—when he is accepted as being great. He will then be called a great man and oh! so humble! But he will be the only person who knows the truth, who recognises the fact that he is superior. The only person who will again say 'so what?'

V. SIDDHARTHA.

## The Eucalyptus Tree

BY E. S. BHAGIRATHA RAO

There, at my door step, stands an eucalyptus tree,  
Tall and handsome and loveable tree,  
It stands alone and alone so high,  
To distinguish itself above all the cry  
Of plants beneath in mean jealousy  
Of the lofty tree.

It gives no fruit; nor flower of use,  
It stands indifferent to praise and abuse,  
It is God's plenty and does its duty,  
To pacify pain of the painful needy  
And delight it finds in doing so.  
No reward it wants unlike the rest, oh, lo,  
It is dumb and gracious, and humble,  
honest,  
To seek an ideal far from the rest.

## GERMAN PRONOUNCED DEUTSCH

Said a German magnate to his faithful valet at a large ball: 'Will you please, the stout gentleman at the farther corner, dressed in black suit and rimmed spectacles, with this knife. ....' At this moment the band struck up and the valet went away with a nod, pocketing the jewelled knife and a note given to him. The next day the newspapers flashed the news of the murder. The question was, who was the murderer in the real sense. A safe guess would be that it was the German language! The magnate, sticking to the rules of German grammar had reserved the verb to the very end of his sentence, and so became inaudible to his valet amidst the blaring of the band. What was an innocent order to return a borrowed article turned out to be a murder.

Reserving the verb to the very end is but one of the methods used by the German language to ward off a foreigner learning the language. There are several such idiosyncrasies in this language, and for the benefit of the beginner, a few practical tips are given.

It is recommended that a course in German be accompanied by a little careful drugging. This is necessary if proficiency in pronunciation is desired. To begin with, a dose of Sedlitz powder (or any such fuzzy powder) is imperative to provide all the wind required for a German reading. In the initial stages, substantial care must be taken about the extraction of 'Umlaut'. Umlaut 'ä' can be easily extorted by the application of Mandel's pigment deep down the throat. This, however, has the drawback of curing a sore throat, indispensable for the characteristic guttural German notes. Hence it must always be taken with its antidote—cutlets fried in turpentine. Sleeping pills taken at judicious intervals serve excellently for Umlaut 'ö', which comes out each time a yawn is stifled.

For a successful Umlaut 'ü', however, mechanical means have to be resorted to, the most effective being a severe pinch when the person is saying an un-umlauted 'u'. Unlike the English language, many of the German words are stressed on the first syllable. Any trouble in this regard is easily set right with a knee-hammer struck on any part of the head. With these techniques, good pronunciation can be achieved in record time.

One must, however, give it to the German language that it is a very matter-of-fact language, sometimes to the extent of being slightly primitive. For example a telephone is called *Fernsprecher* meaning 'distant speaker', and glove is called *Handschuh*, signifying a shoe for the hand. One is apt to wonder how the language manages to express the finer feelings with such a vocabulary.

The German language has its full share of the intricacies of a civilised language, and a beginner has no difficulty in getting lost in it. One of the first things that confronts him is the gender of nouns. One is at a loss when he is told the word 'girl' is a neuter (das Mädchen) or that an inanimate object like a door is given due place in the feminine world. The linguist has an explanation for these freaks of the language, but they are against commonsense, to say the least.

It would be indeed a pity if the foregoing account should dissuade anyone from starting on the German language, for it is a fascinating language of a fascinating people and rewarding in itself.

B. RAMACHANDRA PAI.

'Romantic love should form the motive for a marriage, but it should be understood that the kind of love which will enable a marriage to remain happy and to fulfil its social purpose is not romantic, but is something more intimate, affectionate and realistic.'

—RUSSELL.

## The Border-Conflict with China

DR. M. S. VAIRANAPILLAI

A dispassionate view of the 'Border-Conflict' with China is essential for a proper appreciation of the issues involved. As intelligent people, living in a practical world, we must be honest enough to assess for ourselves the implications of the Chinese conflict for the future welfare of our own country. For the time being at least, the Chinese conflict is over although the national emergency continues to exist throughout the Indian political world. Peace has existed between India and China for over two thousand years and the recent conflict has been, indeed, a strange interlude. We did not go to war with China as the whole world knows; nor have we ever harboured, openly or secretly, any territorial designs on Chinese territory. Therefore, the Chinese action on our two border areas came as a great surprise and a greater shock. Our continued indifference to the no man's land on the Himalayas has cost us heavily. The Chinese took advantage of our position and planned well to claim what was not theirs. We woke up to find that we had taken many things for granted.

People, usually, have short memories. Our record has been crystal clear. The Chinese aggression struck us like a thunderbolt as our government and people had never expected such an unfriendly act on the part of China. We have been consistently going out of our way to befriend Red China in and out of season, even at the cost of our own popularity among certain friendly countries. That we incurred the displeasure of a nation like the U.S.A. solely on account of our stand regarding China cannot be gainsaid. We were the first to recognise the communist government in Red China. After the Kuomintang group was driven out of the Chinese mainland, we have been consistently showing a cold shoulder to the Formosan régime under Chiang-Kai-Shek, partly to please the present set-up in China, forgetting that Chiang was a strong advocate of our independence. We championed the cause of Red China on all conceivable occasions for her entry into the U.N.O. and many of its specialised agencies. We shocked the civilized world by accepting the conquest of Tibet by China as a logical and inevitable event. No occasion was missed to ridicule the representatives of the former Chinese régime in the world forum. We pointed out to Bandung Conference as an indication and example of Asian solidarity in general and Indo-China friendship in particular. We preached and paraded our 'Pancha Sheela' doctrine as an epoch-making theory in Asian and international relationship. It must be pointed that we did not take seriously the hundred and one border incidents which had become rather chronic on our northern frontiers by the aggressive acts of China. The Chinese construction of the long roads in close proximity to our North-Western borders and the occupation of thousands of square miles of Indian territory in the Himalayan region did not make much of an impression on us or our government. We talked more and left many things undone even under provocation. Under the leadership of our Prime Minister and former Defence Minister, we were waxing loud in voice and dance our binding fraternity with the Chinese, the closeness of our culture, and the solidarity of the Asian group of nations.

When, in October last, we were confronted by the Chinese large-scale onslaught, our government and people were taken aback. But our enthusiasm to meet the Chinese aggression was spontaneous. All of us were of one opinion that China, after all, betrayed her own true colours, and only simple and child-like credulity on our part prevented us from understanding the venomous Chinese dragon. Meanwhile, our Prime Minister and Defence Minister assured the nation that the Chinese menace would be beaten back and that India was fully prepared to meet the unpro-

voked aggression and drive back the enemy beyond the McMahon Line and line of actual control as on September 8, 1962. The nation, with one mind and one voice, supported the government stand and rallied round the Prime Minister and his policies. Political parties, with the possible exception of a few in the Communist and Swatantra ranks, vied with each other in their support of the war-effort. The nation, for the first time since independence spoke with a united voice. North and South, East and West, high and low, youth and age, men and women, capital and labour, and rulers and the ruled rose as one man to withstand the Chinese invasion. India went through the birth-pangs of a new sense of unity and solidarity unknown before in her long and chequered history. National integration was no longer an ideal to aspire for but a reality to spring forward to a new day and a new goal in our life and history.

India was now one grand spectacle of people in every walk of life whose first and sole purpose was to drive out the invaders and teach them a lesson which they will never forget. Noblest expressions of love and service for our motherland came from the youth of the nation. They freely offered themselves for national service and enlisted themselves in different branches of the Defence Force. Our hospitals and doctors were not able to cope up with the blood-donations that our youths made throughout the length and breadth of the country. College and university students looked forward to immediately enlisting themselves in the army to lend their whole-hearted support to protect the nation. Our girls in schools and colleges donated their cash and ornaments to swell the Defence Fund. Our women voluntarily parted with the gold ornaments to tide over the national crisis. Teachers, government servants, ministers and even High Court judges donated part or whole of their salaries. Newspapers reported that ministers and politicians were weighed against currency notes, precious metals and even fish during the process of the war-effort. India witnessed an unprecedented volume of heroic speeches being delivered from press and platform in every part of the country. Dramas were enacted; musical and dance performances were announced; concerts were arranged; and old movies were put on the screen in aid of the Defence Fund. Some movie stars participated in the production of short films to accelerate the war effort and achieved momentary glory in light and shade. Others gave thousands of their well or ill-earned money to pass through the limelight for at least a day. The season was a golden opportunity for sensational press to come out with their never-ending heroic editorials. In the midst of the national emergency, marches and processions became common. House to house collections were undertaken. Public meetings put to shame the Bug Clubs in the U.S.A. and the Hyde Park in Britain in the production of professional orators. Some Communist leaders were rounded up. In the midst of all these and more, the Government of India issued the drastic Defence of India Rules.

The other side of the picture is sad and heart-rending. The China Border-Conflict was a godsend to tens of thousands of profiteers to whom nothing else mattered other than profit. They would mortgage the nation and use the heroic youth of the country as cannon-fodder for the sake of their material and temporary gain. Prices of essential commodities began to soar high. Even in the pre-war period, mounting prices of the utter necessities of life were a stock criticism of the government and its administration. The Chinese Conflict clearly revealed how difficult it is even for an efficient government to bring under control 'black-marketeers' and profiteers. They were repeatedly 'advised' by

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## ON COURAGE

By SHANKAR

What a noble word is courage! In Latin 'Cor' means the heart. What a wonderful creation is this heart of man, so full of nobility, so full of just power, so full of sentimental values of love—at the same time mixed and mingled with human jealousy, carnal passions, and brutal strength—why! It's a world in itself:—Awe-inspiring and at the same time thrilling! Yes, it is the home that nestles this inspiring ideal of courage.

It's very difficult to give full meaning to this word. Many a man who fought against cruel temptations in daily life, who loved his neighbour as himself, who kept his heart pure and true—many a man of such sterling qualities has been accused of cowardice in war. Was it really fear that made him run away from the battlefield? Certainly not. In the sight of God, he is just another man who cannot control his nerves in an intricate situation.

In books of history, courage is depicted as the rescue of beautiful princesses from massive dragons and terrible giants. It is the spirit of courage that led so many noble knights on perilous errands. But in its many facets, courage is an enduring word, which will go down in the history of man as his noblest ideal.

There is the daily courage of a diver who descends into deep oceans and whose life depends on the narrow air tube that links him to the surface air. The most unnoticed act of courage is that of the traffic policeman standing in the midst of innumerable cars. Yes! He is in danger of a careless driver, hurling himself at a reckless speed and dashing into the precincts of the safe island over which he holds supreme sway.

Then there is another form of courage—the courage of inquiry that may kill the inquirer. In a darkly lit room, a man is injecting himself. His belief in the existence of a cure for a dreadful malady must be vindicated by risking his own life. It is courage of a noble order.

The two American soldiers who offer themselves and their lives to save the world from yellow fever, are amply rewarded when Maj. Reed says 'Gentlemen: I salute you.' In that salutation is the frank admittance of the indomitable courage of these two soldiers.

Think of Scott trudging along frozen oceans of ice with his companions towards the South pole. Having failed to arrive there first, he returns and in his dimly lit tent, far from his house, he still is courageous as he writes his diary, leaving behind for posterity the marks of a genius of an enquirer.

His work is dull. Yet, he keeps on working, relentlessly and tirelessly. Why does he work when he does not like the work? It is not his desire to see his wife and children starve in poverty. He works for them without concern for himself. Yet, it's courage that smiles to hide the agony within.

Think of a mother sitting by the bedside of a child. The child is pale and thin. She reads a story book for him and when she comes across a picture, she asks 'Look dear, is it not funny?'. None can tell from her eyes, that her mind is breaking within her. Having known the worst, she goes on amusing the child. How noble is courage! Under its sheltering cloak, the brave mother faces the vicissitudes of an agony deep within her heart. Her love for her child ennoble her in to a Goddess of Courage—as it were.

Think of an escaped prisoner standing behind the garden wall with his hands ready to click at the trigger of the gun that he has in his hand. He believes he is free to do it. But is it courage? His face does not show the resplendent beauty of courage, but it depicts a feverish and fearful mask of fanaticism. It's not courage but mere stupidity.

If a drunkard were to go on drinking without ever caring for his home and family and if he is asked to give up drinking, he says in a devilish grimace, 'I don't care what happens'. Can we call this courage? Is he

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## The Determined One

By S. BUKHT

That frail and delicate looking girl that you are watching waiting at the tram-stand, is no other than Farida. There are several other children standing there, too, but I am sure you can at once see the difference between her and those other children. For one thing, there is a great deal of determination in her that is missing in the other children. Look closer and you will observe the sad expression in her eyes, the expression common to those into whom fate forces itself.

Watch her then as she looks forward hoping to see the tram come. Her face remains expressionless. It's office hour now and the tram is rather crowded. As it rumbles to a stop before her, the other children rush to it with a joyous shout and force themselves in. But watch our little Farida. She stands aloof waiting for the rush to subside. She is about to get on when the faint tinkle is heard and the tram moves forward with a jerk. Our Farida still remains. The following tram is, however, less crowded and on this she manages to board with ease.

Let us follow her here, too. Slowly and steadily she walks to the front of the vehicle and quietly sits down at the ladies' seat, places her bag between her legs, puts her delicate elbows just a little out of the window and stares into the space beyond. A thought strikes her and she opens her little pink purse made out of beads, and takes out a ten naya paisa bit. When the collector comes without even bothering to look in his direction she hands him the coin. A second or two later, her pink palms are stretched out again to receive the change and the ticket. These, too, she places in her bag, and then looks out again.

Aren't you wondering what she may be thinking? I am afraid I cannot tell you her thoughts because I am not sure of them myself. Throughout the journey she is rigid. Her face is blank. Whatever thoughts she may be thinking or whatever emotions she may be undergoing, she is certainly taking pains to hide them all. Near her destination she picks up her bag gently and moves towards the exit.

'Hey, Farida', hail her friends at the gate.

'Hey,' she replies softly.

'Prepared your lessons?' asks another of her friends.

'You don't have to ask Farida that,' echoes a friend from behind her.

'Hello, Jean,' says Farida turning back and greeting her with a look which means 'please Jean, don't say that again'.

She does not pause at the gate waiting for the five-minute bell to ring, but walks to her classroom with her book-bag in the left hand. In the classroom, she goes to her allotted desk, opens her book required for the first period and then walks out again and waits before the classroom.

The class has already begun. Notice how intently she watches her teacher, eager to catch every word that escapes her mouth, notice also with what readiness she takes down all that the teacher dictates to the class. When a class-work is given to her, she starts working at it right away and having finished she waits patiently for the teacher to come around and correct her work. The other children who have not yet finished, ask her the answers to some questions. She tells them, but rather reluctantly, not because she is jealous of the other girls also getting all right, but because she believes in individual working. The three forty-five minute periods slowly pass away and soon the bell rings for the tiffin break.

