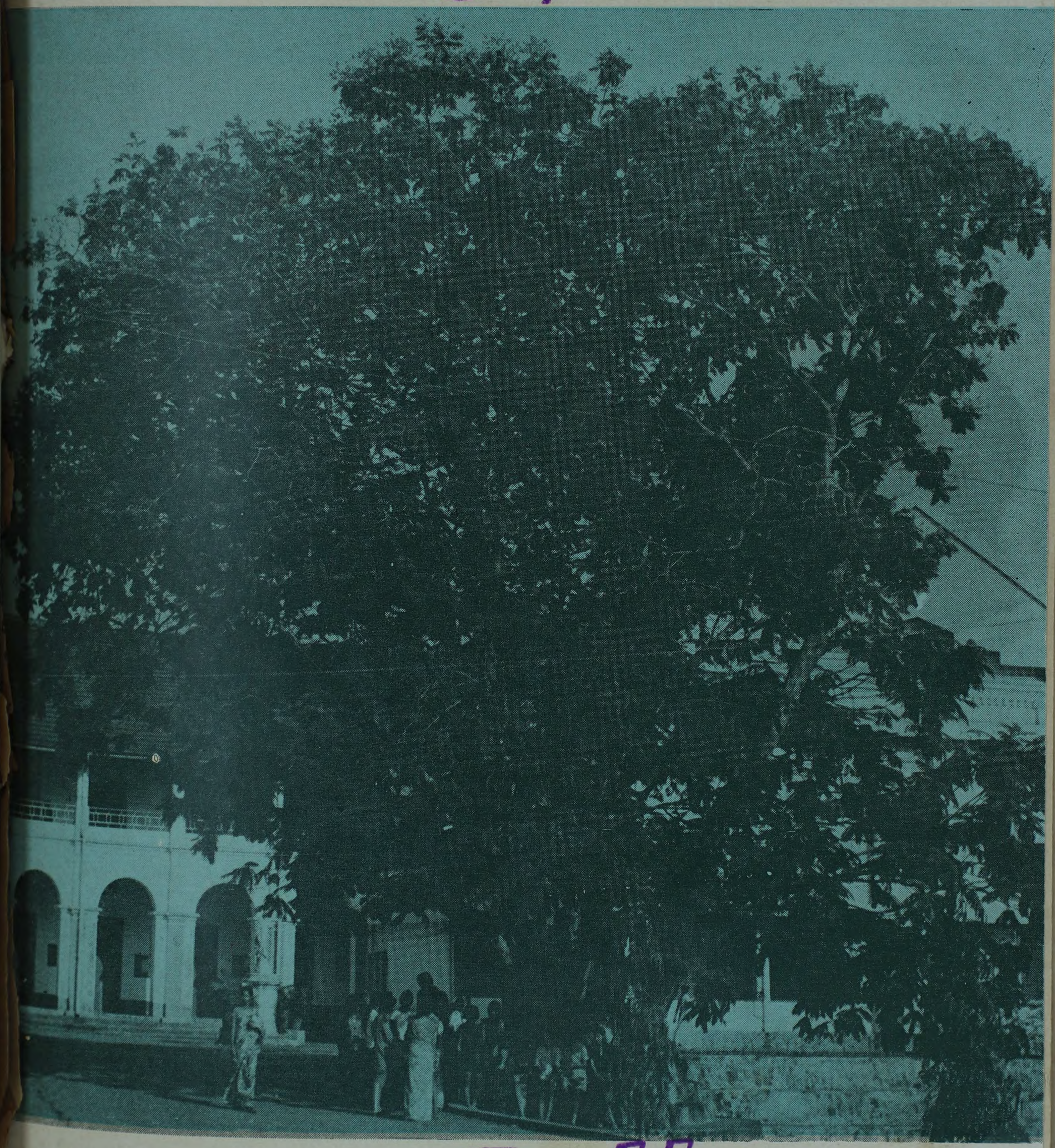
St. Agnes



College

St. Agnes College Magazine

1972-'73

53rd Year

THE APOSTOLIC CARMEL, MANGALORE.

Thro' the 100th year
of the Apostolic Carmel

Thro' the Golden Jubilee
of St. Agnes College

Thro' the Silver Anniversary
of India's Independence

Our Institution
Lives and Grows
Confident
that

GOD IS OUR STRENGTH

1. *O Thou, the Lord of the weak, we approach Thee.*
The flower of our youth with its tender petals,
As a token of worship, and fragrant with devotion,
We offer at they feet.

2. *The affection of friends is desirable;*
The guidance of teachers causes our welfare;
Let a mother possess a treasury of tenderness,
But thou, be thou, the treasury of strength, O Lord.

3. *In peace and strife, in misery and happiness,*
In joy and grief, in life and death,
That gift of strength which destroys sin,
This group of young women begs of thee.

R. Antoine S. J.

Shanti Bhavan

God is my Strength (1926)

This side and that, the quiet water starts
To make a passage for the gentlest thrust;
But lashed to fury by a stormy gust,
It bursts the iron walls of floating masts.
There's a knowing Hand unseen that darts
Each fitful wind and wave : they feel they must
Strike down whate'er resists, and crush it to dust,
Nor cease until their borrowed might departs.

O Agnes, little Lamb, say whence thy power
Derived that made thee Judith-wise prevail
'Gainst Roman Praetors' rage or proferred dower:
Nor lust nor roaring flames could least assail
Thy troth to Christ. Though tempests frightful lower.
To them that trust, the Almighty shall not fail.

Denis Albuquerque, S. J.

Deus Fortitudo Mea (1929)

Dear God, my strength in tend'rest youth,
Eternal Wisdom, unto Thee
I turn, in quest of purest truth;
O Holy, strong One, strengthen me!

Dear God, my strength! How can I trust
My own frail intellect and heart?
Nor teacher, nor the friend most just
Can to my soul Thy strength impart.

Thou art my strength,—not all the lore
Of ancient world and new. Then be
My bulwark strong for evermore,
In sorrow or prosperity.

Teach me to suffer and be strong,
Give me Thy strength to combat wrong.

Dorothy Mcleod

To our College Crest (1957)

The Stars embedded in a deeper night,
Diffused their warmth of truth and knowledge bright!
But what did make the lonely traveller pause—
Was the challenge of an old and rugged Cross!
Aloft, the Mount held up this treasured prize,
It symbolized her life of prayer and sacrifice.
Strange tales were told about the holy Mount,
Its foundations laid on truth's unyielding ground.
On such a rock, Our Lord once laid His head,
'Twas here he asked, that they would give Him bread
And as in answer to His earnest please,
Fair Carmel took her vows on suppliant knee—
So doth the palm its lofty ideals lift,
On thoughtless man doth ever shower its gifts!
Oh tree of noble virtue!—we acclaim,
Success be thine, for service in His name!

"O gentle patroness of holy youth,
Ask God all those to bless, who love the truth!"
Sweet Agnes, as we look up to thee,
Infuse us with thine own sweet purity.
The storm in angry clamour raves; the cruel blast—
Our courage fails—alas! how can we last?
Deliver, Lord!—stretch forth Thy mighty arm—
Encompass us, Thy children, from all harm;
That through the span of time's eternal length
The children feel as one 'God is our strength!

Sharada Thomas

God is my Strength (1961)

The night obscured my road. Black shadows lent
A creeping terror; grief ate all my core;
I stumbled on my hope and strength near spent,
With scarce the faith to take that one step more.
And then before me shone dawn's rush of blue;
I bowed my head, remembered how to pray,
Was shamed in heart, for suddenly I knew
That God had been beside me all the way

Elaine Tauro

Our Love and loyalty

to

Mother M. Carmelita A. C.

Superior General
13th May 1972

Not unto us, O Lord, not unto us,
but unto thy name give glory,
for thy mercy and for thy truth's sake

Psalm 115 : Vs. 1

Our tribute of thanks

to

Mother M. Theodosia A. C.

Superior General
1960—1972

To count
the many blessings;
to recall
treasured memories
of devoted
Staff, Students, Friends, Benefactors
these Golden Years;
and meet in fellowship,
giving thanks
to
the Lord.

DEUS FORTITUDO MEA

Reminiscences of 1922

Miss Elizabeth Britto

Amidst the bewilderment of a complex world, to capture reminiscences and make them red-hot, to recall scenes and to review the past, is an exercise which makes one mentally out of breath. Verily the theme gathers up emotions flinging open the casement of the mind to distant horizons blurred by the passage of near five decades. Nevertheless reminiscences of one's College days have a savour peculiarly their own.

Way back in 1920, when I was just a teenager in Form IV, Rev. Mother Aloysia, a lady of vision, initiative and drive and who thought much ahead of her times founded St. Agnes College - the first ever Catholic College for Women in India. With the support and guidance of the local Jesuit Fathers, Mother Aloysia put her best foot forward and opened the First Year Arts Class. I vividly recall that festive inaugural function because I participated in a *Floral Cantata*, to which the public of Mangalore were invited to extend their cooperation and partnership in the new venture. The infant college with 9 students was accommodated in just one room near the garden at St. Ann's. Very often during the lunch interval, I and some of my adventurous friends would stray in that region, highly intrigued to discover what was happening in the COLLEGE; Students, equipment, lecturers.

With the securing of affiliation in 1921 the College was shifted to Bendore, and simultaneously the High School classes moved thither. This was a red letter day for us. We were transported in a hackney carriage-cade of 21 carriages and felt very important and pompous when received with band, at the gate, by our teachers and conducted with band all along the drive to our new habitation, now . . Christ Hall.

The remarkable achievements in April 1922 at the first ever presentation at the University Examination are commendable: three first Classes, four second, Distinctions in Logic and the Kripa Bai Gold Medal for English. In compliance with the requirements of affiliation, qualified lecturers were appointed. Like all infant institutions this college encountered many difficulties and its teething troubles. The early stages were full of vicissitudes, but with unfaltering trust in Providence problems were straightened out.

In July 1924, the first year B.A. Class was opened with a dozen students on roll, most of whose faces I recall. And outstanding for College activities and academic performance may be mentioned Sr. Gabrielle nee Ivy Fernandes, Sr. Aimee, Aileen Lasrado, Flora D'Souza, Shambavi Punja. I belonged to the second batch, which graduated in 1927. We were just eight - so compact that we were accommodated on the College stage, where the present Chapel sanctuary is located. It may be mentioned that among the eight of us, only three were day-students, the other five hostelites hailing from erstwhile Malabar,

and Travancore-Cochin districts. This is a pointer significant of the feeble impact of university education for women, on the residents of the District.

But the difference between them and now. It is profound, wide, sweeping. In the late twenties, the total enrolement in the College could not have exceeded 150 with hostelites outnumbering....While in those days, only a handful of demure maidens with muffled voices would emerge from the College gate after class in the evening, the present strength of 1650 like a galvanic swelling torrent spills out on the roads that converge in the vicinity of the gate. I for one take immense care never to venture into that region, save in an automobile, lest I should be knocked down and engulfed in that surging flood tide.

Equally impressive have been the developments in the academic sphere. While at the inception of the College, affiliation was secured for the Degree Course only in one group of the Humanities, today the College has become so comprehensive that it offers Degree Courses in Maths, History, Economics, Physical & Natural Sciences, Psychology, Commerce & Geography.

Finally, while I tender my respectful salutations to my old lecturers, I prayerfully wish that Alma Mater while disseminating true knowledge may continue to uphold those values the validity of which has been tested and acknowledged all through the ages.

Reminiscences

Dr. (Miss) Mary Agnes Saldanha

College for my generation was a place where the superstructure came to be built. At Saint Agnes College we had a galaxy of brilliant women headed by Reverend Mother Annunciata. Most were for a long time B.A.s teaching B.A.s; but I wish some of their Lectures were tape-recorded for future generations. When I had to teach "The Tempest" and "Macbeth" about fifteen years after I had left College, the lectures Sister Benedicta and Mother Annunciata had given us came alive, and I sailed through my classes. Ancient History conjures up to memory the angelic Sister Mary Agnes; Constitutional History with its Acts and Writs, the lucid Sister Colette; Prose, the gentle but sporting Sister Eugenie in whose classes we played all our pranks without daring to cross any limits. Others who met us for short periods were Sister Joan who taught us superb French; and the suave and charming Mother Gertrude who later worked for several years, a quarter century to be exact, in an administrative capacity doing as well in it as she had done in her lectures.

....and Greeting the Golden Year 1972

Dynamism was the mark of the Jubilee Celebrations on February 13th, 14th, 15th. Age looks back nostalgically, youth lives in the present and looks forward. With a youthful staff and an effervescing 1400 students, so did the Celebrations.

February 14th—Holy Mass in the Parish Church–no hall in the college could contain the 'people of God' assembled for the occasion. It was a bit of an Agnesian Reunion, too, with friends and old students to breakfast, later toasts and reminiscences.

February 13th-15th—-almost the high spot of the celebrations–a truly marvellously educative exhibition, giving to the 10,500 who flocked to St Agnes those days, an insight into the marvels of science, the problems of history, the beauty of art, the intricacies of the human mind, which are the formal curricula of the College, and the order, esprit de corps, refinement, courtesy, initiative and "finishiative" which are the intangibles "caught" during college years. One of the finest of the old students, Smt. Octavia Albuquerque, opened the exhibition. **The Entrance** a history of the College in tabular statements, statistics and photos led up to

The Psychology department where we were charmed by the artistic lay-out but hurried through, a bit scared whether the Intelligence and Aptitude Tests and Personality Measurement devices were somehow checking us up, and the smiling demonstrators would hand us an unflattering profile on a card at the end. This nervousness was compounded when the Double Seeing, Illusion and Span of Attention apparatus proved the fallacy of the human mind.

History: so it was with something of a sense of escape that we proceeded to something for which we are not really responsible – the U. N. – exhibited in the History department with all its many agencies, FAO, UNESCO, UNICEF, etc. It was not possible in a short time to appreciate sufficiently the magnificent attempt made here to portray the global attempt to build a better world, which is the UN. Art, meticulous attention to detail and enthusiasm demand a more leisurely study,

A little down the corridors, a smiling Japanese maiden whisked us into the land of almond blossoms and kimonos. Amid the fascination of geishas and haiku we wondered what the link between St. Agnes and Japan could be – was there some treaty the Indian Express had not got wind of? Finally, we discovered that it was thanks to the Syllabus that this feast of flowers, gaiety and Japanese charm was ours.

Then on to the beauty spots—the **flower arrangement** entries and the **rangoli**—30 to 50 entries each. . . . nearly all worthy of a prize.

It was difficult to leave and cross over to the **Science Departments,** but **rewarding.**

In Mathematics (pardon—art or science?) the history of numbers, the magic of numbers in numerous puzzles, and the beauty of applied calculations in crystal, and an attractive model of cantilever roof were a three day attraction.

In Zoology the twinkling Evolution tree, the weird freaks of nature and the intricacies of Genetics had to be counterbalanced by stern admonitions, "Move on. Move on".

In Botany leaves, roses, dahlias, mangoes coconuts and plantains masqueraded as rosaceae, compositae, graminae, mangifera indica, cocos nucifera and musa paradaesica. We bowed in silence before their multi-syllabic titles and rejoiced that "A rose by

A PRAYER OF GRATITUDE

Rises in our hearts to God Almighty through whose blessings our work has prospered over the fifty years, and to the Queen of Carmel to whom this Congregation is dedicated. We see behind-us the years of humble beginnings of difficulties and all along God's unfailing Mercies.

Before us lie the challenges of tomorrow and the assurance of the never failing Hand of God.

To All

We say "Rejoice, let us give Thanks to the Lord for His Mercies endure forever."

To you our Staff

Who have shared in our endeavors in so many ways, we express a deep thank you, for your cooperation and hard toil that have helped us to fulfil in some measure the high ideals of our religious and academic excellence.

To the parents of our students, relatives friends and benefactors

We wish the richest outpouring of the graces and blessings of God Almighty.

And to you our very own dear Students

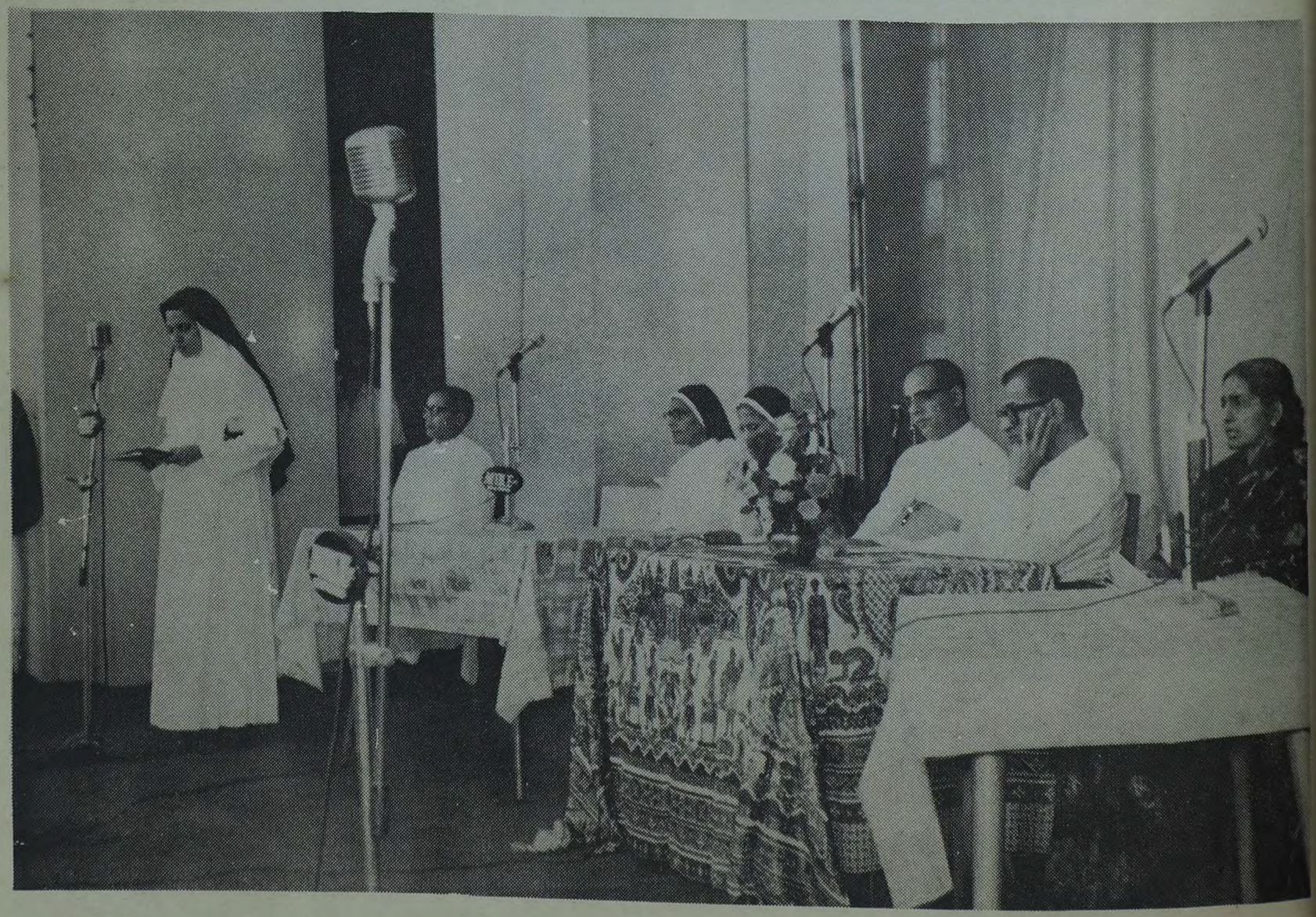
We pray, that you find God in your knowledge, that you trust Him in your responsibility, that you seek Him in every part of your life.

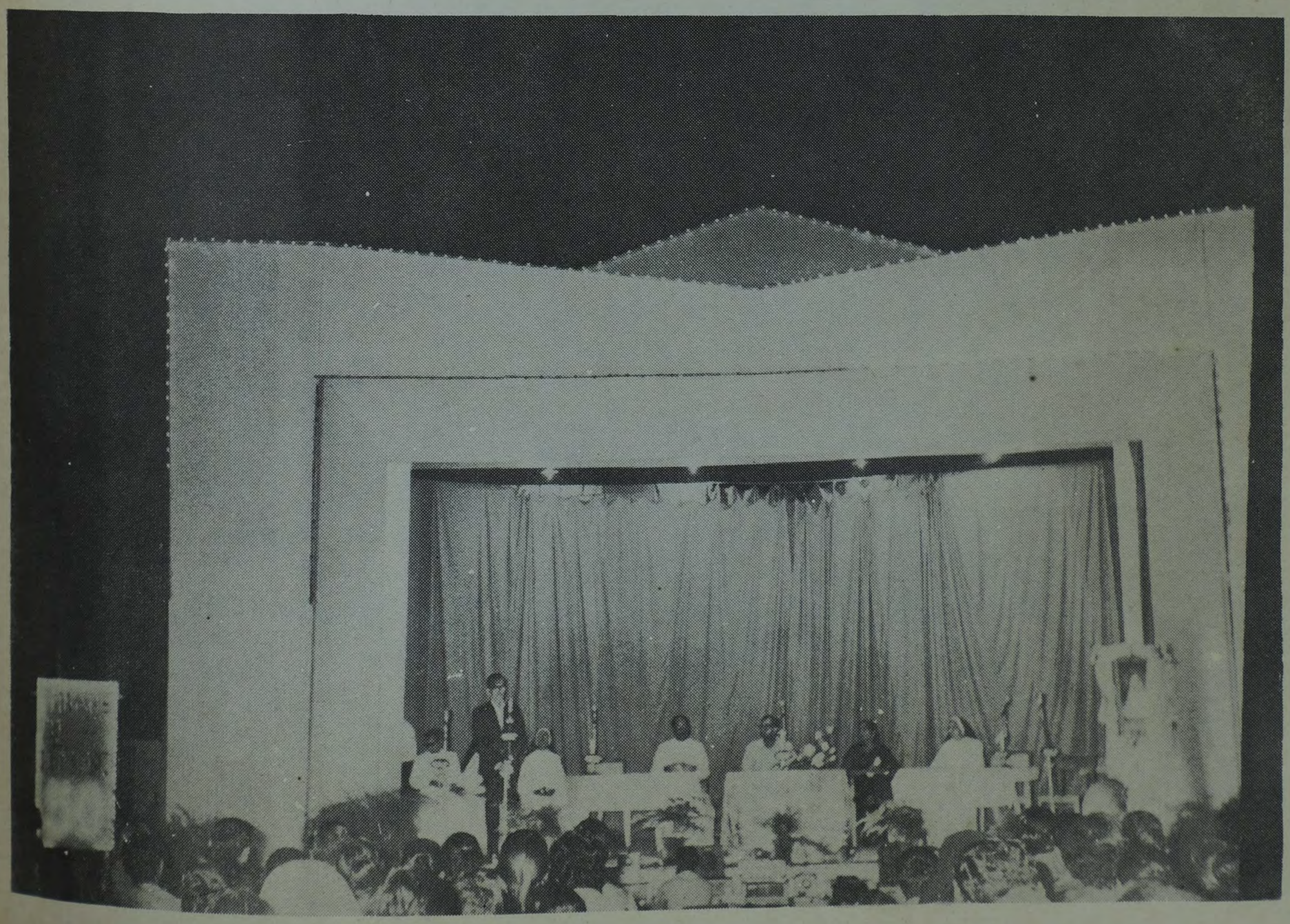
TE DEUM

LAUDAMUS !

Welcome to our Chief Guest:

Padmabushan T. A. Pai





Mrs. KAMALA ALVA

Unveils

the photo of

Mother Aloysia

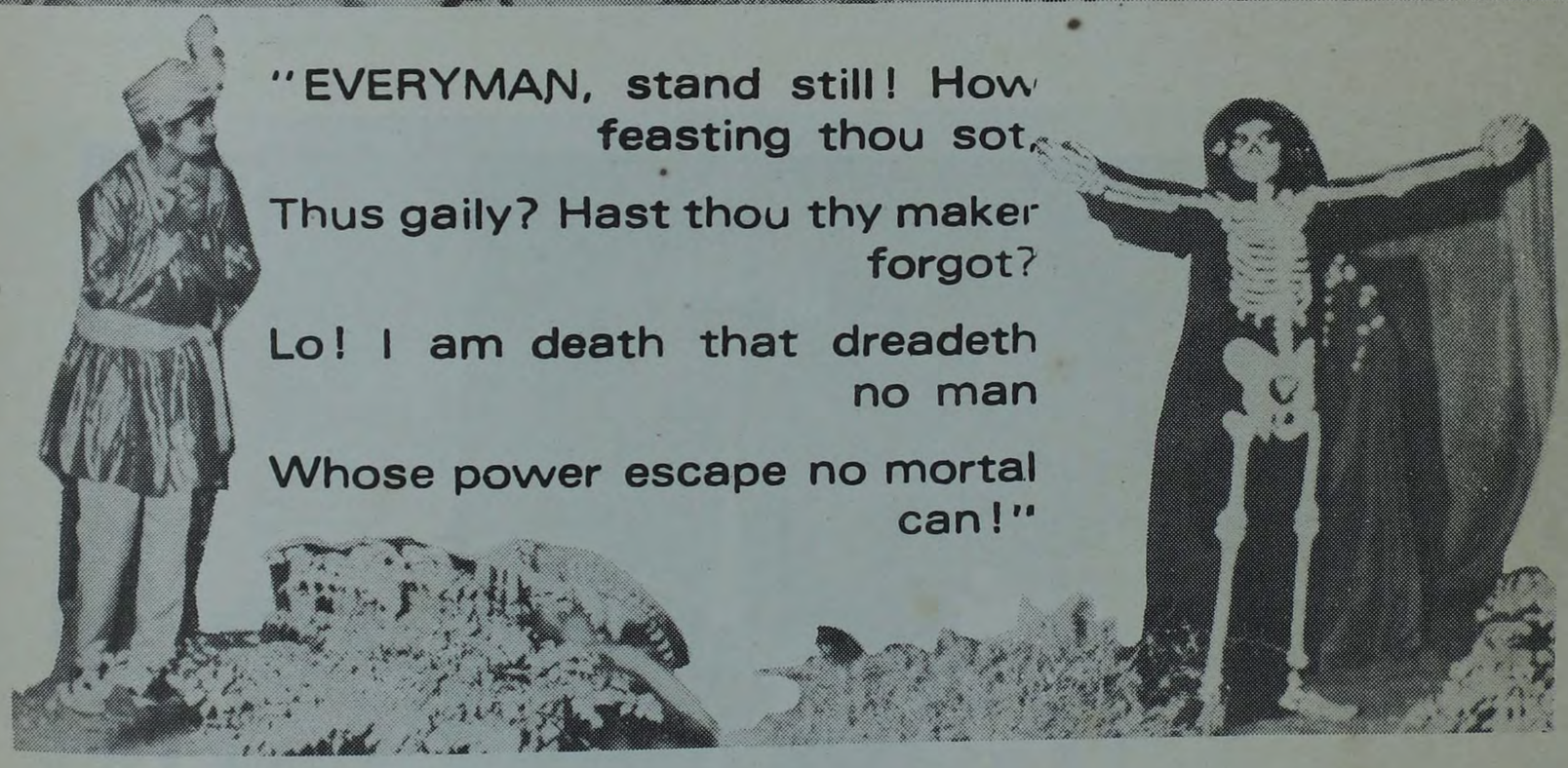
who with

far-seeing vision

founded

St. Agnes College

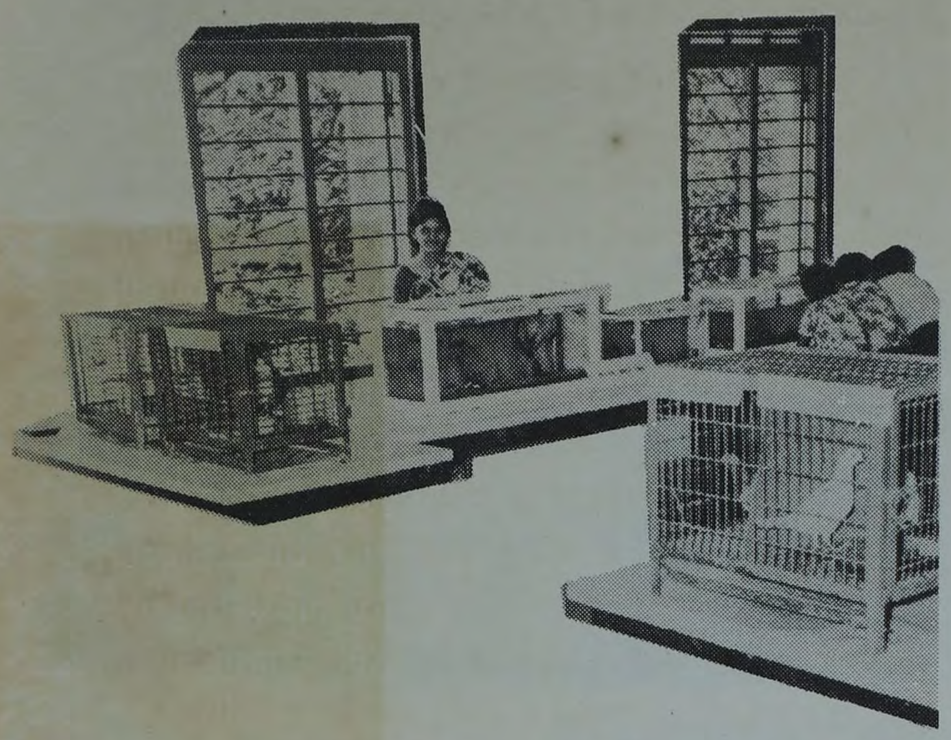
in 1922

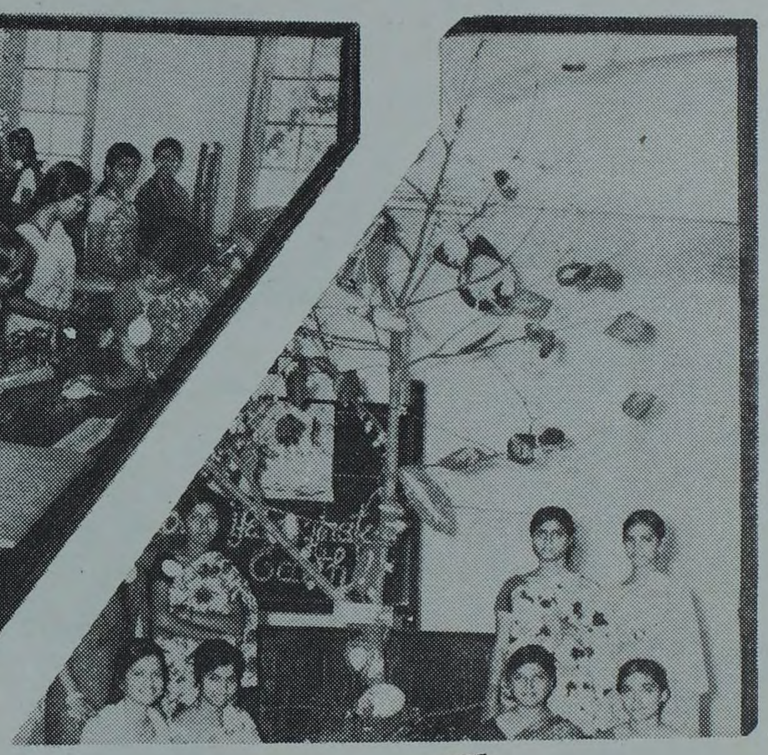

"EVERYMAN, stand still! How
feasting thou sot,
Thus gaily? Hast thou thy maker
forgot?
Lo! I am death that dreadeth
no man
Whose power escape no mortal
can!"

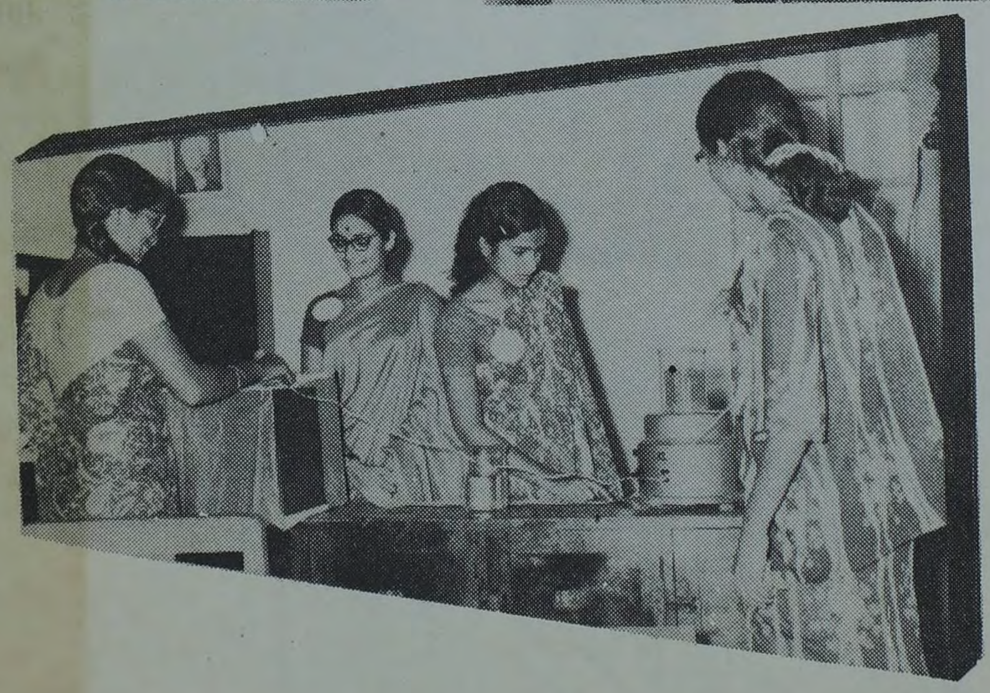
MIKE
MIKE

ARTS AND SCIENCE EXHIBITION

GATEWAY
TO THE LAND
OF
FIGURES







any name would smell as sweet" and proceeded to the **Physics** department where High School Ramans and Curies revelled in mysteries such as "method to determine ratio of charge to mass of an electron" or "instrument to detect the secondary cosmic particles that bomb us all the time." Then up to **Chemistry** where we breathed freely in the homely world of the green revolution, soil-testing, fertilizers, insecticides, dyes, plastics, cosmetics etc., or so we thought, till sharply made to realize that this was a 20 letter formula, and we departed, leaving the last two items drugs and alcohol, to stronger minds.

February 15th – The Public Meeting with Padma Vibhushan T. A. Pai in the Chair and Mother General, our Bishop, distinguished Old Students and the Acting Principal, on the dais, was worthy of the occassion. Sr. Noelline in her words of welcome, stressed the public co-operation the college has always had, Smt. E. Britto spoke gratefully and appreciatively of her old professors, specially mentioning Mother General. Smt. Kamala Alva paid her tribute to the debt Mangalore owes to Mother Aloysia whose photo was then unveiled, and Mrs. Cynthia Pereira, the Agnesian Association Secretary read out messages from the President, the Prime Minister, the Director of Collegiate Education and Vice Chancellor.

The President's speech was worthy of the closest attention. He dwelt at length on the great work missionary institutions have done in South India—that is why the South has such a stamp about it – but he sounded a note of warning for the future—the present type of education must change, where going to College becomes a status symbol, where learning is not geared to life.

It was quite a long meeting but those who waited for the last item were most happy that they did so. "EVERYMAN" appealing to everyone among the huge audience, appealing still more because of the rich oriental setting and costuming struck the true Jubilee note. Riches, power, friends, beauty, all these pass away—only two things remain FAITH and GOODWORKS and these make Death a welcome friend leading to eternal bliss. The directors: Sr. Marie Xavier and Mrs. Urmila Shetty, and the numerous cast of characters and helpers worked hard, but the success of the play was worth all the hard work put in. It gave to the students, parents and well-wishers gathered, the message of "EVERYMAN" as a souvenir of the Golden Jubilee.

Sr. Fidelis A. C.

" Good Deeds with live Faith shall make you secure.
Yet watch ! Your end you know not.

Beauty, Friends, Possessions do man forsake-
All belied their promise who sweetly spake.
All have fled ! yet fear not, steadfastly
Now your Faith and Good deeds shall your guidance be.

For if grief be sincere, God's mercy draws clear.

Now hark ! Time presses. Your first step is Trust:
The Prodigals' path from the slough of Mistrust
The second is Prayer from a contrite heart:
The Prodigals' call to God's mercy; come, start! "

Freedom's Dawn

"Into that Heaven of freedom
my father,
Let my country awake"

Freedom Where the mind is without fear
and the head is held high;

Freedom Where knowledge is free;

Freedom Where the world has not been broken up
into fragments by narrow domestic walls;

Freedom Where words come out from the depth of truth;

Freedom Where tireless striving stretches its arms
towards perfection;

Freedom Where the clear stream of reason
has not lost its way into the dreary desert sands
of dead habit;

Freedom Where the mind is led forward by thee
Into ever-widening thought and action.

From Tagore's **GITANGALI**

Jaya When the long dreary night was dense with gloom,
And India lay still in a stupor,
Thy mother's arms held her,
Thy wakeful eyes bent over her face.
Till she was rescued from the dark evil dreams,
That oppressed her spirit.

Jaya Touched by the golden rays of Thy love,
India woke up and bent her head at thy feet.

Jaya Thou King of Kings; Thou Dispenser of
India's destiny.

He Victory, Victory, Victory to thee.

From Tagore's Translation of **JANA GANA MANA**

The Silver Sheaf

Waken, O Mother, they children extol thee,
Who stand in thy presence to adore and serve thee.
The night is aflush with the dream of the morrow;
Gone are the days of bondage and sorrow.
Waken and solve the problems that enthrall us,
And hallow our hands for the triumphs that call us.

Sarojini Naidu

The service of India means the service of the millions who suffer. It means the ending of poverty and ignorance and disease and inequality of opportunity. The ambition of the greatest man of our generation has been to wipe every tear from every eye. That may be beyond us, but as long as there are tears and suffering so long our work will not be over.

Jawaharlal Nehru,
August 14, 1947.

A quarter of century has since elapsed, durnig which we have had our share of failure and success, of tragedy and triumph. And yet we can take pride in the undeniable fact that despite the long sequence of challenges, we are today stronger, politically, economically and socially.

Let us rededicate ourselves not only to the service of India and her great people, but beyond to the broader goals of world peace and human welfare.

Indira Gandhi,
August 15, 1972.

Time has moved on and once again we are gathered here to review the activities of a year that is swiftly and inexorably drawing to a close. It is a happy occasion when we can cast a backward glance on all the memorable events that have been notched up in the College calendar. We are also happy to welcome into our midst the chief Guest of today, Sri K. Chennabasappa *B.A. LL.B.*, District and Sessions Judge, South Kanara, who has graciously consented to preside at today's function.

The Strength of the College has risen to an impressive 1616 as against 1392 last year.

Staff—Sr. Noelle resumed charge as Principal in June after her return from a sojourn in Europe and the United States, enriched with experiences and with a broader outlook on life. The following staff members have left us for other fields: Mrs. Hema Urmila Shetty (English), Mrs. B. Sheelavathi (History), Miss S. Padmaja and Mrs. Indira Ramakrishnan (Economics). We make particular mention of Mr. P. Gopalakrishna, Reader and Head of the Kannada Department, who relinquished his post after 24 years of dedicated teaching work. The College is indeed grateful to him for his selfless toil and high academic standards. We also acknowledge with gratitude the "Palepady Gopalkrishna Prize" in Kannada founded by him with a generous donation of Rs. 600/-

The following are a welcome addition to the staff. Sr. Sylvette A. C. (Geography), Miss Flossy Mendonca (History), Miss Sunila Pai (English), Miss Usha T. (Kannada), Mr. Frank Lewis and Mr. Krishna Rao (Commerce) and Mrs. Annie Chaly (Physics).

Dr. (Miss) V. Malathi Devi of the Physics Department and Mrs. Leela Upadhya of the Botany Department attended the All India COSIP Seminar organised by the All India Christian Board of Higher Education at Wilson College, Bombay. Sr. Evangelista A.C. of the Kannada Department was deputed to attend the Kannada Janapada Sammelan of the Karnatak University at Dharwar.