Together with her friends they go out to the play-ground and dig into their bags for the tiffin they have brought with them. Farida slowly opens the packet containing the egg and cheese sandwiches and slowly begins eating. Watch eagerly the little group around her talk. No manners are observed here and

(Continued on page 7)

## CIVIL DEFENCE PROGRAMME

Civil Defence Hqs.  
J h u j h a g i r i

January 1963

Confidential

Ref.: CP/WRDN/A/I/39/63

Dear Sir/Madam,

### Sub.: Civil Defence Programme

Under the provision of Civil Defence Programme, we are entering into extensive planning to organize both civilian and industrial corps to the purpose of fire fighting in the event of air raids taking place.

As a civilian whose loyalty is unquestionable, we believe that we may count on you as a patriot for 100 per cent. cooperation. We have therefore taken the liberty of appointing you Air Raid Warden for your ward.

Enclosed is the list of equipment which will be necessary for each warden as set out in Defence Regulations (C.15(P).P 18), and we suggest all possible haste be exercised in making preparations for this emergency.

In anticipation of your support of this scheme, we extend our thanks, and the Committee wish to express their appreciation for your part in the enterprise which we feel is so vital for the community.

Yours faithfully,



p.p. Civil Defence Committee

Encl.: Code CDE/Gool/SS/K.142



ConfidentialCode CDE/Gool/SS/K.142

## LIST OF WARDEN'S EQUIPMENT

- 1) One respirator;
- 2) One axe (to be carried in the belt);
- 3) One stirrup pump (to be carried over right shoulder);
- 4) One rake (to be carried over left shoulder);
- 5) One extension ladder (to be carried under left arm);
- 6) One long-handled shovel (to be carried under right arm);
- 7) One scoop (to be carried in left hand);
- 8) One whistle (to be carried in mouth, fixed with lanyard);
- 9) Two wet blankets (to be carried round the neck);
- 10) One belt (to be worn round the waist, with ten hooks attached for the purpose of carrying six bags of sand and four buckets of water);
- 11) One flashlight (to be carried round the neck on top of blankets);
- 12) One box of matches (for lighting incendiary bombs which fail to ignite);
- 13) One tin helmet (with turned-up brim to carry extra water for drinking purposes only);
- 14) Extra sand (to be carried in all available pockets);
- 15) One anchor (to be dropped in the event of a warden running away);
- 16) One broom (fixed to the warden's back for sweeping up when it is all over).



## Determined One—(Continued)

the girls talk all at once and sometimes even with their mouth full. Suddenly all is quiet. Somehow in that very short instant no one speaks or everyone is waiting for the other to speak. It is at this moment that you will notice a very faint smile steal across Farida's lips. It's a strange smile but you undoubtedly know how to interpret it.

No, no, don't be distracted but watch carefully how eagerly she joins in the conversation. They are discussing their holidays. But somehow or other the conversation undoubtedly drifts back to the question of parents.

'Oh, my parents are so very kind that they don't mind if I don't study at all during the holidays,' exclaims one girl.

'Yea,' says another, 'My pop doesn't mind but my Mum insists that I do at least some studies during the hols'.

Notice how at the mention of the word father Farida stiffens. The jaw bones, if you are observant enough, you will see, stiffen a little and she looks away from the group as though completely disinterested.

'And what about Farida, you must be mugging during the holidays'.

The question brings her back to the group, and you can see strange light of new determination in her eyes as she replies, 'Oh, me. Well my pa... parents let me do as I please,' replies Farida and looks around to see whether anyone had bothered to notice her mistake. They had not.

I forgot to tell you Farida's father had died two years ago but she, for reasons known only to her, didn't want to tell her classmates about the death and let them presume that her father was still alive. The bell rings and it is time for class.

Our object of interest like most of the girls there finds the afternoon classes rather tiring. But you can see that she is making an attempt to keep her mind alert. The final bell leaves her thoroughly tired and wearily she packs up to go home.

No salutation greets her when she is back home. Her presence is taken for granted. Part of the evening she is making a garland of beads and the rest she sits in a little corner where her desk is and begins her work. Several times she is called by her mother to fetch something or the other. She does all this without saying a word and with the same determination that you had noticed when she had been waiting for the tram.

The mother and daughter relationship is rather queer in this little family. Anyway, having completed her chores she goes back to her desk and before commencing her work, again casts a longing glance at the picture of her father which is placed on the shelf above her. Then she is absorbed in her studies.

Dinner, too, is a silent affair. She eats what is placed before her, and mother and daughter exchange a few words, more for the sake of formality and habit than for anything else. Dinner is over and she helps her mother with the washing.

Bed-time does not follow long after. When all seems to have been complete, mother and daughter each go to their respective beds which lie side by side. The light is switched off and all is dark. After a few moments of rustling of bedsheets, silence reigns. The breathing is regular, at least Farida's is. Her mother, however, seems restless. A very soft scratching sound is heard somewhere and the mother raises herself and goes to the adjacent room which has a door leading to the back of the house.

You are alone now with Farida. Look at the relaxed figure on the bed. Then suddenly something seems to disturb her and still half asleep she turns over once or twice and then her eyes gradually open. She stares at the opposite wall and gradually her eyes travel to her mother's vacant bed. In a flash the face is filled with hate and disgust and she whispers, 'Oh God, not again. I will get out of this rut as sure as there is a heaven,' she says. A groan escapes her lips and she turns to the other side and forces herself to sleep.

## LIGHTER SIDE OF LECTURERS' RESIDENCE

### 'GUESS WHO'

Many families in Adyar and Mylapore were found moving out of their homes in mid-December, 1962, and a caravan of lorries laden with household articles and bullock drawn trucks loaded with family belongings was wending its way along the Guindy-Adyar Road practically everyday during those two weeks. This was reminiscent of the memorable march of the early American settlers in search of new homes and hearths in the wild west. This was also a westward march into the wilderness not of the American adventurers but of I.I.T. pioneers. It was the glorious sight of the I.I.T. Faculty members moving into their new dwellings in the sylvan surroundings of the emerging campus of the Indian Institute of Technology.

I was looking forward to this day for more reasons than one; not without justification I told my parents that it would take at least six months to a year for things to get normalised here, and it was better that I moved in first with my newly wedded wife and undergo the ordeal of the pioneering experience and they moved in a year later into a well-settled campus. In a way I am deeply thankful to our Superintending Engineer for, in his circular letter he had stated that my house would be declared fit for occupation on the 1st of December, 1962, and when I brought my parents on the 15th of the same month to my house and nothing was ready, they were convinced of the unenviable ordeal we are in for. Of course, I had a number of other selling points such as bus facilities, supermarkets, schooling for my sisters, and medical aid; thanks to the rate of progress in these directions in our campus, I had no difficulty in discouraging them and starting complacently dreaming about the honeymoon we were going to enjoy here. These inadequacies did not deter us for we had our love to compensate for everything else.

The month of December in the Gregorian calendar coincides with the month of Markazhi in our Tamil calendar, and Markazhi is not supposed to be an auspicious month for moving into a new dwelling. Though I am not a Christian, I felt that the X'mas night should be auspicious enough for this purpose even for a Hindu, for after all, the son of God, could not have chosen this night to be born in this world otherwise. I congratulated myself on finding a very good excuse and persuaded my little superstitious but otherwise enthusiastic wife to launch on our new expedition.

As scheduled, our bullock-drawn wagon arrived at the Gateway to I.I.T. at 8 p.m., and allowing the wagon to move along the Delhi Avenue we walked behind it. There was no one on the road at that hour and the weather was especially delightful for people like us to talk and walk behind the cart unobserved by any prying eyes. The avenue was brightly lit by fluorescent lamps which stretching as they did to the middle of the road reminded me of an army's welcome with drawn swords to their newly-married commander. A group of deer grazing near the roadside looked up and gave us smiles of recognition and gracefully crossed the road oblivious of our presence. A few monkeys shifted from one branch to another in search of better resting places for the night, and the birds were chirping softly in their nests or branches of trees on the sides; the frog orchestra was in its full swing with its delightfully monotonous rhythm, and the overhanging expectation of a friendly cobra with its hooded magnificence passing by lent a romantic charm to the eerie atmosphere. My wife, who was walking by my side silently observing all these, cooed mellifluously into my ears.

'Dear, when you were telling your parents of the defects and drawbacks of I.I.T. campus life, I knew it was to dissuade them from coming in with us to stay; but you know,

you sounded so true and sincere that I myself had a vague fear whether you were not telling the truth. Now all my fears are gone.'

'What do you mean by saying "all your fears are gone"? You will see; everything I said about this place is true.'

'Don't tease me! It is gorgeous around here. Oh, I love to run along this road and chase the deer: See those dazzling eyes in the darkness yonder. Aren't they frighteningly fascinating?'

'You are presuming those eyes to be those of deer, don't you, dearest? But yonder eyes belong to dogs. Stray dogs or street dogs whatever you may choose to call them.'

'Dogs? You are funny! How on earth could you have stray dogs here?'

'Quite simple. Last week, I hear, there was a conference of all the stray dogs in Adyar, and it was unanimously decided by voice vote that to reduce the problem of overcrowding fifty per cent of them should migrate into this new colony. Many were reluctant to move in for lack of food and other facilities, but the steering committee seemed to have stated quite pertinently, that pioneering efforts always entailed some discomforts but their initial privations would be more than compensated by increasing dividends as days and weeks go by. So they are here in good strength to welcome us.'

'You know, you have a way of explaining things. I love you, dear, for that. Believe me or not, I am going to be happy, very happy, if I am not already!'

'You mean with all these obnoxious creatures around you?'

'No, dear, with you around me.'

\* \* \*

At 8.30 we sighted our block C<sub>1</sub>-2 Lecturers' Quarters, and I was pleasantly surprised to find two or three colleagues of mine lined up with their wives and children to welcome us. My wife was particularly pleased to see these friendly folks, but I failed to understand their gloomy looks. While we had come here with a lot of hopes, they appeared to me like prisoners in the Siberian desert camp welcoming newcomers. Their words of welcome seemed to indicate that they were cynically inclined to believe that one more couple to share the campus life would somehow reduce their share of burden or botheration. With their help, we fixed a few bulbs in our house and unloaded our pots and pans from the wagon. Thanking these good people and seeing them off we closed the door and looked around us.

'Well, dear, we are at last in our new house.'

'Show me round the house.'

In the course of the conducted tour we came into one of our bedrooms. My wife was tremendously impressed by the glass doors provided for all windows. I wanted to set her thinking right.

'How many windows of other houses can you see from here?'

In all excitement she counted: 'One, two... five... ten... fifteen...'

'Eighteen! how nice it is! When you introduce me to the wives of your friends around here I can wave to them from my window. In course of time, believe me, I am going to spend my spare time in evolving a code of signs and gestures which can help us express ourselves more eloquently than words.'

'That is a wonderful idea, dear! But there is another angle to view the thing. While you can see through 18 windows, people can see you through these eighteen windows.'

'What is wrong with it?'

'Glass doors; at night with lights on, dear.'

'Oh, uooo, now I understand why you were

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## IIT GOBBLEDEGOOK

S. SRIKANT

I. 'A cheque for Rs. 100 is enclosed herewith.'

'I await for an early reply.'

'A copy of the Ministry's letter is appended below.'

'His letter referred to above is annexed hereto.'

'An application from Shri ABC is attached herewith.'

—These are some of the many incorrect sentences that are current in Government, semi-Government as well as private commercial correspondence, I.I.T. not excluded. Superficially looked at, the errors are not apparent *prima facie*; but, it is only when we go deep into the construction of sentences, we realize the discrepancies that have unconsciously or ignorantly crept in. Not that they are grammatically incorrect, or philologically inaccurate. But the expressions used are redundant and pleonastic. You will appreciate that it is enough if we say 'I heard' rather than 'I heard with my ears', 'I have seen' rather than 'I have seen with my eyes', 'It is a fact' rather than 'It is a real fact', and 'It is a lie' rather than 'It is a false lie'. When you understand that a fact is *always* real, that a lie is *always* false and that you cannot hear or see through organs other than ears and eyes, you will be ashamed of the pleonasms you have unconsciously employed. Similar are the expressions 'enclosed herewith', 'await for', 'appended below', 'annexed hereto', and 'attached herewith'. The term 'enclose' is one word for the two words 'send herewith', 'await', for 'wait for'. 'Append' means annex, 'annex' means attach, and 'attach' means fasten, and the expressions following them are copious and are therefore superfluous.

II. 'The matter may be placed before the Board at their next meeting'—This is another common error committed at the I.I.T. office. The rules of grammar say, when a pronoun stands for a collective noun, it must be in the singular number and neuter gender, if the collective noun is viewed *as a whole* (vide English Grammar by Wren and Martin); as:—

1. The army had to suffer terrible privations in *its* march.

2. The jury gave *its* verdict.

But, when the collective noun conveys the idea of *separate* individuals comprising the whole, the pronoun standing for it must be of the plural number (the auxiliary verb also correspondingly becomes plural); as:

The jury *were* divided in *their* opinions.

Inasmuch as the term 'Board' is viewed *as a whole*, the singular pronoun 'it' should be used. Thus the sentence should read:

'The matter may be placed before the Board at *its* next meeting.'

III. Change of tense in the same sentence is prohibited under the rules of grammar—it is a violation of syntax. Thus the following sentences are incorrect:

'It was already informed that the leave applied for *is* refused. It was also stated that that if you *do not* present yourself at the office on . . . . . disciplinary action would be taken against you.'

The italicised words should read in the past tense as *was* and *did not* respectively, to make the sentences grammatically accurate. This elementary rule is overlooked by many of the correspondents here.

IV. 'Note for Chairman': This is another howler committed at the I.I.T. The preposition *to* is more accurate. Either the sentence should read: 'Note *to* Chairman' or 'Note *for* Chairman's approval'.

Incorrect prepositions are also commonly used here and the following sentences will serve as examples:

'You are selected *for* the post of Stenographer.'

'He has reported *for* duty.'

The preposition *to* in the above sentences would give the meaning intended.

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## THE MANTLE OF MANKAD

R. NATARAJAN

Cricket owes much to its lefthanders—batsmen, bowlers and all-rounders—for, it is they, who supply what, normally, should be a cheerless four or five day masterpiece of monotony, those iridescent sparks of elegance and effect, which draw milling crowds as if with a magical magnet. A Martin Donnelly scattering his foes on the field with 'deep disdain', a Tony Lock playing the python by his victims, hypnotising them into hopeless submission or a Bert Sutcliffe bounding boundaries off his brilliant bat are all preciously preserved in the amber of cricket memory. Woolley, or Warren Bardsley, Morris or Mankad, Donnelly or Davidson, Verity or Valentine, has, each on his day and in his way, been a crowning glory to this eternal sport.