University Laurels—Our students have always tried to maintain a high standard of academic excellence. In the Final BSc. there were 72% passes with 12 first classes and 26 second classes. In the Final B.A. there were 57% passes with 22 second classes. In the Pre-University there were 58% passes with 39 first classes and 71 second classes. Miss Mariette Pais was awarded a gold medal for securing the first rank in English in the University Examination of April 1971 and Miss Uma G. Gubbi secured the fifth rank in the Pre-University Examination (one year) of April 1972.

College Activities—College activities have covered a wide spectrum of subjects both academic and cultural. All the Red Letter Days were appropriately celebrated. At the K.M.C. Mangalore Inter-Collegiate Music Contest, our College secured the first place and shield for Eastern Music Group Songs and the first place and shield for Light Indian Music. In the Western Music Group Songs, it secured the second place. At the Government College, Mangalore, Inter- Collegiate Music Contests, U. C. Poornima (I B.A.) secured the first place in Hindustani Music.

At the district level Rastreeya Bhawa Geet competitions, C. Shobha (III B.A.) secured the first place and U. C. Poornima the second place. In the Bank of Baroda Essay Competition on "Role of Banks in Modern Economy," Abolina Rasquinha (II B. A.) secured the first place at the branch level and the third place at the all India level. She was awarded Rs. 100/-.

At the District, Inter-Collegiate and all-India level—At the district level Junior College Section "Aurobindo Centenary Essay Competition in Kannada," P. Anasuya (II P.U.C.) secured the first place. At the Inter-Collegiate Quiz Contest organised by the Leo Club, Manipal, Sandya Nayk (III B.A.) secured the Best Individual Prize and our college the second place for Teams. At the Inter-collegiate Debate Competition at the Manipal College of Pharmacy, Sandya Nayak again bagged the second place. At the A.D. Shroff Memorial Oratorical Contest organised by the Foum of Free Enterprise through the Rotary Club, Mangalore, P. Shoba Rao secured the first place and Sandya Nayak a consolation prize. At the Inter-Collegiate Debate on "Cooperation" organised by the University of Mysore, P. Shoba Rao secured the second place and was selected to represent the University at the all-India level. The contest has not yet been held, At the Republic Day Inter-Collegiate Elocution Contest conducted by the Lions Club, Mangalore, P. Shoba Rao secured the third place.

At the college level "Independence Day Quiz Contest" conducted by the History Department, Sandya Nayak secured the first place and cash prize of Rs. 25/- Sr. Irene D'Souza second place and Rs. 15/- and Loretta Albuquerque third place and Rs. 10/-. At the Voters Day Celebration Elocution Contest conducted by the Politics Department for the District, Sandya Nayak secured the first place and Rs. 50/-, P. Shoba Rao second place and Rs. 25/- aed Sr. Irene D'Souza third place and Rs. 15/-

At the Inter-Collegiate COSIP Programmes conducted by St. Aloysius College Mangalore, S. Asha (III BSc.) secured the first place and Sr. Irene D'Souza and Patricia Lobo the second place in Physics, and Miriam Pinto (III BSc.) the third place in Chemistry. At the district level Inter-Collegiate Quiz for Degree Students of Physics conducted under the COSIP Programmes by St. Agnes College, S. Asha secured the second place. At the college level COSIP General Quiz Contest, Sumathi Nettar (III BSc.) secured the first place and at the Chemistry Department, Sumathi Nettar again secured the first place and Nalini Ramakrishna the second place.

At the Inter-Collegiate Kannada Debate organised by St. Aloysius College, Mangala H. (P.U.C.) secured the third place. At the Kannada Quiz conducted by the Kannada Department, Ranjaini Udupa (II P.U.C.) secured the first place.

Loretta Albuquerque (III B.A.) secured the third place and a cash award of Rs. 16/6- in the Essay Competition on "Peace is Possible" conducted by the C.B.C.I., Commission for Development, Justice and Peace, New Delhi.

Ten Students of the College participated in the USIS Seminar for students at K.M.C. Mangalore.

While fostering the intellectual and cultural activity of the students, the College does not forget another side of their lives—the side that will train them to fit themselves into their proper niches in a world where change seems to be the rule of the day and life is an ever-moving kaleidoscope of pleasing and unpleasing pictures. In the field of Religion and Ethics several new modes of approach and methodology such as group projects, Gospel study, essays and enacting of Parables, positive thinking and personality tests, critical survey, etc. have been introduced. They Sodality of our Lady and the Legion of Mary continue to work at the spiritual formation of the students.

The College thanks the many visiting speakers who gave us the benefit of their experiences–Dr. M. P. Pai, Principal, K.M.C.; Sri A. P. Gopalkrishna, Retired Civil Judge, Mangalore; Dr. B. N. Hegde–Social Service; Dr. C. N. Kamath—Advances in Modern Medical Science; Prof. T. Krishna Rao,

Principal, Bhandarkar's College, Coondapur– "Planning in India" Col. Elisha–"Experiences of the war in Bangla Desh"; Sri A. V. Rao, Lecturer, St. Aloysius College–"Arrow of Time"; Mrs. Vatsala Talithaya–"Indian Music" Through the courtesy of the USIS, Madras, the following speakers were invited to the College: Dr. Blucher Dee–" U. S. Foreign Policy after World War II; Mrs. Marie Shaw Dee "Modern Feminist Movement in the United States"; and Dr. R. V. Chandrashekar Rao, Head of the Politics Department, Andhra University Waltair– "Twentieth Century Challenges to the American Political System."

Our thanks go out also to Mrs. Eva Madhavan who has started bi-weekly yoga classes which are attended by a dozen students. Also to Dr. G. D. Veliath, Miss Hazel D'Lima, Sr. Vincenza A. C., Swami Vynanandi, Serena Holroyd, Jean Palmquist. the several Fathers who have given talks on Religion and Ethics and helped to conduct Retreats, and to Sri P. Vasudeva Rao, Sri O. Neethi and Fr. W. Albuquerque for their help in Indian and western music.

Let us not forget to thank also Messrs Higgin-bothams, Madras, Messrs B. I. Publications, Madras and the organisers of the Soviet Book Exhibition for conducting book exhibitions in our college for the benefit of the Staff and students during the International Book Year; and Mr. K. S. Upadhya, Mysore State Sangeeth Academy, for organizing a puppet show depicting scenes from the Mahabharata by artistes from Mysore State. The College offers its thanks also to Sri Vithoba Nagavekar, Proprietor, Komal Sweets Stall, for donating a shield for Inter-Collegiate contests sponsored by the College.

The Planning Forum was inaugurated by Dr. W. P. Martin of St. Philomena's College, Puttur. In October it organised an Inter-Collegiate Seminar for 4 Colleges on "Land Ceilings" under the presidentship of Sri S. K. Amin, President of the S. K. Fisheries Board. The students celebrated Gandhi Jayanthi for a local elementary school in a harijan colony. The students help the families of 2 Jawans regularly and also collect old coins and postage stamps. They also helped to undertake a survey on Immunisation of children against diphtheria, whooping cough and tetanus in cooperation with the Mangalore Municipality and Socio-Economic Committee, Bendore. They helped to get soil tested at the Soil Testing Laboratory. A talk on "Community Development" was given by Sri P. C. Shetty, S. E. O. Mangalore.

The College Science Improvement Programme (COSIP)–Our College was selected for this scheme by the U.G.C. early in August 1972 and it is one of the 3 Colleges of the Mysore University selected under the scheme. The College has launched a comprehensive three-year programme with Dr. (Miss) V. Malathi Devi of the Physics Department as Coordinator. The programme includes new methods in theory and laboratory techniques, Staff and student research projects, open book examination system, seminars and the development of a good Film Strip and Reference Book library. Special mention must be made of a six-week seminar in Mathematics for lecturers with 35 participants from the various colleges of the district. Our special thanks to Dr. (Mrs.) Chintayanamma Malliah, P. G. Centre, Konaje, Dr. Narayanan and Dr. Channabasappa K. R. E. C., Suratkal, Prof. Vishwanathan, Government College, Mangalore and Prof. U. S. Upadhyaya, Principal Mahavir College, Moodbidri, for their invaluable help and co-operation.

National Service Scheme— Our College was included under this scheme this academic year. Sr. Olivia A. C. has been appointed N. S. S. Officer by the University. The Advisory Committee consists of the Principal, the N. S. S. Officer, Mrs. Addie Saldanha, M. L. A., Mrs Ratna Hegde, President,

Federation of Social Welfare Agencies, Mangalore, Mr. M. Shivayogi, Asst. Engineer, P.W.D., Mr. A. Koragappa, Dist. Officer for Youth Welfare and Miss K. T. Ragini, the Secretary of the N.S.S. The N.S.S. students are actively involved in various activities at the compus, urban and rural levels. At the campus level, campus cleaning and coaching of educationally backward students is undertaken. At the urban level the members were given lessons in first aid by Dr. Allan Fernandes. They undertake hospital visitation and distribution of fruit to the sick. At the rural level, the members work regularly in a harijan colony of 24 families at Kotimura village and conduct coaching classes for school children every Saturday afternoon. The annual camp was held in the same colony from 14th to 23rd Oct. It was a leadership cum work camp. The students helped in the construction of a house for a poor harijan family for which they collected Rs. 600/- by means of a fancy fete while the President of the Mangalore Taluk Board contributed Rs. 1000/-. During the camp a medical check-up was conducted by 7 doctors lent by the Principal of K.M.C. and medical aid was provided for the sick. The harijans were encouraged to raise kitchen gardens by planting cocoanut seedlings, etc. Annual treats were served to the inmates of Balikashram, the lepers of the Kankanady Hospital and the Damien Home. Clothes, food and medical aid were also supplied to several needy persons including students. A sum of Rs. 500/- was collected by the students to help the drought-stricken area of Chikkahole in Mysore State. The NSS offers special thanks to the Programme Coordinator, Mr. B. K. Shivaram and the Director of the NSS Prof. U. K. Subbrayachar, who visited the camp for a couple of days and gave encouragement to the campers.

St. Agnes College Service Project School of the Mentally Retarded—This school, started in 1970, meets one of the most pressing and urgent needs in the field of social work. It has on its roll 11 boys and 5 girls. It has now been granted recognition by the Department of Public Instruction, Bangalore, as a Primary School for the handicapped and is eligible for government grants. The first floor of the new building, donated by the Apostolic Carmel as its Centenary Memorial, has been completed. The second floor is due to be completed next year.

Excursions—One of the highlights of student activity is the annual excursions in which the students participate. 69 students visited Delhi, Agra, Nainital passing through Madras and Bombay, while a batch of 39 Botany students went to Mysore, Ootacamand, Coimbatore and Ernakulam. The Psychology Department took its students to Bombay and Poona and the Chemistry and Physics Departments organized a tour to Madras, Bangalore and Mahabalipuram. The Geography students visited Koila, Panambur and Chotamangalore.

Physical Education—This is a field in which our students continue to prove their mettle. In the Mysore University Inter-Collegiate Table Tennis Tournament conducted at Chitradurga in January 1972, we secured the second place. Molly Menezes and Chitralekha Shetty were selected for the South India Regional Coaching Camp at Bulsar during the summer Vacation. The College 4×100 metres Relay Team stood first in the city level Dasara Sports, Mangalore, and again at the divisional level at Mysore, but secured second place at the state level. At the M.G.S. Zonal Athletic Meet we won the Team Championship in Athletics and Molly Menezes and Shobha Shetty secured the Individual championship. At the M.G.S. Inter-Zonal Athletic Meet, Molly Menezes secured the first place in High Jump and was selected to represent the University at Ahmedabad. Josephine Fernandes represented

the University at the Inter-Varsity Basket Ball Tournaments at Baroda and P. Sumana and Chitralekha Shetty in Kho-Kho at Kanpur. At the zonal level in team games, we were the winners in Soft Ball, Kho-Kho and Ball Badminton and runners-up in Volley Ball. The over-all championship was secured by our College. At the inter-zonal level, we were runners up in Soft Ball and Ball Badminton. At the YMCA open Table Tennis Tournament Vani Rai secured the second place. At the State Inter-University Athletic Meet Molly Menezes secured the second place in High Jump and 4 × 100 metres Relay.

New Scholarships and Prizes.—We gratefully acknowledge the receipt of Rs. 500/- from the children of the late Mrs. Marcelline Benedicta Fernandes towards founding a prize in memory of their mother.

Conclusion—After this backward glance at the records of the year, it only remains for me to say a warm thank you to all gathered here today—to our friends and benefactors, the parents of our students for their continued help and good will towards us, to our staff members for their unstinted devotion and unwavering loyalty, our students for their abiding faith in us, and to all who have helped to make this day memorable. I pray our good friends and benefactors may always have us in mind and help us to carry out our multitude of projects which so often have been possible because of their generous hearts and open purses. Lastly my special thanks go out to our chief Guest. Thank you, Sir, for your gracious acceptance of our invitation to spend a little of your time with us on this happy occasion. And may God bless us everyone!

Sri M. Noelle A. C.
Principal
St. Agnes College, Mangalore.

GOD IS OUR STRENGTH

God is our strength, let us commit
Our lives into His Hands this day;
Trusting in Him to compass it
That we may find the perfect way.
Fearless of foes, we cast aside
The days of ease we loved of yore;
And stand to the shock of battle-tide
Despite all trials hard and sore.

God is our strength, why fear the foe?
His love like armour doth enfold
Our weak and wayward nature so,
That vanquished lies the tempter bold.
Behold His arm of valour strong,
We'll cling to it in stormy fray,
Nor fear we any harm or wrong,
God is our strength now and for aye.

New Dimensions to EDUCATION

Education: The Search Together

Education: The Twin Challenge:
Quality
Social Justice

Education and Social Change

Education and the Community Spirit

EDUCATION: the Search Together

Thus education, or cultural action for liberation, instead of being the alienating transferring of knowledge, is the genuine act of knowing in which the *educatees* (who are also educators)—as conscious bodies in the world—go forward with the *educators* (who are also educatees) in the *search for new knowledge.*

Paulo Freire: **Humanisation**
published in
Tomorrow Began Yesterday
1970 Seminar of
Educ-International, Rome.

EDUCATION has other aspects too

An Educator Muses
Page . . . 13

Education for National Development
Page . . . 15

The Modern Mother's Dilemma as Educator
Page . . . 17

Travelling also Educates
Page . . . 18

The Educative aspect of Excursions
Page . . . 19

Educating to Poetry
Page . . . 21

EDUCATION: The Twin Challenge

The validity of the Christian effort in higher education in India would depend on the degree of its response to this challenge. Or, to put it differently, the two areas in which a specifically Christian endeavour could make a significant contribution are: in the search for *social justice through education*, and in the *search for quality*. Far too many people seem to think that you have to choose between social justice and quality, and that you cannot have both. These include many Christian educators. They are wrong; leastways, they are unchristian in thinking so. I would suggest that it should be the distinctive quality of Christian education that it simultaneously and uncompromisingly seek both social justice and intellectual quality.

In saying this, I may seem to fall into the same error that so many Christian educators fall into, namely, the error of smugness and self-righteousness. Let me, therefore, hasten to add that I am far from suggesting that Christians would be more competent than others in the simultaneous search for social justice and intellectual quality. All I wish to stress is that if we desire a *specifically Christian presence in India's education*, it is justified only on the basis of such a simultaneous and integrated pursuit.

Prof. **V. V. John:** **Higher Education in the Seventies: Crisis & Hope.**
University of Delhi

Keynote Address at the Triennial Conference
All India Association of Christian
Higher Education, Pune, Dec. 1972.

EDUCATION and Social Change

Consistent with the above direction of social and moral change, the educational pattern must fulfil the following objectives:

a) creation of a new value-system based on human dignity and creativity.
b) eradication of mass illiteracy.
c) creation of a truly democratic and scientific education.
d) awakening of a spirit of scientific enquiry, critical reasoning and power of judgement.
e) development of theoretical and practical knowledge and of the ability to apply such knowledge, consistent with the objective need for the development of society.
f) elimination of all class and caste divisions in education.
g) creation of a democratic structure and administration of education.

Xavier Board of Education
Statement of the Seminar:
EDUCATION FOR SOCIAL CHANGE

"We cannot always build the future for our youth, but we can always build our youth for the future".

Franklin D. Roosevelt

EDUCATION and the Community Spirit

It is a fact that the educative process is carried on not only by academic activity but also by community life. The educational value of community life depends on two factors: the extent to which the individual joins in the community and opens himself to others, and the mutual respect which the members of the community show to one another. It is this respect that governs relationships among the various members of the community: professors, administrators, non-academic staff, and students. This community spirit will be promoted by making sure that there are lines of communication open to everyone, and that everyone has an opportunity to contribute, according to his role and capacity, towards decisions which affect the community. To a great extent the human influence of the university will depend on the vitality of its community life.

"Fostering the University Community"
THE CATHOLIC UNIVERSITY IN THE MODERN WORLD
International Federation of Catholic Universities

A Teacher's Reflections

When forty years of your life have gone into teaching, I daresay you can begin to write your memoirs. The question is, how interesting can you make them, and who will find time to read them. Many have serious doubts whether any old fool should be allowed the licence to inflict his memoirs on tolerant readers, whether so much ink and paper can be wasted on senile reminiscences in these hard times and finally and most importantly, whether the said memoirs have any contribution to make to anything.

In these circumstances, the title of my article is likely to bring a hornets' nest about my ears. I hear an iron whisper, "We live in deeds, not years"; another "Why look back when you should be looking forward"; a third "Let the dead past bury its dead" I've had it. That last monosyllable hurts. There is something irrational about the way people jump to conclusions. How did anyone get the idea, memoirs is all I could write. Besides whatever in Heaven's name, do they mean by discouraging anyone without hearing her side of the story ? I have a spanking good idea, if you would only listen, and if it is'nt brand new, it still seems worth sharing.

And with this little introduction, I shall embark on my real topic : "The Yawning Chasm". The story of the young Roman Curtius is well worth rebating for a start. It is said, the ground once split open in the forum and the deep wide chasm was an unusual traffic hazard. The oracle was consulted and the answer came that the chasm would close only when Rome's Treasure was thrown into it. "I am Rome's Treasure", shouted a handsome fourteen year old as he leapt into the chasm. Everybody held his breath as the parted earth closed over the youth. A tremendous story !

I have looked for a Curtius, since the days of Bhagat Singh and found none. A chasm yawns wherever your eyes are cast—between old forms and new, between old values dying or dead and new ones struggling to be born—A panoramic view of forty years discloses the slow but steady geocentric change that has brought youth to their present state of apathy to progress, their involvement, as modern terminology would have it, in their own selfish, often basic urges, as the hub of all endeavour. Idealism has been bundled up and thrown out of the window or fled the scene in an attempt to save itself.

Give me the young man who will fight or die for his country, not the man who will kill for the lowering of cinema ticket rates or the postponement of examinations. I could find it in my heart to make innumerable excuses for the youth who strikes against corruption and social injustice, whatever his dress or however unkempt the stubble on his chin, especially if he should end by ruining his own future in the effort to get things righted. But when he behaves like a hit-and-run driver who claims his right to kill without being arrested for it, and engages in a hi-jacking spree with the police bribed or brow-beaten into merely looking on, I cannot help feeling sick at the triumph of poltroonery over courage.

To talk of the good old days is just indulging in weak sentimentalism, which takes us nowhere. Everybody gapes helplessly on at the spectacle of material and moral devastation facing society,—the parent, the teacher, even the politician who might often be responsible for fomenting the trouble. What a pass to come to !

As a teacher, I am inclined perhaps futilely, to look back. Will any one listen

to what I may want to say ? It is at this point I realize that the streak of idealism which characterized the youth of a past generation and is still visible in the campus unrest of Western and some Eastern Universities, has deserted our youth.

Talking casually a few weeks ago to a concerned parent, I felt won over by his argument that our national independence having been achieved, and later on the independence of colonial countries, our young people were faced with a vacuum in place of those ideals their older compatriots had lived for. "It is doubtful," he said, "if they know themselves with what to replace the old ideals, and we don't know either.

The impasse savours of tragedy. Is all youth in revolt or only a section ? Are social aberrations like the Hippie outlook, likely to develop into serious philosophies or are they just a passing phase ? Whom are the youth likely to copy next ? The Arab Guerilla ? I doubt it, for his desperate hatred of the Israeli is combined with so absolute a disregard for his own life, he is no model for our skin-saving lot.

What should the teacher do to win over the youth to a saner view of life—go on preaching or start practising ? Is the policing of Universities the answer to mass copying?

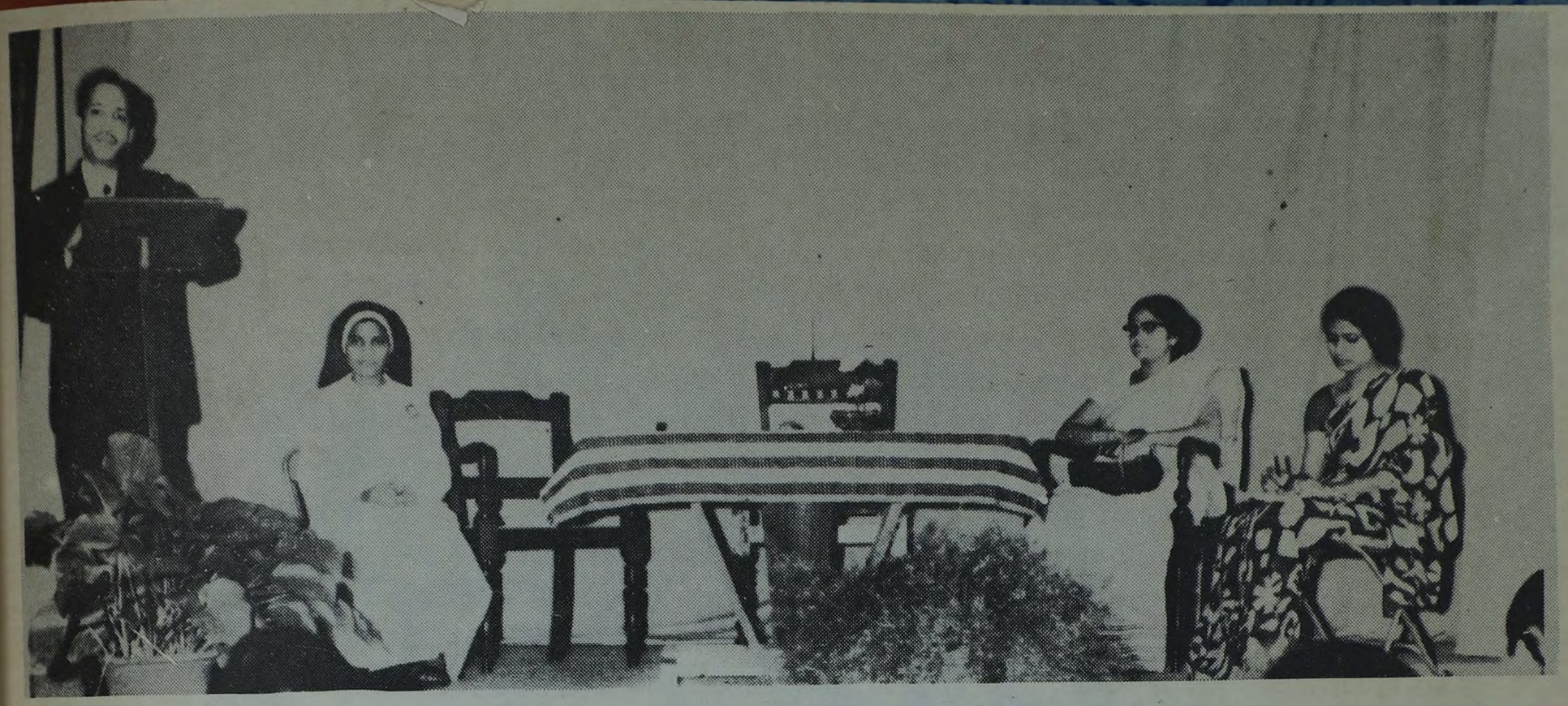
One can go on in this strain forever and to the youth who cannot wait to get power and position, no matter at what cost, such questioning seems off-beat and irrelevant. They would not hesitate to decry it as utter drivel; they have no time for it.

So the answer must be sought from one's own experience of youth. A national crisis of character is certainly in evidence and the infection has been almost inescapable. Perhaps only the poorest living in the so-called backward tracts, have remained untouched and their being a sizable number hardly makes a difference to the state of society in urban India. Dead and forgotten ideals must be replaced, principles must be revised or re-enunciated, and above all, example set for the young to follow.

And this is where the teacher comes in. It is a far cry from the placid academic life of 40 years ago to the present turbulent times, and most of my colleagues in the profession cannot look back on a span as wide as that. Indeed the majority are products of an age of soi-disant individualism, an age in which the decline and fall of nationalism has led to an upsurgence of power-driven agitation. The old generation of teachers is on its way out; and if the younger one which is to be the vanguard of future academic progress is not to learn its idealism from wherever it exists, how will the youth be led ? For, if the salt of the earth lose its savour, wherewith shall it be salted ? If reasons for tolerating the status quo and toeing the line of revolt 'were as numerous as black-berries,' I should still hold the teacher down to the oath, implicit in his acceptance of the profession, the oath to guide and draw out the young mind, teach the young idea how to shoot (how literally we seem to have taken the injunction) ! If the doctor at graduation takes the oath of Hippocrates, promising to minister dutifully to the patient, how much more important is it not that the teacher promise to minister as dutifully to the student !

We have, in a sense, failed the younger generation. If we can endeavour to put back into education some of the idealism our own indifference has helped to pull out of it, the effort will pay dividends in a less disturbed student clientele. But have we burnt our boats ?

Dr. (Miss) M. A. Saldanha

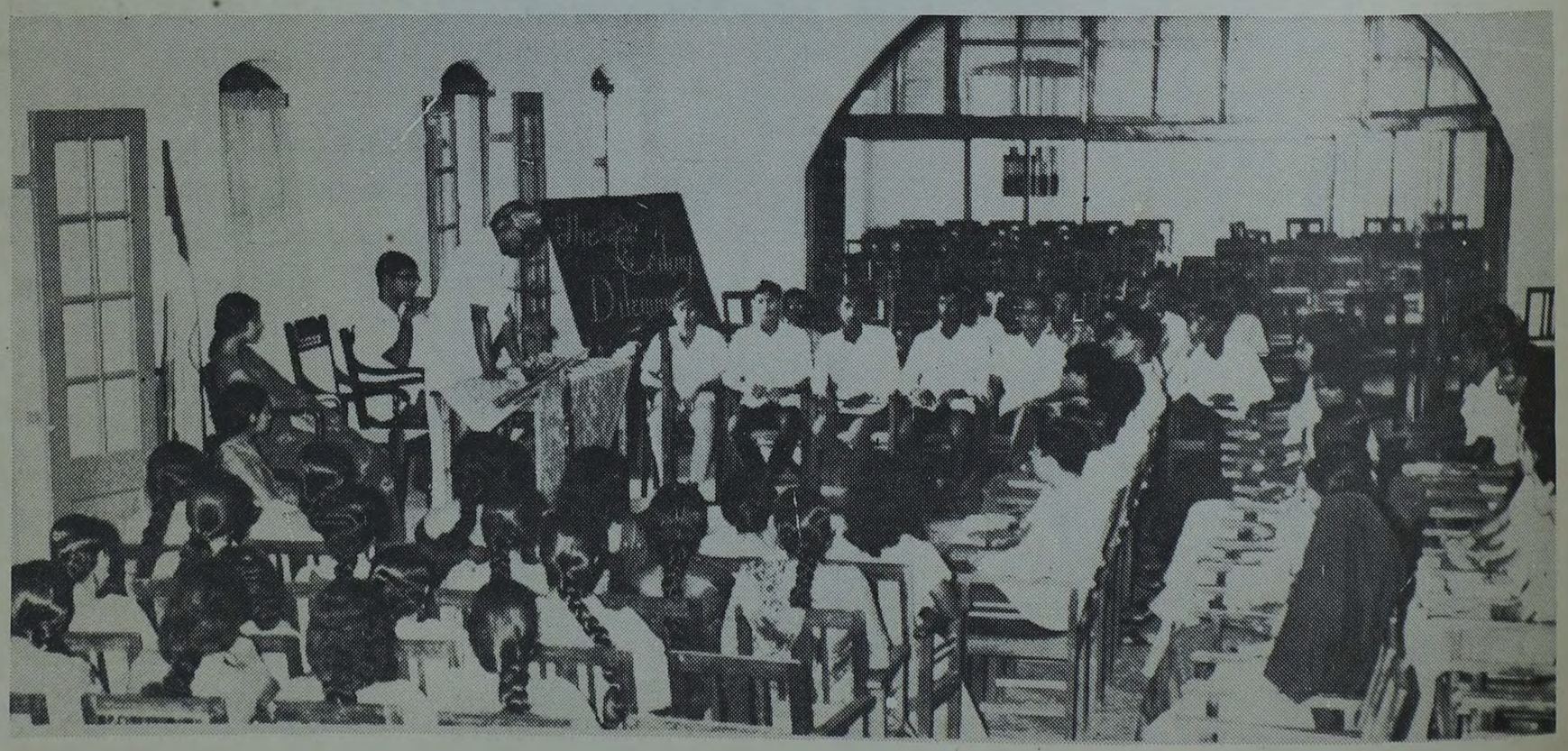


DOCTOR C. R. KAMATH INAUGURATES THE NATURAL SCIENCE ASSOCIATION

AND PROFESSOR T. KRISHNA RAO INAUGURATES THE COMMERCE ASSOCIATION

INAUGURATION OF THE PLANNING FORUM BY MR. W. MARTIN

PLANNING FORUM SEMINAR



"The Ceiling Dilemma"

Education for Development

In the last ten years, there has been a growing understanding all over the world, of the role education has to play in the all round development of nations. This new perspective is based on insights derived from the human-resource theories of several distinguished authors, according to whom education must no longer be considered purely an expenditure or 'consumption' but primarily an investment in man, productive of human skills, social, managerial, technical, and changed attitudes and values, all of which promote economic and social development.

The Report of a group of experts of the United Nations on the Problems of Social Development Planning pointed out that education besides being the legitimate right of the people and a never ending source of personal satisfaction for the individual citizen is also an important factor directly contributing to the economic development of the country. If education at all levels were systematically planned and fully integrated into national development programmes, it would hasten the actual rate of economic prosperity of the country—a growth rate so urgently needed in India by its multi-million peoples and which in turn will condition the extent to which India can expand her education systems.

Though people often have no clear idea of the value of education, they instinctively feel that the education they give their children will eventually produce returns in the shape of upward social mobility, increased earning ability and greater social respectability.

The impact of education on the economic growth of nations has been conclusively proved by various studies conducted in the last 13 years by UNESCO, by other agencies and by individuals. From these studies two facts emerge:—1) the economic growth of nations has a direct correlation to the investment made in education. 2) in the case of practically every country, the major factor in explaining its economic growth is the extent and quality of the education imparted to the people. Indeed, up to 80% of the economic growth of nations is to be attributed directly or indirectly to education.

In India, the educational development programme must be extended to all branches of education from primary to university including adult education. A comprehensive educational planning of this kind must be integrated with the over-all five year plans and be completed on time.

Again, for the proper extension and completion of the five year plans, we have to be conscious of the immense importance of adequately proved and tested planning-techniques of education. However, inspite of the progress made so far when considering the social and economic development' there is felt the need of an overall planning for education. The rate of educational growth has been inhibited inspite of the progress, by various factors. Firstly, because of the population explosion, the high rate of population growth accelerating with a decline in mortality, there is today a higher proportion of persons under 20 years of age. Thus the planners in education face an increase in the school-age population which grows more rapidly than the general increase in population. Secondly, although India has made some economic progress, it has not been sufficient to keep ahead of the population growth. The secondary treatment of education minimises its importance in the productive sector. Broadly, education is a factor of production in all Asian countries including India. But, the present education

system has not necessarily matched the needs of economic and social development. Undoubtedly in India, more attention should be given to planning; a closer relationship between education and vocation. Studies without delay should be set in progress which will reveal the connecting links between vocation and education.

The new realisation of the central role that education plays in national development has shown itself in several most significant ways. The United Nations has declared the 10 years from 1970 to 1980 to be the second decade of development during which attention should be concentrated on the subject of Education for International Development. Further 1970–'71 was declared by UNESCO as the "International Education Year" and the main thrust was to be on the contribution of education to development. Finally, the World Bank which for the first 15 years of its existence, refused to make loans for the educational development and reforming of developing nations has now fortunately and wisely changed its view and made it known that loans will be available for this purpose. The Pearson Report (1968) to the World Bank stresses the central importance of educational reform in developing nations if they are to make proper use of the development funds provided to them by the more affluent countries. All these are happy developments and show what can be done for development through schools and colleges.

Education fosters development in 3 main ways:—

1. First, evidently it improves the quality, efficiency, motivation and national spirit of the working force, a matter evidently of crucial importance for national growth. It is surely due to the high quality of its working force and their national spirit that Japan has been able to make such progress.
2. Secondly, education helps to increase the demand for more and better goods and when such demand exists, the factories and farms become naturally more productive.
3. Finally, education sweeps away crippling obstacles in the way of development coming from customs, traditions and superstitions.

It may be useful at this stage, to study the case of Japan, an outstanding example of a nation which has succeeded in transforming itself in 50 years from a traditional society to a modern one in every sense of the word. It has used education for this purpose and with extraordinary efficiency, right from the beginning of its determined bid to modernise. In 1857, Japan set about the task with the clear understanding that it could not be achieved unless illiteracy was wiped out and a new type of education based on science and not on the humanities, society-oriented and not individualistic, was imparted to its youth. A completely new school system was introduced which succeeded in wiping out illiteracy in 50 years. Japan became one of the greatest nations of the world. It was hauled out of the middle ages into the modern era in less than 50 years:

The 20 years since the end of the II World War has seen another educational revolution in Japan, just as significant as the first. The utter destruction and humiliation brought about by the war showed the Japanese rulers and the people that the path to national fulfillment could not lie through military conquest but only through trade and economic power. There would be no salvation for Japan unless she could compete on equal terms and even outdo the western nations in producing goods of the highest quality, that would be sought after as much for their intrinsic worth as for their low price. The world image of Japan as a producer of cheap shoddy goods, an exploiter

of the poverty of Asian markets, an imitator of the discoveries and products of others, had to be changed. Once more, Japan relied on education to produce the necessary changes in the outlook of her people. Once more, the success of the Japanese experiment is evident even to a superficial observer. Japan is one of the three most highly industrialised nations of the free world and now projects an image of herself as a country possessed of high inventive capacity.

In conclusion, India and her leaders have to face the fact that the provision for the education of the nation from the primary school to university is altogether inadequate both in quality and duration. What, as a country, India cannot afford is to go on being under-developed and as a nation, under-educated. Expenditure on education must be increased and be regarded as an absolutely indispensable investment for national efficiency.

K. Kalpana Nayak

THE WOMAN'S PRAYER

Lord, today I like to speak with you about "renewal"
Frankly speaking, I am a little afraid of that word!
My children use it so often that it sometimes hurts me
and it gives me the feeling that I have been doing
things that were wrong or futile.
It is hard for me to give up things
that I was so accustomed to;
my mother knew what she was doing,
when she educated me,
but Lord, I sometimes really don't know
whether to say 'yes' or 'no' to my children.
I do not want to be
the possessive-type mother, Lord,
and at the same time
I think that I have to protect them,
however much they want to find out things all by themselves.

Lord, I do not want them to get hurt;
I wish and pray that they will discover
that self-giving love brings true meaning into life.
I want them to be happy, Lord, loving and lovable.

Lord, guide me and show me what is your will,
your will must be done,
your will is love.

Grant that my renewal may be that I myself become
more sensitive and open to your will;
so that I do not follow my will, but yours.

May the spirit or Your Son guide and enlighten me.
AMEN.

Fr. Gerwin Van Leeuwn, o. f. m.
"Together", August 1971.

Hazards of a Bus Journey

A journey by bus in Mangalore can be a rare experience to any outsider. But to me it is a common experience, although each day I happen to improve my acrobatic skills further by travelling by these buses. Now you may be wondering if I am a circus artiste, No, I am not. I am a regular passenger in our rickety old local buses. And it is in these buses that I learn simple acrobatics without the knowledge of which you will either be smashed like a boiled potato or wound up and released like a spring wire, especially during peak hours.

When people see the roaring jalopy a great distance way from the bus stop they become alert to guard themselves against punches and pinches for there is no such thing called 'a queue' at the bus stop and it seems that the people of our town believe that strength conquers all as far as a journey by bus is concerned. So, amidst a lot of pushing and pulling the strongest manage to get seats in the bus, and the generous conductor and driver somehow stuff in all the rest of the passengers, for they don't want anyone to be late for office, school or college.

When the last person at the bus–stop has been skilfully squeezed in, the bus at last starts its slow journey while the commotion in the bus still goes on with one passenger standing on another's toes while somebody else is kind enough to stand on his.

Hooked umbrellas play their own part during a bus journey. Although it is an advantage for short people to catch hold of that out-of-reach rod of the bus, it is a disadvantage to some others, especially demure young ladies with swaying hair, as there is every possibility of their hair getting entangled into a fantastic knot in the hook of the umbrella.

If another bus, travelling on the same route happens to be racing to reach the final stop earlier than the one in which you are travelling, then the slow-moving bus naturally gains momentum rapidly and you will be lucky enough to reach your destination early, that is, if it does not meet with an accident on the way or some 'annoying' policeman does not inspect the overloaded bus just when it is getting late for college. While the drivers of the two buses are enjoying the race immensely you have to be prepared for a few nasty jerks and jolts and the sudden applying of brakes which forces you to a somersault or two, and there are also times when you discover that from the rear end of the bus you have reached the front. For a beginner it will be hard, but as you travel daily by these buses, you learn to stand with your legs in between two hefty passengers and your hands clutching at the window bars, you get used to that painful twist of your body in a bus carrying a hundred passengers when it really ought to have carried at the most half the number.

A sitting passenger in these buses does not have a more pleasant time than the standing ones, and the ones hanging on to the bus on the footboard. While you are busy trying to sit comfortably, some others will be busy easing their weight on to your lap. And you cannot complain either, for they always have the handy excuse that someone else is pushing them.

During the rains you will find umbrellas from all directions poking into your flesh which of course gives you the privilege to poke yours into somebody else's. While the passengers alight from the bus the pointed end of the umbrellas advances so menacingly towards you that you wish you were safely back at home under warm blankets.

And this in a nutshell is a journey by bus in our town. Very inviting isn't it?

Geetha K. Nayak
II P. U. C. Science

Our Botanical Tour

"How easy it is to make friends with everything in nature
If you grow them affectionately and with friendship."

Jawaharlal Nehru.

All trips and excursions call for a lot of preparation and excitement. Ours was no exception. Actually, the plan had a full month's attention and scrutiny. The places to be visited were Mysore, Ooty, Coimbatore and Ernakulum, not omitting the minor stops in between. The great day was fixed for the 24th of October. The trip of 7 days was so arranged as to afford us education as well as pleasure.

We started from our College right on schedule. (7·02 a.m. to be exact). We were 40 in all, including the three lecturers. Being very enthusiastic right from the beginning, we showed off the little we knew about the vegetation that we saw. Of course, there was hardly anything to comment on. So we fell to singing songs with the driver accompanying us on the horn, while the conductor turned the sides of the bus into improvised Bongo drums. Breakfast was at Sampage, a mere three quarters of an hour away from Mangalore.

From Mercara onwards, the panorama that stretched out before us—acres and acres of rubber, coffee and citrus trees, up the giddy ghats and down the same—is still fresh in our minds. As we were nearing Hunsoor, our inner sentinel reminded us what we had forgotten. It was 12–30 p. m. Having satisfied that necessity, we pushed on, and round about 2–30 p.m. we reached St. Joseph's Convent, Mysore, where we were to put up for the night. After tea, the same day, we went to the famous Lalitha Mahal a former palace of the Mysore Maharaja. It proved to be a great disappointment to all of us because visitors were not allowed inside. We proceeded to Chamundi hills, where we were able to see the well known Chamundeshwari temple, the Nandi bull and the statue of Mahishasura. We also had a glimpse of the summer palace of the Maharaja, from a distance. We were lucky enough to have a peep at the Mysore zoo. The fauna was great! The royal family of the jungle along with every representative from the jungles of Mysore and of other parts of India were present and at their best behaviour, except a few, who preened themselves endlessly to show off their beautiful colours, fine feathers, and furs.

Brindavan Gardens! The illuminated garden looked simply wonderful with its coloured fountains and well-kept lawns and flowerbeds. It looked in fact, too beautiful to be true. As we had had quite a full day, we retraced our steps back to the convent and tumbled into our beds tired but happy.

Early next morning, we went to Srirangapatanam. The locality of theRanganatittu Bird sanctuary proved to be an ideal place for plant collection. We fell to the task of collecting as many plants as we could from microscopic algae to bigger plants. The attender who had accompanied us brought the sheets for pressing the flowers and with many pairs of willing hands the work was accomplished in no time. After breakfast, we had a quick glimpse of Tippu Sultan's summer palace at Srirangapatanam. The whole palace has on its walls the various battles of Tippu painted in oil colours. It is truly a marvellous piece of work.

It was only after lunch that we started for Ooty. The hills and dales yet untouched

by man, has a charm and beauty that has no comparison. The flora was lush and green and the colours of the rainbow seemed to have tinted the bushes at random. Or perhaps, an unseen hand had lavishly splashed colours from a never exhausting palette.

On the way, we stopped at a place where we collected a few plants including gooseberries. The conductor gallantly offered to pluck for us the tempting fruit and threw them down to us leaves, branches and all. A little higher up the route we stopped again and this time it was the lower group of plants that we collected.

At 7 we reached Ooty, My Gosh! wasn't it cold! 'Hotel Woodlands' was very welcome and after a hot supper we set about pressing the remaining collection. As before, it hardly took us any time and it wasn't long before we were all curled in bed.

Next day after breakfast we set out for another visit to the hills. The sea of everlasting flowers won our heart. Huge bunches were gathered and deposited in the bus. We collected all types of plants—algae, fungi, lichens, and other higher plants, to our hearts content. We wandered in groups during these collections. We trudged up 'Dodda betta' (8,642 ft.), one of the highest peaks in Madras State. At the top, the panorama that spread before our eyes was breath–taking. Although a thin mist was rolling on we had a beautiful view of the land from above.

In the afternoon, we paid a visit to the Ooty Botanical Gardens. We fell in love with the gardens at first sight. Words cannot describe their beauty and the methodical precision with which they are laid out. I think, that every plant, or at least most of them anyway, can be got there. The glass house made us catch our breath in wonder. In fact each and every plant that we saw there had the same effect on us. Altogether we got a collection of nearly one hundred and twenty varieties of plants. We were so much taken up with everything we saw and the explanations of the guide, that we did not notice the time flying. An unpredicted treat was a visit to the Todas (aboriginals) in their homes. We returned to the hotel and decided to call it a Day.

The next morning, we really had a marvellous time—horse-riding and boating a 'must' for all tourists. For those of us who had never sat on a horse before, it was a novel experience. Boating too was a new kind of enjoyment and we, for sure, utilised the given hour as much as we could. We returned to the base, I mean the bus, dead on time.

After a sad, regretful farewell to Ooty, we pushed on to Coimbatore via Conoor. On the way we stopped at two spots selected at random, for some collection. We were not disappointed with our newly acquired flora. We drove on until at 7-30 in the evening we reached Coimbatore. A word about 'Nilgiri'. Truly, it deserves to be called the 'Blue Mountains'. The line of misty dark blue against the lighter shade of the sky stretching for miles, so solemn and majestic, is a sight that strikes wonder in one's heart.

In Coimbatore, we were fortunate enough to see an electron microscope and watch its proceedings. This was in the Agricultural College which in its campus, embraced besides the regular academic course, researches in horticulture and its branches. It also possessed a very large botanical garden but with an entirely different flora from that of Ooty. In Coimbatore too, we were able to add a few plants to our already heavy collection. Our next stop was Ernakulam which we reached after a seven hours journey. The hotel 'Woodlands' in Ernakulam was fabulous and for another 2 days, it was there that we put up.

On the 30th, early in the morning we started on the last lap of the journey, the tour rather. We did not make many

collections after that. We passed through Trichur, Calicut, Cannanore and Kasargod stopping only for breakfast, lunch, or tea. I cannot say whether it was with regret or anticipation that we finally got down from the bus in our College.

Whatever the conclusion, I will not be wrong if I say that besides widening our knowledge about the flora and increasing our botanical vocabulary, the tour on the whole was a huge success in that it combined both work and pleasure so well, that the two could not be distinguished one from the other.

When I look back and recall all the things I've seen and learnt it brings to my mind a little verse inscribed on a slab of stone in the botanical gardens, Ooty.

K. T. Ragini
III B.Sc.

Alas! That spring should vanish with the rose!
That youth's sweet-scented manuscripts should close.
The nightingale that in the branches sang,
Ah! whence and wither flown again, who knows?
And look! a thousand blossoms with the day
Wake; and a thousand scatter into the day.

A CALL

The rain came suddenly
in a light drizzling shower
Like dry leaves' whispers
in soft summer weather.
I, cosily encouched in my bed,
Felt loathe to close the
shutters upon the
Warm earthy smell of
Water mingling with dust.

So the rain beat in, and
I let it play with me,
and with my room
Rather like an indulgent Mother
With a naughty Child.

Nalini R.
II B.Sc.

Paulo Freire and Conscientisation

Arthur S. Lloyd

(Paulo Freire, Brazilian educator, has elaborated an educational theory within the framework of a theory of radical social change and expressed in a literacy training programme. A central concept is "conscientisation" and development of critical consciousness through a process of reflection and action. Opposed to this "problem-posing" education, committed to personal and social liberation, is a "banking" education whose objective is domestication.)

Considerable interest has developed recently among a diversity of groups, in the ideas and methods associated with the Brazilian educator Paulo Freire, author of *Pedagogy of the Oppressed*. The initial purpose of this paper is to outline his educational theory, within the context of his theory of revolutionary social change and as it is expressed in the literacy training programme associated with Freire. The paper will focus on "conscientisation", a concept central to Freire's thought, with the literacy programme seen as a model for initiating the conscientisation process within one kind of social-cultural context.

The Concept of Conscientisation

The word most closely associated with Freire is "conscientisation." Simply put conscientisation means "to make aware" or "awakening of consciousness or "critical consciousness". More precisely, as used by Freire, conscientisation has been defined as the process in which men, not as recipients, but as knowing subjects, achieve a deepening awareness both of the socio-cultural reality which shapes their lives and of their capacity to transform that reality. Conscientisation is a social process, taking place among men as they unite in common reflection and action upon their world. This occurs not through intellectual effort alone but through "praxis", the unity of reflection and action. Conscientisation, then, does not stop at an awakening of perception but proceeds to action, which in turn provides the basis for new perception, new reflection.

Conscientisation both initiates and supports a process by which people become aware of the contradictions in the social structures and situations in which they live, in order to change such structures or situations:

"Conscientisation implies, then, that when I realize that I am oppressed, I also know I can liberate myself if I transform the concrete situation where I find myself oppressed; that would be to fall into the philosophical error of thinking that awareness "creates" reality, I would be decreeing that I am free, by my mind. And yet, the structures would continue to be the same as ever, so that I wouldn't be free. No. Conscientisation implies a critical insertion into a process, it implies a historical commitment to make changes."

Since the content of his work has been the under-developed, poverty-ridden nations of Latin America, Freire sees the basic contradiction which conscientisation focuses to be that between oppressor and oppressed societies. This is expressed, for example, in various ways : the economic and cultural dependency of the Third World nations on the "metropolitan societies"—(The industrialised Western nations); the dependency of peasants upon elites within these Third World nations; the domination of passive learners by authoritarian teachers. It is in this context that Freire has elaborated his theory of revolutionary action, to which his theory of education as cultural action is related. We turn then to his theory of revolutionary action, which suggests the basic presuppositions in the Freirean framework.

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MEET HIM and STAND BY HIM

Leave this chanting and singing
And telling of beads!
Whom dost thou worship
In this lonely dark corner
Of a temple
with doors all shut?
Open thine eyes and see
Thy God is not before thee!

Tagore

IN TOIL AND SWEAT OF THE BROW

He is there where the tiller is tilling the hard ground.

And where the pathmaker is breaking stone.

He is with them in sun and in shower and His garment is covered with dust.

Put off thy holy mantle and even like Him come down on the dusty soil!

Tagore

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How can we sing the Songs of the Lord?

Reader 1: Is it not mockery to sing the praises of the Lord in our independent country? A few weeks ago I walked through the streets of a small town in Bihar. An emaciated pot-bellied child of six, with all his bones sticking out, was hungrily rummaging the garbage heap. He turned to look at me with semi-scared eyes, too desperate to express any sentiment. *How shall we sing?*

Reader 2: I was in Bombay. Starvation is not so obvious there, but I saw greed, deceit and running, for without these it is impossible to survive. There is only the desire to get, no drive to give. Man is a slave in the rat-race to survive. *How can we sing the song of the Lord?*

Reader 1: I am proud of India's independence, but I am baffled. Politics has become a way of making money, at the cost, not at the service of our fellow-citizens. If you cannot get a job and if you have a fairly average gift of the gab, you go into politics. you may become a minister and make pots of money. *How can we sing today?*

Reader 2: I am thinking now of our Mahatma; he has not seen the fruits of the independence he worked for so hard. Would he be happy, if he saw today's state of affairs? What has happened to his ideals? We students cannot wash our hand in innocence. *How can we sing?*

Reader 1: India is our nation. It feeds and educates us. In many respects we belong to the fortunate few. Are we concerned about the less fortunate majority: those who do not have proper food, decent housing, appropriate education, and no prospect for employment? *How can we sing?*

Tomorrow is Born Today, Page 70

Today's 85 percent and tomorrow's 90 percent
rot in misery
in order to make possible
the excessive comfort
of
Today's 15 percent and tomorrow's 10 percent
of the world's population.

Don Helder Camera

"No democracy can exist for long in the midst of want, poverty and inequality."

Jawaharlal Nehru

"No race can prosper till it learns that there is as much dignity in tilling a field as in writing a poem."

Booker T. Washington

Not as

one

of the milling crowds

that in

Cap and gown

Faceless roam —

— But

women

dreaming dreams

To lift to guide

To lead

The homeless

Home!

How can we sing the Songs of the Lord?

Reader 1: Is it not mockery to sing the praises of the Lord in our independent country? A few weeks ago I walked through the streets of a village in Bihar. An emaciated pot-bellied child of six, with all his bones sticking out, was hungrily rummaging the garbage heap. He turned to look at me with semi-scared eyes, too desperate to express any sentiment. *How shall we sing?*

Reader 2: We in Bombay do not see starvation as near as that, but I see decent and cunning, for without these it is impossible to survive. There is only the desire to get, no drive to give. Man is a slave to his rat-race to survive. *How can we sing the song of the Lord?*

Reader 1: I am proud of India's independence, but I am baffled. Politics has become a way of making money, at the cost, not at the service of the millions. If you cannot get a job and if you have a better than average gift of the gab, you go into politics. you may become a minister and make pots of money. *How can we sing today?*

Reader 2: I think now of our Mahatma; he has not seen the fruits of the independence he worked for so hard. Would he be happy, if he saw today's state of affairs? What has happened to his ideals? Instead of a crusade we wash our hand in innocence. *How can we sing?*

Reader 1: India is our nation. It feeds and educates us. In many respects it belongs to the fortunate few. Are we concerned about the surrounding majority: those who do not have proper food, decent housing, appropriate education, and no prospect for employment. *How can we sing?*

Tomorrow is Born Today, Pg. ...

Today's 65 percent and tomorrow's 90 percent
rot in misery
in order to make possible
the excessive comfort
of
Today's 15 percent and tomorrow's 10 percent
of the world's population.

Don Helder Camara

No democracy can exist for long in the midst of want, poverty and inequality

Jawaharlal Nehru

"No race can 'prosper till it learns that there is as much dignity in tilling a field as in writing a poem."

Booker T. Washington

"Lo! We would thrill
the high stars with your story
and keep thee forever
in the forefront
of glory"

—Sarojini Naidu

Sri A. P. Krishna Rao
Our Chief Guest

"But all sorts of things and weather
Must be taken in together
To make up a year
And a sphere
And we think it no disgrace
To occupy this place"

MAGAZINE COMMITTEE AT WORK

Women in Ancient and Modern India

Ancient Hindu scriptures declare that "where women are honoured—Gods dwell". Women of ancient India enjoyed the highest privilege and were the repository of virtue, integrity and wisdom. They were honoured in the home and respected outside it. During the vedic period, a woman was highly respected and adored as the queen of the home. In cultured families, a talented daughter was regarded as the pride of the family. To impart education to the daughters and to help them to settle in life were the two main duties of the parents. In those days, the pursuit of art and literature was a common hobby and there were many ladies who wrote popular poems and composed hymns. In our ancient scriptures, we find reference to as many as twenty women among the seers and sages who are the authors of the Rig Veda—Vishvara and Gosha are some of them.

Marriage was regarded as a religious ceremony. We find instances of love-marriages which were blessed by the parents later on. A bride received a respectful and affectionate treatment in her new house.

Females were admitted to full religious rites and in the Rig Vedic period as wives they participated in all the major ceremonies. No sacrifice could be performed unless the wife joined her husband. The very words 'Sahadharmini', 'Dampati' and 'Ardhangini', frequently used in the Vedas, affirm the fact that both husband and wife were needed for religious performances. There were women philosophers like Gargi and Maitreyi whose conversations are preserved in the Upanishads.

How a mother was respected and adored is quite evident from the fact that Vedic people named the land of their birth as motherland, their spoken language as mother tongue and the sacred cow as cow-mother or Gomata. As a mother, she held a position of great honour, and implicit obedience was due to her; a symbol of all humanity and also of divinity.

The position of a widow was fair. She was allowed to marry. The pernicious Sati custom was not prevalent at that time and Purdah was absent in Vedic society. The girls were often educated along with the boys. The presence of ladies in social and public gathering was a normal feature in the vedic times.

Even in the times of Upanishads and Dharmashastras, the position of women remained unchanged. The Brahmanas declared 'a soulless one cannot attain heaven' but the birth of a daughter was not deplored as we find in later times. In the age of Upanishads, we find women taking part in debates.

It was only during Smrti–Epic Age when epics were becoming popular, that society adopted an indifferent and narrow attitude towards women. In the epic, a woman is honoured more as an ideal wife than as a woman. The law books assert that as women are looked after in childhood by their parents, protected in youth by their husbands and supported in widowhood by their sons, they do not deserve independence. If a woman unfortunately became a widow, she was expected to live a life of simplicity and nobility. The practice of widow remarriage was regarded with disfavour. Girls of low class family at a comparitively young age were given in marriage. Polygamy became common and the independence of women was gradually diminished.

The position of women grew from bad to worse during the degradation of Hindu society. The respect and honour which they had enjoyed became but a memory. All kinds of evil practices were performed

to subjugate the woman. But with the emergence of the forces of modernism, the position of women has improved in our times and thus once again the Indian women have become their old self.

Today women want equality, education and recognition. The advancement of women is the most significant fact of modern India. Gandhiji once said, "Woman is the noblest of God's creations, supreme in her own sphere of activity". These words are blossoming now. The change in the status of women is immense. The constitution of India had thrown open to women all its services on equal terms with men. "The hand that rocks the cradle rules the world".

From its very inception in the 19th century, the Indian National Congress included women and in 1917, it elected Mrs. Annie Beasant as its President. One of the proudest moments of Indian womanhood was when Mrs. Vijayalaxmi Pandit was elected the President of U. N. General Assembly in 1953.

As early as 1857, Rani Laxmi Bai of Jhansi showed unbounded energy and resolution with unparalled heroism and daring. Many women worked incessantly for the social advancement of their lot and gave expression to the restless urge for social, educational and political progress of Indian women.

In free India, the status of women has undergone profound changes. The change in the role of women has been spurred on by education. We can confidently assert that India is the only nation wherein so many women occupy high administrative positions very efficiently. Mention can be made of the late Rajkumari Amrit Kaur, Sucheta Kripalini, Padmaja Naidu etc. They have already demonstrated that they can successfully discharge their duties as administrators, ministers, ambassadors and so on.

In the world of sports, who can forget Arati Saha the lady swimming champion? In other items of sport such as high jump, long jump etc. women of India have sufficient drive and initiative. Then there is the extensive world of literature. Sarojini Naidu the nightingale of India, wrote her poems in English. The names of Mahadevi Verma and Subhadra Kumari Chauhan are well known to all educated people of India. Amrita Pritam has enriched Punjabi language with her works. Many women writers have been awarded prizes by the Sahitya Academi. There are hundreds of women editors, journalists who are performing meritorious services. No one can ignore the services rendered by women in the realm of music, painting and other fine arts.

So India can be reasonably proud of the success achieved by her women in every sphere of human activity. The position of Indian womanhood can be best judged by the pleasing fact that the most important and powerful post of the country is held by a woman—Mrs. Indira Gandhi, the Prime Minister of India—Whose broad vision and sense of purpose has won her laurels at home and abroad.

In conclusion, we may quote the words Jawaharlal Nehru once remarked, "To awaken the people, it is the women who must be awakened. Once she is on the move, the family moves, the village moves, the nation moves".

Shobha Bhat M.
III B.A.

There are numerous strings in your lute
Let me add my own, among them.
And your numberless stars,
Let me place my own little lamp.

Lines from TAGORE (from: **Sing a New Song**)

Jawaharlal Nehru - The Maker of Modern India

Jawaharlal Nahru, the first Prime Minister of Independent India, who served and guided the Indian Nation through the most difficult and formative years was a figure of unshakable faith and unconquerable strength. As a fighter for freedom, he was illustrious, as maker of modern India, his services were unparalleled. In the words of Rabindranath Tagore–"Nehru was like Rituraj–the spirit of Spring–which is the spirit of eternal youth". In the battle for india's freedom he fought with selfless and dedicated resolve. He emerged as the distinguished leader of the nation after Mahatma Gandhi and became the most respected Parliamentarian and Statesman. Gandhiji had great admiration and regard for Nehru.

Jawaharlal Nehru was born with the proverbial silver spoon in his mouth and virtually rolled in wealth, and was the son of an astute aristocratic lawyer Moti Lal Nehru. He had his early schooling at Harrow and followed it up with a term at Cambridge. After his return from England, he was haunted by the tyranny and subjugation of the British imperialism and began his political activities by his association with the Home Rule League established by Lokmanya Tilak and Mrs. Annie Besant. Afterwards, he threw his lot with Gandhiji and became his foremost and trusted disciple. He took part in all the agitations and movements launched by Gandhiji. With Gandhiji's blessing, Nehru took the historic Independence resolution of 'Poorna Swaraj', 'Absolute Independence' which was passed on the midnight of December 31st. 1929. He was the President of the Congress again in 1936, 1937 and 1946. He suffered imprisonment for nearly three years in the 1942 movement. Many precious years of his life were buried within the narrow prison walls.

Jawaharlal Nehru was the chief Defence Counsel in the INA trial, where he defended the INA heroes, who were considered guilty of waging war against the British King. He was the leading spokesman of India in the several negotiations with the British. In 1946, he formed the Interim Government of India and since August 15, 1947, he had been the Prime Minister till his death on May 27, 1964.

Nehru had always been a firm believer in socialism. He gave to the country the egalitarian objective of a socialistic pattern of society. His concepts of planning and socialism were remarkable for their flexibility, democratic character and above all humanism. He laid great stress on comprehensive planning and rapid technological advancement. India's giant Industrial plants, magnificent dams, canals, supersonics, missiles, locomotives and so on are entirely due to Nehru's vision and passion. To him, political freedom meant maximum opportunity to harness one's creative spirit.

Jawaharlal Nehru personally looked after India's foreign affairs and propounded the twin theory of non-alignment and peaceful co-existence. He was a great internationlist and was aware of the dangers of racialism and expansionist nationalism. A believer in the ideals of Panch Sheel and the United Nations, he was opposed to the bi-polarisation of world politics and persistently refused to join any power bloc. His policies achieved for him a place of pride in the comity of world statesmen. Throughout his life, he championed the cause of human liberty. He staunchly believed in the theory of practice of parliamentary democracy. As the political successor of Mahatma Gandhi, he was a worshipper of the creed of the nobility of means. He was also a man of letters. Some of his books have been hailed

as monumental works on Indian culture, thought and history. The world wide popularity of his "Glimpses of World History" "The Discovery of India" "Autobiography" and other books qualify him to be included amongst the distinguished thinkers and writers of this century. His was indeed a brilliant life of many facets.

M. Veena Kamath
II B.A., H.E.P.

Indira Gandhi-The Valiant Woman of India

Indira Gandhi is indisputably the most powerful woman in the world holding together as she does the dazzling diversity of India. Jawaharlal Nehru called her "PRIYADARSHINI" "Beautiful to behold". Indira Gandhi is every inch her father's daughter—a Brahaman intellectual with a strong will and a sometimes waspish temper, which reflects both warmth and is an odd combination of opposites.

After matriculating from Poona, she went to Rabindranath Tagore's Shantiniketan where she experienced a serenity beyond anything she had ever known before. She then went to Switzerland and Oxford and took an active part in the student movement there. She is a creature of the West, yet politically she has tended to lean toward the East. She was reared in luxury. Indira grew up in an atmosphere where duty to the motherland was the highest priority. At Poona she strenuously applied herself to uplift-work in the slum areas. Even in her youthful years, she had a very high sense of duty and integrity of purpose, and she was brave and fearless. Sometimes both her father and mother were in jail and she was alone in the lofty, silent, rambling mansion, Anand Bhavan. Her father tried to ease this cruel separation by writing her letters from the prison.

After her return to India, she married Feroze Gandhi. After a few months, the Quit India Movement started and both were "behind the bars" she was incarcerated for thirteen months. It did not make her bitter. It taught her that each generation had a duty to the next and it was the turn of her generation for the sacrifices.

After India became independent, she became the hostess of the Prime Minister and she thus came into contact with the leading statesmen of the world. It was no idle flattery when Lyndon B. Johnson remarked in 1961—"To know India you must have a teacher like Indira Gandhi."

She helped her father in many ways, and shared his innermost thoughts and ideas on people and policies. Some of Nehru's decisions were largely her decisions. A unique family tradition was preserved when she was elected Congress President in 1969. Three generations of Nehru's had thus held this high office.

During Lal Bahadur Shastriji's Prime Ministership she was persuaded to join the cabinet. After his death, she became the Prime Minister of the largest democracy in the world. Widespread jubilation spread to all parts of India as the news revealed that she has been elected the third Prime Minister of India. The choice of India marked a change in the mood of the Indian people. She was a link between the old and the new India. She faced gigantic problems. There was the stark aftermath of the Indo-Pakistan war. The economy was disorganised, both by the war and foreign aid which had been frozen. Severe drought stalked the land. She never floundered and something of the

courage of Joan of Arc of whom she read in her childhood; was discernible in her during these challenging times.

No one exemplifies the spirit of young India better than her reflecting, as she does, the new vigour and carrying within her an inner fire, zest and zeal, and a single-minded determination to implement her decisions without delay or procastination. From her father, she had inherited a personal magnetism. Her mass appeal is greater than that of any leader after her illustrious father. She is intensely human, a child of the Indian revolution.

Politics runs in her blood. At the height of every crisis, she remains cool and supremely in command. The three planks of her policy are socialism, democracy and secularism. She is a devoted friend of the down-trodden. This is transparently clear in her enunciation and implementation of the New Radical Economic Programme. Her bold and imaginative measure of bank nationalisation had kindled a new spirit in the Indian masses. "Child Welfare Work is nearest to my heart" she once said. Talking of secularism, she said—"secularism is not indifference to religion. It is respect for all religions, your own and that ofothers."

Indira Gandhi is firm about India's policies of peaceful co-existence and non-alignment, but at the same time, she is steadfast in protecting India's frontiers from the rapacious incursions of China and Pakistan. Her utterences on vital issues are clear and unambiguous. She believes that scientific and technological advance is mainly for the welfare of humanity. She also believes in the concept of "One World".

The recent happenings in the wake of Presidential Election of 1969 and Congress split has proved beyond doubt that Indira Gandhi is a lady of great tactical skill who can out-manoeuvre her political adversaries in a miraculous way. She has been accused of harbouring totalitarian tendencies and of hobnobbing with communists, but to an objective observer she is true to her father's heritage and personality. As one eminent journalist puts it "when Mrs. Gandhi feels threatened she can outdo the most cynical and tortuous of politicians, to maintain her position. When feeling secure, she becomes responsible, forward-looking, left-of-centre leader".

It was on one of her birthdays that her father exhorted her to "be brave and all the rest would follow". Her actions since have been a fulfilment of that advice. And so, whatever the challenges ahead –this talented brave lady—who as a child was inspired by the story of Joan of Arc, will no doubt when the need arises meet the challenges to India, with the same courage, dignity and determination and if need be by shining sacrifice.

Vijayalaxmi P. B.
III B. A

Day and night, thy voice goes out from land to land
Calling Hindus, Buddhists, Sikhs and Jains round thy throne
And Parsees, Mussulmans and Christians.

Offerings are brought to thy shrine by the East and the West
To be woven in a garland of love.

Thou bringest the hearts of all people
Into the harmony of one life,

Thou Dispenser of India's destiny
Victory, Victory, Victory to thee.

From the translation of **Jana Gana Mana** (By the author)

The Role of Banking in Economic Development

Banking can be described as "the fulcrum of economic activity, the point at which macro-economic theory meets commercial practice." A really sound, progressive, dynamic, commercial banking system is a fundamental requirement of economic development. In economic planning the plans must have regard to the capabilities of the banking system and the banking system must have regard to the target, set in the plan. The planner and the banker each dependent on the other, neither can succeed without the other. No society can prosper, if economic policy, monetary policy and banking practice are in conflict.

Mobilization of deposits on a massive scale is crucial for a country's development and it is a bank which plays a vital role in his regard. It may not be far wrong to assert that without the evolution of banks in the 18th and the 19th centuries industrial revolution would not have taken place in Europe. It will be equally true to state that without the development of sound commercial banking, under developed countries cannot hope to join the ranks of advanced countries. For, if industrial development requires the use of capital the use of capital equipment will not be possible without the existence of banks to provide the necessary finance to acquire capital. Besides, industrial development will be impossible without the existence of markets to dispose of the goods produced. But how can markets be extended without the services of banks?

Bankers are to be considered not merely as "dealers in money" but more realistically "leaders in development". Similarly banks are not just the store house of the country's wealth, but are the reservoirs of resources necessary for economic development.

All economic progress in the last two hundred years or so has been based on extensive trade and industrialization which could not have taken place without the use of money. Without the introduction of the bank cheque and the bank draft it would be impossible to transact large scale trade between different countries and hence internal and international trade could not have developed. Without such trade, specialization and industrial development could not have taken place. It is necessary to ensure that trade and commerce enjoy bank credit to a great extent. To deprive commerce of its legitimate share of bank finance would be a 'suicidal and self-defeating policy' for unless the goods turned out in large quantities by the leviathan of industry keep on moving to their ultimate destination viz. the consumer, the wheels of the industrial machine will get bogged down under their own weight.

By giving loans and advances both for short and long periods, the banks provide funds to the right type of industries to secure labour and other factors of production. In this way, the banks not only help industrialization but also have a say in the type of economic development which the community will like. Besides, bank loans enable the manufacturers to increase their productive activity, to adopt new methods, introduce better machinery, improve working conditions and generally to speed up production and raise national income.

In Bismarchian Germany and Meiji Japan the state had to play a major role in raising part of the finance. In addition 'forced savings' were raised in both these countries through bank credit. After these examples it became usual in capital-short countries, to look to the banking system to provide some part of the funds for capital formation in the non-traditional sectors of the economy. When after independence, we in this country

launched a planning drive for industrialization it was felt that banks should play a similar role in this country and indeed banks have played a considerable role in financing our industrialization. It is interesting to note that during the 21 years since 1951 the total bank credit has expanded by about Rs. 3,000 crores. Of this income, Rs. 2000 crores has gone to industry. It is undeniable that industry has been excellently served by the banking system; ali the complaints of inadequacy of the bank credit not withstanding.

Another way by which commercial banks encourage production and enhance national income is the transference of surplus capital from regions where it is not wanted so much, to those regions where it can be more usefully and efficiently employed. This distribution of funds between regions has the effect of opening up backward regions and paving the way for this economic development. With their organisational and financial resources banks play a significant role in accelerating the process of economic development in backward areas.

Banks play a vital role in introducing not only new modes of product distribution but in utilizing the existing ones as well. Rural demands particularly of the lower classes of agriculturists are seasonal in nature. These demands spurt during harvest times when cultivators receive cash for their crops. Banks have to work in close co-operation with industrial houses launching agressive sales drives in rural areas so that credit bottlenecks do not prevent these drives from reaching the small shops and villages. In this the role of banks is invaluable.

Banks can influence economic activity in another way also. They can influence the rate of interest in the money markets, through its supply of funds. A cheap money policy with low interest will tend to stimulate economic activity if other conditions are favourable.

Fluctuation in bank credit have an important bearing on the level of economic activity. Expansion of bank credit will provide more funds to entrepreneurs and hence will lead to more investment. Under conditions of unemployment if will push up production in the country. On the other hand, a decline in bank credit will result in decline in production, employment, sales and prices. From the point of view of an underdeveloped economy, the expansion of bank credit offering more financial resources to industries is one of the contributary factors for economic prosperity.

Banks enable the efficiency of the use of loanable funds to be higher than what would have been otherwise. In a world without banks the intermediational mechanism to link savers and investors would be inefficient. For, in a bankless world, the allocation of loanable funds among different uses may not be according to relative viability requirements. The statement that the existence of banks enables monetary policy to be more effective is valid, as the central bank of a country can exercise a greater control over a monetary system if the area of activity of banks is all pervasive. From this angle the existence of a developed banking system is certainly a great asset.

A very important service the banks render to the community is the creation of demand deposits in exchange of debts of others. By these exchange operations banks monetise debt. The significance of banks today follows from the fact that they are "not merely traders in money but also in an important sense, manufacturers of money"

Banks by advancing short term, medium term and long term loans, help agriculture also. They have come as protectors of farmers who are exploited by the money-lenders. In countries like Japan where most of the population is engaged in agriculture, banks have played, and still exercise a vital role in promoting agriculture. In India also

banks have tried to increase the productivity per acre by advancing loans to the farmers to purchase tractors, motor pumps etc.

Banks encourage the habit of thrift in the community by providing facilities for safe keeping of savings and they channelise these savings into productive spheres in accordance with predetermined plan priorities. They mobilize the idle and dormant capital of the community and make it available for productive purposes. The prize winners of the lottery conducted by the various states are made to receive the amounts through the banks. Here again the bankers advise the fortunate ones to invest their capital in the proper channels and thereby bring about a balanced economic growth within the economy. Economic development depends upon the diversion of economic resources from consumption to capital formation. The need for both short term and long term capital increases with economic growth and both these types of capital resources have been supplied by the banking system in developed as well as in under-developed countries. An effective banking system is therefore required to provide financial opportunities for a rising level of income. In Great Britain at the time of the Industrial Revolution an effective banking system existed which provided the working capital required for a rising level of economic activity. In Germany in the inter-war period commercial banks ventured into the field of Individual finance and helped in the individual regeneration of Germany. In recent years banks have come to play a useful role in the economic development of underdeveloped countries. As a result the area of operations of banks is ever expanding, creating new problems and challenges.

After Nationalisation the 14 banks have taken great initiative in starting new schemes of deposit mobilisation so as to advance money to invest in the priority sectors. A special mention must be made of the Insurance linked Savings Bank Deposit Scheme started by the Syndicate Bank, true to its tradition of pioneering activities. The scheme is expected to go a long way in inducing lower income groups to save because of its benefit of free life insurance cover. One of the nationalised banks has recently started a scheme for self employment. It has been evolved to encourage the educated unemployed graduates and matriculates including technically trained or qualified to take up self employment by starting small trading/service/industrial units of their choice.

The nationalised banks seemed to have realised that the student community of every nation is the main reservoir of man-power on whom depends the future of the country.

Hence they have come forward with their attractive schemes to encourage the student community. They are trying their best to uplift them with sympathetic understanding of their problem. Students who are good at studies but are unable to meet the high cost of university education deserve loans to enable them to prosecute their studies without hindrance. Financial help this way to the student-community increased rapidly after Nationalisation. On March 1971, 14 Nationalised Banks advanced Rs. 371-70 lakhs for education out of which the Bank of Baroda stood second having advanced Rs. 166 lakhs. By doing this, the Banks have really tried to develop the country's man-power resources, starting it from the youth level and this in turn will go a long way in making the youth of the country bank conscious, which will augur well for the future all-round prosperity of our country.

Indian commercial banks have started undertaking new functions to help the private sector industries. They underwrite new issues, especially preference shares and debentures. They have also helped Indian industrial undertakings and foreign firms in concluding many deferred payment agreements better to enable the former to import

machinery and other essential items. Though there are restraints from the monetary authority and handicaps of dealing with other people's money, banks have been doing their duty to society and expanding their services in order to keep their activity in step with the growing needs of society. The credit goes to the ingenuity of the bankers. The sophistication of techniques is the very creed of the bankers who have to sell their services and if they find that the society's needs of banking still remain unsatisfied, they try to know why, and search for a new mechanism, which can help them to overcome their deficiency. The banker acts as a 'guide, comrade and philosopher.'

Banks promote exports by bringing about a favourable balance of trade in the country, since they invest in foreign money markets. The aggregate deposits of all scheduled commercial banks have increased from Rs. 881 crores in 1950–51 to Rs. 6189–90 crores in June 1971 and bank credit has risen from Rs. 547 crores to Rs. 4776 crores. The banks industrial advances which stood only at 34% in 1951 accounted for about 82% of total advances in 1970–71. The banks having shed their traditional shyness, have embarked on term-lending to industries through several refinance facilities. These developments demonstrate that banks have spared no efforts to perform the tasks assigned to them.

Thus banks have come to occupy an important place in the industrial and commercial life of a nation. A developed banking organisation is a necessary condition for the Industrial development of a country. Besides supplying financial resources to industry and trade they influence the direction in which such resources should be employed. In their own interest they have to encourage the industrious, the prudent, the punctual and the honest. They are considered as "public conservators of commercial virtues". No wonder then, that everywhere a properly developed banking organisation is regarded as the best and the most solid foundation of industrial and economic progress.

Abolina Rasquinha
II B. A.

THE RALLY, AUGUST 1972, 25 YEARS OF BHARAT

EDUCATING THE MASSES IN FREE INDIA

In the decade 1951-61 literacy increased by 7.4 per cent
while the population increased by 21.5 per cent,

In the decade 1961-71 literacy increased only by 5.3 per cent
while the population increased by 24.8 per cent.

In twenty years, after three five-year plans and three annual plans the number of illiterates increased from 301 million in 1950-51 to 386 million in 1970-71, an increase of 85 million. Meanwhile, in Tamil Nadu alone it is estimated that there are about 17,000 secondary-grade teachers without employment and the state government has suspended the secondary teachers' training course "in view of unemployment among teachers."

According to the Kothari Report on Education, the percentage of the total expenditure for education marked for the lower primary schools—which cater for the illiterates—decreased from 31.9 per cent in 1950-51 to 20.3 per cent in 1965-66.

The Insufferable Drought of India

"Twenty million hit by drought" scream the headlines. What is the reaction of the average city man to this? Absolutely nothing. It is dismissed as routine bad news and not given another thought. There is absolutely no awareness, worse, little inclination to shed off the apathy. The urban rich seem more concerned with the lavish pomp of their normal activities. What will be the fate of these starving millions if the urban purses don't loosen—right now before it is too late?

Stretches of arable land rendered barren, herds of emaciated cattle roaming listlessly, farmers leaving their land and flocking to relief centres have become familiar sights in all drought areas. The land is a parched unending grey, with not a flicker of life anywhere. The vast plains are undisturbed by a single stalk of grain.

The crisis has just begun and the most crucial period will be between March and July. Unless the State Government and the Centre, with the cooperation of the people and voluntary agencies, tackle the situation in a methodical and imaginative manner, disaster is certain. Subsoil water sources, being hastily exploited now after years of neglect, will dry up. Government food stocks are low. Even if the Centre receives foreign aid, it might be too late before the food reaches the starving villagers. Cattle are already dying in their thousands, some of hunger, others at the hands of butchers, so much so that the price has come down to as little as Rs. 10 per animal. The absence of cattle will be felt next year, when it is time to plough the fields.

If food has become scarce in this drought, the scarcity of water is posing an ever greater problem. Practically all village wells and streams have dried up. In many towns and districts water is being sold from 50 paise to a rupee per litre or 10 to 25 paise per glass. The government refuses to call it a famine; they prefer the word "scarcity". But even this scarcity has made people die of starvation in all drought-affected areas.

Drought is not a sudden phenomanon. There have been many recurring droughts in the past. But everyone will agree that this is the most disastrous drought in living memory that has struck India. Some farmers have not seen rain on their land for 2 years. Twenty million people have only a few coins and promises between life and death to live on. They exist more like living corpses than like human beings. In their agonizing and miserable state they turn to the cities for relief and comfort. Thus starts the mass exodus from the rural to the urban areas which are already overburdened with problems of unemployment, overpopulation slums, beggars and the like.

The question naturally arises as to what measures the government has taken to accept the challenge posed by the unprecedented drought conditions. The State Governments have swing into action to provide relief. 60 lakhs of rupees is spent daily on all drought areas. The district administration all over are working very hard to meet the crisis with the understanding and pragmatism essential in the circumstances. Relief work is being provided on either irrigation projects, road building or metal breaking. The government has exempted those students from examination fees whose lives have been completely disrupted by the famine. In order to meet the more serious challenges from March onward, sinking of new wells and digging and repairing of old wells have started and there are the commissions set up by the government to tour the affected areas and hand over reports.

But isn't this action of the government inadequate in the prevailing circumstances? The sum of 60 lakhs at first thought, might seem impressive but upon deeper reflection it seems a mere drop in a vast ocean as it has to be distributed among 20 million people. Though it cannot be denied that the government has done much in the recent past especially after the criticism in the legislatures—a lot more remains to be done. Regrettably promises as always have fallen short of fulfillment.

An expert who was sent by the Mysore State Legislature on a week's study tour of the affected area indicts the government in his report, on various counts like, failure to assess the gravity of the situation, neglecting to have a comprehensive relief programme, inability to provide enough work, food or fodder and failure to ensure that whatever relief works are undertaken help the really needy. Corruption too at the works plays its own part in further depleting the Government's insufficient resources. The supervisors in charge of the relief employment programmes are known to inflate figures of attendance and pocket the extra cash; some cheat the illiterate workers out of their dues. The money that the government squanders on scarcity relief, helps the contractors and officials to fatten themselves and buy newer and better cars and bungalows—thanks to the famine. The Social Welfare Department exists only in name for there is no coordination discernable between the administration, legislators and people. The government's assurances to open fodder and gruel centres have remained largely unfulfilled. People need more food than the government provides. They have not only lost their purchasing power but also the power of resistance to disease which will pose a big health problem in years to come.

If the government is serious about tackling the famine situation, there are several important measures that have to be adopted. These are:—

1. Open more relief centres.
2. Pay better wages to labourers at the camp.
3. Improve functioning of the centres.
4. Arrange water supply by tankers or by any other means.
5. Introduce immediate and effective rationing and distribution of food grains at cheap rates in all affected districts.
6. Provide medical facilities and also have doctors at all camps.
7. Start camps for cattle and provide ample supply of fodder. For this it must requisition all fodder stocks of which there is sufficient to last for the next 6 months in the godown of the big grass merchants.

In its task of battling the drought situation and materialising the above plans the government requires to a great extent the voluntary help of the public whose efforts have to be directed towards avoiding the impending catastrophe, Sans their help the government will only have to indulge in wishful thinking.

Chandra Mallya
III B. A.

Administration and the Citizen

"Administration not only has to be good, but has also to be felt to be good by the people affected",

Jawaharlal Nehru.