While the saga of the world's cricketing lefthanders has been stirring, India's has been no less impressive. Mankad, the Magnificent, set the Indian fashion in left arm spin bowling, as Dior did the Parisian, sartorially. He was, besides, a batsman of world class—in fine, a classical all-rounder of the Miller mould. There was Ram Singh, that Titan of the South, who held batsmen captive with his 'wanton wiles' and meted out Corporal punishment to bowlers, who did not care to conform to canons of length or direction. Then came Nadkarni, who is now indispensable to any Indian Test side, with his consistent batting, nagging bowling and tidy close-in fielding. But, if there is to-day, any Indian Cricketer, on whose shoulders the mantle of the great Mankad has fallen and is, verily, the toast of Indian cricket—it is Abdul Azeez Salim, better known as Salim Durrani.

Salim set the Indian cricket fields aglow during the 1961-62 season, with his thrilling performances with both bat and ball against Ted Dexter and his 'henchmen'. His soaring sixes in the Bombay Test, sent up India's hopes of winning the Test Series against England. With his black magic bag of eleven wickets, he, literally, won the Madras Test off his left arm. He followed his splendid showing against England with epochal performances against the West Indies during the recent Indian tour of the Caribbean. Salim set their tropical palms a flutter both with his batting and howling. His century against the rampaging all-conquering West Indians, in the face of dire adversity, showed character and grit while even batsmen of the sterling stamp of Sothers and Solomon had no adequate answer to his lethal leather. If India won the Test Series against the M.C.C. and had 'one crowded hour of glorious life' or two against the West Indians, it was deservedly due to Durrani. It has been said of Epaminondas that he 'carried Thebes on the wings of his genius'. Similar has been Salim's role by Indian cricket.

Born in 1935 on August 15—a day even, otherwise, auspicious in our national annals—Abdul Azeez Salim made his entry into first class cricket even as a school boy and had the enviable distinction of scoring a century on his maiden appearance in the Ranji Trophy when he compiled 108 runs for Gujarat against Saurashtra in 1954. Later, he transferred his allegiance to Rajasthan, where he was employed on the personal staff of the Maharaja of Mewar, a great patron of cricket. Thereafter, his star rose with that of Rajasthan

in the Ranji Trophy. On his first appearance for them, he played a scintillating innings of 88 runs against Madhya Bharat at Indore. But Salim's vintage performance was reserved for the 1960-61 season when he nearly 'abducted' the Ranji Trophy for Rajasthan. When that 'Rajput' side were dismissed for a dismal score of 140 runs in the first innings, Durrani put new life into his team by sending Umrigar, Apte and Hardikar pavilion bound at a paltry personal cost of 28 runs. In spite of catches galore missed off his bowling, Salim captured 8 wickets for 99 runs—a memorable effort. In the 5 national championship matches he played during 1960-61, Durrani captured 35 wickets for 383 runs, which the cricket Almanac of the year rightly described as 'the finest bowling performance ever given by a Rajasthan player in the Ranji Trophy Championship'. This is saying something when we consider that the Rajasthan side boasted of Vinoo Mankad and Subash Gupte in their ranks.

In International cricket, this gifted lefthander has played against New Zealand, West Indies and Australia, with a pudding performance of 80 against the West Indies at Jabalpur during the 1958-59 season. He made his Test debut on New Year's Day in 1960 against the Australians with a quick-silver innings of 18 runs, small in run value but impressive in his aggressive approach in batting. His historic achievements against England and the West Indies are but recent history and do not require reiteration.

Hardly 28, Durrani has many years of cricket before him. His best is yet to burst into blossom. But even as it is, Salim has joined the brilliant band of immortals of Indian cricket. If the Moghul Salim gave, in his day, Indian art a fascinating fillip, it has been left to this cricketer Salim to raise the tone of contemporary Indian cricket.

The mantle of Mankad could not have fallen on broader or worthier shoulders.

## THE WAYS AND THE MEN

I

It was not exactly yesterday—but then nor was it today—may be something like thirty years back; he had been young, very young indeed, eighteen, to be precise. Thirty years, 'a long time, indeed, very long, as a matter of fact', he thought, 'but then what is it when you can span it sitting in a chair'. It just didn't seem to be anything. How we can traverse the barrier called Time backwards in our retrospective moods is not difficult to imagine. That little understood organ in the queer set up called the 'human body', our mind, knows no barriers, has no limits, can soar into the past and future high above ourselves—like an epiphyte which may sometimes grow to be even taller than the tree it stands on.

And so it was with him now. At eighteen, he had come to do engineering, not very willingly though, but come he had.

Factors more important than his own wishes had been involved, and he had yielded, without struggle which he knew would have been futile, and, moreover, in some inner recesses of his mind he had known that this was the right thing to do. What with the then existing social system, unemployment prevailing all over the country, he stood a very feeble chance and he knew it. Yes, engineering was the best thing to do.

He would get a good job and thus would be able to support his parents well and, may be, make them happy at least in the last few years of their lives.

With these ideas—and a sensible mind and, lastly, without any natural or cultivated qualities for music, his father had had little difficulty in persuading him. His words still rang in his ears, 'Son, you know, you have always been like this, always saying that you couldn't do such or such a thing and then doing it. Didn't you tell me two years ago that it was not possible for you to do science, that you would never get along, but you did and very well, indeed, and that. You are a

genius and I want you to know it. You go and do your engineering and it shall be quite simple.' He knew, of course, that he was no genius, and what his father had said wasn't much different from what any persuading father would say to a reluctant son.

'But, father, music stirs me so, I find everything in me vibrating with it,' was about all that he had managed to say.

'But what do you have to show for it—you can't sing, you can't play, and to say the least, you are about as unmusical a man as ever there was one.' He had half yielded, 'and, son, my dear boy, it is the only ambition of my life. I always wanted to be an engineer but never got to be one. Now it is for you to give me at least the satisfaction of having been the father of one.'

That had settled it. How we love to fulfil our unachieved ambitions—our unattained goals—at least partly by making someone else do the things we could not.

That of course, was the real reason his father had, and he knew it.

And then some years later an Engineer he did become to the entire satisfaction of his father.

II

As the years rolled by, he achieved success—but never the internal satisfaction of happiness. The music still hauled him in a mysterious sort of way which even he didn't understand. But still it had persisted, the feeling that he ought to have learnt it, the only thing he loved really. But then he never had it in him to cause unhappiness and misery to his parents.

III

In the course of time he got married and had a son. He knew what he was going to do with it exactly. He would teach him music.

And that is what he did. By the age of ten, the child had become a child-prodigy and by fifteen he was famous. He was very proud of his son and was exceedingly attached to him.

He prided himself on the fact of having almost created a Great Musician. 'After

all it was through my efforts that he is today what he is.'

He used to present him with pride, not only because he was his son, not even because he was a great name, but because it was he, at least, partly who had made him what he was.

'An exact embodiment of my unachieved ambitions, my unattained goals, my lost ideals, he is what I could not be and more.'

IV

About a month ago he got a letter from his son.

My dear Father,

You will be surprised and may be even shocked on reading this. Coming straight to the point, I want to tell you that I have given up music. I am sorry if it hurts you, but I am afraid that now it shall have to be. I am even more than sorry. I am hurt myself for causing you dismay. I know, of course, all that you did to make me what I was until a few days back.

Be it as it may, I would never have been happy if I had carried on. I had of course, always known that something in me was amiss. But now I know what it is. I always had wanted to be what you are: an engineer. Since that is well nigh impossible, I have decided to become a crane operator. It is, of course, not what I want to be, but, well, then it is the position nearest to my ideals.

Please, do forgive me if I cause you dismay. You know as well as I that I wouldn't have done it, if I could have helped it, for I love you so and I respect you and, more than that, I adore you.

Your . . .

He read the letter. For a moment he was shocked, but then he had forgiven him. And not only that; he even respected him, for, after all, this was something he himself had never been able to do.

'I have succeeded,' he thought, 'in making him what I never could be. He really is the embodiment of all my ambitions and unattained goals.'

R. R. K.



## EDITORIAL

### Wither Sanctuary

The experience of the passengers on a bus between Adyar and Narmada Hostel recently, was rather different. They realised their bus—I.I.T. not State Transport—had been stopped in the midst of our jungle. Later it was discovered that a herd of deer had been complacently crossing the Delhi Avenue and beyond them half a dozen or more cows were resting for the night. Fortunately it was these 'dears' and not something in the nature of the man who was found dangling at the wrong end of the rope in front of the main gate eighteen months ago. Despite the possibility that things may have been nastier like for example, when a gentleman on his scooter during a drizzle skidded in trying to avoid a similar herd of 'dears'.

Meister Eckehart wrote, 'Some people want to see God with their eyes as they see a cow, and love Him as they love a cow for the milk and cheese and profit it brings them'. But for all that and 'Gau Mata' it is a shame, the way these outrageous animals are allowed to move along the roads and streets. Not only do they constitute a perpetual threat to motorists, but what is equally bad, they along with goats seem to indulge in eating the flora from the 'gardens' of the Institute Staff. No wonder 'Waldo' Emerson despised them and wrote 'My cow milks me'.

This campus used to be a sanctuary and that is precisely how we are keeping it. That was precisely the reason why a member of the teaching faculty recently said 'Hi' and offered to show the hissing snake on his drawing room table the way out.

People the world over love deer and go to zoos to watch them and to feed them. They even go to watch snakes. Bangkok even maintains snake pits, which are a great tourist attraction. But in all fairness we should constitute or, at least, have rules and regulations for those who are our companions of the sanctuary.

### FIRST SMOKE

By blithers and jiminy, he'd show he was no funk:

Leapt elfin desire, but scare came along, and Slowed down the jig that in a spiralling tempo

Was serewing in impatience away past prudence.

Now it was even; now he was afraid again; Unstruck the match dropped into the arms of the weed.

Other blades rustled. The breeze ushered in the halloo,

That in familiar octanes preceded the gang. 'Look fellows, he's giving us a treat: a whole

Packet of hoodles! Who'd have thought our sweet saint

Was a real cool chimney—he always seemed sober'

Poor scare took flight. Look the frantic show-off

has struck, and lit, and breathed—its done 'Lord, is this all,' he thought, and remained innocent.

P. MOHAN.

## NEWS AND VIEWS

By SURJIT RANDHAVA

About a fortnight before the Winter Vacations started, it was a common sight to see some of the boys going around settling accounts and making sure they had enough money for the fare home. Came D minus ten days and the rush to the station began. About fifty freshers (still quite green) went to the extent of sleeping a night at the booking office. (Refer to P. C. Gupta's cartoon at the recent exhibition). They got their tickets all right but after having been stepped on by anxious passengers, stray dogs and the like, they swore never to try it again. Anyway, it was Jaideep's bright idea in the first place.

A number of us took the De Luxe northwards. The train journey itself was without much incident except that somewhere before Agra the valve mechanism of one of the cylinders broke down. Immediately about thirty engineers trooped down to the trouble spot and began handing advice left and right. Everything from using a different fuel to changing the locomotive was suggested and it was only by a master feat of self-control that the loco crew did not sit down by the side of the tracks and burst into tears. Sid kept his eyes busy throughout the journey and towards the end he even came up and offered us oranges. Kapur 'The Father of the Film Club' caused a bit of mild embarrassment when he loudly mistook the Ticket Collector for a dining car waiter. Morale was definitely high.

The Capital this winter was simply fabulous. The weather was crisp and everything was just about right. Food was more delicious, the students less studious, the music jazzier, and the girls prettier than ever. As a wise owl once hooted, 'Delhi is a disease: It simply gets you.'

Most of the Staff members seem to have moved into the Campus. The obvious result is that colourful language amongst the students is rapidly on the decline.

Jaggi says that everytime he walks down Banyan Avenue past the Electrical Sciences Block he feels like stretching out his hand, grabbing hold of one end of the building and pulling it until it becomes parallel to the road.

The last week of January was hectic with sports and cultural activities. The order to suspend tests and all other subversive activities was well received and put to good use. Personally, I think it rather unfair to the Fourth Year to conduct tournaments on an Inter Class basis. A good number of their sportsmen have been weeded out over a period of three years and handed over to the present Third Year. It would have been better to have the competitions amongst the departments, in which cases the Mechanicals would have certainly swept the show.

The acceleration of the Courses seems to be the topic of discussion all round. Sen, for one has quickened his pace of walking. The final examinations are not too far off either. Faces seem to look larger and shaving is definitely occupying very little of the IITians time. After all, a lot of hard work has to be put in to carry on in the best IIT in the country.

People walking to the Civil Engineering Block a few days back rubbed their eyes in amazement as they saw a stream of water shooting out of the middle of the road, like on those famed Texan gushers. 'An Artesian', they thought. 'Now our water problem is definitely licked.' Sometime later to everybody's dismay it turned out to be only an underground water conduit ruptured by some over enthusiastic excavator's pick.

By a horrible quirk of fate I happened to be around last week when Sehgal Sahib (he thinks he is a culinary expert) decided to try his hand at making 'halwa'. It was all right except that it was black in colour, there was too much water, far too much fat, and the vile thing (normally solid) had to be consumed in mugs. We just about restrained him from trying out some of the other items he had in mind.

Idea of the Month.—How about a staff car

## LETTERS TO THE EDITOR

### LIBRARY HOURS

Sir,

I fail to understand the working hours of our library. It functions from 9-30 a.m. to 4-30 p.m. Classes finish at 4 p.m. When are we expected to use the library? Is it meant only for rushing in during the lunch hour, borrowing a book, and rushing out to attend the next class? At present, the only time we get to study the bookshelves and look through the periodicals is on Saturday afternoons. Now that staff quarters are ready, it would be very much appreciated if the library working hours were extended to 7-30 p.m.

Yours etc.,  
R. A. VASWANI.

### CURVES AND STRONG FEELING

Sir,

It is amazing that the perfidious hush-hush attitude towards sex reminiscent of an effete Victorian restraint still persists amongst us. At a time when some frank and enlightening views on the aesthetic views of life in a technologically strewn atmosphere are most enlivening, it is a pity that the frustrated critic should choose to his false notions of morality. From the general tenor of his views it is obvious that he criticises just for criticism's sake and his views, in brief, are merely snob-stuff. The author has so vividly delineated the importance of aesthetic beauty in everyday life with a logic harmoniously blended with sound facts of normal human behaviour. 'You cannot stand pat upon the pats. Society, like each person in it, is a growing, living thing, and it must have fresh food and new clothes. So to pretend that men in the twentieth century can live under laws made in the eighteenth, or that children can be brought up like their grandparents, is to act as if society, instead of being alive as an oak, were dead as a rock'—Walter Lippmann.

Yours truly,  
V. RANGANATHAN.