The modern welfare socialist state calls for a greater harmony and proximity between administration and citizens. However one witnesses a chronic tendency for both to drift from each other. So far in the field of public administration the emphasis seems more on the study of 'administration' rather than on 'public' or their relations with administration. Organisational and procedural efficiency, personnel cadres, and promotion prospects, equipment and comfort for administrators and primacy of state interests as against citizens, have largely Influenced the theory and practice of public administration. Partly the prevailing phenomena of 'red-tape', discourtesy and dishonest practices in administration have produced in citizens an attitude of indifference towards administration. Administration it is said behaves like a soulless machine. Administrators are accused of being too much preoccupied with files, and treating citizens requests as cases on files, rather than of human beings. The public servants are also believed to be keen on furthering their own career prospects rather than serving the public. The enormous volume and variety of activities undertaken by governments at different levels in production, in public utility undertakings and in social service and welfare matters, have partly introduced new complexities and technicaleties unfamiliar and irritating to the public. Social instability is also a cause of citizens' unhappiness with administration.

The view that administration is culture-bound and therefore public administration cannot rise any higher than administration in other sectors or institutions in society is very often to be heard. That administrators are citizens drawn from the same cluster of members in society and therefore cannot be any different from the average citizens except to the extent to which their organizational rules, conventions and training make them act, differently—This also is to be heard. However these views cannot be pleaded as an alibi for deficiencies in public administration, and much less in its relations with citizens.

Public administration must improve itself to have better relations with citizens. It must rise above the normal patterns of management in commerce and industry. It must act as an umpire in conflict, as an enlightened, entrepreneur in production sectors: and act as a liberal philanthropist in promotional activities. It must set and follow higher standards of efficiency and consideration towards citizens.

The concept of citizens as "sovereign" looks hollow in the face of bureaucratic dominance. The problem in administration; citizen relationship is to curtail the despotism of administration, and at the same time combat the indifference and hostility of citizens towards administration. The main objective of administration should be citizen satisfaction. Just as consumer satisfaction governs production and distribution in economics so also in public administration, citizen satisfaction should be regarded as an important factor for determining the acceptability or legitimacy of government. This however does not mean mere passive consent of the citizens.

It is becoming increasingly important for administration to try to mobilize the willing co-operation of citizens, to survive and grow

in the competitive world economy and society. Administration must be responsive to the needs and demands of the citizens. Callousness, aloofness, haughtiness, suspicion and resentment of administrators only serve to heighten the antipathy of citizens towards administration and results in their efforts to disrupt administration. The citizens on their part must make themselves aware of administrative norms, practices and structures and lend their genuine support for the goals, policies and programmes of government. They must believe in the integrity and honesty of administrative officials rather than have the tendency to view it as corrupt or corruptible. Both administration and citizens have to understand each other's roles and stop all 'mutual blaming'.

Citizens association with and participation in administration is much desired, but little achieved. Special interest groups and big bosses of political parties dominate so that the citizen feels submerged or rendered helpless by them. Old assumptions and venerations for old institutions are preventing the administrative system from adapting itself to the new demands. The concept of decentralization is an effective instrument of citizen association and participation in administration. However recentralization would set in actual practice, quick communication between head-quarters and field stations. In effect, decentralization is just a political formality and recentralization is an administrative reality.

The complaints of the people in and out of government tend to undermine confidence in government as regards fair play and its competence to manage tensions arising out of developmental activities and expanding bureaucracy. Governments being aware of the emerging strains in bureaucracy have attempted to deal with them through investigating by committees and commissions establishment of Directorates of public grievances with a view to supplementing the prevailing methods of handling complaints and grievances. To deal with the public from a positive side by educating and informing the public, Directorates of Public Relations have been established. The mass media of communication such as radio, press, films, television etc. are also pressed into service for keeping the public informed. What however one finds in the grievance redressal approach is optimism at the start and pessimism during the functioning of the newly established Directorates of Public Grievances.

A top priority item for change in administration is its secretiveness, confidentiality and mystification. Except in highly explosive matters of defence, home or external intelligence, in the rest of the departments there is no need to emphasize them. That trust begets trust is nowhere more true than in the relations between the citizen and the government in a democracy. The outstanding maladies in administration are delays and diffusion of responsibility. These affect the citizen more than the ineptness in policy making or inadequacies in planning or of resources. Ultimately the tone and calibre of administration, citizen relationship are set by the leaders in different walks of life. Administration operates under the direction of leaders from above and citizens understanding and co-operation from below.

Shakila Shetty
III B. A.

Telepathy

Mr. and Mrs. Turner had gone on a short vacation from their home in Louisiana, where they stayed in the same area as their daughter. Their daughter, Mrs. Stone, had an only child Billy. Shortly after they left on their trip, Billy became very sick. The very next morning the Turners cut short their vacation and were back home. Mrs. Turner said that she had had a terrible dream the previous night. In her dream she had kissed Billy, and he was burning with fever, and when she turned around, John (her son, living close by) was standing there with a big hole in his head, pouring blood. He said he fell from a telephone pole. When Mrs. Turner narrated her dream, Mrs. Stone said Billy was terribly sick, but John had gone to work as usual and was fine. In less than an hour John, a lineman, had been brought home by his foreman with a big hole cut above his left eye, bleeding profusely. Thus Mrs. Turner's strange dream turned out to be true and a forecast of this disaster.

What Mrs. Turner went through here, is clearly telepathy. A good many cases of telepathy are dream cases. These are marked by characteristics which distinguish them amid the dreams of a lifetime as a separate class, characteristics, which in part fall within the purview of psychic research.

Telepathy, an interesting part of Parapsychology, is the communication of ideas between two individuals, without sensory means. This communication was first given the name 'Telepathy' by Myers in 1882. He said it was the communication of impressions of any kind from one mind to another, independently of the recognised channels of the senses. At this time, telepathy was known as 'mental suggestion'.

Telepathy occurs in many forms and it is difficult to isolate it. It is not usually reciprocal, and acts only in one direction. The first person, who is called the agent, 'transmits an idea' to the second called the 'percipient', or, in other words, the percipient 'reads the thoughts' of the agent.

Telepathy plays a frequent but fleeting part in everyday life. When chance and associations have been taken into consideration, a residue remains, which cannot be otherwise explained. Everyday, one has a telepathic hallucination, sees or hears, or is touched by absent things. In about 2% of the cases it corresponds to reality, and this is sufficient to create a legend.

The media of telepathy are varied and many, the most common ones being dreams, drawings, hypnosis, and hallucinations. There is an interesting case of telepathy through drawings that took place experimentally. The agent was to send a message to a group of percipients. The agent tried not to concentrate his thought upon any object and noted down whatever images passed through his mind, to see if they would be transmitted. He noted the image of a stag's horn and another image he visualised clearly was that of a glass funnel. At the very same time a percipient drew a sort of funnel with handles upside down. Another percipient at the same time, drew a glass with handles, which she described as the horns of a stag. The figure she drew was like this:

Hallucinations are also one way of transmitting thoughts from one person to another.

For instance, a woman may, in a flash, see a clear vision of her son, dripping wet, at the very same moment he is drowning. Experiments have been conducted to determine and prove the effect of hypnosis on telepathy.

There are certain normal phenomena which give an appearance of being telepathic. Ochorowicz has mentioned some of them: mental suggestion by hints, in which the subject guesses normally with the aid of slight signals; mental suggestion by association of ideas, which occurs between two people living the same kind of life: when one idea is explicitly stimulated, the associated idea arises in the two individuals at the same time and gives them the illusion that they are in communication; mental suggestion by magnetic training between a hypnotiser and his subject: sensory and memory hyperaesthesia in this last case allows an arbitrary language to be built up which communicates nothing to the uninitiated.

Cumberlandism, or false telepathy, depends on unconscious movements. it has been maintained from analysis of reports of such experiences, that in the majority of cases the phenomena of Cumberlandism contains an element of genuine telepathy. Orthodox writers admit that among the numerous variants they have studied are some 'curious' cases which it is difficult to explain by unconscious movements. Janet saw the experiment succeed with a person interposed between the guide and the guesser. He suggests that this person unconsciously repeated the slight movements of the guide. It is difficult to explain the cases in which the guide had no contact with the guesser and was content to follow him about a yard behind. Although the experiment is not successful with all subjects, yet it succeeds brilliantly with 'sensitives'. Janet concluded that there must be more than an automatic motor impulse in Cumberlandism; he observed an incipient division of personality in the guide and also in the subject who received the impulses subconsciously. There are many complicated actions which can not be conveyed by muscular movements, and the majority of experiments in Cumberlandism can only be explained by telepathy.

Much time has been devoted to the characteristics of telepathy. Warcollier came to the conclusion that men are better agents than women, and conversly, women are better percipients than men. But this inequality of sexes in the production of spontaneous phenomena has been contradicted. To find that the majority of agents are male does not mean that they have better gifts for it, but indicates that they have more occasion to use them. The rarity of old men among the agents is explained in the same way.

Communication of thought when the agent and percipient are both in the waking state seems to occur, but it is a little less common when one of the persons is awake and the other asleep or half-asleep. Two-thirds of all cases occur between two sleepers.

When one reads all about this strange extra-sensory perception called telepathy, the question that obviously arises is 'What is transmitted?'. As an experimental fact, any state of mind can be transmitted: sensations, perceptions, and representations, or emotions. An interesting question here is if the transmission is equally easy in all cases and if there is predominance or exclusive selection of a certain type. This is difficult to answer, because a telepathic communication cannot be studied except as a whole, and it is impossible to distinguish the parts played by the agent and the percipient. The percipient is of considerable importance, as he rejects certain impressions received and modifies others. Hence, contradictory results have been obtained by experimenters. Lodge found that an abstract idea was more easily transmitted than a drawing. Warcollier on the contrary thought

drawings more favourable than even material objects. There are various opinions about the transmission of colours; however, individuals are more or less gifted in their power to remember shapes, colours and abstract ideas.

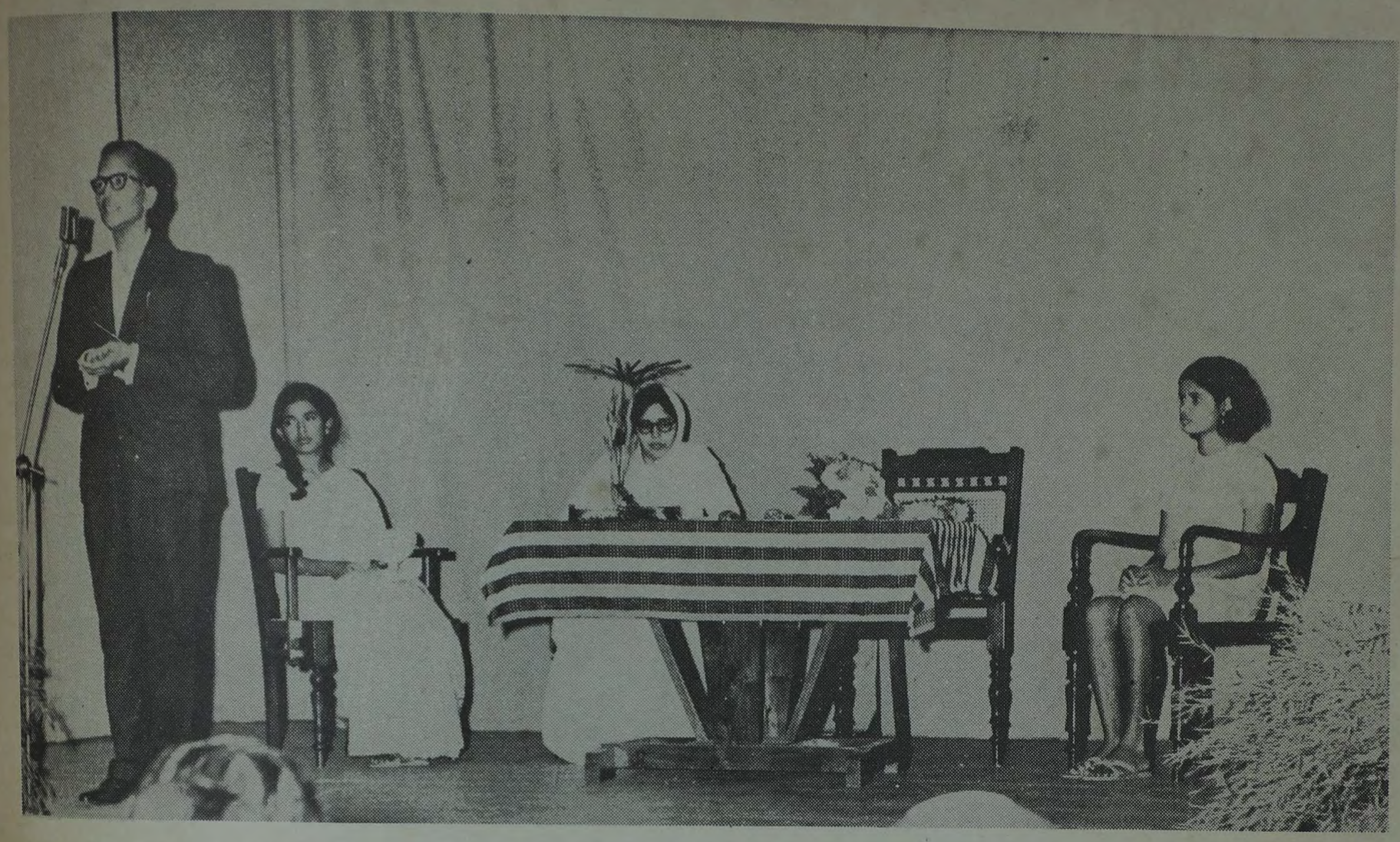
It has often been observed that emotional states were transmitted more easily than intellectual ones, and that the latter, which are never completely pure, were transmitted better when they were more charged with emotion. In spontaneous telepathy, the images transmitted are not purely objective, but usually have strong emotional association. This is one reason why Abramowski said that only emotional states can be transmitted. But this appears to be an arbitrary statement since it depends on a definition of memory according to which there are no images or ideas in our subconscious minds, but only emotional equivalents. Since these latter are as finely differentiated as the things themselves, there seems no point in calling them representational, except to establish an organic theory of thought which gives the lie to all metaphysics.

Shalini Pai
III B.A.

IN JULY

In July, a soft grey looms the sky,
The coconut trees swing gracefully,
As the wind whistles in spirits high
Thunder booms majestically,
As lightning flashes by
Flowers nod heads wisely,
As the sky sobs with a gloomy sigh.
The farmer beams joyfully,
As gently the sky weeps on his crops parched and dry.
And as the green carpet has a bath heavenly,
The croaking toads pry.
The creeper shivers tremulously,
Cows seek a shelter dry,
As the rain beats ceaselessly
On the green pastures nigh.
Fishermen cast aside their boats dolefully,
As the deep waters restless lie.
The birds nestle easlly,
Unable to fly.
Mangoes in the grove loosen easily,
To the tree to cling they try.
As the torrents I watch thrillingly,
Through sheer bliss it makes me cry.

Geetha K. Nayak
II P.U.C. Sc.



Mr. Gopalkrishna Paleppady—farewell after 25 years of service

'VOTERS DAY'—First Fruits of Independence

Festival of Lights

Science

in her

Silvery Splendour

1. The Science of life—and you

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2. India's Contribution to Mathematics

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The Marvels of Science are the Wonders of God

S **loosens** the bonds of dogmatism
C **acts** as a powerful dispeller of fear and superstition,
I fatalism and passive resignation.
E **emphasises** on reason and free enquiry.
N **helps** to lessen ideological tensions which often arise
C because of adherence to dogma and fanaticism.
E **helps** man to understand himself and his place in the universe.

In the developments that we envisage in the future, we hope that the pursuit of mere material affluence and power would be subordinated to that of higher value and the fulfilment of the individual. This concept of the mingling of 'science and spirituality' is of special significance for Indian education.

Report of the Education Commission 1964—66
Education and National Objectives 1—24.

GOD IS GREATER THAN HIS GLORIES

Why do ye recite the glories of God, saying,
'O Lord, Thou hast made the sun, the moon and the stars?'
Yea, what is the use of all this recounting, all this narration?
And many there are that praise and glorify the garden,
And few that wish to see the Owner and Master of the garden.
But I say unto you, 'Is the garden greater than its Lord and Master?'

Ramakrishna Paramahamsa

The Science of life.....and you

Life is all around you; you see it manifested all about you; you yourself are alive. For the greater part of the year in most regions the face of the earth is clothed with a covering of plant life, and there is scarcely an inch of this which does not harbour animal life in some form or the other. In the same way, the sea which occupies over two-thirds of the surface of the globe, supports a population of living organisms: plant and animal, that may even exceed in number those living on the land. The microscope reveals a new world teeming with millions upon millions of tiny organisms each as vibrantly alive as the largest animal. In whatever direction you turn, whether to the air, the land, or the sea, you see a bewildering wealth of life.

What a marvellous assortment of creatures populate the earth ! Giants like whales and massive oak trees, and tiny plants and animals that cannot be seen with the naked eye. So many different sizes and shapes! A thousand fiction writers could not so much as imagine them all.

Man's curiosity has led him to probe into this world of life and to find out what makes living things live. This has helped to build up one great science—"Biology". Biology is full of surprises. As you learn its secrets, you realize how plants and animals grow, and not merely that, for you see how you yourself are like every other creature in some ways, though differing in others. You discover just where you fit in among the world's billions of living things.

As a student of biology, do you even realize what biology can do for you even though you do not take it up as a career? It will enable you to look at a woodland, a field, or a river with much greater interest, for you know something of the plants and animals which live there, and the principles which govern their lives. This gain in knowledge itself will help you to distinguish reality from superstition in regard to a great many issues that you will encounter in society. Many people go through life thinking that toads cause warts, that seeds must be planted in a certain phase of the moon, that snakes can hypnotize birds, that blood controls heredity. Today you know that these old ideas are baseless. You realize that the way to study living things is to discover for yourself what is that which makes things happen in a certain fashion. This is what distinguishes the biologist from the layman.

Biology will help you to solve problems. It will increase your power of observation. Everyone naturally observes but not everyone has the curiosity to go further. A study of biology will enable you to evaluate your observations and draw correct conclusions from what you see and not take things for granted.

Biology enables you to answer questions about life and living things, such as: Can identical twins be of different sexes? How does your body produce immunity to a certain disease? How is energy stored in food? Is the mother or father responsible for the sex of a child? The answers to these and countless other questions about life are part of the knowledge you acquire when you study biology.

Have you ever watched anglefish glide gracefully through columns of waterplants in a tropical aquarium? Many species of tropical fish thrive in the tanks of thousands of amateur quarists. Others prefer fancy goldfish or the many small fish of our native waters. Hikes for bird collections, nature photography, flower and vegetable cultivation, insect collections—biology admits of such fascinating hobbies!

A great many contacts you have with the living would might be classed as biological necessities—such as seeding and fertilizing a lawn, spraying insect pests, and protecting food from spoilage. Biology will help you to perform these tasks skillfully.

Certainly there are many advantages to be gained from a study of biology which are not listed above. Whether or not you see any immediate fruit to be gained from biology or any other intellectual discipline, you should seek to cultivate a wholesome attitude toward all areas of learning. A great biologist of the nineteenth century, Henry Thomas Huxley, once stated "An educated man is one who has learned to appreciate all beauty, whether in nature or in art, and to respect others as himself". The field of biology can lead you not merely to admire beauty but also teach you to respect all forms of life.

Sr. M. Doris A. C.
III B. Sc.

THE SILVERY SPLENDOUR

The pale moon peeps through the slits of the coconut palm shield
The leaves of the mango appear silvery black in the waters of the moonlit fields,
The night is enchanting with the twinkling of stars,
As a pair of villagers tread to the toddy bar.
To many young lovers the moonlight spells romance
Tara's eyes lower shyly at her husband's adoring glance.
A silver garb adorns the stately casurina
Countless stars glimmer through the banyan so serene,
The moonlight spreading o'er the greenery is luxurious still
A feast to the eyes, a heavenly thrill.
An owl's hoot, a cricket's sharp whistle,
A splendrous vista of rose thistle,
The stretching shadows on the pale lit ground,
A sparkling strip of water passing with a gurgling sound,
And dancing along with it is the moon-
I drink in this beauty as if in a swoon
O beautiful nature thou art a boon!

Geetha K. Nayak
II P.U.C. Sc.

India's Contribution to Mathematics

Little is known at present of mathematics regarding the achievements of the early Indian mathematicians and our indebtedness to them, though it is now generally admitted that the decimal–place–value system of notation and the innumerable inventions in the countless branches of mathematics were invented and first used by the Hindus. It is not fully realised to what extent we are indebted to them for our elementary mathematics. This is due to the lack of a reliable and authentic history of Hindu mathematics.

Most of the great discoveries and inventions of which Europe is so proud would have been impossible without a developed system of mathematics and that in turn would have been impossible if Europe had been shackled by the system of Roman numerals. The unknown man who devised the new system was, from the world's point of view, after the Buddha, the most important son of India.

Do you know that the ZERO was invented in India as early as the beginning of the Christian era to help the writing of numbers in the decimal scale? The Hindu mind did not rest satisfied till it evolved the complete Arithmetic of zero. The mathematical implications of ZERO (shunya) and infinity, never more than vaguely realised by classical authorities, were fully understood in mediaeval India. Earlier mathematicians had taught that $x/0 = x$. But Bhaskara proved that it was infinity. He also established mathematically what had been recognised in Indian theology, at least a millennium earlier, that infinity, however divided, remains infinity.

The epochal character of this step has been universally recognised. Laplace, the brilliant mathematical astronomer, has paid glowing tributes to our Indian mathematicians. "It is India", he says, "that gave us the ingenious method of expressing all numbers by means of ten symbols, each symbol receiving a value of position, as well as an absolute value; a profound and important idea which appears so simple to us now that we ignore its true merit, but its very simplicity, the great ease which it has lent to all computations, puts our arithmetic in the first rank of useful inventions; and we shall appreciate the grandeur of this achievement when we remember that it escaped the genius of Archimedes and Apollonius, two of the greatest men produced by antiquity".

The same surprise is expressed by Dantzig: "Particularly puzzling to us is the fact that the great mathematicians of Greece did not stumble on it. Is it that the Greeks had such a marked contempt for applied science, leaving even the instruction of their children to the slaves? But if so, how is it that the nation that gave us geometry, and carried the science so far did not create even a rudimentary algebra? Is it not equally strange that algebra, that cornerstone of modern mathematics, also originated in India, and at about the same time that positional numeration did?"

Through the necessity of accurately laying out the open air site of a sacrifice, Indians very early evolved a simple system of geometry, but in the sphere of practical knowledge the world owes most to India in the realm of mathematics, which was developed in Gupta times to a stage more advanced than that reached by any other nation of antiquity. The success of Indian mathematics was mainly due to the fact that the Indians had a clear conception of abstract numbers, as distinct from numerical quantity of objects or spatial expansion. While Greek mathematical science was largely based on mensuration and geometry, India transcended these

conceptions quite early, and, with the aid of a simple numeral notation devised rudimentary algebra which allowed more complicated calculations than were possible to the Greeks and led to the study of 'number' for its own sake.

Mediaeval Indian mathematicians such as Brahmagupta (7th century), Varahavira (9th century) and Bhaskara (12th century) made several discoveries which in Europe were not known until the Renaissance or later. They understood the import of positive and negative quantities, evolved sound systems of extracting square and cube roots, and could solve quadratic and certain types of indeterminate equations. For, Aryabhatta gave the usual modern approximate value of 3·1416, expressed in the form of a fraction $\frac{62832}{20000}$. This value, much more accurate than that of the Greeks, was improved to nine places by decimals by later Indian mathematicians. Some steps were made in trigonometry, spherical geometry and calculus chiefly in connection with astronomy.

Indian tradition believed in oral communication and not in the written word. It is a big tragedy therefore that a great many discoveries and authentic records have been lost to the world forever. But of what use is it in merely glorifying our past if we do not contribute our mite towards developing it? So let us continue building mathematics the foundation for which has been firmly laid by our ancestors.

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Asha Sanganal & Patricia Lobo
III B.Sc.

"God is the infinite, all-filling splendour,
He is the bountiful fulness of Grace
That, in its allness, the worlds that are foldeth;
Within it, creation encompassed stays"

Tayumanauar

Amplifiers

Amplifiers find increasing application in measurement apparatus, control equipment, regulatory devices and the like, but their principle use is in telegraph, telephone, radio, television, communication systems, radar systems, and the customary classification of them as to frequency range is based on their service in these last applications. In order to establish criteria for the fitness of an amplifier for a particular application, an understanding of the nature of the grid signal voltage to be amplified and of the receiving mechanism is necessary. For example, the signal may be morse code, voice, music, impulses from a television iconoscope or a voltage to be measured; and the receiving mechanism may be a telegraph sounder, the human ear, a kinescope, or an indicating instrument.

The electrical counterpart of telegraphed intelligence consists of a voltage or current signal that alternates irregularly and abruptly between zero and a fixed value. The ideal form of such a signal is a periodic series of flat topped, half cycles. which may be even resolved into a Fourier Series. To transmit such a signal without change of waveform, the amplifier and all other parts of the system must be able to amplify all voltages whose frequencies lie between the upper and the lower limit. Also it must preserve the phase relations among the different frequency components, and reproduce them correctly in the output.

When some wave shape that is an exact electrical representation of a sound passes through an audio amplifier completely unmodified, except as to amplitude, there is no distortion and the amplified output from a speaker will sound exactly like the original (provided, of course, that the speaker does not introduce any distortion). Now what is distortion? In audio-frequency amplifiers we have many a time to contend with certain difficulties; distortion being one of the main. We all have listened to the tinny, squeaky and unnatural sounds of miniature radios, the noisy, crackling and tortured ones emanating from an over waded table radio; and the boomy and screechy ones being projected from some so called high fidelity phonographs. This is what is meant by distortion or 'disturbances' as we more commonly know. True that in practice, a reproduced sound never sounds like the original, there is bound to be some difference even with an ideal amplifier and speaker. For one thing, a speaker is not a musical instrument and can never reproduce the spatial sound distribution of a symphony orchestra, or even a grand piano. Another reason is that sound is usually reproduced monaurally, that is, by a single channel from one microphone through one amplifier and one speaker, while we listen binaurally with two ears. The time difference with which sound strikes each ear of the listener produces a spatial realism in depth, which permits us to tell approximately where each sound is coming from. This effect cannot be reproduced by monaural, or single channel reproduction, but has been stimulated quite successfully by the so called stereophonic or binaural reproduction devices. However, let us leave aside these refinements and try to understand, what really happens in this phenomenon of distortion. There are three main types of distortions: firstly frequency distortion, secondly phase or time delay distortion and lastly amplitude or non-linear distortion.

Frequency Distortion: Theoretically speaking, "this distortion is usually a function of the character of the circuits associated with the amplifier. If the gain Vs frequency characteristic of the amplifier is not a

horizontal straight line over the range of frequencies under consideration, the circuit is said to exhibit frequency distortion over this range." In simpler words it means that frequency distortion exists whenever the full audio range from about 20 to 15,000 cycles per second is not completely reproduced. If the high-frequency response is deficient, you will not be able to hear the "overtones" of some high-pitched instruments, such as the violin, flute or horn, and they will all sound very much alike. The sound from the speaker will then appear very boomy or bassy. On the other hand if the low frequency response of the amplifier is deficient there will be some other drawbacks.

Phase or time delay distortion: Delay distortion, also called phase—shift distortion, results from the fact that the phase shift of waves of different frequency in the amplifier is different. Though delay distortion is not easily perceptible to the ear, it is very objectionable in systems that depend on wave shape for their operation as in television or facsimile systems. If the phase shift is proportional to the frequency, a time delay will occur although no distortion is introduced.

To see this, suppose that the input signal to the amplifier be sinusoidal in nature of the form;

$e_1 = E_{m1} \sin(wt+\theta_1) + E_{m2} \sin(wt+\theta_2) + \ldots(1)$

Where θ_1 θ_2 are the epoch angles E_{m1} and E_{m2} are the amplitudes.

If the gain K is constant in magnitude but possesses a phase shift 'ψ' that is proportional to the frequency, the out put will be of the form.

$$e_2 = KE_{m1} \sin(wt+\theta_1+\psi) + KE_{m2} \sin(2wt+\theta_2+2\psi) + \ldots(2)$$

This out put potential has the same wave shape as the in put signal, but a time delay between these two waves exists by writing $wt^1 = wt+\psi$

then $e_2 = KE_{m1} \sin(wt^1+\theta_1) + KE_{m2} \sin(2wt^1+\theta_2) + \ldots(3)$

the above is simply the expression (1) with the exception that it is referred to a new time scale 't'

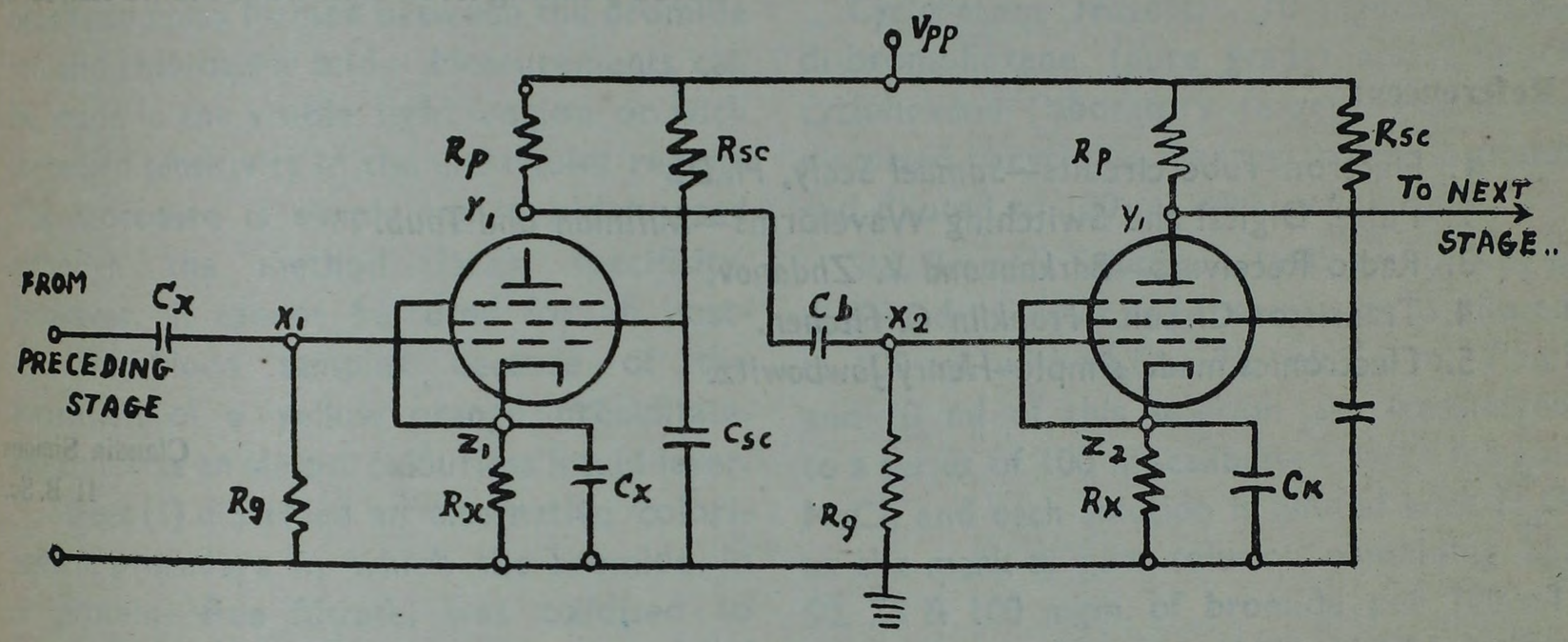
Amplitude or Non-linear Distortion: Non-linear distortion is that form of distortion which occurs when the ratio of potential to current is a function of the magnitude of either. This is perhaps the most serious form of distortion that would occur in an amplifier and it is usually this type we have in mind, when we say that a sound is "terribly distorted". As the term implies, amplitude—distortion causes a modification in the relative amplitudes of a signal. It does not mean that the amplitudes of the two half cycles of a sine wave cannot be enlarged, as indeed they must be in an amplifier, but it means that they are unequally amplified with respect to each other and the input wave form. However the oddity with this type of distortion is that the amplified output usually contains frequency components not present in the signal applied to the amplifier.

It now seems but proper that after knowing a little about the various forms of distortion, that we tune ourselves, to knowing about a particular amplifier. So it shall be the 'video amplifier' that we will concern ourselves with, hereafter.

The term 'video' is applied, to the signals that carry the visible intelligence in a television transmission system, and an amplifier with an effective frequency range of about 30 to a few million cycles per second is called a video-frequency or broad band amplifier. Such an amplifier may be used to amplify pulses in radar and periodic visual signals ie T.V. In a radar receiver, the video amplifier is connected between the detector and the CR tube. In T.V. receivers, it is connected between the detector and the picture tube. The electric

properties of a video amplifier are evaluated in terms of the frequency and phase characteristics that is a broad band width, video amplifier must introduce negligible phase distortion because the eye is very sensitive to changes of phase between the components of a complex light signal. The point is that when a rectangular pulse is applied to the input of a video amplifier, because of the distortion introduced by the amplifier, the screen grid will display pulses with a waveform other than rectangular. Before going further on, with the basic requirements for a video amplifier; the following is a diagram of a cascaded arrangement of a common cathode (CK) vacuum tube stage amplifier.

THE COMMON CATHODE (CK) VACUUM TUBE STAGE AMPLIFIER



C_b–CAPACITOR
R_g–GRID LEAK RESISTOR
R_p–PLATE (COLLECTOR) CIRCUIT RESISTOR
R_k–CATHODE RESISTOR
R_{sc}–SCREEN RESISTOR
C_k, C_{sc}–CAPACITORS

The output Y_1 of one stage is coupled to the input X_2 of the next via a blocking capacitor C_b which is used to keep the d–c component of the out put voltage at Y_1 from reaching the input X_2. The resistor R_g is the grid leak and the plate (collector) circuit resistor is R_p. The Cathode resistor R_k, the screen resistor R_{sc} are used to establish the bias. The By pass Capacitors, used to prevent loss of amplification due to negative feed back are C_k in the cathode and C_{sc} in the screen circuit.

Lastly come the requirements that video amplifiers should meet. These depend on their expected application and function. The basic requirements are:—

1. The out put voltage of the amplifier must be within the limits stipulated in the specifications.

2. Rise and fall time of a rectangular pulse at the amplifier output must not exceed the specified values.

3. Voltage overshoot and undershoot at the amplifier output must be kept to a minimum.

4. The droop of the longest pulse should not be greater than that specified.

5. The operating voltages of the amplifier values and indicator tube between pulses should not noticeably differ from the quiescent (no signal) state.

6. The changes in the amplifier performance caused by value replacement must not exceed the limits allowed by the specifications.

In general a video amplifier must exhibit a flat response out to several megacycles. To achieve such a flat response compensating networks are used to couple stages and to provide a boost in amplification at the high frequency end of the video spectrum where alpha deterioration and shunt capacitances have maximum effect. Transformer coupling is not used due to its inherent narrow band width; R–C coupling with associated peaking networks has become standard.

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Claudia Simons
II B. Sc.

Increased Bromide Concentration in Blood—Gas Chromatography

Sedatives of the bromouride type such as cabromal [N-(1 bromo-1-ethyl butyryl) urea] and Bromo-valetone [N-(2 bromo-3 methylbutyryl) urea] are almost completely metabolised in the body and evidence for their ingestion is usually found in an increased level of bromide in the blood. Treatment with pharmaceutical products containing KBr or exposure to methyl bromide vapour may also result in a raised blood bromide level. The determination of the concentration of bromide in blood is therefore important in both toxicological and clinical investigations.

The total bromine in blood can be determined by ashing the blood sample, usually with alkali, and determining the bromine in the ash by titrimetric or colorimetric methods. These are lengthy procedures, particularly when large number of samples are to be analysed, and the amount of bromine lost on ashing appears to be variable. Alternatively, bromine in blood can be determined by physical methods such as neutron-activation analysis, or x-ray flourescence spectrometry ion-selective electrodes have been used for the direct determination of bromide and iodide in serum; blood samples, however, require the removal of protein, and the consequent dilution of the sample reduces the bromide–ion concentration to a level at which in the

presence of chloride, the electrode response is no longer linear, the electrode becoming relatively insensitive to changes in bromide–ion concentration.

Colorimetric methods for the determination of bromide in blood require a protein free solution, which is usually obtained by precipitating the protein with trichloroacetic acid. The bromide concentration in the filtrate is then determined from the colour intensity of the yellow–orange complex formed between the bromide ion and chloroauric acid. Measurements can be made in the visible light region or with increased sensitivity in the ultraviolet region. The procedure is simple and is widely used although the method lacks specificity. However, it cannot be used for all post-mortem blood samples because of the formation of a yellow orange precipitate, which leaves an almost colourless liquid layer.

Street (1) described an alternative colorimetric procedure in which the bromide, in a protein—free filtrate, was oxidised to bromine, extracted into cyclohexane and determined colorimetrically. When this method was used the moist cyclohexane solution of bromine was unstable and considerable fading occured, particularly in daylight; no improvement in stability was found when the reaction was carried out in subdued light and the solutions were kept in the dark before measurement. Street recommended an ether extraction of the protein-free filtrate before oxidation and extraction with cyclohexane and he surmised that this ether extraction removed unsaturated compounds that would otherwise react with the extracted bromine. This suggested the deliberate addition to cyclohexane of a suitable alkene that would react with the bromine to form a volatile bromo-compound suitable for determination by gas chromatography. This technique is made quantitative by the inclusion of suitable internal reference.

Apparatus needed: A gas chromatograph, equipped with a flame ionisation detector. Ground-glass stoppered test tubes.

Reagents: All reagents are analytical reagent grade.

Trichloro acetic acid 20% w/v
$H_2 SO_4$ acid - approximately 5N.

35 ml of conc. H_2SO_4 is diluted to 250 ml with water, Potassium permanganate, Sodium Sulphite, anhydrous.

Cyclohexane reagent: 70 mgm of 1, 6–di-bromohexane (pure grade) and 2 ml of cyclohexane (laboratory reagent grade) are dissolved in cyclohexane (spectroscopic grade) and diluted to 100 ml with cyclohexane.

Std. Bromide Solution: 1·489 gm. of KBr is dissolved in water and the solution is diluted to 100 ml. with H_2O. 2·5 ml, 5·0 ml. 7·5ml and 10 ml of this solution are transferred to a series of 100 ml-calibrated flasks 0·5 gm. NaCl, and each solution is diluted with H_2O to the mark to give solution containing 25, 50, 75 & 100 mgm. of bromide per 100 ml. respectively in 0·5 per cent w/v NaCl solution.

Procedure:

Calibration: 10 ml of trichloroacetic acid is added to a mixture of 2 ml. of std. bromide solution and 2 ml. of water. The contents are mixed well and 7 ml of this solution is transferred to a stoppered test tube. To this is added 2 ml. of 5N H_2SO_4 and 50 to 60 mgm of $KMnO_4$ and 2 ml of cyclohexene reagent. The tube is stoppered and is shaken well for 30 seconds. Now 100 to 120 mgm. of sodium sulphite is added to the reaction mixture and the contents are mixed gently until it is decolourised. The layers are allowed to separate and 2 μl aliquots of the upper layer is taken for gas chromatography. The peak heights are measured and the ratios of peak heights are calculated for 1, 2 dibromocyclohexane and 1, 6 dibromohexane. The procedure for the remaining std. bromide solutions is repeated

and a graph of peak height ratios against the concentration of bromide is drawn.

Samples: 10 ml of trichloroacetic acid solution is added to a mixture of 2 ml of blood sample and 2 ml of water and the mixture is shaken well. The mixture is filtered through a Whatman No. 541 (or equivalent) filter paper. 7 ml. of the filtrate is taken in a test tube and the procedure is followed as mentioned in the calibration section. The peak height ratios found are converted into bromide concentration in milligrams per 100 ml by using calibration graph.

If the concentration of bromide solution is greater than 100 mg. per 100 ml the determination is repeated with 1 ml of blood, 3 ml of H_2O and 10 ml of trichloroacetic acid.

Thus a simple, specific method for determination of increased concentration of bromide in blood by gas chromatography has been developed. Chloride at the normal level found in blood, does not interfere, and combined bromine as in cabromal and bromvaletone, gives a negligible response.

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Padmawathi B.
II B. Sc.

The Gateway to the Land of Figures

Fifty golden years have passed since the establishment of St. Agnes College. As part of the celebrations of this significant year, 1972, an 'All Science and Arts' Exhibition was held from the twelfth to the fifteenth of February. The birth and then the growth of Mathematics throughout the ages together with the expected future discoveries (like thought-waves whose velocity may be the greatest, even surpassing the velocity of light or any other waves) could be clearly visualised by one who walked through the exhibition rooms.

"The Gate Way To The Land of Figures" looked most inspiring with different mathematical operators and symbols sach as $\int dx$, $\sin\theta$, $\wp$, ε, C, $\log z$, τ, Σ, τ and a chart which read:

"Do you know
What you do not know is infinity
Which can be known
By knowing yourself."

The "Dawn of Mathematics", as one entered, looked splendid; for, surrounding the sun were the portraits of 25 great Mathematicians including the 6 imaginary portraits of ancient Indian Mathematicians, to cover the historical development from 3000 B.C. to the present century. The famous Vedic sayings:

"Poornamadah, Poornamidam
Poornath Poornamudhatchathe
Poornasya Poornamadhaya
Poornameva vashishyathe"

and

"Yatha shikha Mayuranam
Naganam Phanaya Yatha
Thatha vedanga Shasthranam
Ganitham Murdhani Sthitham,"

showed as it were the great contribution of India towards Mathematics. These sayings indicate the numbers from $-\infty$ to 0 and 0 to $+\infty$ with addition, subtraction and other mathematical operations.

What captured one's attention was the 'Tree of Mathematics' with its numerous branches and sub-branches such as Algebra, Calculus, Geometry, Topology, Astromy etc. spreading gloriously. How vast this great subject is—for the spreading branches seemed countless!

Mathematics dominates nature and it exists in Art too! For what else can explore the Universe but Mathematics? To make this clear an array of plants in pots were kept, to show that their vertical leaves and the required circuits to reach them follow the numbers in Fibonacci's series—0, 1, 1, 2, 3, 5, 8, 13 . . . . . (The series begins with zero, then one, and any other number is the sum of the previous two numbers). Objects of nature like flowers, shells etc. were also exhibited and shown to satisfy the equations of equiangular and logarithmic spirals. And what about the important human organs that follow Mathematical laws? For, the two eyes (which are so symmetrical and exact) are two spheres placed inside two ellipsoidal cavities. The two symmetrical ears are almost two cardioids. The nose—a semi-cone and the mouth a spheroid. This was all clearly shown in charts. A particle when dropped in water creates concentric circular waves, a fly moves towards light along the arc of a spiral, an eagles path to catch it's prey is a cycloid. Who taught Mathematics to these creatures of nature? They know by instinct that the time taken to move along a straight line even though it is the shortest distance, is longer in a vertical plane since the acceleration along it is a constant.

Next, the specification of a point in terms of Cartesian, cylindrical and spherical coordinate systems was explained with models; following this were models of a cone, cylinder, hyperboloid, hyperbolic paraboloid and a beautiful neat threaded model of a 23 sided polygon. Fine diagrams of Leminiscate of Bernoulli and Cote's spirals of 5 and 8 petals, designed with rangoli powders added a touch of colour. One of the interesting short explanations that could be seen was "The present Exhibition can be seen with a sufficiently powerful telescope after 3 years from a distance of 4 light years, always at a point whose space coordinate is 5. The reason for this being:—

$$\sqrt{x^2+y^2+z^2+(it)^2} = \sqrt{5^2-3^2} = 4.$$

Do you know that the earth is "197, 29, 46, 072" years as per Indian Astronomy, which agrees with the 'Radio Active' Scientific method of dating the age of the earth? There are also several commandments in Mathematics like the Ten Commandments– Thou shalt not divide by zero....etc.

Mathematics is a paradox but it is great fun too. This was shown in games of about 25 different types, puzzles, Mathematical Magic etc. which were as brain teasing as they were relaxing. It was interesting to note that one of these items was to show the motion of a cone along an inclined plane and Euler's formula of Polyhedrons in terms of wooden models.

The next part of the exhibition was held in a dark room. Since the original manuscripts could not be reproduced by hand, the printed manuscripts from books of Mathematics were enlarged and shown on the screen by means of an epidiascope. The

manuscripts dated from 3000 B.C. to 1700 A.D. Thus the development of numerals and mathematics all over the world could be clearly seen. Suitable tape-recorded commentary made the pictures on the screen more understandable.

Indeed at the exit one felt as if one was born, had marched through the Ages and had gone forth with Mathematics with the goal of diving into it's fathomless sea to seek its hidden treasures and then bask in their beauty and splendour.

Patricia Lobo
III B. Sc.

The Nuclear Force

Perhaps the most challenging question in Atomic Physics is "what holds the nucleus together?" Ever since Ford Rutherford discovered the atomic nucleus scientists have spent more man hours on this intriguing problem than on any other. It would be creditable indeed if some advance in the fundamental understanding of this problem could be reported. Unfortunately, no concise theory that can deduce mathematically the nuclear forces from a few basic assumptions and experiments has yet been founded. This is because of the complex and varied nature of the properties that this force possesses.

Prior to the discovery of the strange character of the nuclear force, all types of material interactions were described quantitatively in terms of the more familiar and much simpler forces–either gravity or electro magnetic forces.

The force of gravity is an "inverse–square law" force. i. e. the force varies inversely as the square of the distance between two attracting masses. The nature of this force is "central" (see fig. 1)

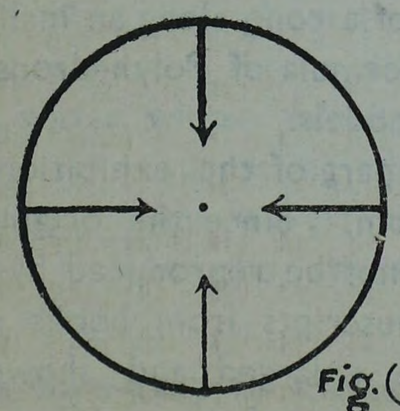


Fig. (1)

Another way of studying the forces of interaction between two attracting or repelling bodies would be to consider their potential energy. The potential energy stored up in a fair of attracting bodies is equal to the work that would have to be done to pull them infinitely apart. The amount of work done obviously depends on the way in which the force of attraction decreases with distance. This consideration is important in the study of two-nucleon nuclear systems, to which I shall refer to later. The electro static forces are similar to gravity. They are also "central" and obey the "inverse-square" law. But they differ from gravity in that they are much stronger and possess definite directions: attractive or repulsive.

Turning to nuclear forces, all that could be said of them in the beginning was that the force between the particles in the nucleus (the nucleons) was very strong, but extends over very small ranges of the order of 10–13 cms. The fact that a number of protons were tightly bound together in the nucleus showed that this force was stronger than electrical repulsion. A nucleus only measures a few Fermies across. If the nucleus is smaller still the nuclear force is stronger. But at still shorter distances the force changes its direction and becomes repulsive. But if the nucleus measures beyond a few Fermies across, the nuclear force falls rapidly down to zero. Thus the nuclear force is very different

from the gravitational and electrostatic forces.

Since the nuclear forces have very short ranges of action, the nucleons are very closely packed together, with very small "interspaces". In order to confine a nucleon to a region of this size, its rationalized de Brogilie wavelength λ must be also correspondingly small and its kinetic energy must be of the order of

$$p^2/2M = h^2/2MN\lambda^2 \sim 20MEV,$$

where p–angular momentum, M–Mass, h–Plank constant and MEV-million electro volts.

The force between nucleons is not a classical force. Half a century ago, many of the confusing inconsistencies and contradictions existed in atomic physics due to the application of classical mechanics instead of quantum mechanics for their description. We are now so accustomed to the application of quantum mechanics to nuclar phenomena, that it is difficult to think of something not existing in its realm. Yet some scientists are now of the opposite opinion. This of course remains to be proved. In the meanwhile, a number of models of the nucleus on the basis of experimental and deduced data have been constructed. This article would not be complete without an elementary description of a couple of them.

1. The α Particle Model:

When one considers certain nuclei such as ^{12}C; ^{16}O; and ^{20}Ne, which consist of even numbers of protons and an equal number of neutrons; an attractive possibility that suggests itself is that these nuclei might be treated as groups of α particies*. The relative high stability of these nuclei, and the large binding energy of ^4He, make it real to assume that pairs of protons and nutrons become associated inside the nucleus for short periods of time, as α particles.

At first glance it might appear that the observed binding energies of nuclei would support the α particle model. The binding energy per nucleon for an average nucleus is about 8 MeV. and that for an α particle is 7 MeV. Hence it seems possible for a nucleus to be composed of a number of α particles bound to one another with energies of about 4 MeV per α particle or 1MeV per nucleon. But if the α particle model is considered quantitatively, serious difficulties appear. Hence this model is not fully valid. But it is sometimes used in connection with excited states of light nuclei, but the results are far from satisfactory α particles * – Breakdown product of nuclear fission are identical with He nucleui.

2. The Liquid Drop Model

Since the nuclear force has a very short range of action, the nucleons of a nucleus

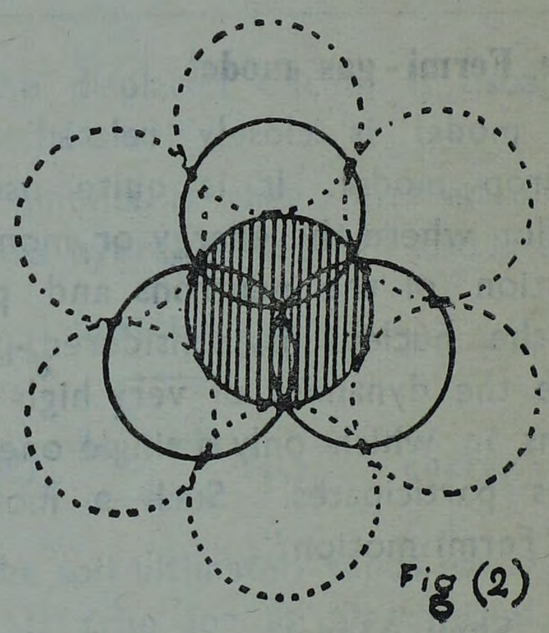


Fig (2)

can interact only with their nearest neighbours. This fact suggests a similarity between nuclear interaction and chemical interaction. It also suggests the idea of representing a nucleus as a crystalline aggregate of nucleons. If one does this, then one concludes that the individual nucleons must be able to move about within the nucleus as atoms do in a liquid, since the zero-point vibrations of the nucleons about their mean rest positions are too violent for stability. Hence one can think

of a nucleus as a small drop of liquid.

The analogy can be extended further. The "excitation" of a nucleus can be compared to the increased kinetic energy of the liquid atoms upon heating; the emission of nuclear particles from the excited nucleus can be considered as an "evaporation process", the binding energies of the emitted particles being analogous to "heat of vapourization". These ideas are essentially part of Bohr's theory of the compound nucleus.

The liquid drop model follows the "closet-packing" arrangement as shown in the figure 2. It represents a sphere (shaded) surrounded by 12 others. Three (dotted) are in contact above, and three (not shown) below. A successful quantitative application of the liquid drop model is to the interpretation of the phenomenon of nuclear fission.

3. The Fermi-gas model

This model is closely related to the liquid-drop model. It is quite useful in application where the energy or momentum distribution of the neutrons and protons inside the nucleus is considered, as for example the dynamics of very high energy collisions in which only a single one of the nucleons participates. Such a motion is called "Fermi motion".

4. The Shell Model

The periodic nature of the chemical properties of the elements have been explained on the basis of their electronic configuration in terms of a "shell model" of the atom. The shell model explains clearly and simply this feature of atomic structure and also simplifies the treatment of optical and X-ray spectra. An interesting phenomenon for which this shell model provides an illuminating semi-quantitative explanation is that of nuclear isomerism. The shell model also helps to predict magnetic moments of nuclei. Despite certain drawbacks, the shell model is the most successful nuclear model up to date.

Some of the other models are:—

5. The Liquid-rotator model &

6. The Complex-potential model

The nuclear shell–model, has given an impetus to the development of an understanding of the atom.

With the discovery of the Neutron by Chadwick in 1932, it became clear that there are two types of nuclear building blocks or nucleons:—(1) The proton and (2) the neutron. This laid open grounds for speculation about three types of nuclear forces:—(1) proton–proton (p-p), (2) Nutron–proton (n-p) and (3) nutron–nutron (n-n).

The nn system is called a "dineutron" system, the np system is called a "deuteron" and the pp system is called a "two-proton" system. Of these only the deuteron exists in nature, the other two being unstable.

To learn more about the nuclear forces, the process of "scattering" is one of the methods employed. Here one nucleon is shot towards another at high speed. For a brief moment they come within range of the mutual nuclear force, then separate again. in the process, the projectile nucleon swerves from its original path, and the target nucleon is pulled out of position. These deflections are recorded by particle counters and are also imprinted on a photographic emulsion. By counting the number of dark spots on the photograph representing the relative intensities of a particle beam scattered in various directions, and from data from the particle counters, the experimenter draws a graph which he then presents to the theoretical physicist and asks him—what kind of force produced such a curve,

Though only very rough approximations of the right answer can be drawn from these graphs, the answers are near enough to the truth to encourage scientists to pursue the truth more keenly. To quote another, Evans, " . . . . every worker in nuclear physics faces the opportunity of making a significant discovery ".

Reference:

1. The Atomic Nucleus—*Robby D. Evans.*
2. The Nuclear Force—*Robert E. Marshall.*
3. Nuclear Physics—*Dr. A. E. S. Green.*
4. Principles of Modern Physics —*Robert B. Leighton.*

Nalini R.
II B. Sc.

Fertilizers

Fertilizers are inorganic compounds containing cations and anions which interact with the exchangeable cations held by the soil. The principal types of fertilizers that may have such effects are:

1. Ammonium salts and organic nitrogen compounds that decompose to liberate ammonia.
2. Phosphate fertilizers.

Nitrogenous Fertilizers:

Nitrogen is essential for the growth of plants. It gives green colour to the leaves and better yield. Lack of nitrogen makes a plant lose its green colour and strength, making it an easy prey to insects and diseases. Addition of ammonium fertilizers or urea increases the percentage of nitrogen. The immediate effect of adding a fertilizer such as ammonium sulphate to the soil is the following exchange reaction.

$$\text{Calcium Soil} + (NH_4)_2SO_4 \rightleftarrows \text{ammonium Soil} + Ca\,SO_4$$

The displaced calcium is usually washed out of the soil.

Ammonia is then nitrified and in the process hydrogen ions are also produced.

$$NH_3 \xrightarrow{\text{bacteria}} NO_2^- + H^+ + \text{energy}$$

$$NO_2^- \xrightarrow{\text{bacteria}} NO_3^- + \text{energy}$$

The soil ultimately tends towards acidity. This is true for all ammoniacal fertilizers and even for urea though the initial effect of urea is to raise the pH due to the liberation of ammonium carbonate as follows:

$$\text{Urea} \xrightarrow[\text{Hydrolysis}]{\text{urease enzyme}} \text{Ammonium Carbonate}$$

Subsequently ammonium carbonate reacts like any other ammoniacal fertilizer. Ammonium ion can also be fixed by clay minerals belonging to the vermiculite class.

Phosphatic Fertilizers:

Phosphate fertilizers supply phosphoric acids to the plant which help for the quick growth and strengthens the roots. Thus enabling the plant to resist the diseases and insects and to give a better yield. If the soil is acidic then there is a lack of phosphates. And though the phosphate is supplied to the plant it is not properly used by the plant. Superphosphate is the commonly used and useful phosphatic fertilizer.

The reaction which phosphates undergo in soils are complex. A variety of reactions take place to reduce the total concentration of phosphate in solution. Different compounds of varying solubilities are formed which are mostly reaction products with iron, aluminium and calcium, depending upon the soil reactions.

The kind of phosphate ion present depends on the pH of the solution as is evident from the following equation:

$$H_3PO_4 \xrightarrow[(-H^+)]{OH^-} H_2PO_4^- \xrightarrow[(-H^+)]{OH^-} HPO_4^{--} \xrightarrow[(-H^+)]{OH^-} PO_4^{---}$$

Over the pH range 4·0 to 8·0 the principal ionic species present in the soil are $H_2PO_4^-$ and HPO_4^{--}. Below pH 6·5 the monovalent $H_2PO_4^-$ ion dominates whereas up to a pH of 9·0 the divalent HPO_4^{--} dominates and above pH 9·0 trivalent PO_4^{---} becomes more prominent.

In general the $H_2PO_4^-$ ion is considered somewhat more available to plants than other ionic species. In soils however, this relationship is complicated by the presence or absence of other compounds or ions. As soil acidity increases there is an enhancement in the activities of iron, aluminium and manganese and under these conditions soluble phosphorus is fixed as very complex and insoluble compounds of these elements. The fixation due to Fe and Al phosphates increases markedly when the pH falls below 5·0. Chemical reactions of soluble ions of Al^{+++} Fe^{+++} and Mn^{++} usually found in strongly acid mineral soils, with $H_2PO_4^-$ ions result in the formation of hydroxy-phosphates which are insoluble and hence unavailable to plants.

$$Al^{+++} + H_2PO_4^- + 2H_2O \longrightarrow Al(OH)_2H_2PO_4 + 2H^+$$
(Insoluble)

The above reactions are commonly found in oxisoils and other highly weathered and leached soils which contain hydrous oxides of Fe and Al in active forms.

When the pH is above 7·0 the activities of Fe and Al are considerably reduced and the activity of Calcium is relatively enhanced. Thus in alkaline and calcareous soils phosphate fixation usually occurs in compounds of calcium. The pH and concentration of Ca^{++} are the controlling factors in the precipitation of Calcium phosphates. Some of the reaction sequences are as follows:

1. $Ca(H_2PO_4)_2$—Monocalcium phosphate Ca : P :: 1 : 2
2. $Ca(H_2PO_4)_2 + Ca \rightarrow 2\,CaHPO_4$ (dicalcium phosphate) Ca : P :: 1 : 1
3. $2\,CaHPO_4 + Ca \rightarrow Ca_3(PO_4)_2$ (Tricalcium phosphate) Ca : P :: 3 : 2
4. $3Ca_3(PO_4)_2 + Ca + 2OH^- \rightarrow Ca_{10}(PO_4)_6(OH)_2$ (hydroxyapatite) Ca : P :: 5 : 3

If conditions are favourable and with passage of time, hydroxy – oxy, – carbonate, or even fluorapatite may be formed; the last named compound being highly insoluble.

Between pH limits 6 and 7 fixation of phosphorus is at a minimum and hence its availability to plants is at a maximum.

The nature of residual phosphorus compounds from application of phosphatic fertilizers to the soil was investigated in the Soil Science Division, Regional Research Station Raichur. Three different kinds of

soils viz. deep black, medium deep black, and red soils were incubated for three weeks with ammonium dihydrogen phosphate and superphosphate separately at three different levels of phosphorus. At the end of three weeks the soil samples were analysed for different P fractions and salient features of the results were as follows:

1. Al–P was present in red soil that received superphosphate.
2. The availability of P in all the soils was less in superphosphate treated samples.

It is commonly argued that the fixation of P is more from a soluble phosphatic source. However in the work reported here there was less fixation in the case of ammonium phosphate than superphosphate. The reason for this difference appears to be the high acidity produced when superphosphate comes in contact with moisture and the liberation of Al from the lattice structure by H^+ ions and the former combining with phosphorus ions to form insoluble phosphate. This is evident from the presence of Al–P in the soil treated with superphosphate whereas none was present in the untreated soil.

To verify the above hypothesis the pH values of superphosphate and ammonium phosphate in the presence of varying amounts of water were determined and the data are presented below.

pH values of superphosphate and ammonium phosphate suspensions in water:

Substance: Water ratio	Super Phosphate	Ammonium Phosphate
1:1	2.4	4.0
1:2	2.5	4.4
1:3	2.7	4.5
1:4	2.7	4.6
1:5	2.8	4.7

Potassic Fertilizers :

Potassic fertilizers help the production of chlorophyll which is a necessary requirement for the plant to produce its food. Lack of these fertilizers affects the fruits or corns as well as leaves. Leaves lose their green colour and become yellow, and the plant perishes soon. Mureate of potash and sulphate of potash are only two main potassium fertilizers. Former contains a percentage of 60 parts of potash and the latter a percentage of 46—50 parts of potash.

When potassic fertilizers are added to the soil, potassium is expected to displace an equivalent of other cation(s) held by the soil.

The role of fertilizers in the growth and yield of plants and crops should be closely linked with the efforts of man to take advantage of the maximum spread by government of fertilizer complexes over the country, which will indirectly help to feed the millions of India's masses.

Elizabeth Fernands
III B.Sc.

Chromatography

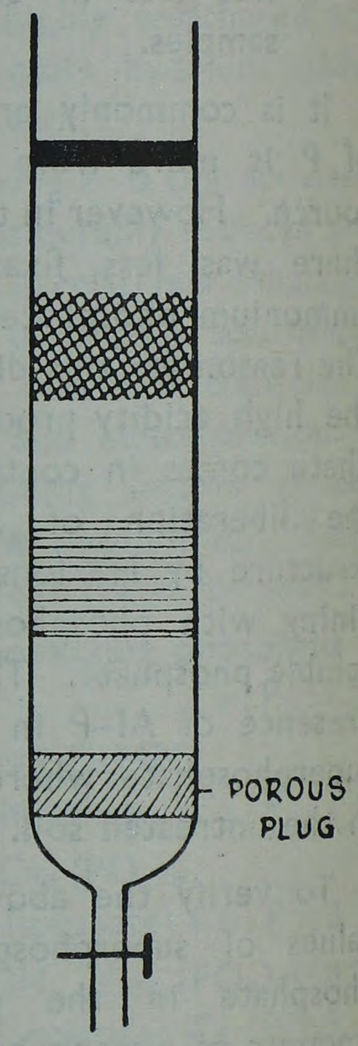
Chromatography is a modern method of analysing and resolving a mixture into its components. The principle is that certain solids, liquids and vapours have the property of adsorbing the molecules of certain substances on their surface. Tswet, as Russian scientist observed that when chlorophyll was poured through a column of suitable adsorbent, the components were adsorbed at the top of the column. When a solvent was then poured through the column, the column was resolved into a series of coloured bands which moved down at different rates.

It consists of two phases, a mobile phase and stationary phase. The stationary phase is the adsorbent and it adsorbs the molecules of the components of the mixture passed through the column. Usually alumina, silica jel, cellulose etc. are used as adsorbents. Liquids can also be used as stationary phases. The mobile phase is the solvent. It is the carrier of the mixture to be analysed. Water and organic solvents like benzene and acetone can be used as the solvents.

The mixture to be analysed is mixed with a suitable solvent and is made to pass through a column from the top. When the solvent slowly travels down the column, it adsorbs the different components dissolved. But the degree of adsorption being not the same for all, different components will collect at different levels. Thus, the least adsorbed one will travel through the greatest, and the most adsorbed through the shortest distance. Thus the different components can be separated.

Column Chromatography:

Column chromatography was first developed by the American scientist D. T. Day. Here the stationary phase is filled in a long burette. The solvent which has dissolved the mixture is made to pass from the top. While it travels down, the column adsorbs the dissolved components at different places. This is called partition. The solvent runs down from the bottom. Then the pure solvent is poured again from the top, slowly. Now the different components travel with the solvent and collect at different levels. This is called development. The least adsorbed substance has travelled to the bottom with the solvent and can be run down by using the stop cock. Thus by pouring more and more of the solvent, different components can be separated.



A different method of separation can also be used. The stationary phase is uniformly applied on the surface of a long glass strip. After partition the column is dried, sprayed with a spraying reagent and the glass is cut at different places to obtain the collected components. Colourless substances are detected by passing ultra-violet rays.

Paper Chromatography:

In qualitative analysis of cations, it is very hard to detect the ions and to separate them at the end. Hence paper chromatography is used for this purpose.

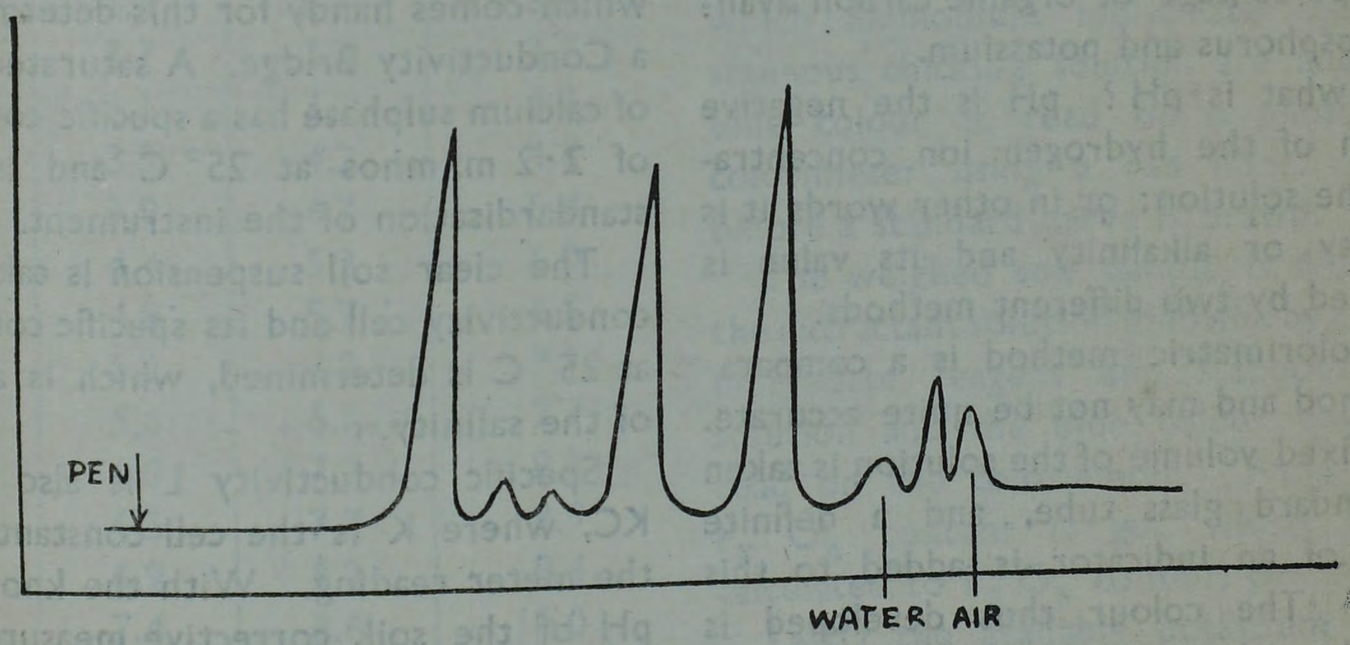
Paper made of cellulose has the property of adsorbing some cations. But this degree of adsorption is different for different ions.

A drop of the solution to be analysed is placed at one end of a long strip of filter

paper. A suitable solvent is made to be absorbed by the filter paper from the same end. The solvent slowly travels through the filter paper and carries along with it, the ions of the solution. Different ions are adsorbed at different rates by the filter paper. As in the case of column chromatography, the least adsorbed ion moves forward. The most adsorbed ions are left behind. After a sufficiently long time, the filter paper is dried and sprayed with the spraying reagent which gives particular colours to certain ions. The distances through which different ions have travelled can be measured and they can be distinguished.

Vapour Phase Chromatography:

This is the most important type of chromatography. The principle in this is the same as that in column chromatography. The mobile phase here is the carrier gas, usually hydrogen. The stationary phase is a liquid. Different substances are retained on the stationary phase to different extents or their retention periods are different. Hence



they come out of the column at various times.

An advantage of this method is that a very small quantity of the given mixture is sufficient. At first the mixture is injected in volumes as small as 1 μl or 2 μl (10^{-6} litre) from a microsyringe. Hydrogen gas is passed in a stream which is heated. The liquid mixture will now be in the vapour state. This arrangement is called the injector.

The carrier gas carries the mixture to a chromatographic column, a long metal tube packed with an inert powder. On this the liquid phase is coated. Adsorption takes place in this column.

The gas then enters the detector. It cools down a tungsten filament heated by a battery. Different gases cool the filament to different extents depending on their thermal conductivities. This causes a fluctuation in the voltage produced across the circuit. The fluctuation produced is recorded by a pen moving on a graph sheet at a constant rate.

The several peaks in the graph (for eg. 1, 2 & 3) correspond to maximum voltages. The distance of the peak from the point corresponding to the injection of the sample is a measure of its retention time. But, it is not possible to know when the injection was made, and therefore air is also injected. The peak corresponding to air is taken as zero to calculate the retention time of different substances.

Applications of Chromatography:

Chromatography finds many applications in the field of chemistry. It is applied in the analysis and resolution of both organic and inorganic mixtures. It finds use in quantitative separation of the components from a complex mixture and also in the identification and purification of substances.

Soil Testing

About six or seven decades ago soil was considered an inert material made of different proportions of clay and sand particles. Since then, our knowledge of soil has improved and it is no longer considered as a dead entity, but a very lively one, with characteristic physical, chemical and biological properties, which confer on it individuality and specificity. By understanding our soils we can improve greatly its productivity and usefulness.

Today soil testing has developed considerably as a scientific method of understanding soil. It aims at making recommendations with regard to soil management practices in general, and about manuring and fertilizer practices in particular after evaluating the fertility status of the soil by laboratory analysis. The recommendation is profitable only if the soil sample is representative and the past history of the soil and cropping is known. Analysis of soil reveals its pH, salinity, percentage of organic carbon available, phosphorus and potassium.

Now what is pH? pH is the negative logarithm of the hydrogen ion concentration of the solution; or in other words it is its acidity or alkalinity and its value is determined by two different methods.

The colorimetric method is a comparative method and may not be quite accurate. Certain fixed volume of the solution is taken in a standard glass tube, and a definite quantity of an indicator is added to this solution. The colour thus developed is compared with the colours of a set of standard solutions of different pH values. Since this method is not accurate it is not commonly used.

A more reliable procedure is based on E. M. F. measurement using glass electrode pH-meters and is made easy as these are direct reading instruments. Acidic solutions have pH less than 7 (between 0 and 7) while pH value of an alkaline solution is more than 7 (between 7 and 14). The standard buffer solution is a saturated solution of potassium hydrogen tartarate A. R. grade which gives pH 3.66 at 25° C.

10 grams of the soil is measured in a 50 ml beaker and placed in the wooden rack having 11 such beakers each containing 10 gms. of the soil sample. With the help of a multiple dispenser or 20 ml automatic pipette, 20 ml of distilled water is added and stirred intermittently with a glass rod for $\frac{1}{2}$ an hour. The pH of the soil suspension is determined with the pH meter as per the directions supplied. The suspension is stirred with the glass rod prior to noting the pH reading. The electrodes are washed with distilled water after each determination.

The next important factor of the soil is its salinity, in other words, the total soluble salt content of the soil. The instrument which comes handy for this determination is a Conductivity Bridge. A saturated solution of calcium sulphate has a specific conductivity of 2·2 m. mhos at 25° C and is used in standardisation of the instrument.

The clear soil suspension is taken in the conductivity cell and its specific conductivity at 25° C is determined, which is a measure of the salinity.

Specific conductivity L is also equal to KC, where K is the cell constant and C is the meter reading. With the knowledge of pH of the soil, corrective measures can be suggested such as lime requirement.

Lime requirement is based on the measurement using glass electrode pH meter. The reagent consists of 1·8 gm of nitrophenol, 3 gms of potassium chromate, 2·5 ml of triethanolamine, 2 gms of calcium acetate and 53·1 gm of calcium chloride dihydrate in a litre of water and its pH is

adjusted to 7·5 by the addition of sodium hydroxide.

5 gms of the soil sample is measured out to which 5 ml of distilled water is added along with 10 ml of the reagent and well shaken. The pH is then determined.

For soils having pH 6·4 or above no lime need be recommended. If the pH is less than 6·3 lime is recommended, as per the table given below. The values are given in tons of pure calcium carbonate per acre, required to bring the soil to pH indicated. and must be converted to their equivalents of agricultural limestone locally available.

Lime required to bring the soil to an indicated pH according to pH of the soil buffer suspension:

pH of Soil buffer Suspension	Lime required to bring soil to indicated pH in tons/acre		
	Pure Calcium Carbonate		
	pH 6.0	pH 6.4	pH 6.8
6.7	1.0	1.2	1.4
6.6	1.4	1.7	1.9
6.5	1.8	2.2	2.5
6.4	2.3	2.7	3.1
6.3	2.7	3.2	3.7
6.2	3.1	3.7	4.2
6.1	3.5	4.2	4.8
6.0	3.9	4.7	5.4
5.9	4.4	5.2	6.0
5.8	4.8	5.7	6.5
5.7	5.2	6.2	7.1
5.6	5.6	6.7	7.7
5.5	6.0	7.2	8.3
5.4	6.5	7.7	8.9
5.3	6.9	8.2	9.4
5.2	7.4	8.6	10.0
5.1	7.8	9.1	10.6

However the fertility of the soil is determined by the organic carbon, available phosphorus and potassium contents. Organic carbon represents the nitrogen content of the organic matter.

A standard curve is prepared using solutions of sucrose of accurately determined concentration.

Each of these solutions is oxidised by the same quantity of 1 N potassium dichromate and concentrated sulphuric acid and the green colour formed is read on a photo-electric colourimeter using a red filter. The zero reading of colorimeter is previously adjusted with a blank solution. A curve is drawn by plotting the colorimeter against the carbon content in sucrose solution.

Then 1 gm of the soil sample is treated with 1 N potassium dichromate, concentrated sulphuric acid and 1·25% silver sulphate and kept overnight. The green colour is read on the photoelectric colorimeter as before and from the standard curve the carbon content is got which is usually expressed per 100 gms of the soil.

An equally important factor is the available phosphorus which is also determined by the help of photo colorimeter. A standard solution of potassium dihydrogen phosphate is prepared. It is reacted with a definite volume of extractant solution containing ammonium fluoride, hydrochloric acid to which ammonium molybdate reagent and stannous chloride solution are added. The blue colour is read on a photo electric colorimeter using a red filter. And as before a standard curve is drawn.

The weighed soil sample is treated with the extractant solution followed by ammonium molybdate reagent and stannous chloride solution and the blue colour developed is read on the colorimeter. From the curve P_2O_5 content is got which is usually calculated to P_2O_5 content per acre.

Lastly the available potassium has to be determined. A normal solution of neutral ammonium acetate is prepared. The other solution required is a standard potassium solution got by dissolving 1·5851 gms of pure potassium chloride in one litre of distilled water. A number of working standard solutions are prepared by taking known

different volumes of standard potassium solutions which are diluted to one litre with the neutral ammonium acetate solution. A flame photometer is set up by atomising the two end—working solutions. The readings of the other working solutions are noted and standard curve is drawn.

Weighed soil sample is treated with ammonium acetate solution, shaken well and filtered. The filtrate is mixed with 2 drops of butyl alcohol and the potassium content is determined with the flame photometer and the standard curve is drawn. The potash content is expressed as K_2O per acre.

With a knowledge of organic carbon, available phosphorus and available potassium, suitable fertilizer can be recommended. The present green revolution of which we hear almost everyday, owes a lot to soil testing.

Elizabeth Fernandes
III B. Sc.

HYMN OF THE UNIVERSE

'Blessed be you, harsh matter, barren soil, stubborn rock; you who yield only to violence, you who force us to work if we would eat.'

'Blessed be you, perilous matter, violent sea, untameable passion: you who unless we fetter you will devour us.

'Blessed be you, mighty matter, irresistible march of evolution, reality ever new-born; you who, by constantly shattering our mental categories, force us to go ever further and further in our pursuit of the truth.

'Blessed be you, universal matter, immeasurable time, boundless ether, triple abyss of stars and atoms and generations: you who by overflowing and dissolving our narrow standards or measurement reveal to us the dimensions of God.

'Blessed be you, impenetrable matter: you who, interposed between our minds and the world of essences, cause us to languish with the desire to pierce through the seamless veil of phenomena.

'Blessed be you, mortal matter: you who one day will undergo the process of dissolution within us and will thereby take us forcibly into the very heart of that which exists . . .'

Pierre Teilhard De Chardin

THE SEA AND I

Lone am I
on the deserted beach,
high on the rocks,
standing.
Below me, crashing thunderously,
breaking, spraying gainst the rocks,
is the sea–
the restless, foaming sea.

Sprays of water fly up
in rainbow colours.
Sprinkles my face,
kisses my lips
with a salty tang.
Oh, you restless, foaming sea
you roar
you envelop me
and I cannot hear the sounds of this
world.

Lost in my dreams
I can see a life beyond the waves-
A bright, sunshiny, carefree world.
I flounder.
I can see a life beyond-
a life beyond-
beyond the waves.
A vision!
A dream!
Only a dream?

A bell tinkles somewhere,
somewhere far.....
Breaks my thought, my vision, my dream.
A temple situated on the rocks:
The House of God!

The bell rings louder and louder still.
Is it a warning?
God above
God who is greater than the sea,
bless me for my vision's gone.
I cannot see a life beyond.
A moment's lost!

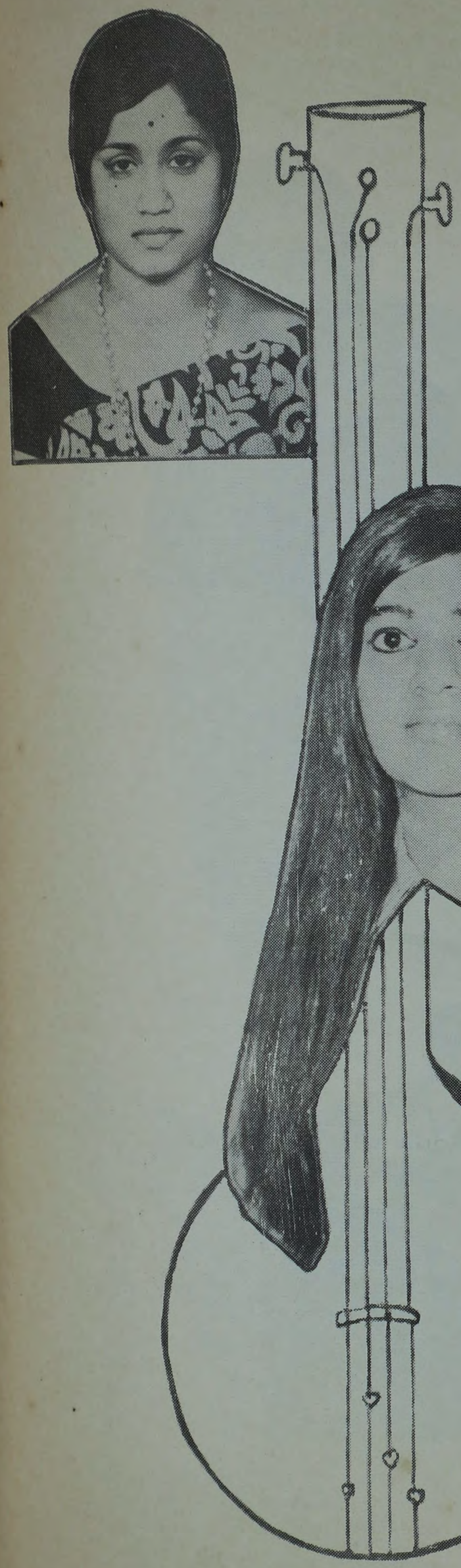
A moment of my life-
dashed to the ground
like the waves in the sea;
broken like the shell on the shore.
The vision's gone
My dream's gone.
Rose to its height,
stood quivering still
like waves which form
rise high in its glory adorned,
reaches its peak.
A second!
A minute!