### BACHELOR'S PITY

Sir,

If a thought is given to the discrimination made between the bachelor and the married staff members of this Institute, it would be interesting to note that the Chief Minister of Madras, Sri Kamaraja Nadar and the late Chief Minister of West Bengal, Dr. B. C. Roy would not have received any accommodation in the Campus except on chumery basis, if they would have been a member of the staff of this Institute. There are a number of great sons of India who have never married and have dedicated their lives to the cause of independence and development of this country. They should be thankful that no such rules are followed where they are working or have spent their lives.

Yours,  
A FORMER BACHELOR.

Get ye a Woman, sire! Ed.

An litanains 3 Worries

No Parking

Will the authorities ensure that the driveway in front of the present administrative office is kept free of parked cars? Certainly, there is enough parking space nearby for any number of cars, without the necessity of encroaching and causing obstruction on the driveway. It is strange that the *No Parking* signs painted in large letters in front of the building should go unnoticed. Perhaps it is rather conveniently ignored.

A possible explanation for cars being parked in front of C. E. Building may be that this is the only space shady throughout the day and free from bird's dropping, falling branches etc.—Ed.

race of forty laps around Delhi and Bonn Avenue. I'd place my bet on one of the three infuriated sewing machines bearing the name Volkswagen and flitting around in the campus.

### No Conferences, Please

While conferences are no doubt, the order of the day, would it not be better if (unofficial) office-table conferences, by the staff in general and the ladies in particular, are held only during the lunch recess?

### I.I.T. Standard Time, Please

Similar to the Indian Standard Time, the Greenwich Mean Time, etc., why not we have an I.I.T. Standard Time? This should eliminate the different timings observed by the various sections and departments now. If necessary, a clock tower may be installed in front of the present administrative office, to ensure the prompt coming in (and also, of course, the going out) of the staff and students alike.

'AN ITALIAN'

### ANTI-GARDEN

Dear Editor,

The present 'National Emergency' caused by the Chinese aggression has had occasion to lead the Government of India to issue instructions to observe the utmost economy in expenditure. One is surprised to see the so-called horticultural operations going on in full swing in certain parts of the Campus. Can't these operations be deferred till the 'Emergency' ceases?

Yours,  
'ECONOMIST'

### POWERTY

Sir,

While inaugurating the Rihand Dam in Uttar Pradesh, the Prime Minister said 'Power is the only cure for poverty'. Judged by this saying, one feels that our Institute must be quite rich! It is a familiar happening to see the Street Lights (in the residential colony) switched on even before the twilight hour. Many a time it has been noticed that the lights were on even as early as 4-30 p.m. If not for conserving the Institute fund, at least for the sake of austerity induced by the National Emergency, will the authorities kindly see to it that street lights are switched on to serve the real purpose of driving away the darkness?

Yours etc,  
ONE INTERESTED.

### NO EXAMS, PLEASE!

Sir,

We are undergoing a period of emergency in view of the Chinese invasion on the Indian soil. Anything and everything at our disposal is given to the nation to strengthen its war effort and mobilise its defence potential. There is spontaneous enthusiasm all round to help the Government to push back the Chinese. 'Hear no rumours, Spread no rumours', 'Ornaments for Armaments', 'Save for the brave'—these are some of the slogans we frequently see in the dailies. Working hours in offices have been enhanced by half an hour. A farmer in Andhra gives his only saving of Rupees five and naye paise twenty-two to its Chief Minister and his gesture gets wide publicity. The I.I.T. hands over a 'big' cheque to Shri Kamaraj, our popular Chief Minister. The medley of disgruntled groups become one, each political party suspends its demands, sets aside its political ideologies and principles and helps the country in strengthening the jawans' braving against the recalcitrant Chinese.

Of the many things done in the name of emergency is the instructions of the Director of Public Instruction of our State to all the schools not to detain any pupil in the selection examinations in the S.S.L.C. class, or the tenth standard. His argument is that the

minimum educational qualification for the Defence Services is only appearance at the S.S.L.C. examination and, therefore, it would be wasteful of human material so badly needed at this critical time, if pupils of the tenth standard are detained. This, I am sure, would be welcomed by many. When the Selection Examination is abolished, why not the Final Examination, too. I hear some enthusiastic students (obviously dull) say: 'True, it can be abolished as well.' Examinations have nowadays become a gamble; it is quite likely that a dull-headed pupil comes out of the examination with flying colours, while the studious and the industrious get plucked.

Why not the I.I.T., too, dispense with the various examinations—terminal, half-yearly, final and so on? Students who have completed the course by attending the lectures may be issued with certificates of merit. At the present emergency, more and more technical personnel is needed than ever before, and the Chinese cannot wait on the boundary for us to complete the course by passing the examinations! Such abolition of examinations! at all institutions, including the I.I.T., will save much of students' health, energy, time (in some cases lives!), tons of stationery (vide 'Save for the brave') and bottles of ink consumed, the examiners' heavy fees (which we cannot afford at the present emergency) and above all and most important of them all, the headache to the examiners to go through all the answer papers. The amount so saved could be credited to the National Defence Fund, and I will take the personal responsibility of handing over the amount so saved to our Honourable Prime Minister, Pandit Nehru, at Delhi.

Any objections to this suggestion please?

Yours etc.,  
'INTERESTED'

## REPUBLIC DAY

At Survey Camp Site at  
Thiruneermalai



It was in a perfectly quiet and solemn manner that we celebrated the Republic Day at the site of the Survey Camp at Thiruneermalai near Pallavaram on 26th January. The National Flag was hoisted by Sri R. Radhakrishnan and the entire ceremony was gone through with a quiet fervour by the students and staff. After the Singing of the National Anthem, sweets were distributed and then the function came to a close.

### Gobbledegook—(Continued)

V. Certain nouns and verbs take the preposition at the end of a sentence and this is more often ignored by the I.I.T. Mr. Fowler, who maintains the legitimacy of the prepositional ending in literary English, observes in his *Modern English Usage* that 'the remarkable freedom enjoyed by English in putting its prepositions late and omitting its relatives is an important element in the flexibility of the language'. The following are some of the examples with a prepositional ending:

1. His request cannot be acceded *to*.
2. The leave may be availed *of* by him.
3. This is provided *for* in the Statute.
4. The matter will be decided *upon*.
5. Your request cannot be complied *with*.
6. He is known the world *over*.
7. This, I insist *on*.
8. There are good rules to live *by*.
9. I dislike being talked *about*.
10. Such a result cannot be wondered *at*.

When an incumbent says that he rejoins duty after *availing* leave, we just sympathize with his poor knowledge of grammar in having omitted a necessary preposition 'of'.

VI. Memoranda should always be in third person, and never in the second. Instructions in a copy of a letter communicated to any third party should also be in the third person. Example: A letter addressed to XYZ and copy endorsed to the Estate Officer. The latter should be addressed in the third person thus: 'He is requested to hand over keys of house number Q to ABC.' If you begin 'You are requested to . . . etc.', you have erred.

VII. *a.m.* and *p.m.*, meaning *ante meridiem* and *post meridiem*, should *always* be in small letters and never as 'A. M.' 'P. M.' A. M. in capitals means Air Ministry or Albert Medal; P. M. means Post Master, Prime Minister or Provost Marshal. (*Vide Oxford English Dictionary*). Stenographer and typists of the I.I.T. will kindly note this.

VIII. 'the 20-12-1962':—this is another absurdity committed by typists and stenographers here. This is nothing but lack of understanding of what has been written or typed. Either it should be 'the 20th of December 1962', or '20-12-1962'. 'The 20-12-1962' is ridiculous. *The Guide for Drafting Indian Standard*, however, states that the month *shall not* be indicated by numerals, but shall be spelt *in full* or abbreviated by their first three alphabets only. (*infra*).

IX. 'Kind Signature': This is another term at which I am surprised. I do not know whether there is also a signature which is *unkind* or *cruel*. This adjective can sensibly be eschewed.

X. 'With reference to', 'reference cited above', 'the undersigned is directed to', 'I am directed to', and 'kind attention is invited to'—these are some of the pompous and hackneyed expressions used in government correspondence, and, any letter, you may lay your hands on, will have these phrases. If you use any new expression or phrase, of course, without altering its meaning, it is looked upon with disfavour and the clerk concerned is termed not-a-good drafter or a bad correspondent. Why the phrase 'with reference to' be not substituted by 'in response to', 'inadvertence to', 'anent to' or 'adverting to' nobody knows. They just say that you should not employ such expressions. *The Guide for Drafting Indian Standard* does not throw any light regarding this. It may be of interest to note here that an enthusiastic reader, probably averse to this type of bureaucratism, has suggested in a magazine, that the clerk who writes 'the undersigned is directed' ought to have his increments withheld, until such time he gives an undertaking on oath never to do it again; that he who employs the expression 'the matter is under active consideration' needs warning that it is time he pulled himself up; and that the writer who drafts 'it is regretted' should be dealt with in such a way that he regrets his pessimistic outlook.

(Continued on page 13)



Dr. Shrimali—(Continued from page 1)

Institutes of Technology? I must say that there are a number of students in the I.I.T's who will match—if not outmatch—any student in any foreign university. Of course, the Indian Institutes of Technology contain the cream of Indian student society. But even in other colleges the standard of education is not low. I must say, however, that the number of failures is large.'

Ananthu suggested that this may be due to the system of examination.

'Whatever that may be,' Dr. Shrimali answered, 'the standard of our III Class students has to be raised. Their standard is lower than those of foreign students, and we should try to bring it up. We must reduce the number of failures as far as possible'. He looked upon passing and failing from an interesting viewpoint. 'Failures are a waste of man-power,' he said.

He wholeheartedly agreed with B. R. Pai's suggestion that only selected students should be admitted to the universities for higher education. Pai pointed out that a student who has passed School Final or Pre-University, is never satisfied with his studies. He always wants to go in for higher and higher degrees, as too much value is attached to these higher degrees.

#### Alternative Opportunities

Dr. Shrimali said that this was due to the lack of alternative opportunities. At present, there were very few lines to which a student after passing out from his or her school could go. It was essential that students must be shown ways other than pursuance of studies in universities in order to make a living. The number of alternative prospects depended upon the economic condition of the country. As India advances economically, more of such opportunities would be produced.

Dr. Shrimali said he favoured students of B. Tech. going in for practical training after getting their degrees rather than studying for M. Tech. or any other form of higher studies.

He was reluctant to answer Vikram Rao's queries as to whether he favoured shortening of the five-year degree course in engineering. 'The Ministry of Scientific Research and Cultural Affairs is considering that question. Please ask my colleague, Prof. Humayun Kabir, about it,' he said.

But when Vikram pressed for his personal view on the question, he said he did not want the present standard of engineering education to be lowered. 'Whatever we do—whether we shorten the duration of the course or not—we cannot afford to let the standard go down,' he said.

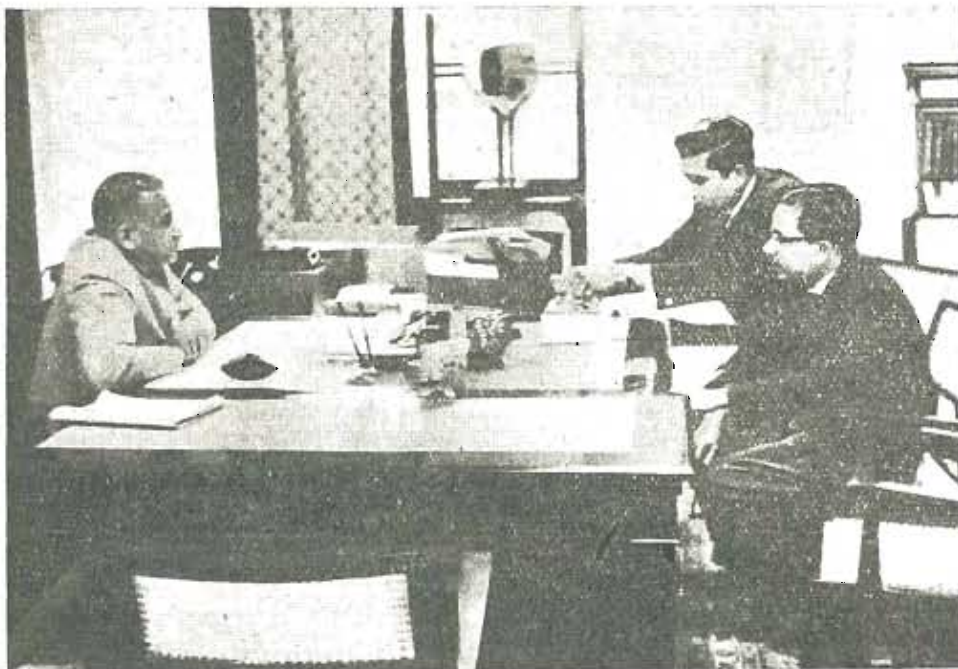
He agreed with Ananthu that there was a tendency among students as well as elders to place more and more trust in foreign studies and foreign equipment. He said this was a sad state of affairs. It was not good that employers were having a very high esteem for a candidate only on account of his having foreign qualifications. He called upon students to work industriously until the day when Indian students, Indian goods and Indian machinery would be regarded with as much, if not more, respect as foreign ones.

On this optimistic note the interview ended. Pai thanked the Minister for the kind way in which he had answered their many questions, after which Dr. Shrimali walked back into his hungalow.

T. S. ANANTHU  
M. VIKRAM RAO  
B. RAMCHANDRA PAI

Dr. Deshmukh—(Continued from page 1)

Mudaliar called a meeting of the students and staff of the Madras University quite early after the emergency. He has indicated many ways in which the students can help. In the beginning, it was for collections to contribute to the National Defence Fund, but later the



channel became more regularised and it is not everyone who can help us except that everyone can give to an accredited authority. Next suggestion was that the N.C.C. should be made compulsory, and I believe most universities are taking steps in that direction. It is made compulsory not by direct law but by providing in the regulation for it in the ordinance that 75 per cent attendance at parade will be necessary for those who are eligible for N.C.C., and those who are not admitted in the N.C.C. because they are not medically fit, would have to attend some percentage of something else like P.T. which I also think the colleges and universities will organise, and so far as the girls are concerned, may be, it will not be P.T. but home medical classes and first-aid classes or many other classes undertaken with a view to assist. Students should also ensure that there is a closer integration among student bodies whether it exists in the South or North, but in many student bodies you have friction sometimes and differences leading to split in the unions. There are universities where there is more than one defence effort body. Now, that does not seem right somehow, somebody is in error, and it seems to me that it should be realised by the student world that they should bring greater integration among their ranks. Then there is a possibility, I think, of their being used for civil defence organisations. In Delhi there is an idea that you ought to help the police in controlling traffic. The suggestion has been put forward that students should volunteer to learn to control traffic so that they may have a sense of doing something and relieving Government organisations. Above all, I suppose this emergency which is expected to be of a very long duration, has put the nation on its mettle. Now, that means that as years pass by, those who are students today will be citizens tomorrow occupying various rolls in the life

of the country. Now, if they happen to have wasted their time at the university or not fully utilised it, then they will be less effective members of the society supposed to be organised on this sort of permanent war effort. That means that the motivation of students must be different towards their studies. It is no longer a case of getting a label that you pass a certain examination and, therefore, you are eligible for some sort of job. There should be a joint effort to ensure that whatever the job you secure you are competent to do efficiently and diligently. That imparts a great deal more of discipline and understanding of the aims and objects of education. If the students learn their lessons well, then, I think, they will be making lasting contribution to the defence effort than some of those things which in the nature of things will be transient.'