Then crashes to the ground
goes back timidly, simpering to join
the sea

My dreams lie shattered;
while everything's gone, hope is not.
Hope remains.
Have I to go too
timidly, simpering,
back to my old life-
dreary, grim, bleak, unhappy?
while all is lost,
Hope remains.
Two roads diverge-

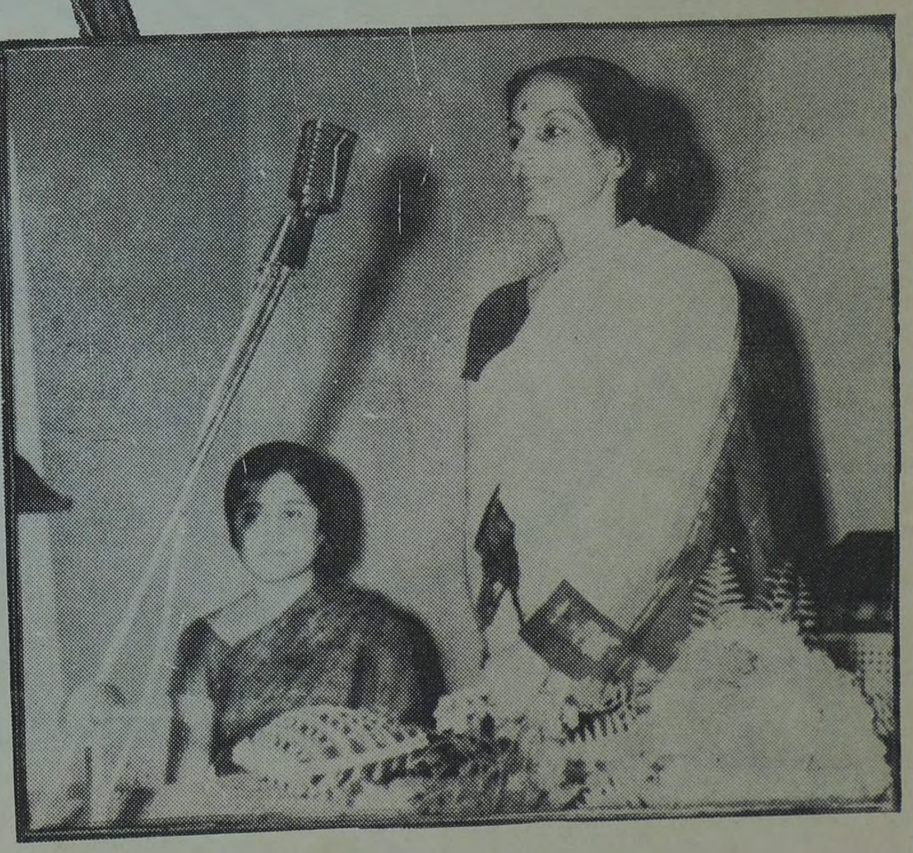
One goes back.
one stretches forward;
a path less trodden on.
I want a life beyond the waves
I tread the path less trodden.
The tinkling temple bells recede and fade.
I see a life beyond,
glimmering, shimmering.
I see a life beyond.....
beyond you.....
Oh, you restless, foaming sea.
My dreams lie shattered;
while all is lost
Hope is not.
Hope alone remains?

Suthan Kerkera
III B.A.



"HOW CAN A BIRD
THAT IS BORN TO SING

SIT IN A CAGE
AND SLEEP?"



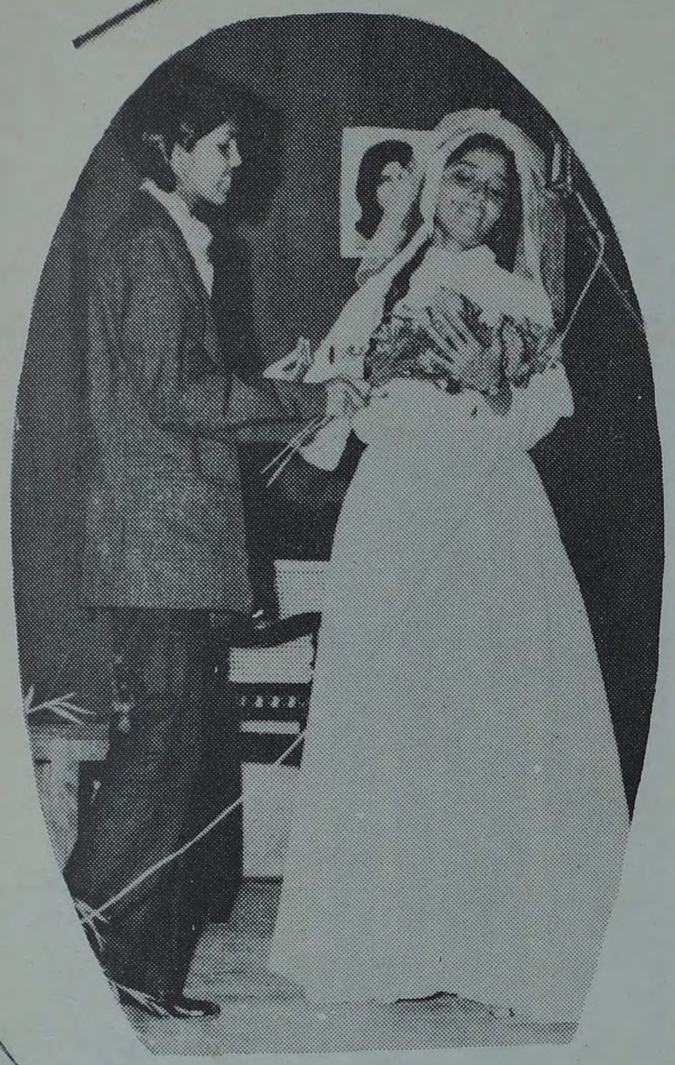
"IF MUSIC BE

THE FOOD OF

LOVE

PLAY ON"

a mid-term break



with

Drama

Song and

Dance

The tired remmnant of the

Union down there

Working tirelessly with the cry

"God is our Strength"

COLLEGE UNION CABINET IN SESSION

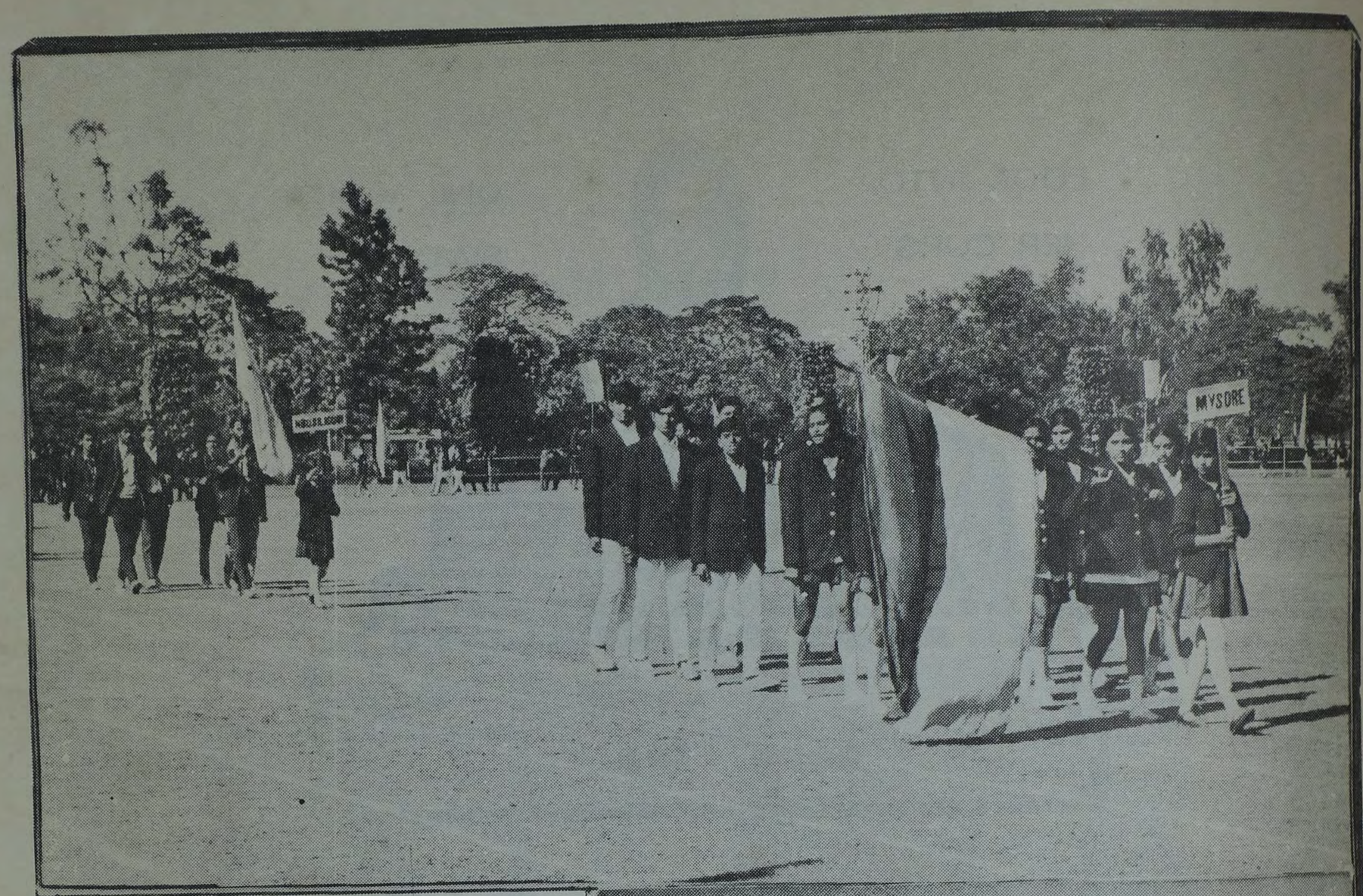
LOOK INTO
HER CUPS
OF
SILVER

ONE MIGHT
SWOON

ATHLETIC TEAM

BADMINTON TEAM

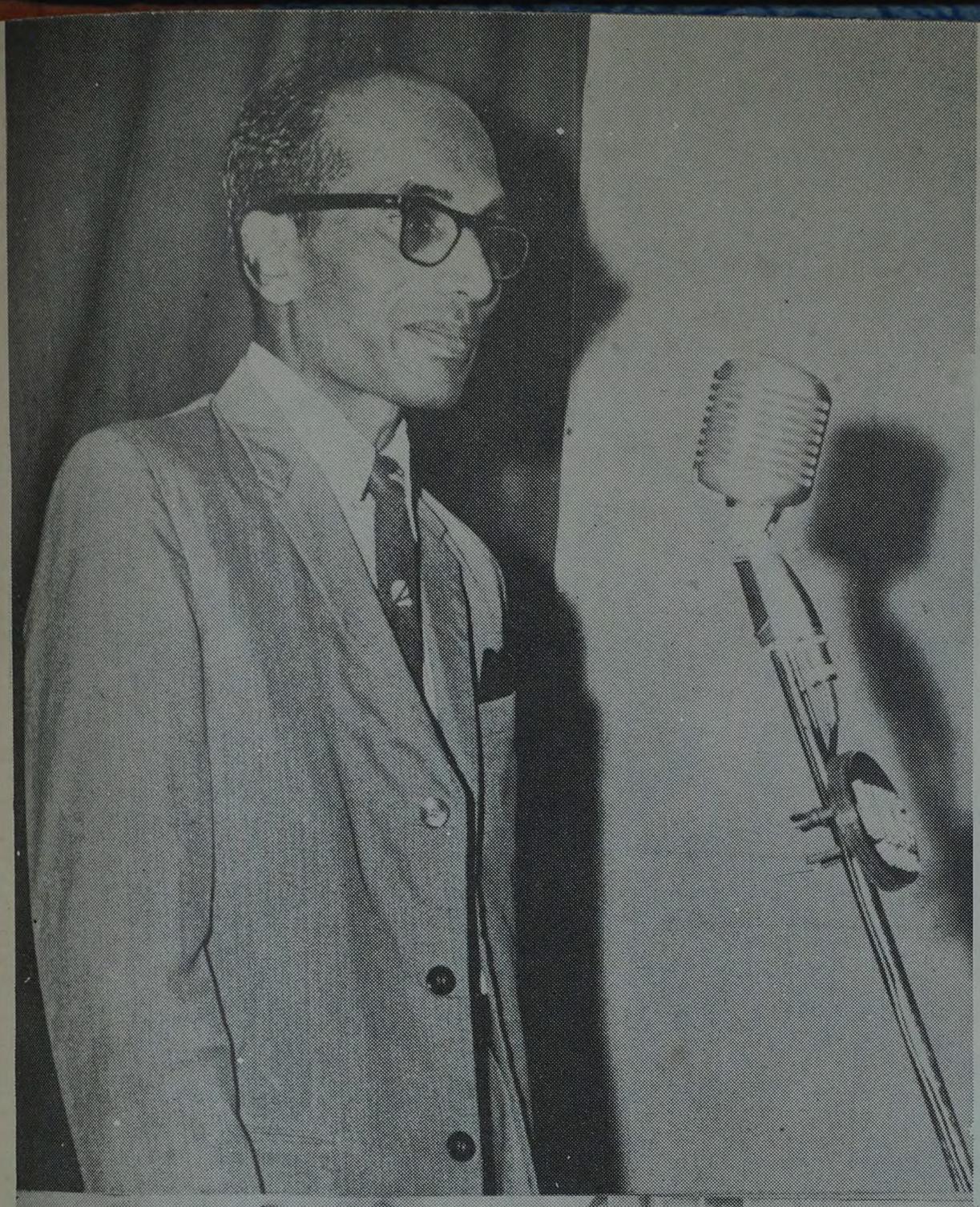
"GET OUT OF THE WAY



YOU LITTLE
FELLOWS!

THE CHAMPIONS
ARE COMING
TO PLAY"

COLLEGE DAY



The Presidential Address

Sri K. Chennabasappa

District and Sessions Judge,
Mangalore

Our Audience

COLLEGE DAY

KISA GAUTAMI

Wherever there is SHARING
there is GOD

The NSS: Service—
More than a mere slogan

The Mentally Retarded— A Special School } A Meaningful Memorial to Humanity

Somewhere far from town and people
In a stable poor
Jesus Christ was born of Mary
In a cave obscure

To seek Him, don't trouble
To Bethlehem to go
In silence you'll find him
And in the MAN NEXT DOOR

Sing a New Song No. 54

"The friendship of those we serve is the foundation of our progress."

"Every young generation has its central concern....
Today's young people seem to have chosen for their concern
the dignity of the individual human being."

Robert F. Kennedy

I am endeavouring to see God
Through service of Humanity
For I know that God
is neither in Heaven
nor down below
but in EVERYMAN

Mahatma Gandhi

A Meaningful Memorial to Humanity

A hundred years of educational endeavour
of the Apostolic Carmel, Mangalore, India,
found no fitter memorial to its Centenary of Service,
than a SPECIAL SERVICE PROJECT
at St. Agnes College, Mangalore-575002.

This Primary School, (soon to acquire government recognition)
was opened on August 4, 1970.

There were just six children, six children of God
with a mental retardation
that called for **Special Care.**

The **Opportunity Class** at st. Agnes
was slowly and steadily availed of:
6 children in 1970; 9 in 1971; 12 in 1972; 18 in 1973,

When it is a question of GOD'S CHILDREN,
Their education, their care, their career and their future,
nothing is too much to give:
be it in the **School:** by the instructors and mentors
be it in the **home:** by the parents and family
be it in **society:** by friends and well-wishers.

St. Agnes College Special Service Project

School for the Mentally Retarded Project

On its First Annual Prize Distribution Day

Smt. Rathna Hegde, honoured Chief Guest, Sr. Vera, Pro-Provincial Superior and Chairman of the Apostolic Carmel Mysore Education Society, Sr. Innocence, Superior, Sr. Noelle, Principal, dear parents of our students, friends and well-wishers. We are happy and privileged to have you all here with us on this first Annual Prize Distribution Day of our School. Though an infant institution in the third year of its life, our school is slowly finding its feet and from humble beginnings is gradually growing in strength day by day, thanks to the continued interest and encouragement you have shown in it. We welcome you heartily and think it fitting to review with you the activities of this year, of which I am presenting a brief report.

Staff: The Staff continue as last year: Sr. Maria Jyothi A.C. in charge. Miss. Premila Joseph, assistant. We are fortunate this year to have, in addition, the voluntary honorary services of Mr. Madhav Kamath of the Gandhi Peace Foundation, who conducts weekly music classes. We acknowledge with gratitude the services of Srs. Lily Pinto and Carmeline Sequeira, for one month. Miss Annie Mascarenhas, helps daily, with the students.

Strength: The strength of the school has risen: from 12 last year to 18 this year. Several inquiries have been made by parents of other students who would like the school to provide residential facilities. Unfortunately we are not able to provide the same in the present situation. We are happy to say that three of our pupils of last year were able to join the normal school; one of them ranked 6th out of 36 children in his class. Of course such cases will be rare.

Curricular and Co-Curricular activities: In a homely atmosphere the children are taught reading, writing, arithmetic and hygiene, according to their individual capacities. In addition the basic activities of self-help are organized. Moral/Religious instruction and games are a daily feature. The chief aim of all our teaching is to help our students out of their excessive dependence and to gain self-confidence and control so that they turn out useful members both in the family circle and in society at large. For the success of our efforts in school, we count on the continued cooperation of parents for the education of the children at home.

Study is made concrete by audio-visual aids, demonstrations, activities and outings.

The children eagerly await the weekly music lessons of Mr. Madhav Kamath; the songs he has taught them probably resound in their homes.

A certain amount of craft, cutting-out and drawing is taught. Most of the children have enough muscle coordination for simple craft-work, which may be of use to them in later life. We are grateful to the Codialbail Press for providing us with a huge set of papers to be folded as practice work for the senior boys. Other children prepared decorative wrappers which they presented to the heads of institutions. As a certain standard of drawing and colouring is necessary for the students, we have provided the children with the latest type of books for this purpose.

Our most recent endeavour has been in the field of Yoga. Yoga exercises are found to be very beneficial to these children as

they help to tone up, integrate and soothe the nervous system. The children participate actively in these lessons which are held twice a week.

Independence Day was celebrated in the children's own festive way. The senior boys and girls coloured a large-sized map of India which was then worked on the floor with sand and rangoli. They also had Christmas celebrations together with Principal's day.

A memorable event of the year was a camp organized for the children at Ullal, the main aim of which was to provide a closer study of the children in all their activities, ranging from self-help to sleeping habits. It has left a lasting and pleasant impression on the minds of both teachers and children. In this connection we must thank Srs. Innocence, Maria Nita and Odilla for the help they rendered us during the camp. Next year we propose to organize a camp for 3 days, with the consent and kind cooperation of the parents.

Outings play a prominent role in the education of the children. This year they visited the Panambur Harbour Project, the Government Dairy, and the Tagore Park. We are grateful to Mr. V. V. Kudva who generously provided us with a bus free of charge for the outings. Another day a picnic was organized to the Ullal beach.

The next outing proposed is to the circus. It will not be for the regular acrobatic show but more to see the animals.

Though we hold examinations at the end of the term, we do not grade the children nor give them marks. The tests are means to enable the parents and teachers to know where the child stands. Competition is not possible in this school-room situation.

We are happy to note, that on the whole, a homely atmosphere and a very good spirit of cooperation prevails among the students. They have accepted each other almost as members of a family and readily offer mental help.

Visitors To The School during the year were Sr. Vera A. C. Pro-Provincial Superior, Mr. George D'Souza of the Indian Social Institute, Fr. Tom Lay S. J. Department of Ecumenism of Louis University U.S.A. the students of Roshni Nilaya School of Social Work, Dr. Kothanda Rao, Neuro Surgeon of Fr. Muller's Hospital and the Joint Director of Public Instruction who inspected the school last month.

The school is likely to be granted government recognition soon.

School Building: We are happy to inform you that the ground floor of the new building to accomodate our children is ready. We owe it to the generous donations of our benefactors, as an A. C. Centenary memorial. We rely on the Providence of God for the necessary finance for the first floor.

Parent-Teacher Cooperation: If effectiveness of education calls for parent-teacher cooperation, it is needed very specially in a school like ours. We appreciate very much the periodic visits of some parents to the school and the full cooperation we have received in whatever we do, especially during our camp. However may we request even more cooperation, especially in continuing our education, in the form of self-help also in the home. This would go a long way towards fulfilling many of our other desires for the welfare of your children and ours. We thank all of you as well as our other friends and benefactors for the generous interest they have taken in our school and the encouragement they have given us. We thank God for the little He has helped us to achieve; We pray God to shower His blessings on you and all of us.

The N.S.S. at S.A.C. 1972-1973

St. Agnes College was included under the National Service Scheme this year, with effect from July 1972. After the orientation-cum-training course at Mysore, Sr. Olivia A.C., who was appointed NSS officer by the University, took charge during the first week of July. The Advisory Committee was formed in three weeks time, with the Principal, NSS Officer, Student Secretary, District Officer for Youth Services, Asst. Engineer PWD, President of the Federation of Social Welfare Agencies, Mangalore and a Lady MLA.

The Unit started functioning from August Ist. The response on the part of the members was satisfactory and steady for the major part of the year. The activities undertaken were: teaching the educationally backward students of the College, attending to campus cleaning and clearing games fields, training in First Aid with talks and demonstrations; A small Harijan colony comprising of 23 houses was adopted by the students; aftergetting to know the people there, the students spent the Saturday afternoons regularly at the colony, teaching children, visiting homes and holding time-to-time enquiries.

The annual camp was a special feature deserving mention. The students were actively involved in arranging the camp—contacting speakers, drawing up the camp schedule, working at the survey schedule; arranging for food and other requirements, and above all fixing up the work projects during the camp. The camp was from Oct. 14th morning to Oct. 23rd afternoon. It was attended by 75 students. It was a leadership-cum-work camp: manual work in the morning and leadership courses in the afternoons, running through the nights. The students were able to accomplish a few modest projects, with the cooperation of many cordial friends: with the help of the Institute of Social Work, Roshni Nilaya, the students conducted a socio-economic survey of the colony; with the help of a team of doctors a thorough medical examination was conducted and thence after-medical care is given regularly by the students; a kitchen garden was raised in every house with vegetables and coconut seedlings; every school-going child was given a dress each which was stitched by the students during the camp. The most exciting project, however, was the reconstruction of a fallen house, which the students undertook as a challenge. They helped in demolishing the dilapidated walls of the old house, digging the foundation anew, digging out and the old walls and preparing of the mud bricks; the rest of the job was done by two men who helped us during the work. The contract was later given to a mason of the place and the work was completed in two months time, the delay being due to the inclemency of the weather, the uncertainty of the showers which threatened us even up to the first week of December.

Other activities of the unit were: raising of funds through a fancy fete in the month of October, the proceeds of which were used for our camp projects; raising of funds through raffles in the month of January to collect money for Chikkahole; visiting the patients and distributing fruits to them regularly during the months of November and December. celebrations of national festivals for the people of the colony: Independence Day, Deepavali, Children's Day, Christmas; sports organised in January to celebrate New Year's Day.

The last activity for the year was the celebration of Leper's Day. The students took delight in cooking a sumptuous meal for the leprosy patients of the hospital

(150 of them), they served the meal themselves; a variety entertainment was also held in the evening with sports; while distributing prizes for the winners, every patient was given a scented soap as a little gift—we were able to accomplish all this due to the continued generosity of our Principal. The valedictory function was held on Feb. 19th with our Taluk Board President as Chief Guest. He distributed certificates to the outgoing students, who were 47 in number. Though the activities for the current academic year are closed, we are planning ahead our activity for the coming year.

We are grateful to the members of our Advisory Committee, our Principal, the Director and Programme Coordinator from Mysore—all these have constantly extended to us their continued interest, cooperation and goodwill. We hope and pray that the NSS will go a long way to instil in the students the spirit of service and leadership and thus enable them to channelise their energies in accomplishing constructive activities for the Neighbour, for Society and for our dear Country.

NEW SONGS OF ASIAN CITIES

Whatever You Did to the Least of My Brethren

Whatever you did to the least of my brethren,
you did it to the King of all men.

1. He was standing by the highway, shivering under the rain,
clothes all tattered, teeth all a chatter,
and I went on my way.

2. A mother in the river washing Mister Big's clothes,
hoping for the money for the coming baby,
and I lay on my bed.

3. Sister in a restaurant, working for less than her gain,
all for money, until midnight,
and I kept sipping my drink.

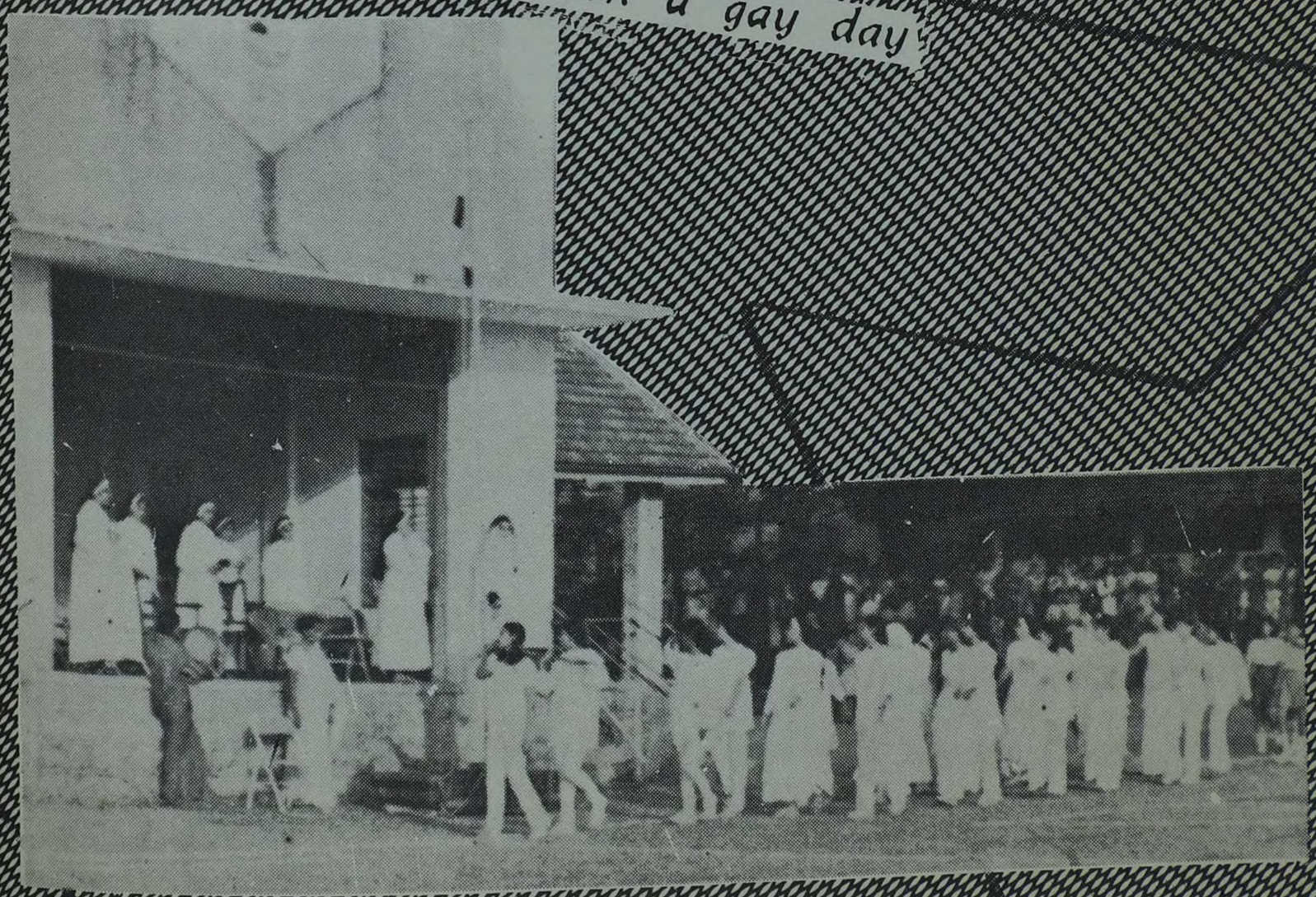
4. Father in a corn field, sweating under the sun.
Farmer did the labor, rich man got the favor,
and I just sat in my chair.

5. Brother in a jail house, waiting for his trial to begin.
Three years in prison, without any reason,
and I kept reading my book.

And I, what have I done?

STUDENTS DAY

Some discipline on a gay day

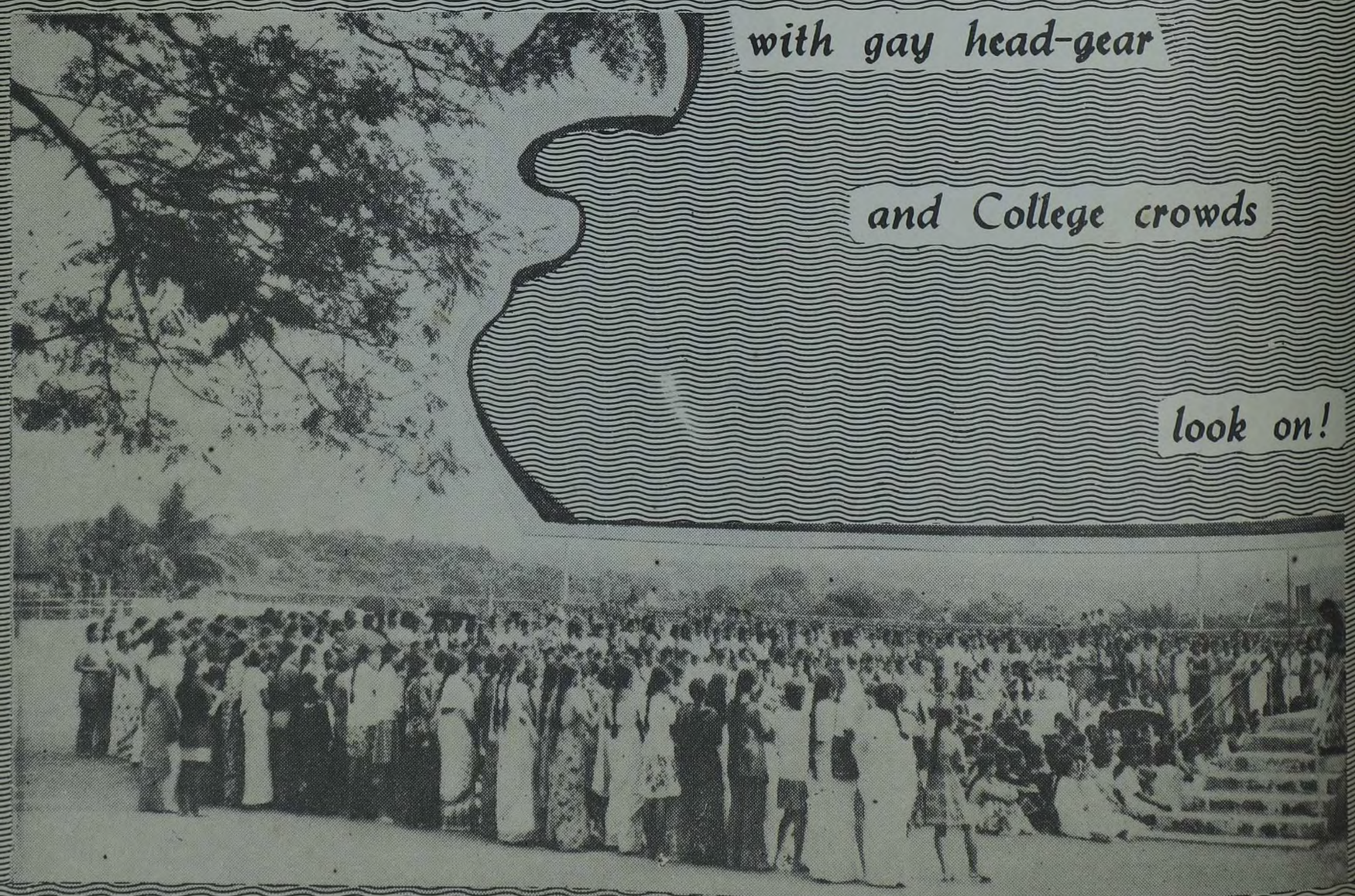


Strangely gay

with gay head-gear

and College crowds

look on!



In a bright gay Mood

and the gayest moment of it all

Relating Religion to the Reality of Life

Paul Tillich once said: "The existence of religion as a special realm is the most conspicuous sign of man's fallen state." Particularly the youth senses the validity of this observation. More than against its adultness the youth reacts against the unrelatedness of prayer, worship and liturgy to life. They intuitively feel that faith and its religious expressions cannot be a compartment of their daily life, but that these are **either** a myth for primitive people **or** the real basis or the true perspective of their life. Hence the latter are anxious to make their life an integral part of their worship in order to make worship an integral part of their life and to break the tragic dichotomy between religion and life, between their faith and their commitment to the world, for which God has made them responsible.

Remarkably, the same integration is confessed and proclaimed by the Churches. "The joys and the hopes, the griefs and the anxieties of the men of this age, especially those who are poor or in any way afflicted, these too are the joys and the hopes, the griefs and the anxieties of the followers of Christ," proclaims Vatican II in its Pastoral Constitution on the Church in the Modern World. And the Uppsala Assembly of the World Council of Churches lays a clear connection between worship and world:

> In its worship, as surely as in its witness in the world, the Church is called to participate fully in Christ's reconciling work among men. In worship we enter God's battle against the demonic forces of this world which alienate man from his Creator and his fellowmen, which imprison him in narrow nationalism or arrogant sectarianism, which attack his life through racism or class division, war or oppression, famine or disease, poverty or wealth, and which drive him to cynicism, guilt and despair. When we worship, God shows us that in this battle the final victory belongs to Jesus Christ.
>
> (Report on Worship, No. 7, P. 79)

The youth demands that the Churches practise the solidarity with the world, which they proclaim, not only in their activities and involvement in the world, but also in their liturgy and worship. Young people want to live the famous words of John; "If anyone says, 'I love God', and hates his brother, he is a liar; for he who does not love his brother whom he has seen, cannot love God whom he has not seen" (1 Jn. 4, 20). A separation between these two is fatal and it blocks the future both of the Church and of the Kingdom of God. Sharper than we expect, the youth sees through ambiguous attitudes. Our prayer (worship, liturgy) is honest, when our commitment in life is honest. "If you bring your gift to the altar, and there remember that your brother has something against you, leave your gift there before the altar and go; first be reconciled to your brother, and then come and offer your gift" (Mt. 5, 23-24).

Fr. Gerwin Van Leeuween in **Worship in Youth's Idiom (P. 13)**

"Some people see things as they are and say *why*
But I dream of things that never were and say *why not.*"

Robert F. Kennedy

Too Long—

Jean Vanier

Too long
have we forgotten
that Peter and John and Eileen
—mentally deficient—
are people.

People who love
and who want to be loved
who have joys
like you and me.

(you see we are normal people
. . . . isn't it nice being normal?)

Peter & John & Eileen
have hearts that suffer
when we do not look at them
with respect
and love.

Too long have they been treated
like perpetual, dependent, incapable
children
for whom we must do everything . . . .
"poor creatures."
When will we learn,
When will we learn
that Peter & John & Eileen
have their rights

for they are people
and more—
children of God.
We have too long despised them.
We have treated them with pitying
paternalism,
ignoring their potentialities.

We have forgotten
that they want
our **respect**
our **love,** but not smothering,
protective love,
but love made up of esteem
and a desire to give life,
possibilities to create,
to give,
to feel useful to society.

They have a right
to grow, to develop
in creativity and work
in joyful leisure,
in knowledge,
in small houses,
in spiritual life.

All these activities
should be open to them,
but we the so-called
normal people

(isn't it nice being normal . . . you & me?)

with atrophied hearts
and over-burdened minds,
obsessed by efficacity,
we forget that they are people.

Peter,
John,
Eileen,
you have no voices to cry out.
You cannot go on strike.
Will you forgive society?
Will you forgive me?

For too long
I ignored you.

Christ on the cross
cried out,
"My God my God, forgive them
for they know not what they are doing."

When you are resurrected
will you say that
to our Eternal Father
for us?
"They did not know what they were doing
when they didn't stop to listen to us,
to respect us,
to help work and live."

(Isn't it nice being normal . . . you and me!)

From: **Eruption to Hope**

THE VALEDICTORY FUNCTION

Is my gloom, after all,
shade of his hand
outstretched caressingly?

Ah fondest, blindest, weakest,

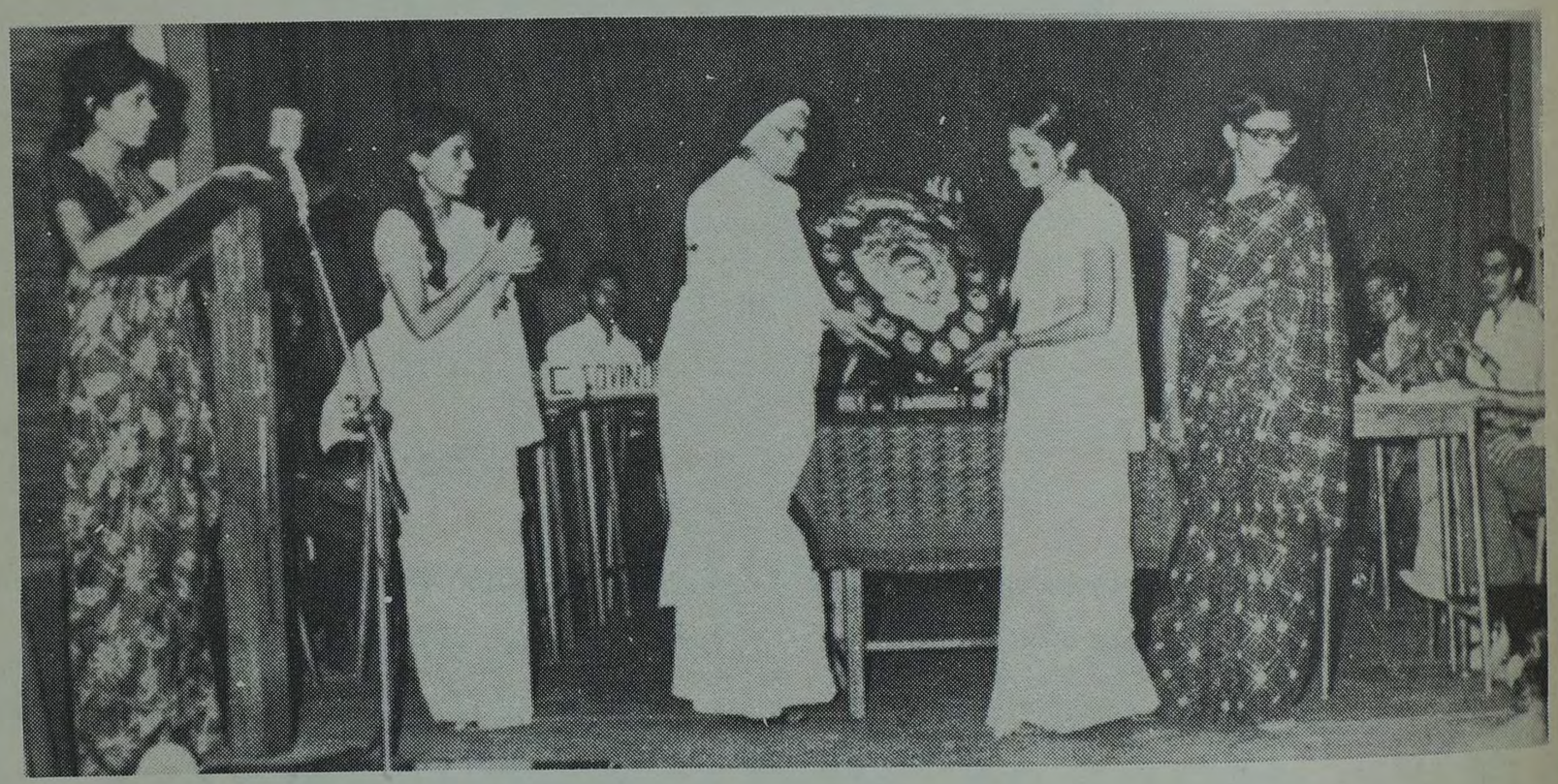
I am He whom thou seekest!