#### Accelerating Courses

In reply to Vikram Rao's query as to whether under the present circumstances it would be advisable to shorten our courses, Dr. Deshmukh replied that as regards medicine, the actual service put in for defence organisations would be regarded as a year spent as an intern or house surgeon. As regards technological studies, it is the brevity of time interval that matters. 'But,' he added, 'this does not necessarily mean shortening the course. Although there may be some marginal or peripheral adjustment, essentially it means that all the apparatus of education, the workshops, the laboratories and even the teachers will be so utilised that larger number of students pass through this process, but essentially with the same time of cultivation that we contemplated in the beginning, because obviously it would not be in the interest of anyone to let loose on the country somebody who does not have the ability to discharge the function that will be entrusted



to him. That will be poor service to the country.'

#### Student Indiscipline

After that, T. S. Ananthu asked Dr. Deshmukh what steps students could take to eradicate indiscipline.

'You ought to be good,' he said. 'Some students will be inclined to do some mischief, but with most students against them, they will find it difficult.'

When Ananthu said that bad students generally predominated, Dr. Deshmukh disagreed and said, 'No, if you take 100 students, you will find 5 or 6 ring-leaders who lead some kind of unlawful movement'.

'Even if that be so,' said Ananthu, 'it is not possible to stop them, because good students are generally timid'.

The Vice-Chancellor vehemently disagreed with this statement. This led to a very interesting dialogue between the two, the Vice-Chancellor finally emerging clearly victorious. He ended up by saying: 'It is possible to stop bad students, if you have the courage, but you do not have the courage, because you say, "Well, supposing I am harassed at the bus stop, or somebody sits in Satyagraha outside my door!" In the name of either students' solidarity or merely because you are too timid, you haven't got the courage to say, "Get away, I am going to do what is right in the circumstances, and you are not going to deflect me by your threats and your harassments." Ultimately, if you analyse student trouble, it is always discovered that this was led by a few people who are finally given some punishment and they are suspended or they are expelled and the rest of the students remain where they are. They either apologise and they are forgiven or they have to put in additional work and so on. Now, I do not see why students who do not agree with these ring-leaders, cannot stand up against them.' Finally, he looked at Ananthu and added, 'If, as you say, most of the good students are timid, the future of the nation is doomed. What can timid students do for the future of the country?'

The Assistant Editor had no answer and preferred to proceed to the next question:

'Sir, whenever we go for a job and we say that we have a degree in England, we are considered superior to those who have degrees here. Do you think this is a healthy tendency?'

Dr. Deshmukh said that he was sorry such tendencies were creeping into society. He himself had studied abroad, but had not been affected by such wrong ideas.

'I belong to that body of students which 50 years ago or 45 years ago went for their education abroad,' he said. 'I passed my Intermediate and then went to Cambridge. I took my degree there. I do not hold any Indian degree. I took classes in National Science in Cambridge and also competed for the Indian Civil Service, but in those days you could not compete for it in this country. That was 1918, so I had no option in any case, but I am, on the other hand, also aware of many students who have gone abroad not being able to find a job here. It is for this purpose of accommodating them that the Ministry of Scientific Research and Cultural Affairs have started the system of pool office, that is to say, a pool of these students who have returned from abroad and who cannot be fitted into any kind of job which is suitable for them, to give them a little breathing time and also to ensure that in the meantime they are able to follow whatever speciality they have cultivated in the hope that in about two or three years' time they may find it possible to get fitted somewhere either in the academic line or in some other line.'

At the end of the half-hour interview, Editor Anand Singh Bawa thanked the Vice-Chancellor for the friendly and interesting talk he gave them in spite of his several important engagements.

#### The I.I.T. 'Lake'

Dr. Deshmukh said he was extremely glad to have met students from the I.I.T. Madras.

He said he had once been a member of the Board of Governors of this Institute and had visited the Institute once. 'You have a very beautiful Campus with a very impressive lake behind your hostel', he remarked.

'During which season did you go there?' asked Vikram Rao.

'In October. Why?'

'It was a lake then. It is no longer a lake now,' quipped our Assistant Editor.

All four burst into laughter, and they parted on this humorous note.

#### Gobbledegook—(Continued)

XI. 'Thanking you', 'With regards', 'With best wishes'—these are the frequent phrases used at the end of some of the letters. Many may be surprised to note that these are not sentences *by themselves* and as such incomplete and grammatically incorrect too. The word 'I remain', 'We remain', 'I am' or 'We are' are too invariably, to, follow these words (after a comma) before the subscription. Thus, it is correct to say 'Thanking you, I remain, Yours faithfully, etc.', and incorrect to say, 'Thanking you, Yours faithfully, etc.'

XII. Certain sentences are so constructed that they are incomprehensible, leave alone their grammatical inaccuracy. As a specimen, I quote below a sentence from an important circular letter: 'Although, being equally hosts, formal invitations may not be most appropriate, I would like to extend an invitation to all. . . .'

XIII. I am reproducing below, for general information and future compliance by all those interested in good correspondence, relevant extracts from *The Guide for Drafting Indian Standard* (published by the ISI, Delhi):

- i. *And/or*: The use of the expression 'and/or' is not recommended. It should be used with great care to avoid ambiguity.

#### Example:

Not recommended: Indian and/or Egyptian cotton may be used.

Recommended: Indian cotton, or Egyptian cotton or a mixture of the two may be used.

2. 'All right', 'along with', 'up to', 'up till'—these are separate words and *shall not be used as one word*.

('Inasmuch' is one word and shall not be separated).

3. 'Percent', 'Subcommitted'—these words are to be used as *single words*.

4. Incorrect expressions: Certain expressions are incorrect or redundant or inelegant for use in standards and should be replaced by correct forms.

#### Examples:

Incorrect	Correct
above-mentioned clauses	clauses mentioned above
adequate enough	adequate, or enough
mentioned earlier	mentioned earlier
annexed hereto	annexed
appended hereto	appended
enclosed herewith	enclosed
equipments	equipment
if supposing	if, or supposing
large number of measurements	large number of measurements
are required	is required
machineries	machinery
oftentimes	often
personnels	personnel
sufficient enough	sufficient, or enough
tin-plates	tin plate
two times	twice

Note.—Use of the following expressions, though grammatically not incorrect, *should be avoided* in standards as far as possible:

as per: acknowledge herewith; acknowledge the receipt of; as and when; for the reason that; if and only if; if and when, most recent.

5. Dates: Dates shall be given in the order: day, month, year. Commas, 'st', 'nd', 'rd', or 'th' *shall not* be used.

The month shall not be indicated by numerals, but shall be spelt in full or abbreviated as indicated below:

Jan.	Apr.	July	Oct.
Feb.	May	Aug.	Nov.
Mar.	June	Sep.	Dec.

(Continued on page 17)

CHRISHNA VEEVA!....



The Director has remarked that he has **TAKEN** the scum and not the cream of Indian Students' Society



# WHAT IS GRAVITY?

By HERMANN BONDI, F.R.S.

*Mr. Bondi is Professor of Applied Mathematics at King's College, London University, and the author of 'Cosmology' and 'The Universe at Large'.*

There is no force with which we are quite so familiar in our daily lives as gravity. From early youth we know that when we fall we hurt ourselves. We know that this is the force that keeps us on the ground, that our legs must resist at every moment. Nevertheless, science finds it rather difficult to digest gravity, and our best modern theory of gravitation, Einstein's theory, is a complete and beautiful theory that yet does not quite fit in with the rest of physics.

The investigation of gravity in a scientific manner started with Galileo, and he found the first of the great peculiarities of gravity. He discovered that all bodies fall equally fast. It is clear that this is only true when no other forces act. If, for example, air resistance is allowed to act at the same time as gravity, and acts differently on two bodies, then they will not fall at the same speed—like a feather and a steel ball. On the other hand, if no other force is acting, as in empty space, then we know now with great accuracy that Galileo was right, and that all bodies fall equally fast. This means that we cannot switch off gravity—it means that gravity hooks on to every body. This is different from all other fields. An electric field will pull a charged body but not one that is everywhere neutral. If it is highly charged, it will be pulled strongly. If it is weakly charged, it will be pulled lightly. If it is uncharged, it will not be pulled not at all. A magnet will pick up a piece of steel but will not have any attraction for glass.

## A Difficult Force to Investigate

This property of gravity is part of the reason why it is such a difficult force to investigate. When we do experiments in physics, we try to see what things are like when we switch on something and also when we switch it off to see what the consequences of the particular condition are. But gravity is always there. Therefore experiments on gravity are not easy, and the number that can be carried out effectively is rather limited.

A second peculiarity of gravity is that it is a force that always has the same sign. Gravity is always attractive: bodies always pull towards each other.

A third and rather more difficult peculiarity to understand is that it is an exceptionally weak force. Perhaps this sounds rather odd when we conduct all our daily lives under the stress of gravity. But we must remember that the Earth which holds us down is a very big body. If we go into other realms of physics, then the physicist plays with small particles in his laboratory and examines the forces that act between them. Here, perhaps, one can see in the most dramatic fashion how weak gravity is. Two of the most important constituents of matter—the proton and the electron—are both charged, and both have mass, so that we expect them to interact both electrically and gravitationally. The electrical force between them varies like the inverse square of their distance, just like the gravitational force. Of course, we cannot measure the gravitational force between them—it is far too weak. But we can compute it, and when we compare the electrical force with the gravitational one, the ratio turns out to be a monstrous number—one that has to be written with forty digits. The electrical force is vastly greater than the gravitational one. How then does it come about that gravity is so important for us, whereas electrical forces apparently are not so significant? The point here is that electrical forces tend to neutralize each other. If we think again of the Earth, all the protons in it, or virtually all of them, are shielded by electrons, and so the electrical force of the Earth on us is very weak. But, in gravity, no such shielding is possible. The gravitational pull of every particle is added to

the gravitational pull of every other particle, and so we get the impressive total that is the force of gravity.

There is yet another peculiarity of gravity closely connected, one would think, with this property of weakness, which we do not understand at all clearly. Indeed, it seems surprising that there should be such an enormous ratio between any two quantities in physics as there is between electrical and gravitational forces. But let us imagine that gravity were stronger and electric interactions weaker. It is electrical interactions that make up the strength of materials, that give solid bodies their rigidity and fluids their compressibility, and all these things that we call the structure of matter. Now consider the surface of the Earth. This is itself heavy and pulled towards the centre, and only does not fall because the underlying material is so strong and resists this tendency of the surface to fall in. But if we suppose that gravity were strong, then this outside of the Earth could come in and we could indeed imagine engineers attaching apparatus to it, allowing it to come in towards the centre and gaining energy from this.

## Energy from Contraction

By so gaining energy, by giving in to gravity as it were, gravity itself would be increased. The force on the surface in the new condition would be greater than in the old one. This is the opposite of what happens with any other force. If we stretch a string and we allow the ends to be pulled together, then this pulling together, this giving in to the force, will diminish the force itself. And similarly with all other forces: only in gravity do we actually increase it by giving in to it. Our engineers on this hypothetical Earth, then, when they were next short of energy or power, could allow the Earth to contract a little further, and after that contraction they would be in a more favourable position than before to extract more energy. They need not take the Earth—they could take an orange and allow that to contract to a minute size, and allow it to go on contracting and gain more and more energy from it. The only reason why this is impossible is because gravity is so weak. If this were not impossible, then there would be little point in physics in talking about energy, because every system, every body, could gain as much energy as it liked by allowing itself to contract a little under gravity.

Indeed, we can compare energy in physics as a measure of exchange value between heat and electrical energy and all the others with money in an economy, which is also a measure of exchange value. If gravity were much stronger and we could gain energy by allowing bodies to contract, there would be as little point in thinking about energy in physics as there would be in thinking about money in an economy in which everybody had a private money-printing press.

## Einstein and Newton

I hope to have pointed out enough about the peculiarities of gravity to make it clear that we should expect any decent theory of gravity to be one that is different from all other theories in physics. This is indeed the case with the theory of gravity we now have—Einstein's theory of gravitation—which for historical reasons is usually called the General Theory of Relativity, although this is not a particularly good name. This theory grew out of the first comprehensive theory of gravitation we had, which was Newton's theory. Newton's theory of gravity was so good at describing the motion of bodies under gravity that astronomers could use it to calculate the motion of all the celestial bodies, the planets and their satellites, with enormous accuracy and to predict eclipses to the second. It was an extraordinarily good

theory in the sense that it predicted innumerable facts with great accuracy.

Why, then, have we left this theory? There are fundamentally two reasons. First, on rather general grounds, in Newtonian theory gravity is very much a force like all the others, and so the theory fails to account for the peculiar nature of gravity. Secondly, Newtonian theory did not deal with light. This was beyond the physics of his day, and it is only in more recent times that we have learned to describe well the motion of light. The theory that describes this clearly and briefly is the Special Theory of Relativity, also due to Einstein. It so happens that Newton's theory of gravitation is in fact incompatible with the Special Theory of Relativity, which we know from countless experiments to describe the motion of light and of fast particles with great accuracy. Therefore we require a new theory of gravitation and Einstein's attack on the problem was made for these reasons.

Newtonian theory of dynamics starts off with Newton's first law, which says that if no force acts on a body, it moves in a straight line with constant velocity. We can look at this as saying that this motion in a straight line with constant speed is the standard motion of matter. If matter moves in this way, then no special explanation is required. It is only when matter moves in a different way, when matter is accelerated, that we have to look for a force that causes this acceleration. What Newton told us, in effect, and where he differed so greatly from his predecessors, is that if a body moves in a straight line with constant speed, then it is a waste of time to look for a force responsible for this motion. We serve a purpose only in looking for a force when there is acceleration.

## An Unverifiable Law

How would a physicist go about verifying this important law of Newton's? Suppose he had a test body, then he would go round this test body and make sure that no rope was pulling it; next he would make sure that there was no electric charge on it so that it could not be pulled by an electric field. He would try to make sure that it was not magnetized so that magnetic fields could not pull it. In this way, with sufficient care, he could exclude every field of force pulling the body, every field other than gravity. There is no way in which he could exclude gravity, since all bodies fall equally, since there is no shielding against gravity. We have therefore to deduce regretfully that Newton's first law describes an unattainable state. It is an unverifiable law. So one is led to think whether one should not perhaps try to formulate things a little differently. Since gravity is the one force that cannot be switched off, should we not perhaps look at the motion of matter under both gravity and inertia, the freely falling motion of matter, as its standard motion, and look for a force only when a body deviates from this standard motion? Geometrically the standard motion would be much harder to describe than Newton's standard motion of straight line motion with constant speed. On the other hand, in this way we would set gravity apart from all other forces in accordance with its peculiarities, and we would be able to describe it in a logically far more satisfactory way.

Let us now go back to Galileo's law that all bodies fall equally fast. What does this mean? It means when I am falling freely and I hold a book in my hand and let go of this book, it will fall with me because the book and I will fall at the same speed, and so the book will not move relative to me. When I am falling freely, there does not seem to be any gravity. We know this well nowadays from artificial satellites. The astronauts in artificial satellites experience weightlessness. This merely means that since the satellite and the astronaut in it and all the equipment there are falling freely, giving in to gravity without resistance, therefore there is no differential motion—all move together. Hence inside the spaceship a book released will stay where it was put. We can then say that as soon as we are falling freely we have abolished gravity, and we can demand of any theory of gravitation that when gravity



has been abolished in this way by moving with it, then all the things we know in physics ordinarily, in particular the laws of the propagation of light and fast particles described in special relativity, should apply.

However, if we search a little further, then this abolition of gravity is rather a local affair only. Suppose we fell down in a box, down a lift shaft, locally we would not notice gravity, but if we looked out a long way and saw across to a different place where gravity was in a different direction—say, shall we say, a meteor coming down—then we would not have abolished gravity there, because the pull of the force out there is in a different direction from what it is here. In other words, we cannot abolish the inhomogeneity of the gravitational field.

#### When Gravity Seems Absent

We can think about this in a slightly different way. Let us imagine that we have a shaft going vertically downwards right through the centre of the Earth, and suppose we have a big lift—a big box that starts from here at rest, and then falls down freely faster and faster to the centre of the Earth. If we imagine ourselves in this box, then during the fall we shall be weightless, and gravity in the first instance will appear to have been abolished. However, imagine two particles initially at rest on opposite sides of this box—they are both falling freely, that is to say they are both falling towards the centre of the Earth; and so these two particles originally at rest will, in fact, collide when we pass through the centre of the Earth. In other words, the fact that the direction of gravity is not quite the same on opposite walls of the lift gives us a residual quality of gravity that cannot be abolished; a relative acceleration of neighbouring particles.

Einstein then used this relative acceleration of neighbouring particles combined with the local validity of special relativity to create his theory of gravitation. In this way the theory describes the reaction of bodies to the gravitational field, but it has to be supplemented by another condition, namely a condition that shows how the gravitational field is produced. How do massive bodies create gravitational fields? Here again, led on by Newtonian theory, one can show that these expressions that describe the relative acceleration of neighbouring particles can readily be combined to give an expression that one can put equal to the source of the field. Moreover, when this is done—and this is one of the great beauties of the theory—it expresses in itself automatically one of the great laws of physics: the laws of conservation of mass, energy, and momentum.

#### Different from All Other Forces

Thus Einstein created a new theory of gravitation, a theory that is satisfactory far beyond anything that Newton did because it fits in with special relativity and because it explains several of the peculiarities that I mentioned earlier. Naturally, all bodies fall equally fast in this theory because it is based on the abolishability of gravity. Again, it puts the energy of gravity into a different compartment from the energy of other forces. It makes gravity a force different from all the others. On the other hand, there is little in the theory to indicate why gravity is always attractive.

In physics a theory must not only be satisfying and self-consistent—it also has to fit the facts. What demands can we make here on Einstein's theory? The enormous success of Newton's theory in accounting for motions within the solar system makes it clear that any other theory of gravitation must lead to substantially the same results as Newton's theory if it is to agree with observation at all, and indeed Einstein's theory does. But it goes beyond Newton's theory, in particular, in that it includes the motion of light. It can tell us, as Newton's theory cannot, how light is affected by gravitational fields. It also gives, for the motion of the planets, slightly different answers from Newton's theory; and some of the most important tests of the theory are concerned precisely with a check of these forecasts of the theory.

What we now need urgently is some form of junction between this theory of gravitation,

the best theory of gravitation that we have, and the rest of physics. A great deal of work is going on in this field, but unfortunately the answer seems to be elusive. It is a doubly difficult subject—difficult because gravity is a peculiar force and rightly described in a special way, and because its mathematical expression is so exceedingly complex; but we hope to gain much more insight once this gap between the theory of gravitation and the rest of physics has been closed.

—Third Programme.

(Reprinted from THE LISTENER,  
November 29, 1962).

### Merry, not Worry

If 'miss is as good as a mile',  
That's no reason for me to worry,  
Since mile is no longer than Nile,  
I will make my rhymes to be merry.

If 'haste does make indeed a waste',  
That's no reason for me to worry,  
Since waste all I make before I taste,  
I will make my rhymes to be merry.

If 'sweet are the uses of adversity',  
That's no reason for me to worry,  
Since sweeter are those of laxity,  
I will make my rhymes to be merry.

If I should 'look before I leap',  
That's no reason for me to worry,  
Since I shan't, for a leap, be first to peep,  
I will make my rhymes to be merry.

E. S. BHAGIRATHA RAO.

#### On Courage—(Continued from page 5)

not wrecking the peace of a happy home by his foolish attitude?

People who stick to their concepts of religion and politics without caring for the untold misery that they cause around themselves have no sense of courage. They behold with their eyes innocent people being sacrificed at the altar of poverty, yet they persist in their thoughts. It is not courage but mere stupidity. Ultimately, it may prove to be a thorn in the way to happiness of the world.

True courage lies in the suppression of the ego. It is like a lighthouse on the slippery rocks of Time standing unbalked in the ocean of circumstance with waves lashing in all their fury—yet this noble beacon sends its penetrating radiance to unselfish people—whatever clime he may be in.

One of the shining examples of courage is that of Jesus. It's courage to pardon One's enemies. He is true and sincere; He is kind and merciful; He loves Truth and lives in it. Yet: When He is crucified on Calvary, He has the courage to utter 'Forgive them: For they know not what they do!'. It is the courage of the highest order. It is Man at his best. It is courage that unveils for us the stars of God.

To do our duty unflinchingly in the midst of fear is courage. To be noble in our duty will be our humble service to the nation at the present state.

GUESS WHAT?

R. P. LOOMBA

# TRUE CREASE

YOU STEP OUT

- to visit friends
- to meetings

OR STEP IN

- to your office
- to your Boss' Chambers

YOU WILL LOOK SMART DRESSED WITH



**STATIENE**  
POLYESTER 55% 45% WOOL

READY MADE TROUSERS \*  
which keep TAILOR-TRUE crease at all times.

- Keep Shape plus Fresh Look
- Look Smarter plus Extra Wear
- Wrinkle Resistant plus Tailor-True Crease
- Washable at Home plus Shrink and Moth Proof

\* A creation of **STATE TRADERS**  
Khaleel Buildings,  
Chickpet, Bangalore-2.

## PERSONALITIES (7)



MR. R. NATARAJAN, I.A.S.

'R. Natarajan, I. A. S.' says the legend on the board. You enter for your interview not without trepidation and find that instead of a stuffy, stiff-necked executive, you are confronted with a genial and smiling countenance. His memory for faces and names is fantastic. He surprised us, in a recent talk, by mentioning that G-1 wrote frequently for *Campastimes*. That Siddhartha was thus called in the 1 Year, and not very often at that, even we took a moment to recollect.

Regarding *Campastimes* he says that he heartily approves of it and he feels that humour should always be the watchword. One of the items most looked forward to on the Annual Day is the Registrar's speech. To any visitor the title 'Forever Amber' would look innocent enough and quite a serious topic. Any such morbid conjectures are rapidly dispelled by the hilarious words that follow, regaling the audience with mirth and incidentally and unavoidably adding to the discomfiture of a few staff members who bravely smile through it.

The Registrar has had a brilliant academic career. His university education was confined

in Madras to the Loyola, Presidency and Law Colleges in the order given. He passed out with a string of medals to his credit and was first among the Arts students in the I.A.S. examination.

Everyone here is quite conversant with his passion for cricket. He enthusiastically takes part in the Annual Staff vs. Students Match, and his able captaincy this year on January 29 all but won the match for the staff. The match ended in a time draw. He also writes articles on cricket. He captains the I.A.S. IX in the Annual Match against the I.P.S. IX. But it will come as a surprise to quite a few that he was a force to reckon with in Table Tennis in his college days. He won many local tournaments, but obeying the old adage that 'discretion is the better part of valour', he prudently kept—out of state and national tournaments.

In a recent talk with him I asked him why the main roads inside the Campus were named as Delhi, Bonn and Madras Avenues. His rejoinder spoke volumes. He said: 'I.I.T. Madras is a Tale of Three Cities'.

M.V.R.

## Over A Cup of Aye Aye Tea

Lately, the atmosphere of our Campus has changed enormously. The forest hitherto inhabited by deer and monkeys—not to mention other species of the animal world—has now new occupants: the Staff who have moved into their brand-new quarters, which are in a class by themselves.

The staircase, for example, seems to have been designed for the dear old Pygmies of Africa, for any person of normal height would surely have to stoop in order to avoid being brained by the ceiling. And I suppose we should attribute it to shortage of wood that the fuses are open and at a height of about two feet from the ground. Reliable sources inform us that a certain Staff member's child was severely burnt by an electric shock due to the above eccentricity. However, we are glad

to learn that the shortage has meanwhile been overcome and the exposed fuses and meters are being covered by wooden boxes.

Someone, somewhere seems to have got the brilliant idea of advocating against the taking of a bath at night. To ensure this, no light connection was made in the bathroom of some particular type of quarters. Not being satisfied with this, the designer contrived to make the slope of the bathroom towards the bedroom. To top it all, the shower takes up an ideal position to flood the whole bathroom.

The W.C. has got more than its share of problems. The door is virtually unlockable and opens in such a way that, if accidentally opened, it would pitch the person inside, right into the commode.

Apart from flushes working for twenty-four

hours non-stop and others making up for this overzealousness by not working at all, there is the bathroom door which opening to the inside, has no lock or bolt outside. It is held close by a simple (what's the other word?) latch, or, rather isn't held close at all but opens with the slightest zephyr. Should someone have been under the impression that Professors never close their bathrooms?

And then there was the buzzer which didn't like to buzz. The first time it was worked, it angrily jumped off the wall.

And then there is the bolt, but no hole for it.

And then there is the high diving board with which some of the houses seem to have been equipped. No swimming pool was, however, visible. It now appears that those ledges are meant to be landings for the 'fire escape' which, in spite of the absence of rails, should prove to be of uncalculable use for thieves.

And then there were those monkeys who invaded a professor's residence through the ventilation holes above the staircase. Finding it impossible to use the same way out, they concentrated their forces in the ground-floor putting up a war front of hissing and bared teeth against the Professor's united forces entrenched at the top landing of the staircase. The only way out for these unworthy descendants of Sugriva they blocked, themselves: the front-door.

And then there is... was... oh, let's forget it!

Two new gates have been built opposite C.L.R.I. to give evidence of the existence of something inside of what looks like an uninhabited forest. What this something is, however, nobody is able to find out unless he is familiar with the Institute crest. Even the signboard bearing the inscription 'Indian Institute of Technology, Madras' which for sometime had been left to stand forlorn on the humble looking centre road (now blocked by a most ugly looking primitive variety of chevaux-de-fise) has been removed. The only signboards visible threaten that this is 'No Thoroughfare' (one gate permanently closed as it is, is no thoroughfare anyway, and the strip of 'road' visible through the other is anything but inviting), and that 'Trespassers Will Be Prosecuted'. Don't worry, nobody will trespass. They simply pass. Not through but by.

A very serious accident happened a short while ago. A Civil Engg. student was walking near the Science and Humanities Block when he lifted aside a wire to pass by, and found that he was clutching a live wire carrying 440 volts. He fainted, and two of his friends luckily managed to pull him off by his clothes. Due to the total absence of any equipment in our dispensary to meet such an emergency, the student was taken to Hospital in the Registrar's car still not yet having regained consciousness. He is now fully recovered, but this incident should serve to warn us against such acts of gross negligence.

It is learned from usually reliable sources that plans are taking shape to stage the Ramayana in a dramatic version specially prepared for the I.I.T. The great Sanskrit epic has been chosen particularly for the ideal conditions offered by our open-air theatre. The two scenes which usually create almost unsurmountable technical difficulties, have found an ingenious and almost natural solution there. These two scenes are the construction of the bridge to Lanka which will be staged in the inundated bowl of the theatre. As has also been learned, the I.I.T. monkeys are already getting registered as cast for King Sugriva's army. The second scene—Sita's vanishing in the furrow at the end of the epic—should also create no technical difficulties whatsoever: the theatre provides ample opportunity for Sita to vanish without leaving any trace.

*Campastimes* feels happy to inform its readers that the Complaint Box to be installed in front of the Director's office as was suggested some months ago, is in the process

of being designed. Tenders for the wood and lock have already been invited.

The construction of the cow-shed in the rear quadrangle of Kaveri Hostel has been at a standstill for the past few weeks because of a complaint filed by the Head of the Herd which enjoy the comfort of the front quadrangle through SPCA. The NBCC has no 'chanus' whatsoever.

Even New Zealand's 'Kangaroo Forest News' concludes each issue: 'Opinions expressed in this periodical are not necessarily condoned or even understood by the editorial staff.'

Compastimes News Service.

Contributions for Campastimes should be either typed or written as legibly as possible and should be sent to the office not later than the last day of each month.

Gobbledegook—(Continued)

Examples :

- Incorrect : (1) 2nd Sept., 1936  
(2) Jan. 4, 1948  
(3) 17 Aug. 1957
- Correct : (1) 2 Sep. 1936, or 2 September 1936  
(2) 4 Jan. 1948, or 4 January 1948  
(3) 17 Aug. 1957, or 17 August 1957
6. Negative expressions : In specification clauses, the use of phrases of the type 'shall be not more than' shall be preferred to 'shall not be more than'. The latter expression, however, may be considered more appropriate in cases where the limits of an undesirable characteristic are being specified.
7. Spelling : The *Oxford English Dictionary* shall serve as the authority for spelling.
8. Clarity : Abbreviations shall not be used where the meaning is likely to be obscured. In cases of doubt, words should be spelt out in full.

Note.—Abbreviations, 'i. c.' 'e. g.', 'viz.' shall not be used.

9. Singular and Plural : The same abbreviation shall be used both for singular and plural words.

Examples :

Incorrect : 10 cms, Nos. 15 to 30, 10 nos.  
Correct : 10 cm, No. 15 to 30, 10 numbers.

10. Conventional Signs : The use of conventional signs for abbreviations in the text is not recommended. Thus, 'percent' and not '%', 'sq' and not '□' shall be used in the text.