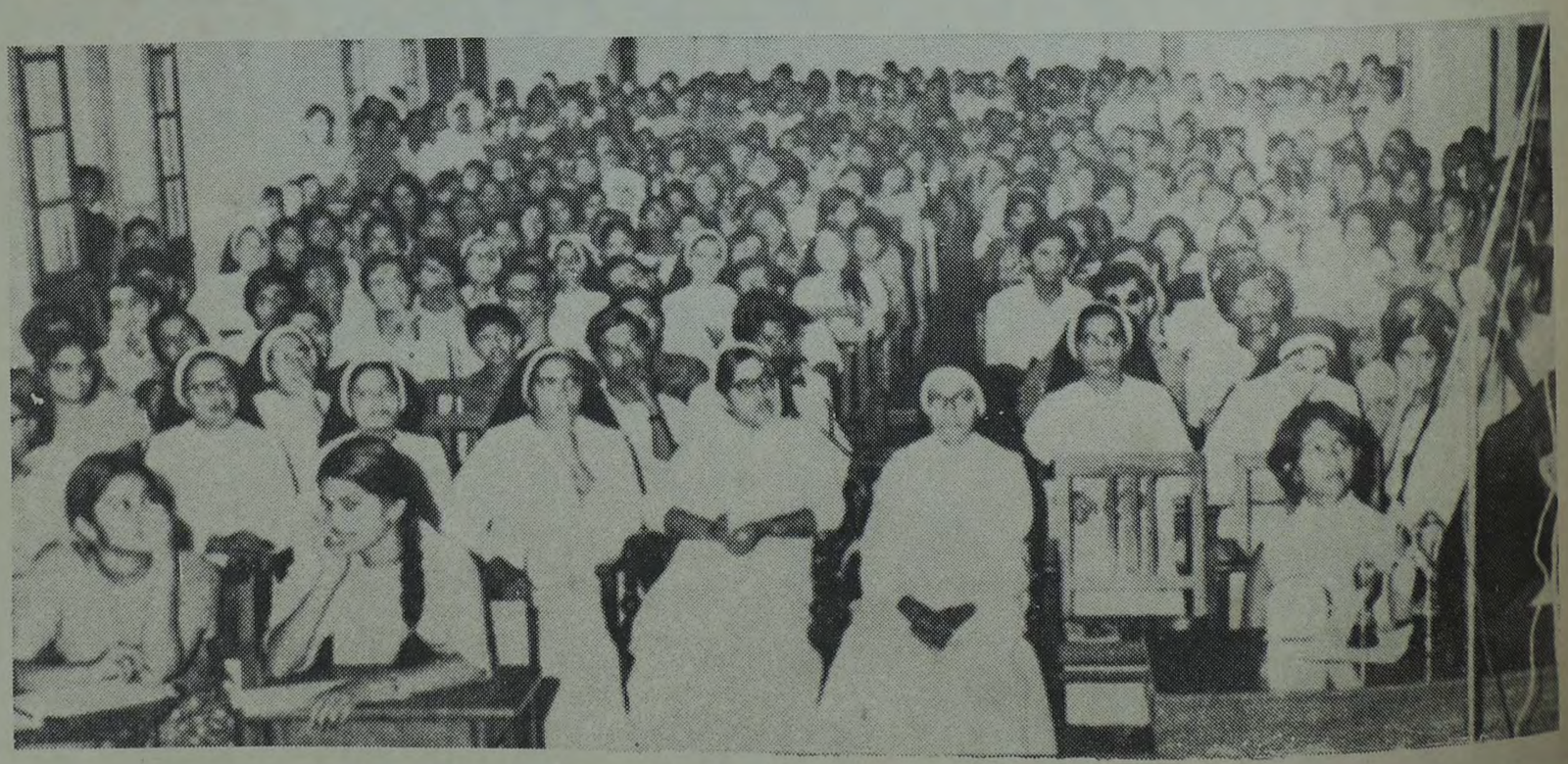
Thou dravest love from thee,
who dravest me."

The last long sip together

INTER COLLEGIATE QUIZ COMPETITION

AND ALL THAT MIGHTY BRAIN IS LYING STILL"





'ಇಳೆಗಿಳಿದ ಕಲ್ಪತರು'

ಉದಯಿಸಿಹ ಬಾಲಭಾಸ್ಕರನ ಕೆಂಗಿರಣಗಳು
ತಂಬೆಲರನೊಡಗೊಂಡು ಪಯಣ ಬೆಳೆಸಿಹವು ।
ಮೂಡಣದ ಬಾನೊಳಗೆ ಓಕುಳಿಯನೆರಚಿರಲು
ಬಾನ್ದೇವಿ ಕಿಲಕಿಲನೆ ನಗುತಲಿಹಳು ॥

ಕೋಗಿಲೆಗಳಿಂಚರವ ತುಂಬಿಗಳು ರ್ಝೀಂಕೃತಿಯು
ತಾಳವೇಳಗಳೊಡನೆ ಒದಗಿಸಿಹವು ।
ಸೊಗಸಿನಾ ಮೆರುಗನ್ನು ಕಂಪಿನಾ ಒಸಗೆಯನು
ಪುಷ್ಪರಾಜಿಗಳೊಡನೆ ನೀಡುತಿಹವು ॥

ಕುಂದಿರದ ಚೆಲುವಿನಿಂ ಕೊನೆಯಿರದ ಸೊಗಸಿನಿಂ
'ಇಳೆಗಿಳಿದು ಬಂದಿಹನು ಕಲ್ಪತರುವು' ।
ನೋಟಕರ ಯಾಚಕರ ಮನವ ತನ್ನೆಡೆ ಸೆಳೆದ
ಮಾಟಕನು ಮಾರ್ದನಿಯ ನುಡಿಸುತಿಹನು ॥

ತನ್ನತನವಿನಿತಿಲ್ಲ ಕೀರ್ತಿಯಾಸೆಯದಿಲ್ಲ
ನಿಸ್ವಾರ್ಥ ಬೋಧೆಯನು ಎಸಗುತಿಹನು ।
ತುಂಬುಕೈಗಳ ದಾನಿ ಬೋಧೆಯುಣಿಸುವ ಗುರುವು
ತತ್ತ್ವ ಗೀತೆಯ ಜಗಕೆ ಸಾರುತಿಹನು ॥

ತ್ಯಾಗ ವಾತ್ಸಲ್ಯಗಳ ಸಾಕಾರ ರೂಪವನು
ತಾಳಿನಿಂದಿಹನವನು ಮಾತೆಯವೊಲು ।
ಭಕ್ತರಾಭೀಷ್ಟಗಳನೀವ ದೇವನ ತೆರದಿ
ಚ್ಯುತಿ ಬರದು ಬೇಡಿದಾ ಬಯಕೆಗಳಿಗೆ ॥

ಗಂಭೀರ ಭಾವದಲಿ ತುಂಬು ಹೃದಯವ ಪಡೆದ
ಸ್ವಾರ್ಥರಹಿತದ ಬದುಕು ನಿನ್ನ ಮುಡಿಪು ! ।
ಯಾವ ಅನ್ವೇಷಣೆಯುಂ ಯಾವ ಸಾಧನೆಯಿದುವು
ಉಸುರೆಯಾ ಸಾಧಕನೆ ನಿನ್ನ ಗುರಿಯನ್ನು ? ॥

ಸಂದೇಶ ಸಂಸ್ಕಾರ ತುಂಬಿ ಕಳುಹಿದರೇನು
ಧರೆಗಿಳಿದು ಬಂದಿರುವ ದೇವದೂತ ! ।
ಆದರ್ಶ ಪಥವನ್ನು ತುಳಿದು ನಿಂದಿಹ ನಿನ್ನ
ಅನುಕರಿಸಿ ಮುನ್ನಡೆಯೆ ಧೃತಿಯಂ ನೀಡು ॥

ಕೆ. ಪರಮೇಶ್ವರಿ
II B. A.

ಬಾಳ ಗೆಳತಿ

ಮೂಡಣದ ಬಾನಿನಲಿ ರವಿಯುದಯವಾಗುತಿರೆ
ಹೃದಯದಲಿ ಉಕ್ಕುತಿದೆ ಸಂತಸದ ಹೊನಲು
ಬಹುದೂರ ಬೆಟ್ಟದೆಡೆ ಗಿಡಮರಗಳಿಡೆಯಿಂದ
ತೂರಿ ಬರುತಿರುವುದಾ ಕಿರಣಂಗಳು
ನೋಡುನೋಡುತಲಿರಲು ನೀಲ ಅಂಬರದಂಚು
ತಳೆಯಿತದು ಹೊಂಬಣ್ಣ ಅರೆಕ್ಷಣದಲಿ
ಪಳಪಳನೆ ಹೊಳೆಯುತಿದೆ ಮುತ್ತಿನಾ ಮಣಿಗಳವು
ಹಚ್ಚ ಹಸುರಿನ ಹುಲ್ಲು ಹಾಸುಗೆಯಲಿ
ಕಡಲೆಡೆಯ ತಂಗಾಳಿ ಮೈಯ ನವಿರೇಳಿಸಲು
ಕೇಳಿ ಬರುತಿದೆಯೆನಗೆ ಪಕ್ಷಿ ಇಂಚರವು
ಅರಿವಾಯಿತೆನಗಾಗ ಸೃಷ್ಟಿಕರ್ತನ ಮಹಿಮೆ
ಮುಳುಗಿದೆನು ಭಾವನೆಯ ಮುಂದಿರದಲಿ
ವಿಹರಿಸಲು ಅರೆಕ್ಷಣದ ಕಲ್ಪನಾ ಲೋಕದಲಿ
ಸಖಿಯೋಡಿ ಬರುತಿಹಳು ಬಹು ವೇಗದೀ
ನೆನಪಿನಾ ಹಾಳೆಗಳ ಪುಟಗಳನು ತಿರುಗಿಸಲು
ಅರಿವಾಗುತಿಹುದೆನಗೆ ನಿನ್ನ ವ್ಯಕ್ತಿತ್ವ
ಹೇಗೆಂದು ಬಣ್ಣಿಸಲಿ ನಿನ್ನ ಈ ಗುಣಗಳನು
ವರ್ಣನಾ ಕೌಶಲವು ತಿಳಿಯದಿರಲು
ಪ್ರೇಮಕಡಲೊಳಗೆನ್ನ ಮುಳುಗಿಸಿದ ಪ್ರೇಮಮಯಿ
ಪೆಡೆದಿರುವೆನಾ ಭಾಗ್ಯ ಈ ಜನ್ಮದೀ
ದುಃಖದಲಿ ಬೇಸತ್ತು ಮುಂದೆ ಪಥ ಕಾಣದಿರೆ
ಕಂಗಳಲಿ ನೀರ್ತುಂಬಿ ನಿನ್ನ ಬಳಿ ಬಂದೆ
ಎನ್ನ ನೀ ಬರಸೆಳೆದು ಕಣ್ಣೀರನೊರಸಿದೆಯ
ನಿನ್ನೆದೆಯಲೆನಗಾಗ ಆಶ್ರಯವನಿತ್ತೆ
ಅಭಯ ಹಸ್ತವನಿತ್ತ ನಿನ್ನ ನುಡಿಗಳ ಕೇಳಿ
ಚಿತ್ತ ಶಾಂತಿಯು ಪಡೆದೆ ನಿನ್ನ ಸನ್ನಿಧಿಯಲಿ
ನಿನ್ನಾಸರೆಯಲೆನಗೆ ಎದೆ ತುಂಬಿ ಬಂದಾಗ
ಮೈಮರೆತು ಒರಗಿದೆನು ನಿನ್ನೆದೆಯಲಿ
ಯಾವ ನೋವೇ ಬರಲಿ, ಏನೇ ಕಷ್ಟವು ಬರಲಿ
ಹೆದರುವೆನು ನಾನೇಕೆ ನಿನ್ನ ಪ್ರೀತಿಯಲಿ ?
ಸಿರಿತನದ ಬಡತನದ ಬೇಧಗಳು ನಮಗಿಲ್ಲ
ತಿಳಿದವಳು ನಾನೆಂಬ ಹೆಮ್ಮೆಗೆಡೆಯಿಲ್ಲ
ಸ್ವಾರ್ಥವೋ ದುರಾಶೆಯೋ ಪರಿವೆಯೇ ನಮಗಿಲ್ಲ
ಬಂಧಿತರು ನಾವೀಗ ಪ್ರೇಮಪಾಶದಲಿ
ರೂಪು ಸೌಂದರ್ಯಗಳ ಆಸೆ ನಮಗಿನ್ನಿಲ್ಲ
ಬರಿಯ ಗುಣವೊಂದಿರಲಿ ಬಾಳಿನುದ್ದದಲೀ
ಬೆಲೆಬಾಳ್ವ ಕಾಣಿಕೆಗಳರ್ಪಣೆಗಳಿಲ್ಲಿಲ್ಲ
ಹೊಗಳಿಕೆಯ ಮಾತುಗಳಿಮಗೆ ಬೇಕಾಗಿಲ್ಲ
ನಿಷ್ಕಳಂಕಿತ ಪ್ರೇಮವಿದಂ ಅನವರತ ಅಳಿಯದಿರೆ
ಆ ದೇವ ಮೆಚ್ಚುವನಿದಕೆ ಸಂಶಯವೇ ?
ಎನ್ನ ಭವಿತವ್ಯದಲಿ ನಿಶೆಯನೇ ಕಂಡಾಗ
ನಾ ನಿನ್ನ ನೆನೆಯುವೆನು ಆ ಸಮಯದೀ
ಘೋರಾಂಧಕಾರದಲಿ ಹಾದಿ ನಾ ಕಾಣದಿರೆ
ಪಿಡಿದು ಬರುವೆ ನೀನಾಗ ಪ್ರೇಮದೀವಿಗೆಯಾ.
ಹೊತ್ತು ಬೈಗಾದಾಗ, ಬಾನು ಕೆಂಪಾದಾಗ
ತಳೆವುದಾ ಕಡಲದೋ ಕೆಂಬಣ್ಣವಾ
ಸುಶ್ರಾವ್ಯ ಸಂಗೀತ ಕೇಳಿ ಬರುತಿರುವಾಗ
ಎನ್ನ ಹೃದಯವ ಹಿಂಡುವುದು ನಿನ್ನ ನೆನಪು.
ನೀಲ ಬಾಂಧಳದ ನಡು ತಾರೆಗಳನೊಡಗೂಡಿ
ಚಂದಿರನು ಸೂಸುವನು ಬೆಳದಿಂಗಳಾ
ಚೆಲುವೇ ಮೈ ತಳೆದು ಬಂದಂತೆ ನಿಶಾರಾಣಿ
ಬೆಳಗಿದಳು ಹಣತೆಗಳ ಸಖಿಯನಾದರಿಸಲೂ
ಉಷೆ ತನ್ನ ಕರಗಳಲಿ ಹೊನ್ನಗಳ ಕಾಣಿಕೆಯ
ಪಿಡಿದೋಡಿ ಬರುತಿಹಳು ರವಿಯುದಯದೀ
ಈ ಪರಿಯ ಮಿಲನವನು ಸಹಿಸಲಾರದೆ ವಿಧಿಯು
ಅಡಗಿಸಿದನಾ ನಿಶೆಯ ಚಂದ್ರನೊಡನೆ
ನಮ್ಮ ಈ ಮೈತ್ರಿಯನು ವಿಧಿ ಸಹಿಸದಿರ್ದೊಡೆ
ಮುಂದೇನು ಗತಿ ಎಂದು ಕೊರಗುತಿಹೆನು
ಸಹಿಸೆನಾ ಅಗಲಿಕೆಯನೆಂದೆಂದು ಜೀವನದಿ
ಮುಂದೆ ಮರೆಹೊಗ್ಗುವೆನು ದೇವರೆಡೆಗೆ
ಓ ಗೆಳತಿ ! ನೀನೆನ್ನ ಚಿಂತಿಸದಿರೆಂದೆಂದು
ನಾ ನಿನ್ನ ಮರೆಯುವೆನೆ ಈ ಜನ್ಮದೀ ?
ಸ್ವರ್ಗಸುಖವನೆ ಕೊಡುವ ನಿನ್ನ ನಾ ಮರೆಯುವೆನೆ !
ಪಡೆಯುವೆನು ನಿನಗಾಗಿ ಮರುಜನ್ಮವಾ.

ಸುನಂದ ಬಿ.
II B. Sc.

ಟಾಗೋರ್ ಪಾರ್ಕಿನಲ್ಲಿ ನಾನು ಕಳೆದ ಸಂಜೆ

ಟಾಗೋರ್ ಪಾರ್ಕಿಗೆ ಹೋಗಿ ಎಂದಾದರೂ ನೀವು ಸಂಜೆಯನ್ನು ಕಳೆದಿರುವಿರಾ? ಟಾಗೋರ್ ಪಾರ್ಕಿಗೆ ಹೋಗಿ ಸಂಜೆಯನ್ನು ಆನಂದಮಯವಾಗಿ ಕಳೆಯುವುದು ನನ್ನ ಪಾಡಿಕೆ. ಅದರಲ್ಲಿ ದೊರೆಯುವಷ್ಟು ಆನಂದ, ಶಾಂತಿ, ಉಲ್ಲಾಸ, ನನಗೆ ಬೇರಾವುದರಿಂದಲೂ ದೊರೆಯ ಲಾರದು. "ಕೇವಲ ಕೆಲವು ಹೂಗಿಡಗಳು, ಹಾಗೂ, ಒಂದು ನೀರಿನ ಬುಗ್ಗೆಯಿಂದ ತುಂಬಿದ ಆ ಪಾರ್ಕಿನಲ್ಲಿ ಏನದು ಅಷ್ಟು ಆಕರ್ಷಣೆ"? ಎಂದು ನಿಮಗನ್ನಿಸ ಬಹುದು. ಆದರೆ, ಅದರಲ್ಲಿ ಅಡಕವಾಗಿರುವ ಸೌಂದರ್ಯ ಅದರಲ್ಲಿ ದೊರೆಯುವ ಶಾಂತಿ, ಸಂತೋಷವೆಲ್ಲವೂ ಪ್ರಕೃತಿಯ ಪ್ರೇಮಿಗಳಿಗೆ ಮಾತ್ರಾ ಗೋಚರಿಸುವುದೆಂದು ನನ್ನ ನಂಬಿಕೆ. ಸಾಮಾನ್ಯ ಜನರು ಸಂಜೆಯ ಹೊತ್ತನ್ನು ನೆರೆ ಹೊರೆಯವರೊಡನೆ ಮಾತನಾಡಿ, ಇತರರನ್ನು ಟೀಕಿಸುವುದ ರಲ್ಲಿ ತೃಪ್ತಿಯನ್ನು ಪಡೆಯುತ್ತಾರೆ. ಆದರೆ ಒಮ್ಮೆ ಯಾದರೂ ಪ್ರಕೃತಿಯ ವೈಚಿತ್ರ್ಯವನ್ನು ನೋಡಿ ಮೆಚ್ಚಿ ಕೊಳ್ಳುವವರು ಬಹಳ ವಿರಳ.

ಅದೊಂದು ನಯನ ಮನೋಹರ ಸಂಜೆಯ ವೇಳೆ, ಪಾರ್ಕಿನೊಳಗಡೆ, ಇರುವ ಒಂದು ಕಲ್ಲು ಬೆಂಚಿನ ಮೇಲೆ, ಸಮುದ್ರಕ್ಕೆ ಅಭಿಮುಖವಾಗಿ ನಾನು ಹಾಯಾಗಿ ಕುಳಿ ತಿದ್ದೆನು. ಪಾರ್ಕು ತುಂಬಾ ಪ್ರಶಾಂತವಾಗಿತ್ತು. ಹೊರ ಗಿನ ಜನರ ಹಾಗೂ ವಾಹನಗಳ ಗಲಭೆಗಳಿಂದ ದೂರ ವಾಗಿತ್ತು. ಪಾರ್ಕಿನ ತುಂಬೆಲ್ಲಾ ಅಲ್ಲಲ್ಲಿ ಕೆಲವು ಜನರು, ಪ್ರಕೃತಿಯ ಸೌಂದರ್ಯಸುಧಾ ಪಾನಮಾಡಲು ಕುಳಿ ತಿದ್ದರು. ನಾನು ಕುಳಿತು ಸುತ್ತಲೂ ನೋಡತೊಡಗಿದೆ. ಎಲಾ! ಭಗವಂತನ ಅದ್ಭುತ, ರಮ್ಯ, ಕಾಣಿಕೆಗಳಲ್ಲೊಂದಾದ ಬಾನು ಎದ್ದು ತೋರುತ್ತಿತ್ತು. ಏನು ಹೇಳಲಿ, ಭಗವಂತನೇ ಕೈಯಾರೆ ಹೊಲಿದು, ಬಣ್ಣಕೊಟ್ಟು ಚಿತ್ರ ಬಿಡಿಸಿ ಹಾಸಿದ ಚಾಪೆಯಂತೆ ತೋರುತ್ತಿತ್ತು ಆಕಾಶ, ಹತ್ತಿಯನ್ನು ರಾಶಿ, ರಾಶಿಯಾಗಿ ಹರಡಿದಂತೆಯೂ, ಹೂವುಗಳ ರಾಶಿ ಯಂತೆಯೂ, ಆನೆ, ಕುದುರೆಗಳ ಆಕಾರವನ್ನೂ ತಳೆದು, ನೀಲ, ನೇರಳೆ, ಕೆಂಪು. ಕಿತ್ತಳೆ ವರ್ಣಗಳಿಂದ ಕೂಡಿ ನನ್ನ ಕಣ್ಣುಗಳಿಗೆ ಸೌಂದರ್ಯ ಪಾನ ಮಾಡಿಸುತ್ತಿತ್ತು. ಆಹಾ! ಮುಂದೆ ನೋಡಲು ಏನದು ರಮ್ಯ! ಚಿತ್ರದಲ್ಲಿ ಬರೆದ ಸಾಗರದಂತೆ, ನೀಲವಾರಿಧಿ ಅಲೆಗಳ ಕಲರವವಿಲ್ಲದೆ, ಚಲನೆ ಇಲ್ಲದೆ, ನಿಶ್ಚಲವಾಗಿ ಗಂಭೀರವಾಗಿ ಕಾಣಿಸುತ್ತಿತ್ತು. ನಾನು ಕುಳಿತಲ್ಲಿಂದ ನೋಡಿದರೆ ಸಾಗರವು ಆಕಾಶ ಚಪ್ಪರಕ್ಕೆ ಕಟ್ಟಿದ ನೀಲಿ ತೋರಣದಂತೆ ನಯನ, ಮನೋಹರವಾಗಿ ತೋರುತಿತ್ತು. ಆ ನೀಲ ವಿಶಾಲ ವಾರಿಧಿಯಲ್ಲಿ ಆಟದ ಬೊಂಬೆಗಳಂತೆ ಚಿಕ್ಕ ಚಿಕ್ಕ ಕಪ್ಪಾದ ದೋಣಿಗಳು ತೇಲು ತ್ತಿದ್ದವು. ಮಗದೊಮ್ಮೆ ದಿಡೆಯಲ್ಲಿ ನಿಶಾರಾಣಿಯನ್ನು ಕಂಡು ಹೆದರಿ, ಹೆದರಿ ಸಾಗರಕ್ಕೆ ಧುಮುಕಲು ದಿನಮಣಿಯು ಆಕಾಶದ ನೆತ್ತಿಯಿಂದ ಸಾಗರದ ತಳವನ್ನು ತಲಪಿದ್ದನು. ಕೆಂಪಾದ ಕೆಂಡದಂತೆ ಹೊಳೆದು, ಪೂರ್ಣ ಗೋಲಾಕಾರ ನಾಗಿದ್ದ ಅಂಬರಮಣಿಯು ನಿಮಿಷ, ನಿಮಿಷದಲ್ಲಿ ಗಾತ್ರ ಸಂಕುಚಿತನಾಗುತ್ತಿದ್ದನು. ಒಮ್ಮೆ ಮಡಕೆಯೊಂದನ್ನು ಸಾಗರ ತಲದ ಮೇಲೆ ಕವುಚಿ ಇರಿಸಿದಂತೆಯೂ, ಮಗ ದೊಮ್ಮೆ ಅರ್ಧಗೋಲಾಕಾರನಾಗಿಯೂ, ಇನ್ನೊಮ್ಮೆ ಸರಳರೇಖೆಯೊಂದನ್ನು ಸಾಗರದಂಚಿನಲ್ಲಿ ಏಳಿದಂತೆಯೂ, ತೋರಿ ಮನಸ್ಸಿಗೆ ಆಹ್ಲಾದ ನೀಡುತ್ತಿದ್ದನು. "ಸೂರ್ಯನು ಹೊರಟು ಹೋದರೆ ಇನ್ನೇನು ಗತಿ?" ಎಂದು ಗಾಬರಿ ಯಿಂದ ಚಿಲಿಪಿಲಿಗುಟ್ಟುತ್ತಾ ವರ್ತುಲಾಕಾರದಲ್ಲಿ, ಗೂಡನ್ನು ಸೇರುವ ತವಕದಿಂದ ಬಿಳಿ ಹಕ್ಕಿಗಳು ಹಿಂಡು ಹಿಂಡಾಗಿ ಹಾರಾಡುತ್ತಿದ್ದವು. ಚಿಕ್ಕ ವಿಮಾನಗಳನ್ನು ಹೋಲುವ ಗಿಡುಗಗಳು ಭಗವಂತನ ಮಡಿಲಲ್ಲಿ ಸ್ವೇಚ್ಛೆಯಿಂದ ಹಾರಾಡು ತ್ತಿದ್ದವು. ತಂಗಾಳಿ ಸುಂಯ್ಯನೆ ಬೀಸಿ ನನ್ನನ್ನು ರೋಮಾಂಚ ನಗೊಳಿಸುತ್ತಿತ್ತು. ತನ್ನ ಪ್ರೇಮಿಯ ಆಗಮನವನ್ನು ಸಂತೋಷದಿಂದ ಸ್ವೀಕರಿಸುವಂತೆ, ಲತೆಗಳು ತಂಗಾಳಿಯ ಬರವನ್ನು ತಮ್ಮ ಬಳುಕಾಟದಿಂದ, "ಹೂ" ನಗೆ ಸೂಸಿ ವ್ಯಕ್ತಪಡಿಸುತ್ತಿದ್ದವು. ಹಸಿರು ಹುಲ್ಲಿನ ಮೇಲೆ ಮಾಣಿಕ್ಯ ವೈಢೂರ್ಯಗಳನ್ನು ಚೆಲ್ಲಿದಂತೆ, ಕೆಂಪು, ಬಿಳಿ, ಹಳದಿ ಹೂ ಗಳು ಹರಡಿ, ಭೂಮಿದೇವಿಯ ಸೌಂದರ್ಯಕ್ಕೆ ಮೆರಗು ಕೊಟ್ಟಿದ್ದವು. ಹೂಗಳಿಂದ ಹೂಗಳಿಗೆ ಸಂದೇಶವನ್ನೊ ಯ್ಯುವ ಶ್ಯಾಮಲವರ್ಣದ ತುಂಬಿಗಳು 'ಗುಂಯ್' ಗುಡುತ್ತಾ ಪ್ರಕೃತಿಯ ಗಂಭೀರಭಾವನೆಗೆ ತಾಳ ಹಾಕು ತ್ತಿದ್ದವು. ಎಲಾ! ಇನ್ನೊಂದೆಡೆ ಹಸಿರು ಸೀರೆ ಉಟ್ಟು, ತಲೆಬಾಗಿ, ನಸುನಾಚಿ, ಗಾಳಿಗೆ ಅತ್ತಿತ್ತ ತೂಗಾಡಿ ಬರುವ ಜನರಿಗೆ ಸ್ವಾಗತ ಕೋರುತ್ತಾ ನಿಂತಿದ್ದವು ಸಾಲು ಸಾಲಾಗಿ ಅಶೋಕ ವೃಕ್ಷಗಳು. ಆಹಾ! ಪ್ರವೆಯುತ್ತಿರುವ ನೀರಿನ ಬುಗ್ಗೆಯನ್ನು ಏನೆಂದು ಹೇಳಲಿ? ಹಾವಾಡಿಗನ ಪುಂಗಿಯ ನಾದಕ್ಕೆ ತಲೆದೂಗಿ ನರ್ತಿಸುವ ಹಾವಿನಂತೆ ನಲಿಯುತ್ತಿತ್ತು ಒಂದು ನೀರಿನ ಚಿಲುಮೆ. ಮಗದೊಂದು, ತೆಳುವಾದ ಬಿಳುಪಾದ, ಉಡುಪನ್ನು ತೊಟ್ಟ ಚೆಲುವಾದ ಚೆಲುವೆ

ಯೋರ್ವಳು ತಾಳಬದ್ಧವಾಗಿ ನರ್ತಿಸುವಳೋ ಎಂಬಂತೆ ತೋರುತ್ತಿತ್ತು. ಬಿಳುಪಾದ ಶುಭ್ರವಾದ ನೀರು ಮೇಲಕ್ಕೆ ಚಿಮ್ಮಿ ಹಾರಿ, ಬೆಳ್ನೊರೆಯಾಗಿ ಕೆಳಕ್ಕೆ ಬೀಳುತ್ತಿತ್ತು. ಒಮ್ಮೆ ಸ್ತ್ರೀಯಂತೆ ತೋರಿದರೆ ಮಗದೊಮ್ಮೆ ಸ್ತಂಭದಂತೆಯೂ, ಇನ್ನೊಂದು ಕ್ಷಣದಲ್ಲಿ ಕನ್ನಿಕೆಯರು ವೃತ್ತಾಕಾರದಲ್ಲಿ ಬಾಗಿ, ಎದ್ದು ನರ್ತಿಸುವರೋ ಎಂಬಂತೆ ತೋರುತ್ತಿತ್ತು.

ಇನ್ನು ಆ ಸೌಂದರ್ಯ ಉಪಾಸನೆಗೆ, ಸಾವಿರಾರು ಜನರು ಬರುತ್ತಿದ್ದರು ಗುಂಪು ಗುಂಪಾಗಿ ತಂಗಾಳಿಯ ತಂಪಿಗೆ ಹಂಸನಡಿಗೆಯನ್ನೂ ನಾಟಿಸಿ ನಡೆದು ಬರುವ ಲಲನಾಮಣಿಗಳ ಅಂದವೇನು, ಹಾವಭಾವಗಳೇನು! ಶ್ರೀಮದ್ ರಾಜಗಂಭೀರ್ಯದಿಂದ ನಡೆದು ಬಂದು, ಮತ್ಸರ, ದ್ವೇಷಾದಿಗಳನ್ನು ಗಾಳಿಗೆ ತೂರಿ, ಇಹಪರವನ್ನು ಮರೆತು, ನುಣುಪಾದ ಹುಲ್ಲಿನ ಮೇಲೆ ಕಾಲುಚಾಚಿದ ತರುಣರೆಷ್ಟು! ಚಿಂತೆಯನ್ನೆಲ್ಲಾ ಮರೆತು, ಕ್ಷಣಕಾಲವನ್ನಾದರೂ ಸುಖವಾಗಿ ಕಳೆಯಲೆಂದು ಬರುವ ವೃದ್ಧರೆಷ್ಟು! ದಂತದ ಬೊಂಬೆಗಳಂತೆ ಶೃಂಗರಿಸಿಕೊಂಡು ಓಡಾಡುವ ಮಕ್ಕಳ ಕೇಕೇ ಸ್ವರದಿಂದ ತುಂಬಿಹೋಗಿತ್ತು ಸಂಪೂರ್ಣ ಪಾರ್ಕು. ಇಂಥಾ ಸುಸಮಯವನ್ನು ಬಿಟ್ಟು ಹೋಗಲು ಯಾರಿಗೆ ತಾನೇ ಮನ ಬಂದೀತು? ಇವರೆಲ್ಲರ ಆಗಮನದಿಂದ ಭೂದೇವಿಯು ಸಂತುಷ್ಟಳಾಗಿ ಎಲ್ಲರನ್ನೂ ತನ್ನ ಮಡಿಲಿನಲ್ಲಿ ತುಂಬಿಕೊಂಡಿದ್ದಳು. ಆನಂದಲೋಕದಲ್ಲಿ ಮುಳುಗಿ, ಸೌಂದರ್ಯಸಾಗರದಲ್ಲಿ ತೇಲಿ, ಅಬಾಲವೃದ್ಧರೆಲ್ಲರೂ ಸ್ವರ್ಗಸುಖವನ್ನನುಭವಿಸುವ ಅವರ ವದನಾರವಿಂದದಲ್ಲಿ ತೋರಿಬರುತ್ತಿತ್ತು.

ರವಿಯು ಕಣ್ಮರೆಯಾದ ದುಃಖದಿಂದ, ನಿಶಾರಾಣಿಯು ಶ್ಯಾಮಲವರ್ಣದ ಸೀರೆಯನ್ನುಟ್ಟು ಬಂದೊಡನೆಯೇ, "ಭಯಪಡಬೇಡಿ," ಎಂದು ನಗುತ್ತಾ ಹೇಳುತ್ತಿರುವ ಚಂದ್ರನು ಮೆಲ್ಲನೆ ಬಾನನ್ನು ಏರಿ ನಗುತ್ತಿದ್ದನು. ಕರಾಳ ಆಗಸದ ಮಧ್ಯೆ, ನಾರೀಮಣಿಯ ಕೇಶರಾಶಿಯಲ್ಲಿ ಶೋಭಿಸುವ ಬಿಳಿ ಹೂವಿನಂತೆ, ಚಂದ್ರನು ತಾರಾ ಸಮೂಹದೊಡನೆ, ಮೆಲ್ಲ ಮೆಲ್ಲನೆ ದಿನಕರನನ್ನು ತಳ್ಳಿ ಅವನ ಸ್ಥಾನವನ್ನು ತಾನಲಂಕರಿಸಲು ಸಿದ್ಧನಾಗುತ್ತಿದ್ದನು. ಕೆಳಗಡೆ ಪಾರ್ಕಿನಲ್ಲಿ, ಹುಣ್ಣಿಮೆ ಚಂದ್ರನನ್ನು ಹೋಲುವ ದುಂಡಗಿನ, ಕ್ರಮಬದ್ಧವಾಗಿ ದೀಪಗಳು ಜಗ್ಗನೆ ಬೆಳಗಿದವು. ಅವುಗಳು ಕತ್ತಲೆಯಲ್ಲಿ ವಜ್ರದಂತೆ ಹೊಳೆಯುತ್ತಿದ್ದವು. ಅವುಗಳಿಂದ ಹೊರ ಹೊಮ್ಮಿದ ಬೆಳಕೂ, ಚಂದ್ರನ ಬೆಳಕೂ ಸಮ್ಮಿಲನವಾಗಿ ಇಡೀ ಪಾರ್ಕನ್ನು ಬೆಳದಿಂಗಳ ಸ್ನಾನದಲ್ಲಿ ಮುಳುಗಿಸಿದಂತೆ ತೋರುತ್ತಿತ್ತು. ಪಾರ್ಕಿನ ತುಂಬೆಲ್ಲ, ಕಡಲೆ, ಹಣ್ಣು, ಮಸಾಲೆಗಳನ್ನು ಮಾರುವ ಹುಡುಗರು ರಾಗವಾಗಿ ಕೂಗುತ್ತಾ ಜನರ ಗದ್ದಲಕ್ಕೆ ಶ್ರುತಿ ಕೂಡಿಸುತ್ತಿದ್ದರು.

ಈ ರೀತಿ ಪಾರ್ಕಿನಲ್ಲಿ ನಾನು ಎಷ್ಟು ಹೊತ್ತು ಕುಳಿತಿದ್ದೆನೊ, ಏನೋ ಎಂಟು ಗಂಟೆಯ ಕೂಗು ಹಾಕಿದಾಗಲೇ ನಾನು ಎಚ್ಚೆತ್ತೆ, ಜನರೆಲ್ಲರೂ ಈಗಾಗಲೇ ಮನೆಗೆ ಮರಳಲು ಸಿದ್ಧತೆ ನಡೆಸುತ್ತಿದ್ದರು. ನಾನಾದರೋ, ಆ ಸ್ವರ್ಗ ಸುಖ, ಶಾಂತಿ, ಬೆರಸಂತೋಷದಲ್ಲಿ ಮುಳುಗಿದ್ದೆ. ಅಲ್ಲಿಂದ ಹೊರಡಲು ನನಗೆ ಮನಸ್ಸೇ ಬರಲಿಲ್ಲ. ಹೇಗೂ ನಾನು ನಿಧಾನವಾಗಿ ಮನೆಯ ಕಡೆಗೆ ತೆರಳಿದೆ ತಾಯನ್ನಗಲಿ ಹೋಗುವ ಮಗುವಿನಂತೆ.

ಇಂಥಾ ಅಪೂರ್ವ, ಅಮೂಲ್ಯವಾದ ಸಂಜೆಯನ್ನು ಮೂಢ ಜನರು ಹಾಳುಮಾಡುತ್ತಾರೆ. ಆದರೆ ಸಂಜೆಯ ಮಹತ್ವವನ್ನು ಅವರೇನು ಬಲ್ಲರು? ಸಂಜೆಯ ಹೊತ್ತು ಪಾರ್ಕಿನಲ್ಲಿ, ಭೂದೇವಿಯ ಮಡಿಲಲ್ಲಿ ತಲೆ ಇರಿಸಿ ಒರಗುವ ಹಾಗೂ, ಪ್ರಕೃತಿದತ್ತವಾದ ಸೌಂದರ್ಯದ ಆಸ್ವಾದನೆಯನ್ನು ಸವಿಯುವ ಭಾಗ್ಯವಿಲ್ಲದಿರುವ ಜನರನ್ನು ಕಂಡಾಗ ನನಗೆ ನಾನೇ ಧನ್ಯಳು ಎಂಬ ಭಾವನೆ ಬರುತ್ತದೆ. ನನ್ನ ಲೇಖನವನ್ನು ಓದಿ ಇನ್ನಾದರೂ ಈ ವರೆಗೆ, ಸಂಧ್ಯಾದೇವಿಯ ಸೌಂದರ್ಯವನ್ನು ಆಸ್ವಾದಿಸದವರು ಸಂಜೆಯ ಆನಂದವನ್ನು ಪಡೆಯುವ ಮನಸ್ಸು ಮಾಡಿದರೆ, ನಾನು ಬರೆದ ಈ ಲೇಖನ ಸಾರ್ಥಕತೆಯನ್ನು ಪಡೆಯಿತೆಂದು ಭಾವಿಸುತ್ತೇನೆ.

ಸರ್ವಮಂಗಲ ಪಿ.
II P.U.C.

ನೇತೃತ್ವದ ಗುಣ ಲಕ್ಷಣಗಳು

ಯಾವುದೇ ಒಂದು ಕೆಲಸವನ್ನು ಸಾಧಿಸಹೊರಟ ಒಂದು ಗುಂಪಿಗೆ ಒಬ್ಬ ನಾಯಕನ ಅಗತ್ಯವಿದೆ. ನಾಯಕ ನಿಲ್ಲದ 'ತಂಡ'ವೊಂದನ್ನು ತಂಡ ಎಂದು ಕರೆಯುವುದಾದರೆ ಅದು ಆ ತಂಡ ಅಥವಾ ಗುಂಪು ಅಥವಾ ಈ ಅರ್ಥ ಕೊಡತಕ್ಕ ಇನ್ನಾವುದೇ ಶಬ್ದಕ್ಕೆ ಆಪಮಾನ ಮಾಡಿದಂತೆಯೇ ಸರಿ. ಅದಕ್ಕೂ ಮೊದಲು ಈ 'ನೇತೃತ್ವ' ಎಂಬ ಶಬ್ಧದ ಮೂಲವನ್ನು ತಿಳಿಯೋಣ.

"ನೀ" ಎಂಬ ಸಂಸ್ಕೃತ ಧಾತುವಿನಿಂದ ನೇತೃತ್ವ "ಎಂಬ" ಶಬ್ದ ಹುಟ್ಟಿಕೊಂಡಿದೆ. 'ನೀ' ಎಂದರೆ ಮುನ್ನಡೆಯಿರಿ ಎಂದರ್ಥ. ಯಾವನು ತನ್ನ ಗುಂಪಿನವರ ಅಥವಾ ತನ್ನ ಹಿಂಬಾಲಕರನ್ನು ಮುಂದೆ ನಡೆಸುತ್ತಾನೋ ಅವನೇ ನೇತಾರ.