11. Letter spacing : The letter of such abbreviations as 'ISI' shall neither be spaced nor punctuated.

Example : Incorrect : I S O or I.S.O.  
Correct : ISO

(It is doubted whether 'IAS' can be spaced and punctuated).

12. Numerals of more than Three Digits : The use of punctuation marks like commas for breaking up numerals shall be avoided.

Example : Incorrect : 5,716,500  
Correct : 5716500

13. Comma :

General Principle : A comma is used as a mark of separation to make clear the grouping of words, phrases and clauses with respect to grammatical structure of the sentence.

Clause or phrase within a sentence : If a clause or phrase within a sentence is to be set apart from the rest of the sentence, one comma before the clause or phrase and one after it shall be used.

Example : Incorrect : 1. It is important that in order to satisfy the temperature condition, an automatic regulator may be provided.

2. The rule as has been stated separately, is tentative.

Correct :

1. It is important that, in order to satisfy the temperature condition, an automatic regulator may be provided.

2. The rule, as has been stated separately is tentative.

Lord Macaulay once declared that the finest compliment paid to his writing was by one who said that no sentence in the great *History of England* needed for its understanding a second reading. The I.I.T. correspondents will please note this, and see that their writings do not require a re-reading to know what they convey, to find out the *sententia* behind them. The contents of the correspondence should be crisp, lucid and clear; it should be, as somebody put it, like a lady's skirt, short enough to attract, but long enough to cover the subject matter.

I hope the officials at all levels will give the correspondence a better look with more grammatically correct sentences. The stenographers and typists should not be mere copyists, mechanically typing out whatever the officials write, but should be good correspondents, too, and type the drafts given them *mutatis mutandis*, of course, only when there need be. If the typists and the stenographers say 'It was so there in the draft', when an apparent error is pointed out, I am sorry to say, they are unfit to hold the posts they have been in.

The following are the winners of the Annual Photo Exhibition held on January 26, 1963 :

Life Study	First : 'Ocean of Time' by K. Mahesh. Second : 'Portrait of Grief' by J. M. Anand.
Landscape	First : 'Stony Splendour' by S. Nageshwar. Second : 'Departure' by S. Shrimali.
Miscellaneous	First : 'Shaping Hands' by K. Mahesh. Second : 'Study No. 1' by S. Shrimali.
Drawings	First : 'Engrossed' by V. L. Prasad. Second : 'Dr. S. Radhakrishnan' by C. V. Sahasranamen.
Paintings	First : 'Bhangra' by U. Ramakrishna Shettigar. Second : 'At the Front' by U. Ramakrishna Shettigar.
Cartoons	First : 'Favour-to-Dogs' by Pradeep Gupta. Second : 'Unveiling Ceremony' by Pradeep Gupta.

With Compliments

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Victoria House, Victoria Road,

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**The Border-Conflict—(Continued)**

the ministers to take into consideration the state of emergency and refrain themselves from exploiting the situation. For the most part, the words of 'advice' fell on deaf ears. Speculation began to lift its head in certain quarters and looked around for easy money in terms of huge contracts. Politicians of certain variety never lost an opportunity to run down the government and its internal and external policies. During those days, the policy of Non-alignment came in for a good deal of criticism by interested and disinterested politicians alike. For one reason or another, Prohibition became a target in certain quarters as it was an ideal in others. Those who advocated its retention or abolition pointed, strangely enough, to the same ideal of national welfare. Soaring prices of essential commodities could not be fully brought under control even under national emergency.

Meanwhile, the nation began to focus its attention to the events and engagements in the far off no man's Himalayan regions. News, both real and unreliable, have a peculiar way of spreading in India. Even our intelligentsia is not altogether free from the credulity-complex. Generally speaking, many of our newspapers, with a view to pushing their own sale and expanding their market, came out with sensational headlines arresting thereby the attention of the general public. Unfortunately for us, even the carefully worded despatches, slowly but surely, revealed that all was not well with our forces on the front. There is no question that we have some of the best fighting material in the world. From the time our soldiers withstood the German onslaught in the battlefields of France in the First World War till they were able to checkmate the Pakistan aggression in Kashmir, they had won many laurels. No one who has known their fighting calibre has failed to pay high tribute to their tenacity, courage, skill, and teamwork on the battlefield.

Fighting was taking place both in the NEFA and Ladakh areas at a height of over 14,000 feet. It was soon evident that our forces were not acclimatized or trained to fight at such heights and under adverse climatic conditions. Medical experts generally agreed that they were not psychologically or physically trained. As days rolled on, it became unbearably cold for our jawans. They were not deliberately or systematically trained for such an eventuality even as the German soldiers under Rommel were to face the privations of a desert warfare. Reports from more sources than one revealed that our soldiers were not adequately clothed or equipped with modern weapons to meet a most determined enemy, adequately trained and equipped, and accustomed to fighting under all conditions and prepared to stake his life and all as if they did not matter. The Chinese came from colder regions, provided with ultra-modern weapons and equipment and having been used to constant warfare for more than a generation. Their military exploits exasperated our generals. In the war of nerves, the scales were against us. The Chinese had pre-planned an invasion in all its detail and had cleverly eliminated chance as a factor in their military strategy. Reverses in the NEFA and Ladakh area took the Indian public by surprise as the nation was assured, even on the eve of the 'Border Conflict' that the defence of the country was in 'safe hands'. Events followed with lightning rapidity. Thousands of our brave soldiers were either killed or taken prisoners. Hundreds of them were wounded or missing. Our communication lines were thrown out of gear. Much valuable equipment was lost to the enemy. The Himalayas, the impregnable fortress for untold ages, gave an easy passage to a ruthless enemy. Victory after victory, the Chinese were now knocking at the doors of Assam. The Gangetic plain lay prostrate before them.

Even at the very start of this conflict, as soon as the public got scent of an unfavourable trend at the front, the murmur slowly gathered momentum and became an open criticism of government and its defence policies. Jaya Prakash Narain, Acharya Kri-

palani and C.R. openly clamoured for the resignation of Shri Krishna Menon as Minister of Defence. A few wanted to impeach him. Some politicians insisted on an open inquiry to be instituted even in the midst of war. Others wondered how the enormous funds allotted for defence were expended. The policy of non-alignment was now assailed in no uncertain words. International Communism in general and Indian Communism in particular, suffering a staggering blow, was still unpredictable. The belligerent attitude of Pakistan throughout this critical period made the Indian political sky dark and overcast. Prime Minister Nehru did not want to change horses at mid-stream. But when many of his party members politely but firmly demanded the resignation of Krishna Menon, he was left with no other alternative except to part company with his valued and age-long friend. Krishna Menon himself, sensing the situation, submitted his resignation days before such an eventuality arose. Prime Minister Nehru rose to the occasion and never missed an opportunity to exhort the nation to stand as one man to face the tenacious enemy. Soon, Mr. Chavan was sworn in as Defence Minister. It appeared that Krishna Menon was made a scape goat.

When the 'Border Conflict' broke out and all was not well with India's defence, Soviet Russia took to a policy of epic silence. Prime Minister Nehru's one great concern was regarding the unpredictable policy and course of action that Soviet Russia might adopt during those dark days. The conflict was in its infancy, and it was not an all-out war. It was now that the United States government under President Kennedy, after scoring a political and strategic victory in Cuba for no loss of life or property, thundered on the side of India irrespective of our internal and external policies in the past or present. The U.S. Government meant business and minced no words in their all-out support in our war-effort. Days ahead of our request for war materials and equipment, the U.S. Government made a list of the most essential war commodities we would need and started collecting them for immediate shipment by air. The Chinese suffered their first major defeat in this undaunted stand of the U.S.A. to help India irrespective of the cost. They suffered their second major defeat when the Indian Communists altogether ignored their international programme. There was no communist uprising anywhere in India. The Chinese met with their third major reverse when almost all political parties and the people stood solidly behind Nehru in their determination to fight for every square inch of the homeland. When the Commonwealth countries under the leadership of Britain spoke with one voice against the aggressor, it unnerved him beyond all expectation. The Chinese morale was staggering in a death chance when world public opinion condemned the Chinese as aggressors and sympathised with India in her heroic stand. The visiting German President lost no opportunity in denouncing the Chinese aggression and promising all possible help to India. Finally, the continued silence of Russia and the Russian tacit disapproval of the adventurous-expansionist policy of the Mao Tse-tung regime irritated and demoralised the Chinese. When Premier Nikita Khrushchev's attitude was made clear, the military victories of the Chinese became too heavy a burden for them to bear. They lost their nerve. The war was lost. The Chinese announced the unilateral cease fire on 1-11-62 to the utter amazement of India and wonder of the whole world. The Colombo Powers won a day of glory for themselves by their proposals almost acceptable both to India and China. Although a fluid state of affairs still persists in the Ladakh area, the NEFA area has now been completely re-occupied by the Indian forces.

The Gold Control Order, modifications in our Third Plan, the rising prices, the Anti-Secessionist Bill, the N.C.C. training for all our young men and women in colleges, various security efforts that are now being undertaken, the urgency to come to terms

with Pakistan, the impending central and state taxes, the measures to gear up our defence set-up and a wedge in the Communist camp are some of the by-products of the 'Border-Conflict'. It dragged us into limelight and revealed our strength as well as our weakness. It has also taught us unforgettable lessons for the future. However, the fact that China and India are going to be neighbours for endless ages to come ought to steer these two countries into ways and means that are in consonance with the dignity of man and an all-embracing philosophy of life transcending temporary gains and flimsy advantages that have distorted man and society since the dawn of civilization and turned man against his brother in an unending circle of social suicide.

**Lecturers' Residence—(Continued)**

so vehement on my making the window curtains. O.K., before fixing the cot and the bed, let us provide a cover from view.'

\* \* \*

There are two light points in our bedroom and after arranging the bedroom my wife wanted to switch on the second light as well to see how nice her decorations looked like. When she put the second switch on, the bulb did not burn but the fan started functioning.

'Dear, the fan functions with this switch on, and I don't see any other switch for the light.'

I looked up, thought for a while, an idea flashed into my mind. I said, 'Try the fan regulator, dear.'

'You are right,' she cried, 'the light burns as I turn it on.'

'Indefficiency, negligence and indifference,' I said, disdainfully.

'Dear, why do you sound so sorrowful?' she cocked her eyes for sometime, turned the regulator from stage 1 to 4 and then to 'on' and the brightness was gradually increasing.

'What do you think of this novel idea, dear?' I asked ironically.

'Personally I feel, it is a great idea. Tell the Superintending Engineer when you meet him tomorrow that I really appreciated this new device. You know, what I mean, dear. Look up.'

I didn't know what to say. I guess I looked foolish.

She turned the regulator back to '1' and the light was just sufficient to reveal her silhouette; she walked towards me with all angelic grace and bent over my foolish face. 'Cheer up, dear, it is going to be marvellous.'

The next day I told her at lunch time, 'Look here, dearest; the Superintending Engineer refuses to take credit for your compliments; it seems it is a unique feature in our house alone and not found elsewhere. On enquiry I learnt that the electrician knew we were a newly-married couple and hit upon this brilliant idea of providing us with the exact thing you appreciated last night. A very shrewd fellow indeed.'

My wife felt alike warding him a Nobel Prize for his 'aesthetic sense in illumination'.

\* \* \*

The next afternoon my neighbour moved in with his wife and few children. He is a veritable critic of engineers and an idealist after perfection. Half an hour after his arrival he dashed into my flat opposite and called out: 'Doctor, look what a ridiculous thing they have done. There is no light point for the second bathroom. I need not verify it in your bathroom, and I am sure they wouldn't have done it there either.'

Alas, it was true, and thereupon, he gave vent to his spleen on the constructional engineers, lack of commonsense in their thought process, ineffective supervision by indifferent people and the like. After he left, I turned to my wife.

'Don't you think, dear, my friend is not romantic enough to appreciate one of the bathrooms without light. It gives you a wonderful choice. You can take a bath in one bathroom with lights on and for a change get into the other and have a bath without light'.

'My comprehension fails here. Why not they give us a light point in the bathroom and leave it to us to have the light on or not as our moods permitted?'

'Look here. You are trying to question the very fundamentals. Why should there be two bathrooms then? Don't you see, dear, when there are two bathrooms one should be with a light and the other without? According to your way of thinking one bathroom would be sufficient. You see, dear, you are not bright today. Come on, let us forget it.'

My neighbour, hotheaded as he was, lost no time in sending a strongly worded letter to the authorities bringing their pointed attention to this major defect in planning. Lo and behold, the next day five workers marched into our apartment and started digging a square hole on the wall between the lavatory and the bathroom.

'What is the big idea?'

'I don't know myself, dearest. Let us wait and see.'

Slowly it dawned on me that what they were up to was to make the lavatory light illuminate the bathroom through the square hole on the wall in between.

'Dear, I am afraid, there is a flaw in the idea. Technically speaking, there should not be any airpassage between the lavatory and the bathroom. When one is in use, the other cannot be used.'

'You have a point there, dear.'

Accordingly I told my neighbour of this new problem and, having a number of children, he appreciated this point of view and shot off another letter to the engineer.

The next day five more workers trooped in with ladder, cement etc., and gave a decent form and shape to the square. We thought the second letter had no effect. But on the third day five more men walked in and fixed a glass and closed the hole. Now there could be light without odour.

'I want to ask you something.'

'Yes, dear.'

'Don't think I am also criticising engineers. I am just curious, that is all. Instead of all this botheration, they could have drilled a small hole, pulled a wire from the verandah and given us a light. Don't you feel it would have been better that way?'

'You are not to be blamed dear. You ought to have had smattering of your husband's knowledge of economics. Let me teach you something at least today. You see, according to your method, it would have meant employment for a single worker for a single day. Now what did you see? Five workers were employed for three days and that means 15 workers in all for purposes of comparison. Imagine this being done to all flats. The earnings of these workers will be spent in consumption goods; there will be greater demand for consumption goods; more consumption good will be produced; more men will be employed to produce consumption goods; more employment means more payment in the form of wages; again more spending on consumption goods and so on, ad infinitum. You see the seemingly wasteful expenditure leads to increase in national income and elimination of unemployment. It is with this great idea in mind that the late Lord Keynes, the master brain of England in the thirties, suggested that if you have no work to give to the unemployed, ask them to dig holes and fill them up again and pay them for this activity.'

'Didn't you tell me, dear, that economics is commonsense crystallised?'

'What do you mean?'

'Don't be angry dear. Your economics is always beyond me.'

\* \* \*

The fifth day dawned on us, and at 9 a.m. four electricians came into our house and asked for our permission to attend to some electrical installations connecting the servants quarters with the electric main in our house. Quite to my purpose they started digging a hole, this time on the floor at the edge of the rear verandah, and the whole block was reverberating with deafening noise.

'What are they digging in there for, d-a-r-l-i-n-g?' shouted my wife into my ears.