ಯಾವನಿಗಾದರೂ ಹಿಂಬಾಲಕನಾಗಲು ಸಾಧ್ಯವಿದೆ. ಆದರೆ ತನ್ನ ಹಿಂಬಾಲಕರನ್ನು ಸರಿಯಾಗಿ ಮಾರ್ಗದರ್ಶನ ನೀಡುತ್ತಾ ಸತ್ಕಾರ್ಯಗಳನ್ನು ಅಥವಾ ಅದಿನ್ನೇನೇ ಇದ್ದರೂ ಸಾಧಿಸಲು ಕೆಲವರಿಗೆ ಮಾತ್ರ ಸಾಧ್ಯ. ಅದೂ ಸಹ ತನ್ನ ಸ್ವತಂತ್ರಬುದ್ಧಿಯಿಂದ ಆಲೋಚಿಸಿ ತನಗೆ ಅನ್ನಿಸಿದಂತೆ ಒಳ್ಳೆಯ ದಾರಿಯಲ್ಲಿ ನಡೆಯುವುದು ಬಹಳ ಕಷ್ಟಕರ.

ಒಬ್ಬ ಮನುಷ್ಯನು ನೇತಾರನಾಗಲು ಒಳಗಿನ ಸಂಸ್ಕಾರವೂ, ಬಾಹ್ಯವ್ಯಕ್ತಿತ್ವವೂ ಅತಿ ಮುಖ್ಯವಾಗಿವೆ. ಜೊತೆಗೆ ತಾನೆಲ್ಲರನ್ನೂ ಸತ್ಪಥದಲ್ಲಿ ಮುನ್ನಡೆಸಬಲ್ಲೆನು ಎಂಬ ಆತ್ಮವಿಶ್ವಾಸವು ಸಹ ಪ್ರಮುಖಸ್ಥಾನವನ್ನು ಪಡೆದಿದೆ. ನೇತಾಜಿಯವರು ಅತಿ ಸುಪ್ರಸಿದ್ಧ ಮುಂದಾಳು. ಅವರಲ್ಲಿದ್ದಂಥ ಪ್ರತಿಭೆ, ಮೇಧಾಶಕ್ತಿ, ಸತ್ಯ, ಧರ್ಮ, ನ್ಯಾಯನಿಷ್ಠೆ, ಕಾರ್ಯ, ವಾಚಾ, ಮನಸಾ ಕೆಲಸಮಾಡುತ್ತಿದ್ದಂತಹ ಕರ್ತವ್ಯನಿಷ್ಠೆ, ಆರೋಗ್ಯಪೂರ್ಣ ದೃಢಕಾಯ, ನಯ, ವಿನಯಭರಿತ ನಡೆನುಡಿ, ಪರ್ವತವನ್ನಾದರೂ ಅಲ್ಲಾಡಿಸ ಬಹುದೆಂಬ ಅಚಲ ಆತ್ಮವಿಶ್ವಾಸ ಹಾಗೂ ದೇಶಪ್ರೇಮವೇ ಮೊದಲಾದ ಸಕಲ ಸದ್ಗುಣಗಳು ನೇತಾರನಾಗುವ ವ್ಯಕ್ತಿಯಲ್ಲಿ ಇರಲೇಬೇಕು.

ಯಾವ ಮನುಷ್ಯನಿಗಾದರೂ ಯಾವ ಕೆಲಸ ಮಾಡಬೇಕಾದರೂ ಆರೋಗ್ಯವಿರಲೇಬೇಕು. "ಆರೋಗ್ಯವೇ ಭಾಗ್ಯ" ಬಲ್ಲಿದರಾದ ವಿದ್ವಾಂಸರ, ನಮ್ಮ ಹಿರಿಯರ ಮಾತಿದು ಅಕ್ಷರಶಃ ಸತ್ಯ. ಆರೋಗ್ಯವಿಲ್ಲದವನು, ಏನು ತಾನೇ ಸಾಧಿಸಬಲ್ಲನು. ಅಂಥ ವ್ಯಕ್ತಿಯು ನೇತಾರನಾದರೆ ಏನಾಗಬಹುದು ಎಂದು ಕಲ್ಪನೆಮಾಡುವುದೂ ಸಹ ಅಸಾಧ್ಯವಾದ ಮಾತು. ಆರೋಗ್ಯವಿದ್ದಲ್ಲಿ ಮಾತ್ರ ಹುರುಪು, ಬುದ್ಧಿಮತ್ತೆ, ದೃಢಮನಸ್ಸು, ಸಹನೆ ಹೆಚ್ಚೀಕೆ ಎಲ್ಲ ವಿಷಯಗಳೂ ಸಹ. ನೇತಾರನಾಗಿರುವ ವ್ಯಕ್ತಿಯಲ್ಲಿರ ಬೇಕಾದ ಗುಣಗಳಲ್ಲಿ ಆರೋಗ್ಯವು ಪ್ರಥಮ ಸ್ಥಾನ ಪಡೆದಿದೆ ಆರೋಗ್ಯವಂತನ ಶರೀರವನ್ನು ಒಮ್ಮೆ ನೋಡಿದರೆ ಇನ್ನೊಮ್ಮೆ ನೋಡುವ ಎಂದು ಎನಿಸುತ್ತದೆ. ನೇತಾರನಾಗಿರುವ ವ್ಯಕ್ತಿಯು ಶಾರೀರಿಕವಾಗಿಯೂ ಮಾನಸಿಕವಾಗಿಯೂ ಬಹಳ ಚುರುಕಾಗಿದ್ದು ತನ್ನ ಅನುಯಾಯಿಗಳಿಗೆಲ್ಲಾ ಚೇತನದಾತನಾಗಿರಬೇಕು. ಉತ್ಸಾಹದ ಕಾರಂಜಿಯೇ ಎನ್ನುವಂತಿರಬೇಕು.

ಉತ್ತಮವಾದ ವ್ಯಕ್ತಿತ್ವವಿಲ್ಲದೆ ಇದ್ದಾತನು ನೇತಾರನಾಗಲು ಎಂದೆಂದಿಗೂ ಅರ್ಹನಲ್ಲ. ನೂರಾರು ಜನರ ಮಧ್ಯದಲ್ಲಿಯೂ ಎದ್ದು ಕಾಣುವಂತಹ ವರ್ಚಸ್ವೀಮುಖವಿರಬೇಕು. ಹಾಗಿದ್ದರೆ ಆ ವ್ಯಕ್ತಿಯ ಮುಖವೇ ಅವನು ನೇತಾರನೆಂದು ಸಾರುತ್ತದೆ. ಅವನ ಶತ್ರುಗಳಿಗೂ ಕೂಡಾ ಅವನ ಬಗ್ಗೆ ಗೌರವ ಉಂಟಾಗುವ ರೀತಿಯಲ್ಲಿ ಅವನ ವ್ಯಕ್ತಿತ್ವವಿರಬೇಕು. ಮುಖದಲ್ಲಿ ಯಾವಾಗಲೂ ಸಾತ್ವಿಕ ಭಾವವಿರಬೇಕು.

ಮನಸ್ಸು ಹಾಗೂ ಶರೀರದ ಉಡುಗೆ ತೊಡುಗೆಗಳು ಸರಳವಾಗಿರಬೇಕು. ಗಾಂಧೀಜಿಯವರು ನಮ್ಮ ದೇಶದ ಜನರ ನೆಚ್ಚಿನ ನಾಯಕರು. ಅವರ ಜೀವನ ಅದೆಷ್ಟು ಸರಳ! ಅವರ ನಡೆನುಡಿಗಳು ಅದೆಂಥ ಸರಳವಾಗಿದ್ದವು! ಅಂಥ ಸರಳಜೀವನವನ್ನು ಮಾತ್ರ ನೇತಾರನು ಬಯಸಬೇಕು. ದೃಢಮನಸ್ಸು ಹಾಗು ಅಚಲವಾದ ಆತ್ಮವಿಶ್ವಾಸಗಳಿಲ್ಲದ ವ್ಯಕ್ತಿಯು ಎಂದೆಂದಿಗೂ ಯೋಗ್ಯ ಮುಖಂಡನಾಗಲಾರ. ಮನಸ್ಸು ಚಂಚಲವಾದರೆ ಅದೆಂಥ ಕಷ್ಟ! ಆತನಿಂದ ಯಾವ ಕೆಲಸವನ್ನೂ ಯಾವ ರೀತಿಯಿಂದಲೂ ಕೊನೆಗಾಣಿಸಲು ಸಾಧ್ಯವಿಲ್ಲ. ದೃಢವಾದ ಮನಸ್ಸಿದ್ದರೆ ಮಾತ್ರ ಇಂದ್ರಿಯನಿಗ್ರಹ ಸಾಧ್ಯ. ಇಂದ್ರಿಯಗಳ ಮೇಲೆ ಹತೋಟಿ ಇಲ್ಲವಾದರೆ ಅಂಥ ನೇತಾರನ ಹಿಂಬಾಲಕರು ಎಂದಿಗೂ ಉತ್ತಮರಾಗಲೂ ಸಾಧ್ಯವಿಲ್ಲ. ನೇತಾರನೇ ಇಂದ್ರಿಯಗಳಿಗೆ ದಾಸನಾಗಿ ವರ್ತಿಸಿದರೆ "ಬೇಲಿಯೇ ಹೊಲವನ್ನು ಮೇಯಲು ಹೊರಟಂತಾಗದೆ"? ಒಂದು ಕಾರ್ಯವನ್ನು ಆರಂಭಿಸಿದರೆ ಯಾರಾದರೂ ಆ ಬಗ್ಗೆ ಟೀಕಿಸುತ್ತಾರೆಂದು ಅರ್ಧದಲ್ಲಿಯೇ ಬಿಡುವದಲ್ಲ. ಅದನ್ನು

ಸಂಸೂತ್ರವಾಗಿ ಮುಕ್ತಾಯ ಮಾಡುವ ಎದೆಗಾರಿಕೆಯಂ ಮುಂದಾಳುತನದ ಹಿರಿಯ ಲಕ್ಷಣ.

ವಾಕ್ಚಾತುರ್ಯವು ನೇತೃತ್ವದ ಪ್ರಧಾನ ಲಕ್ಷಣಗಳಲ್ಲಿ ಒಂದು. ತನ್ನ ಮಾತನ್ನು ಒಪ್ಪದವರೂ ಸಹ ಒಪ್ಪುವಂತೆ ಮಾಡುವ ವಾಕ್‌ವೈಖರಿಯಿರಬೇಕು. ಆ ಮಾತುಗಳನ್ನೆಲ್ಲ ಮನಃಪೂರ್ವಕವಾಗಿ ನಯವಿನಯಭರಿತವಾಗಿಯೇ ಆಡುತ್ತಿದ್ದರೆ ಅದನ್ನು ಕೇಳುವವರು ಮುಗ್ಧರಾಗಬೇಕು. ಅಂಥ ಅಗಾಧವಾದ ವಾಕ್‌ಶಕ್ತಿಯಿರಬೇಕು. ಮಾತುಗಳು ನಿಧಾನವಾಗಿ, ಸ್ಪಷ್ಟವಾಗಿದ್ದರೆ ಮಾತ್ರ ಕೇಳುವವರ ಮೇಲೆ ಪರಿಣಾಮ ಬೀರುತ್ತದೆ. ಒಂದು ವಿಷಯದ ಒಳಿತು ಕೆಡುಕುಗಳ ಬಗ್ಗೆ ಚರ್ಚಿಸುತ್ತಿರುವಾಗ ಅದು ಯಾಕೆ ಒಳಿತು ಅಥವಾ ಯಾಕೆ ಕೆಟ್ಟದು ಎಂಬುದು ಸ್ಪಷ್ಟವಾಗಿ ಸಕಾರಣವಾಗಿ ವಿವರಿಸಿ ತಿಳಿಸಬೇಕು. ಆ ಮಾತುಗಳಲ್ಲಿ ಆತ್ಮವಿಶ್ವಾಸ, ಭರವಸೆ, ಧೈರ್ಯೋತ್ಸಾಹಗಳು ತುಳುಕಾಡುತ್ತಿರಬೇಕು. ಮಾತು. ನಡೆಗಳು ಎಂದಿಗೂ ಧರ್ಮಕ್ಕೆ, ನ್ಯಾಯಕ್ಕೆ ವ್ಯತಿರಿಕ್ತವಾಗಬಾರದು. ಅಧರ್ಮ, ಅನ್ಯಾಯಗಳ ವಿರುದ್ಧ ಹೋರಾಡುವಂಥ ಶಕ್ತಿಯನ್ನು ತುಂಬುವಂಥ ಚೈತನ್ಯವಿರಬೇಕು ಆ ಮಾತುಗಳಿಗೇ, ಹೆಚ್ಚೇಕೆ "ನುಡಿದರೆ ಮುತ್ತಿನ ಹಾರದಂತಿರಬೇಕು, ಮಾಣಿಕ್ಯದ ದೀಪ್ತಿಯಂತಿರಬೇಕು" ಎಂಬಂಥ, ಬಸವಣ್ಣನವರ ವಚನದ ಅಂತರಾರ್ಥವು ತಿಳಿದಿದ್ದರೆ ಬಹಳ ಒಳ್ಳೆಯದು. ಮಾತು ಹಿತವಾಗಿ, ಮಿತವಾಗಿರಬೇಕು. ಅದು ಬಹು ಬೆಲೆಯುಳ್ಳದ್ದೆಂದರಿತು, ತೂಕಮಾಡಿ ಆಡುವಂತಿರಬೇಕು. ಆಲೋಚನೆ ಮಾಡಿಯೇ ಮಾತನಾಡಬೇಕು. ಮಾತುಗಳು ಬರಿಯ ಗಂಭೀರವಾದರೂ ಸಾಲದು. ಅದರಲ್ಲಿ ನವಿರಾದ ತಿಳಿಹಾಸ್ಯದ ಎಳೆಯಿದ್ದರೆ ಉತ್ತಮ.

"ಧೈರ್ಯಂ ಸರ್ವತ್ರ ಸಾಧನಂ" ಧೈರ್ಯವೆಂಬುದು ಒಬ್ಬ ಧೀರ ಮುಂದಾಳುವಿನ ಊರುಗೋಲಿದ್ದಂತೆ. ದೈರ್ಯ ಕೆಟ್ಟರೆ ಏನುಂಟು? ಕೆಚ್ಚೆದೆಯೂ, ಸಂಘಟನಾ ಸಾಮರ್ಥ್ಯವೂ ಧೀರನಾಯಕನ ದಾರಿಯ ದೀವಟಿಗೆಗಳು ತನ್ನ ಕೆಲಸದಲ್ಲಿ ಒಮ್ಮೆ ಸೋಲುಂಟಾಗುವ ಸಂದರ್ಭ ಬಂದರೂ "ಸೋಲೇ ಗೆಲುವಿನ ಸೋಪಾನ" ಎಂದು ಆಲೋಚಿಸಿ, ಇಟ್ಟ ಹೆಜ್ಜೆಯನು ಹಿಂದೆಗೆಯದೆ ಮುಂದೆ ನಡೆಯಬೇಕಂ. ಆಗ ಇಂಥ ಧೀರನಿಗೆ ಗೆಲುವು ಸಿಗದೆ ಇನ್ನಾರಿಗೆ ಗೆಲುವು? ನೇತಾರನೇ ಧೈರ್ಯಕೆಟ್ಟರೆ ಅವನ ಹಿಂಬಾಲಕರಿಗೆ ಧೈರ್ಯ ತುಂಬುವವರು ಯಾರು? ಆ ಶಕ್ತಿ ತನಗಿದ್ದರೂ ಸಾಲದು. ಅದನ್ನು ತನ್ನ ಹಿಂಬಾಲಕರೂ ಅಭ್ಯಸಿಸುವಂತೆ ಅವರಿಗೆ ಬೋಧಿಸಬೇಕಂ.

ಪ್ರಾಮಾಣಿಕನಲ್ಲದ ವ್ಯಕ್ತಿಯು ನಾಯಕನಾದರೆ ದೇಶ ವೆಂದಿಗೂ ಉಳಿಯಲಾರದು. ಉಳಿದೆಲ್ಲ ಗುಣಲಕ್ಷಣಗಳಿಗೂ ಪ್ರಾಮಾಣಿಕತನವಿದ್ದರೆ ಮಾತ್ರ ಬೆಲೆ. ದುರಾಶೆ ಎಂಬುದಂ ಆತನಲ್ಲಿರಲೇಬಾರದಂ. ಅದೇ ಮಾನವನ ಅವನತಿಗೆ ಕಾರಣ. ಮಾಡುವ ಕೆಲಸವನ್ನು ಸಹ ಫಲಾಪೇಕ್ಷೆಯಿಲ್ಲದೆ ಮಾಡಬೇಕು. ಸತ್ಯಹರಿಶ್ಚಂದ್ರನನ್ನು ಆತನ ಸತ್ಯವೇ ರಕ್ಷಿಸಿತಂ ಎಂಬುದು ನಾಯಕನಿಗೆ ಚೆನ್ನಾಗಿ ತಿಳಿದು ತಾನೂ ಅಂತಹ ಸತ್ಯಸಂಧನಾಗಬೇಕು. ವಂಚಕರಿಗೆ ಸಮಾಜದಲ್ಲಿ ಸ್ಥಾನ ಸಿಗದು. ಆದುದರಿಂದ ಪ್ರಾಮಾಣಿಕತೆ, ಸತ್ಯಸಂಧತೆಗಳು ನೇತಾರನಲ್ಲಿದ್ದರೆ ಅವನ ಅನುಯಾಯಿಗಳಲ್ಲಿಯೂ ಅದೇ ಬೆಳೆಯಬಹುದು. "ಯಥಾ ರಾಜಾ ತಥಾ ಪ್ರಜಾ" ಮುಖಂಡನು ಉತ್ತಮರಾದರೆ ಹಿಂಬಾಲಕರೂ ಉತ್ತಮರಾಗಲು ಸಾಧ್ಯ. ಇಲ್ಲವಾದರೆ ಅದೆಂತು ಸಾಧ್ಯ? ನೇತಾರನು ಕರ್ಣನಂತೆ ದಾತಾರನೂ ಆಗಿರಬೇಕು. ದಯೆಯೂ, ಕ್ಷಮಾಗುಣವೂ ವಿಶೇಷವಾಗಿರಬೇಕು. ಮನುಷ್ಯನೆಂದಮೇಲೆ ತಪ್ಪು ಮಾಡದಿರಲು ಸಾಧ್ಯವೆ? ಆದರೆ ಅದನ್ನು ತಿದ್ದಿಕೊಂಡು ಮುಂದಿನ ಜೀವನವನ್ನು ಸರಿಯಾಗಿ ನಡೆಸುವಂತಹ ಗುಣವಿರಬೇಕು. ಲೋಭಿಯೂ ಆಗದೆ, ದುಂದುವೆಚ್ಚವನ್ನೂ ಮಾಡಬಾರದು. ಯಾವುದೂ ಅತಿಯಿಲ್ಲದೆ ಮಿತಿಯನ್ನರಿತಿರಬೇಕು. ಸಹನೆಯಿಲ್ಲವಾದರೆ ಮಾಡಿದ ಕೆಲಸಗಳೆಲ್ಲ ನೀರಮೇಲಿನ ಹೋಮದಂತಾದೀತು. ಪ್ರತೀಕಾರದ ಭಾವನೆಯಿರಲೇಬಾರದು. ನೇತಾರನಲ್ಲಿ ವಿಶ್ವಪ್ರೇಮಿಯಾಗುವಂತಹ ಗುಣವಿರಬೇಕು. ಶ್ರೀರಾಮಚಂದ್ರನ ನ್ಯಾಯನಿಷ್ಠೆ. ಶ್ರೀ ವಿಶ್ವೇಶ್ವರಯ್ಯನವರ ಕರ್ತವ್ಯನಿಷ್ಠೆ ಈ ಎರಡೂ ಒಂದಾಗಿ ಮುಖಂಡನಲ್ಲಿರಬೇಕು.

ದೇಶಪ್ರೇಮವೂ ನಿಸ್ವಾರ್ಥಸೇವೆಯೂ ನಾಯಕನ ಹಿರಿಯ ಗುಣಗಳಲ್ಲಿ ಪ್ರಮುಖವಾದವು. "ಅಹಂ" ಭಾವನೆ ಎಂದಿಗೂ ಸಲ್ಲದು. ಶ್ರೀರಾಮಕೃಷ್ಣ ಪರಮಹಂಸರಲ್ಲಿದ್ದಂತಹ ಇಂದ್ರಿಯನಿಗ್ರಹದ ಜತೆ, ಸಚ್ಚಾರಿತ್ರ್ಯ, ಸಚ್ಛೀಲವನ್ನೂ ಬೆಳೆಸಿಕೊಂಡು ತನ್ನ ಜೀವನದಲ್ಲಿ ಅನುಷ್ಠಾನಕ್ಕೆ ತರಬೇಕು. ನಾಯಕನಾದವನು ಎಂದಿಗೂ ಶಿಸ್ತು ಗೆಡಬಾರದು.

ಇಷ್ಟೆಲ್ಲಾ ಇದ್ದರೆ ಸಾಕೆ ನಮ್ಮ ನಾಯಕನಾಗುವ ವ್ಯಕ್ತಿಯಲ್ಲಿ? ಸಾಲದು ಇನ್ನೂ ಒಂದಿದೆ. ಒಂದೇ ಏಕೆ ಬೇಕಾದಷ್ಟಿವೆ. ಆದರೆ ಎಲ್ಲಾ ವಿಷಯಗಳಲ್ಲಿ ಪಾಂಡಿತ್ಯವೂ ವ್ಯವಹಾರಕುಶಲತೆಯೂ ಇರಬೇಕು. ಹಲವಾರು ತೆರನಾದ ವಿಷಯಜ್ಞಾನಗಳಲ್ಲಿ ಪರಿಪೂರ್ಣತೆಯಿರಬೇಕು. ಭಾಷಾಜ್ಞಾನ, ಲೌಕಿಕಜ್ಞಾನ ಇರಲೇಬೇಕಂ. ತನ್ನ ಬುದ್ಧಿಶಕ್ತಿಯನ್ನು ದೇಶದ ಏಳ್ಗೆಗಾಗಿ ಉಪಯೋಗಿಸಲಂ ತಿಳಿದಿರಬೇಕು.

"ಹುಲ್ಲಾಗು ಬೆಟ್ಟದಡಿ, ಮನೆಗೆ ಮಲ್ಲಿಗೆಯಾಗಂ, ಕಲ್ಲಾಗು ಕಷ್ಟಗಳ ವಿಧಿಯ ಮಳೆಸುರಿಯೆ ಬೆಲ್ಲ ಸಕ್ಕರೆ ಯಾಗು ದೀನದುರ್ಬಲರಿಂಗೆ" ಎಂಬ ತತ್ವವನ್ನರಿತು. ನಡೆಯಲು ತಿಳಿದಿರಬೇಕು.

ಈ ಎಲ್ಲಾ ಗುಣಗಳನ್ನು ಹೊಂದಿದ ವ್ಯಕ್ತಿಯುಂ ಮಂಖಂಡನಾದರೆ ಆ ದೇಶವು "ರಾಮರಾಜ್ಯ"ವಾಗು ವುದರಲ್ಲಿ ಸಂದೇಹವಿಲ್ಲ. ಆದರೆ ಇಂತಹ ವ್ಯಕ್ತಿ ಸಾವಿರ ಕ್ಕೊಬ್ಬನಾಗಲಿ ಇರುವ ಕಷ್ಟ. ಕೋಟಿ ವ್ಯಕ್ತಿಗಳಲ್ಲಿ ಈತ ನೊಬ್ಬನಿದ್ದರೂ ಆ ಮುಂದಿಯಂ ಉದ್ಧಾರವಾಗುವುದು ನಿಸ್ಸಂಶಯ.

ಉ. ಕೃಷ್ಣವೇಣಿ
II B. Sc.

ತ್ಯಾಗದ ಮಹಿಮೆ

ಅದೊಂದು ಶುಭ ದಿನ. ವಿನುತಳ ಬಾಳಿನಲ್ಲಿ ಅತ್ಯಂತ ಉಲ್ಲಾಸಮಯ ಘಟನೆ. ಎಂದಿನಂತೆ ಪ್ರಾತಃಕಾಲ 'ಇಂಡಿ ಯನ್ ಎಕ್ಸ್‌ಪ್ರೆಸ್' ದೈನಿಕದ ಮುಂಖಪುಟವನ್ನು ವೀಕ್ಷಿಸಿ ದಾಗ ಅವಳ ಕಣ್ಣಿಗೆ ಬಿದ್ದ ಆ ದೃಶ್ಯ ಚಿರಸ್ಮರಣೀಯ ವಾಗಿತ್ತು. ಅವಳ ಪತಿ ವಿಂಗ್ ಕಮಾಂಡರ್ ವಿಶಾಲ್ ಅವರ ಭಾವಚಿತ್ರವು ಮುಂಖಪುಟದಲ್ಲಿ ಶೋಭಿಸುವುದ ರೊಂದಿಗೆ, ಅವರಿಗೆ ಮಹಾವೀರಚಕ್ರ ಪ್ರಶಸ್ತಿ ಲಭ್ಯವಾಗಿದೆ ಎಂಬುದಾಗಿತ್ತು. ವಿನುತಳು ಎಷ್ಟೋ ದಿನಗಳಿಂದ ಆಶಿಸಿದ ಕನಸು ಇಂದು ನನಸಾಗಿತ್ತು. ಆ ಅಮೃತಘಳಿಗೆಯಲ್ಲಿ ಅವಳಿಗಾದ ಆನಂದ ಅವರ್ಣನೀಯವಾಗಿತ್ತು.

ವಿಂಗ್ ಕಮಾಂಡರ್ ವಿಶಾಲ್‌ನಲ್ಲಿದ್ದ ಸಾಹಸಪ್ರವೃತ್ತಿ ಆತನನ್ನು ತಾಯಿನಾಡಿನ ಸೇವೆಗಾಗಿ ಪ್ರೇರೇಪಿಸಿದ ಫಲ ವಾಗಿ ಭಾರತೀಯ ವಾಯುಂದಳವನ್ನು ಸೇರಿದ ಕೆಲವೇ ಸಮಯದೊಳಗೆ ಸ್ಕ್ವಾರ್ಡನ್ ಲೀಡರ್ ಹುದ್ದೆಗೇರಿದ ವಿಶಾಲ್ ತನ್ನ ಹೆಸರಿಗೆ ತಕ್ಕಂತೆ ವಿಶಾಲ ಮನೋಭಾವದವ ಹಾಗೂ ಸೂಕ್ಷ್ಮಮತಿಯುವನಾಗಿದ್ದ. 1965ರ ಭಾರತ ಪಾಕಿಸ್ತಾನ ಯುದ್ಧ ವಿಶಾಲನ ಸಾಹಸಕ್ಕೆ ಹೊಸ ಅಹ್ವಾನ ವನ್ನು ನೀಡಿತು. ತನ್ನ ಅಪ್ರತಿಮ ಶೌರ್ಯದಿಂದಾಗಿ ಆತ ವೀರಚಕ್ರ ಪ್ರಶಸ್ತಿಯನ್ನು ಪಡೆದಿದ್ದ.

ವೀರಚಕ್ರ ಪ್ರಶಸ್ತಿ ಪಡೆದ ವಿಶಾಲನ ಕೀರ್ತಿ ಇನ್ನಷ್ಟು ಹೆಚ್ಚಿತು. ಹಲವಾರು ಶ್ರೀಮಂತ ಕುಟುಂಬದವರು ತಮ್ಮ ಮಗಳನ್ನು ಆತನಿಗೆ ಕೊಡಲು ಹಾತೊರೆಯುತ್ತಿದ್ದರು. ಆದರೆ ವಿಶಾಲನು ತನ್ನ ಜೊತೆಗಾರ್ತಿಯು ಆಯ್ಕೆಯಲ್ಲಿ ಬಹಳ ಜಾಗರೂಕನಾಗಿದ್ದ. ಆತನು ನಿಜವಾಗಿ ಬಯಸಿದ ಹುಡುಗಿ ವಿನುತ. ಸಕಲ ವಿಧದಲ್ಲಿ ಅನುರೂಪಳಾದ ವಿನುತ ಬಡಕುಟುಂಬದ ಕನ್ಯೆ. ಆದ್ದರಿಂದ ವಿಶಾಲನ ಮನೆಯವರು ಅದಕ್ಕಾಗಿ ಸ್ವಲ್ಪ ಹಿಂದೇಟು ಹಾಕಿದ್ದರು. ಕೆಲವು ತಿಂಗಳ ನಂತರ ಕಾಲನೊಂದು ಕಳಕೊಂಡ. ಕೃತಕ ಕಾಲಿನೊಂದಿಗೆ ವಿಶಾಲ ತನ್ನ ಮನೆಗೆ ಬಂದಾಗ ಆತನನ್ನು ಆ ಸ್ಥಿತಿಯಲ್ಲಿ ನೋಡಿದ ಎಲ್ಲರಿಗೂ ದಿಗ್ಭ್ರಮೆಯಾಯಿತು. ಅತ್ಯಂತ ವಿಷಾದನೀಯ ಸ್ಥಿತಿಯನ್ನು ಕಂಡು ಎಲ್ಲರಿಗೂ ಕಳವಳ ಹಾಗೂ ಪಶ್ಚಾತ್ತಾಪ. ವಿಶಾಲನ ಈ ಸ್ಥಿತಿ ಯನ್ನು ಕಂಡ ಶ್ರೀಮಂತ ಕುಟುಂಬದ ಕನ್ಯೆಯರ ಪಿತರು ಈಗ ನೆಂಟಸ್ಥಿಕೆಗಾಗಿ ಹಾತೊರೆಯಲಿಲ್ಲ. ಆದರೆ ಈ ಸಂದಿಗ್ಧಸಮಯದಲ್ಲಿ ಆತನ ಬಗ್ಗೆ ಹೃತ್ಪೂರ್ವಕ ಅನುಕಂಪ ವನ್ನು ಪ್ರದರ್ಶಿಸಿದವಳು ವಿನುತ. ವಿಶಾಲನ ಈ ಸ್ಥಿತಿ ಯನ್ನು ಕಂಡು ಅವಳು ಆ ಸಂದರ್ಭದಲ್ಲಿ ಈ ರೀತಿ ಹೇಳಿದ್ದಳು "ನಿಮ್ಮ ಸೇವೆಯನ್ನು ಮಾಡುವ ಭಾಗ್ಯ ವನ್ನು ಪರಮಾತ್ಮನು ನನಗೆ ಕರುಣಿಸಲಿಲ್ಲವಲ್ಲಾ" ಎಂದು ಉದ್ಗರಿಸಿ ಗಳಗಳನೆ ಅತ್ತಿದ್ದಳು. ಅವಳ ಕಣ್ಣೀರು ವಿಶಾ ಲನ ಹೃದಯವನ್ನು ಸಂತೃಪ್ತಗೊಳಿಸಿತು. ಹಾಗೂ ಆತನು ಅವಳನ್ನು ತನ್ನ ಬಾಳಸಂಗಾತಿಯಾಗಿ ಆರಿಸಲು ಕಾರಣ ವಾದುವು. ಆದರೆ ವಿಶಾಲನು ಕೃತಕ ಕಾಲನ್ನು ಇರಿಸಿ ಕೊಂಡ ಉದ್ದೇಶ ವಧುವಿನ ಮನಪರೀಕ್ಷೆಗೆ ಮಾತ್ರ ಆಗಿತ್ತು. ವಿನಹ ಆತನು ಕಾಲನ್ನು ಕಳಕೊಂಡಿರಲಿಲ್ಲ. ಕೆಲವು ದಿನಗಳ ನಂತರ ವಿಶಾಲ್ ಹಾಗೂ ವಿನುತಳ ಮಂದುವೆ ವಿಜೃಂಭಣೆಯಿಂದ ನಡೆಯಿತು.

ಸಂತೋಷದ ಹಿಂದೆ ದುಃಖ ಅದೊಂದು ದುರ್ದಿನ. ವಿಶಾಲ ಎಂದಿನಂತೆ ವಾಯುಯಾನ ಪ್ರಯೋಗಶಾಲೆ ಯಲ್ಲಿದ್ದಾಗ ಆಕಸ್ಮಿಕ ಸ್ಫೋಟ ಸಂಭವಿಸಿದ ಕಾರಣ ವಾಗಿ ತನ್ನ ಎಡ ಕಣ್ಣನ್ನು ಕಳಕೊಂಡ. ಈ ಸಂದರ್ಭ ದಲ್ಲಿ ವಿನುತ ಭಾರತೀಯ ನಾರಿಯು ಉನ್ನತ ಆದರ್ಶ

ಪರಂಪರೆಗನುಗುಣವಾಗಿ ತನ್ನ ಎಡಗಣ್ಣನ್ನು ವಿಶಾಲನಿಗೆ ದಾನವಾಗಿತ್ತಳು. ಏಕೆಂದರೆ ವಿಶಾಲನು ಒಂದು ಕಣ್ಣನ್ನು ಕಳಕೊಂಡುದರಿಂದಾಗಿ ವಾಯುದಳದಲ್ಲಿ ಆತನ ಜೀವ ಮಾನವು ಅಳಿವು ಹಾಗೂ ಉಳಿವಿನ ಪ್ರಶ್ನೆಯಾಗಿತ್ತು. ಯಶಸ್ವಿ ಶಸ್ತ್ರಚಿಕಿತ್ಸೆಯಿಂದಾಗಿ ವಿಶಾಲ ಪುನರ್‌ಜನ್ಮ ವನ್ನು ಪಡೆದ. ಆದರೆ ಒಕ್ಕಣ್ಣಿನಿಂದ ಬಾಳುವೆ ಸಾಗಿಸುತ್ತಿದ್ದ ವಿನುತಳಿಗಾಗಿ ಮನದಲ್ಲಿ ಮರುಗುತ್ತಿದ್ದ. ಅವಳ ಅನುಪಮ ತ್ಯಾಗಕ್ಕಾಗಿ ಅವಳನ್ನು ಪಡೆದ ತಾನು ಧನ್ಯನೆಂದು ಎಣಿಸುತ್ತಿದ್ದ. ಇತ್ತ ತನ್ನ ಪತಿಗೆ ಕಣ್ಣನ್ನಿತ್ತು ಹೊಸ ಬಾಳನ್ನು ಒದಗಿಸಿದ ಅಪೂರ್ವ ಆನಂದ ಹಾಗೂ ಮನಃಶಾಂತಿ ವಿನುತಳಲ್ಲಿ ನೆಲೆಸಿತ್ತು, ರಾಷ್ಟ್ರರಕ್ಷಣೆಯಲ್ಲಿ ಕಿಂಚಿತಾ ಸೇವೆ ಸಲ್ಲಿಸಿದೆನಲ್ಲಾ ಎಂಬ ಆತ್ಮಾಭಿಮಾನ ಅವಳಲ್ಲಿತ್ತು.

1971 ಡಿಸೆಂಬರ್‌ನಲ್ಲಿ ಬಾಂಗ್ಲಾ ವಿಮೋಚನೆಗಾಗಿ ಭಾರತ ಪಾಕಿಸ್ತಾನಗಳೊಳಗೆ ಪುನಃ ಯುದ್ಧ ನಡೆಯಿತು. ಎರಡೂ ರಣರಂಗಗಳಲ್ಲಿಯೂ ಭಾರತದೇ ಮೇಲುಗೈ. ಆ ದಿನ ಡಿಸೆಂಬರ 8, ನಸುಬೆಳಕಿನಲ್ಲಿ ವಿಶಾಲ ತನ್ನ ಪುಟ್ಟ ನಾಟ್‌ನೊಂದಿಗೆ ತನ್ನ ಗುರಿಯಾದ ಶತ್ರುವಿನ ಪೇಶಾವರ ರಾಡರ್ ಕೇಂದ್ರವನ್ನು ಧ್ವಂಸಗೊಳಿಸಲು ಮುನ್ನುಗ್ಗುತ್ತಿದ್ದ. ಹಠಾತ್ತನೆ ಪಾಕಿಸ್ತಾನದ ನಾಲ್ಕು ಯುದ್ಧ ವಿಮಾನಗಳು ಆತನನ್ನು ಹಿಂಬಾಲಿಸಿದುವು. ಗಗನದಲ್ಲಿ ಭೀಕರ ಕದನ ನಡೆಯಿತು. ವಿಶಾಲ್ ತನ್ನ ಯುದ್ಧಕೌಶಲ್ಯವನ್ನು ಪ್ರಯೋಗಿಸಿ ಎಡಗಡೆಯಲ್ಲಿದ್ದ ಮಿರೇಜ್ ವಿಮಾನವನ್ನು ಉರುಳಿಸಿದ ಇನ್ನೊಂದು ಕ್ಷಣದಲ್ಲಿ ಬಲಗಡೆಯಲ್ಲಿದ್ದ ಸೇಬರ್ ಜೆಟ್ ಒಂದನ್ನು ಧ್ವಂಸಗೊಳಿಸಿ ತನ್ನ ವಿಮಾನಕ್ಕೆ ಪೆಟ್ಟಾದರೂ ವೈರಿಯ ಪಾಶದಿಂದ ಪಾರಾಗಿ ಸುರಕ್ಷಿತವಾಗಿ ಮರಳಿ ಹಾಗೂ ಎಲ್ಲರ ಅಭಿನಂದನೆಗೆ ಪಾತ್ರನಾಗಿದ್ದನು.

ಆದರೆ ಇಂದು ಇಂಗ್ಲಿಷ್ ದೈನಿಕವನ್ನು ಓದುವಾಗ ತನ್ನ ಪತಿ ವಿಶಾಲನಿಗೆ ಮಹಾವೀರಚಕ್ರ ಪ್ರಶಸ್ತಿ ಸಿಕ್ಕಿದ ಸುದ್ದಿಯನ್ನು ಓದಿ ವಿನುತಳಿಗೆ ತಾನು ಮಾಡಿದ ತ್ಯಾಗ ಸಾರ್ಥಕವೆನಿಸಿತು. ಈ ಸುದ್ದಿ ತಿಳಿದ ಕೆಲವೇ ದಿನಗಳೊಳಗೆ ವಿನುತಳಿಗೆ ಪತಿಯಿಂದ ಸಂತೋಷದ ಸುದ್ದಿಯೊಂದು ಬಂದಿತ್ತು. ಅದೇನೆಂದರೆ ಪ್ರಶಸ್ತಿ ದಾನ ಸಮಾರಂಭದಲ್ಲಿ ಹಾಜರಿರಲು, ವಿನುತಳು ನವದೆಹಲಿಗೆ ಹೊರಟಳು. ಅಂದು ಪ್ರಶಸ್ತಿ ದಾನ ಸಮಾರಂಭ ರಾಷ್ಟ್ರಪತಿಯವರಿಂದ ಮಹಾವೀರಚಕ್ರ ಪ್ರಶಸ್ತಿ ಪಡೆದ ಬಳಿಕ ಅಲ್ಲಿಯೇ ಹಾಜರಿದ್ದ ಪ್ರಧಾನಿ ಇಂದಿರಾ ಗಾಂಧಿಯವರಿಗೆ ವಿನುತಳ ಪರಿಚಯ ಮಾಡಿಕೊಟ್ಟ ವಿಶಾಲ್ ಅವಳು ತನಗಿತ್ತ ಕಣ್ಣಿನ ವಿಷಯ ತಿಳಿಸಿದ. ಅದಕ್ಕೆ ಪ್ರಧಾನಿಯವರು "ಇದು ತ್ಯಾಗದ ಮಹಿಮೆ" ನಿಮ್ಮಬ್ಬರನ್ನು ಪಡೆದ ಭಾರತಮಾತೆ ನಿಜವಾಗಿಯೂ ಧನ್ಯಳು" ಎಂದು ಶುಭವನ್ನು ಹಾರೈಸಿದರು. ಆಗ ವಿಶಾಲನ ಮಗ ಪುಟ್ಟ ಆಕಾಶ "ಅಮ್ಮಾ, ನೀನು ಅಪ್ಪನಿಗೆ ಒಂದು ಕಣ್ಣುಕೊಟ್ಟೆ. ಇನ್ನೊಂದು ನನಗೆ ಕೊಡು ನಾನು ಪರಮ ವೀರಚಕ್ರ ಪಡೆಯುತ್ತೇನೆಂದ". ಮುದ್ದು ಬಾಲಕನ ಈ ಮಾತುಗಳನ್ನು ಕೇಳಿ ಎಲ್ಲರೂ ನಕ್ಕರು. ಆದರೆ! ವಿನುತಳ ಒಂದು ಕಣ್ಣಿನಿಂದ ಮಾತ್ರ ಆನಂದಬಾಷ್ಪಗಳು ಸುರಿದುವು.

ಮೇಬಲ್ ಬ್ರಿಟ್ಟೋ
II B.Sc.

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