I signalled the fellows to stop and repeated the question.

'It is just to connect the wiring in your servant's quarter with your main.'

'It has been done already. There was light there last night.'

'Yes, sir, but it was all wrong.'

'All wrong?'

'Yes, sir. You see, sir, we connected each one of the flats in this block to each one of the servant quarters according to an order we were asked to follow. The people in charge of numbering the servants' quarters followed a different order. So we have been asked to alter the connections and adhere to their order of numbering.'

I burst out laughing at the incredible situation. 'Look here, boys; the easiest way out of this muddle is to renumber the servants' quarters the way electrical connections have been given.'

'No sir. Those people have refused to do it.'

I got wild and said, 'What if I refused permission to dig in here?'

'Dear' intervened my wife, 'it can't be as bad as all that. Why not you make further enquiries and find out?'

I went out and asked a supervisor and got the wiser; I came back to explain to my wife, 'The story runs like this, dearest. Each Lecturer's flat has a water-tank from which water should go to the servants' quarters attached to it. The numbering has been done according to the order of the water connections. Electric connections have been done differently. It is simple case of lack of co-ordination between these two departments in our gigantic organization. That is all, dearest.'

'So, after all, it was not as bad as we thought it was.'

The digging went on with its devastating fury for two full days.

\* \* \*

Didn't you say that in Asst. Professors' quarters there are five fans, and electric buzzer besides a few other additional fittings? You are an Assistant Professor, and when you are allotted a lecturer's apartment they should at least provide us with the facilities you are entitled to.'

'Why do you want them, dear? Are not four fans adequate for you?'

'You see, this big hall looks barren with a single fan. An additional fan with a wash basin at the corner will help us convert that portion into a beautiful dining hall. Don't you think so?'

'I do, dear. But you see, dear, the authorities feel that when we will be asked to move out to Asst. Professors' quarters they don't want to dismantle anything from the Cr quarters for fear of creating a sort of an ill-feeling toward the incoming Lecturers.'

'It is really nice of them to think so. I do really appreciate it; but what about the present Assistant Professors' quarters now allotted to the German foreman with all the fine furniture and posh fittings? Do you think, dear, that I can look forward to all the luxury when we move into one such quarter when the Germans move out? Keep it in mind; you should use your influence to get into one such building. I would love to live in an air-conditioned bedroom during summer.'

'There is logic in your expectation, dear, but unfortunately logic is not always possible in real life. You have to learn to live with inconsistencies which are oftentimes less logical than logical.'

'I don't see eye to eye with you, dear.'

'O.K. dear, let us agree to disagree on the point for the present. Sometime I may be able to prove it.'

\* \* \*

It was ten days since we had moved in, and after endless days of constant disturbance by one party or other, there seemed to be lull in the intruding activity. The floor was polished, the kitchen repaired, the domes fixed to lights, and I even carried out my wife's suggestion to fix a blue light bulb for our bedroom beside the white bulb operated by the fan regulator.

The night advanced on us quite early in the evening since the sky was overcast and at 8-30 rain came pouring down in torrents. We ate early and were relaxing in the snug comfort of our living room. The weather was ideal to turn in for the night.

'Darling,' cooed my wife, 'it looks our

honeymoon starts only today. Don't you feel the thrill when the elements are furious?'

'I do. I am in my elements, dear.'

We stood enjoying the beauty of our bedroom.

'Blue light or white light, dear?'

'Till we fully cover our windows with the curtains and shutters, no light, please.'

'As you please, dear. Since you wanted me to fix the blue light, I thought you might be interested.'

'I am not so sure about the angle depression from the third floor opposite to our floor.'

'Why not we keep the light on this night and ask my friend tomorrow, dear?'

'Oh, shut up!'

'It is the way of logic, my dear, if you don't mind.'

'You look very cute. Do you know?'

'Oh, shut up.'

\* \* \*

The next morning my wife thought she should write to her parents of the glorious life she is having with me in the I.I.T. campus.

'Darling, I have some difficulty in giving them the correct address. All along they wrote to me to our Adyar address. Now it has come to I.I.T. You know, all these days I have not bothered much to know what these letters really stood for. I have something on my mind, but I am not sure I am right.'

'What have you got on your mind, dear?'

'Institute of Indian Technology. Am I Wrong?'

'Do you know, dear, you are right for once! you are brilliant!! How is that it didn't strike me at all? I.I.T.—Institute of Indian Technology. How did you get it, dear?'

'You know, you told me that this is one of the institutions of national importance, and naturally I thought it should be devoting itself to the development of Indian Technology in Free India.'

'Your logic is absolutely flawless! dear!!!'

\* \* \*

The last night of our short honeymoon. The moon was full in all her splendour. Putting the lights off we went to bed enjoying the moonbeams peeping through our windows. I presume the glass windows, the openness of the bedroom and the like have marred my wife's idea of privacy in her bedroom.

'Darling.'

'Yes, dear.'

'Don't you get a little uneasy with the feeling that you are being watched all around?'

'That is not the way to look at it, dear. Are not stolen kisses thousand times sweeter than safe one?'

'I shouldn't flatter you. You know no one can beat you in explaining away things like that.'

'Don't you think dear, we should be thankful to those who have provided us with atmosphere of constant thrill and excitement that goes with stolen kisses?'

'Whom should we be thankful to darling?'

'Let us thank on this full-moon night, the one who has conceived of this flat system for I.I.T. and the other who has given us the glass windows!'

Amen.

## I Importune . . . . .

E. S. BHAGIRATHA RAO

These roses I've brought are thine,  
My lady, for ever and ever thine!  
Am I, my poor self, more to thee,  
No Sweeter air nor smell  
Can carry as much as these  
The lofty words I have to tell  
Thy wandering memory,  
Ever busy with vivacious spree  
I beg to say, to pray, to praise,  
Of my love, for yours, of your beauty  
Denying even that of a dainty.  
I want, I see, I wait, I hope  
Do not my lady make the dupe—  
Reject my love, my soul, my strife.  
Precious indeed for an ideal life.

## I.I.T. Literary Activities

January has been a busy month for the Literary Activities Committee. In the week beginning from January 23, we had no less than five competitions—four of them inter-collegiate.

On Wednesday, January 23, the Institute Annual Group Discussion Competition was held. The III Year Team discussed 'Censorship is an unavoidable measure in any civilized society' and was declared first. A welcome feature was the strong IV Year Team which stood a close second. The Institute team was selected for the Inter-Collegiate Group Discussion, R. Venkateswaran, S. Nageshwar, V. Siddhartha, T. S. Ananthu and R. A. Vaswani were chosen to represent the Institute.

The Inter-Collegiate Debate on Republic Day morning was to have been an All-India debate, but due to the national emergency it was decided to restrict it to Madras only. Six colleges—Guindy Engineering College, Madras Christian College, Loyola College, Pachaiyappa's College, Queen Mary's College and the I.I.T. participated. The subject before the house was 'The secret of happiness lies in liking what one does and not in doing what one likes'. The I.I.T. team consisting of T. S. Ananthu and R. A. Vaswani walked away with the Institute Trophy. T. S. Ananthu was declared best speaker and Miss Mridula Rao of Queen Mary's College was placed second. Prof. R. Krishnamurthi conducted the day's proceedings in a most efficient manner.

In the Inter-Collegiate German Recitation Competition for the trophy awarded by Dr. N. Klein, no outside colleges sent any entries. We had expected at least the Max-Müller-Bhavan would be represented. On the home front, R. Venkateswaran was the winner with C. V. Sahasranaman in second place.

The response for the Quiz and Group Discussion was unexpectedly poor. Guindy Engineering College, Pachaiyappa's College, Queen Mary's College and the I.I.T. were the only four teams present to compete for the Quiz Trophy donated by Shri R. Natarajan. Guindy Engineering College was placed first with M.A. Reddy and V. Chandran in first and second positions respectively.

In the Inter-Collegiate Group Discussion we had only two guest teams—Loyola College and Guindy Engineering College. It was the I.I.T. Team, however, who again walked away with the honours.

In retrospect I must say that we not only expected more guest teams, but that we also had entries from many teams who just did not turn up at the last minute. Many colleges put forth the plea that the third term is too crowded with activities of their own and, therefore, they are reluctant to send out teams. It has been suggested that the events be held sometime in September-October if a better response is desired. Well, we have noted this point, and I sincerely hope that next year we will see many more teams in all the four events.

R.A.V.

### 'MY DEAR FOOL, COME HERE'

It was no less a person than the Hon. Dr. Sastry, Vice-Chancellor of the Andhra University, who told Mr. Sundaram, 'My dear Fool, come here!!!'

Mr. N. Sundaram, the renowned mono-actor, gave the I.I.T. a sample of his brilliant talents on January 21st in the newly constructed Metallurgy Workshop Block. The evening's programme consisted of pieces from Shakespeare's *The Merchant of Venice*, *Julius Caesar*, *Othello* and *Macbeth* and Abraham Lincoln's *Speech at Gettysburg*, a rendering of the *National Anthem* on The Flute Without A Flute and some of his—Mr. Sundaram's—experiences on the stage.

To say the least, Shakespeare would have

turned in his grave. Mr. Sundaram who has given performances of complete Shakespearian plays frequently lapsed into the usage of 'spoke' instead of 'spake' and 'have' instead of 'hath'. His vast knowledge was but at the bottom rung of the ladder when, explaining the story of the *Merchant of Venice*, he remarked that Mahatma Gandhi influenced Bassanio. He, however, succeeded in climbing much further up this ladder. Indeed, he was speaking the truth when he said, '... and then Shakespeare became my victim.'

His rendering of *Othello* was quite good. However, one came away with the impression that Desdemona could not have been slain.

Much to the discomfort of the audience (having come late was bad enough) he embarked on a discourse of how one should commit passages to memory. What the method of teaching in present day schools is and how the teaching of English could be improved. Why Tamil should not be spoken in an English classroom and the reason why four students should read a poem instead of forty. And all along he was self-convinced that part of his audience was studying P.U.C. and, therefore, was in the category of reading English novels which have the heading 'Book for Students studying English and having a Vocabulary of 3000 words.'

Flute without Flute—the *National Anthem* was murdered just as *Macbeth* murdered the King.

On the whole the evening though entertaining and interesting in parts, came to a close with a feeling of relief.

TUB.

## DRAMA REVIEW

BY OUR DRAMATIC CRITIC

The play *Adventure of the Mazarin Stone* (Arthur Conan Doyle dramatized by Mr C. Krishna) was enacted at the open-air theatre on the 26th January. Owing to the absence of a curtain, the settings for the one act play were on view long before the play began. Directed by C. Krishna, it was not an unqualified success. Mr. Siddhartha said his lines confidently and naturally—although the same could scarcely be said of the others—what he lacked in memory he made up in acting. Mr. Nageshwar as Watson was too stiff and unnatural. A Watson who twiddles his thumbs, twitches his upper lip and shakes his head in a distressed manner at the Count's ranting is scarcely compatible with the genuine article. Mr Vaswani as the Count was not bad. Although he too fell a prey to the general defect of staying blank and idle while someone else was saying his lines. For example, he seemed entirely unimpressed by the fact that the jewel had been snatched from him and that his arrest was imminent. Not a vestige of fear, chagrin in bafflement was seen on his face. Mr Bukht as Lord Cantelmere acted quite well as a haughty and over-bearing member of the aristocracy. Mr Menon as Sam Merton, the Strong-Arm man affected a Yankee accent instead of a Cockney one. Mr Loomba acted Billy the page.

### PRIZE WINNERS

The following are the list of prize winners of our Institute in the Third All India Inter-Collegiate Photographic Exhibition 1962 organised by Photographic Society, I.I.T., Kharagpur.

#### I. Experimental

First Prize—E. A. Olia... 'Destinies I draw'

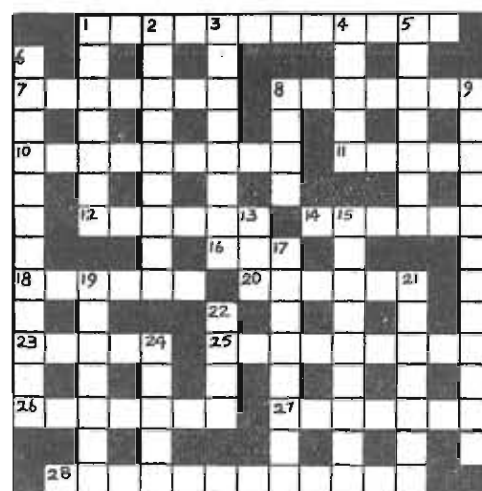
#### II. Colour

Second Prize—K. Mahesh... 'Binaca, the key of his success'

#### III. Portraiture and Life Study

Second Prize—K. Mahesh... 'Taxidermist'

## SQUARE-DANCE No. 4



### Clues

#### Across

1. It has a novel fall. (5,2,5).
7. Finishes after the mischievous fellow, threatens (7)
8. Begun, with Ted after a heavenly body (7)
10. This type of conveyance is not the best way of reaching on time! (4,5)
11. Penny angers with these Scottish weapons (5)
12. Changed depart and divided (6)
14. Fences accept these types of goods (6)
16. Morse E (3)
18. Unless you're bent on 27 across, eat only these types of mushrooms! (6)
20. Drink fit for hunters, perhaps (6)
23. Ten is mixed for a small addition (5)
25. Courteous invitation to a departing visitor (4,5)
26. Ages after the hog—it's for the birds! (7)
27. One may commit this crime without fear of punishment (7)
28. Proverbially, this nice mitt rearranged saves nine (6,2,4).

#### Down

1. In conjunction with a leap, it's an athlete's fear (3,4)
2. Lunar Tuna becomes off beat (9)
3. Subjugated (8)
4. Represent, with for (5)
5. Charm (7)
6. Elusive character (4,1,3,4)
8. Rejected in favour of the singer in the picture (4)
9. Disillusioned (12)
13. This turned up fish is a healer (3)
15. Coin and stain lead to the composer (9)
17. His name suggests that of his father (8)
19. Seemingly visible, but requiring perceptivity (7)
21. Understood (7)
22. Champions in the R. A. C. estimate (4)
24. Fishy type? (5)

M. CHANDRASHEKAR.

## THE SQUARE DANCE

### No. 3 Solution

Across	Down
1. Natural	1. Nymph
6. Coot	2. True
7. Mounts	3. Ration
8. Horde	4. Monroe
9. Glen	5. Ethel
11. Ides	10. Linger
14. Annal	11. Indian
16. Ribbon	12. Madam
17. Aces	13. Genus
18. Handles	15. Abel

The first correct solution of Square Dance No. 3 received, was by Miss Geeta Gopal of S.I.E.T. College, Madras. She is recipient of the prize awarded by R. Venkateswaran. The prize book is *Modern Humour—An Anthology for the Sixties* from Belloc to Wodehouse.