



**Madurai University
Library**

10th Anniversary

14th December, 1968

SOUVENIR

The True University of these
days is a collection of books.

Carlyle

— Heros and Hero Worship —

GOVERNOR OF MADRAS

RAJ BHAVAN

Madras-22,

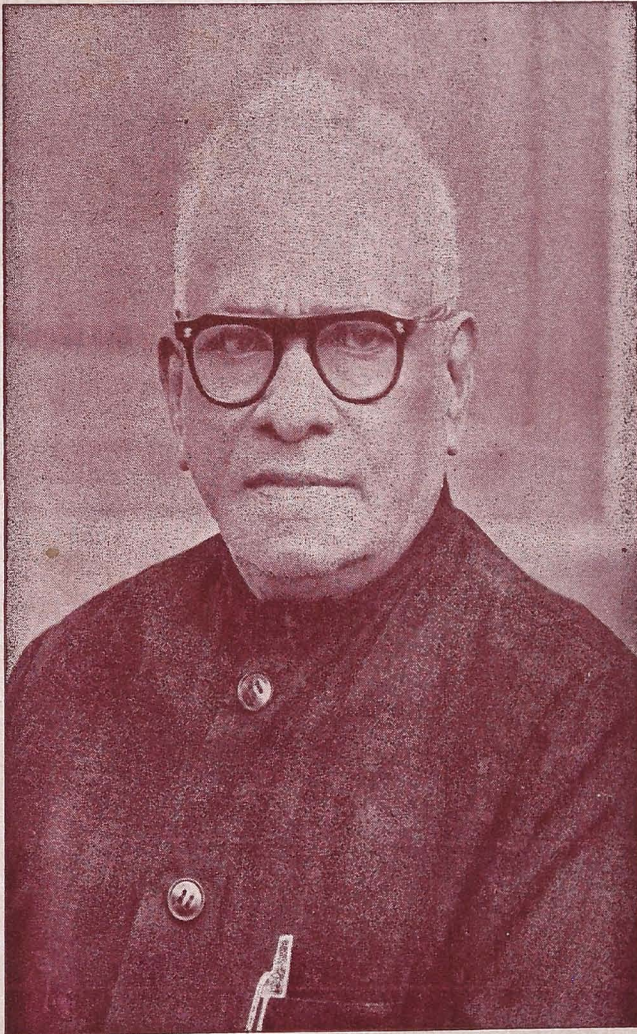
14th August, 1968

MESSAGE

*I am happy to know that the Madurai University
Library will be celebrating its Tenth Anniversary this
year. I wish the celebrations success.*

(Ujjal Singh)

Governor of Madras.



Dr. T. P. MEENAKSHISUNDARAN
Vice - Chancellor
Madurai University.

Foreword

THE Madurai University Library, started in December 1957 as "the Madras University Extension Library", has now completed a decade of fruitful existence. About ten years ago, Madurai came to be the first mofussil centre in the Madras State for the development of post-graduate studies, the teaching work being regulated on the basis of inter-collegiate cum University co-operation. The provision of an adequate library being an essential pre-requisite for post-graduate studies, the Madras University started the extension Library on a modest scale with a number of advanced books for post-graduate studies and expanded it gradually until the library became a part of the Madurai University from February 1966. Thanks to a handsome grant from the Wheat Loan fund and to the State Government giving a site free of cost, the construction of a permanent building for the Library became possible.

In the past ten years, the library has expanded considerably as the generous grants given by the University Grants Commission and the annual allotment of the University have brought about the addition of a number of books. The number of volumes in the Library has increased from 1500 in 1957 to over 34,000 at the end 1967. During the same period the number of members of the library has increased from 4 to 2060. The library subscribes to over 200 foreign and Indian periodicals, and a good many of them are on science and technology. The collection of the library has been strengthened by the gift of books, periodicals etc., by the British Council, the USIS, the Asia Foundation etc.

The library now occupies a prominent place in the intellectual life of the University community and it is sure to grow in importance and usefulness in the years ahead. Well-arranged and well-kept, the library provides congenial conditions for its numerous users.

Madurai University,
University Buildings,
8th November, 1968. } T. P. MEENAKSHISUNDARAN,
Vice-Chancellor.

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Madurai University

Library -

A Decade of Progress

By

S. GNANAMUTTU, M.A., D.L.S.

“THE real function of a University was not so much the accumulation of books but was rather the accumulation of the conjoint thoughts among men coming from different places, brought together for the purpose of leading a conjoint life” with these words, Dr. C. P. Ramaswamy Aiyar laid the foundation stone of the Madras University Extension Library on the 2nd February 1957. Hence the establishment of the Madras University Extension Library owes its name to the University of Madras, Government of Madras, the University Grants Commission and the India Wheat Loan Educational Exchange Program. Madurai at that time was a prominent University sub-centre in the mofussil having a fairly large number of affiliated colleges and it was selected as the first centre for starting this Extension Library.

The Government of Madras alienated a spacious site in Madurai at the Chokkiculam area estimated to cost Rs. 30,000, which was given free of cost for the construction of the library. The University Grants Commission sanctioned Rs. 4 lakhs for the construction of the Library building and necessary furniture. The construction of the building was started in 1959 and was completed in 1961. The library building was

declared open by Dr. C. D. Desmukh on October 16, 1961, former Chairman of the University Grants Commission. Dr. C. D. Desmukh while opening the building rightly remarked that Madurai will become a miniature University centre with all amenities available including library facilities and well equipped laboratories. The building is constructed as the model of the University Library in Madras and can accommodate about 1 lakh and odd volumes with necessary reading space, periodical section, seminar rooms, microfilm unit, drawing rooms etc.

IMPACT OF THE INDIA WHEAT LOAN EDUCATIONAL EXCHANGE PROGRAM

The India Wheat Loan Educational Exchange program started three Extension Libraries in India—one at Udaipur, one at Ludhiana and one at Madurai. Thus the birth of the Madurai Extension Library was established at Madurai on 15th December 1957, under the joint auspices of the University Grants Commission, University of Madras and the India Wheat Loan Educational Exchange program. The Library started functioning Library Service in Madurai, in a rented building at the American College campus with a total of about 1,000 books purchased under the U. G. C. funds on 15th December 1957. The major purchase of books for the Madurai University Library was done by the two magnificent grants of the India Wheat Loan Educational Exchange Program of 50,000 dollars and 25,000 dollars respectively during the years 1957-60.

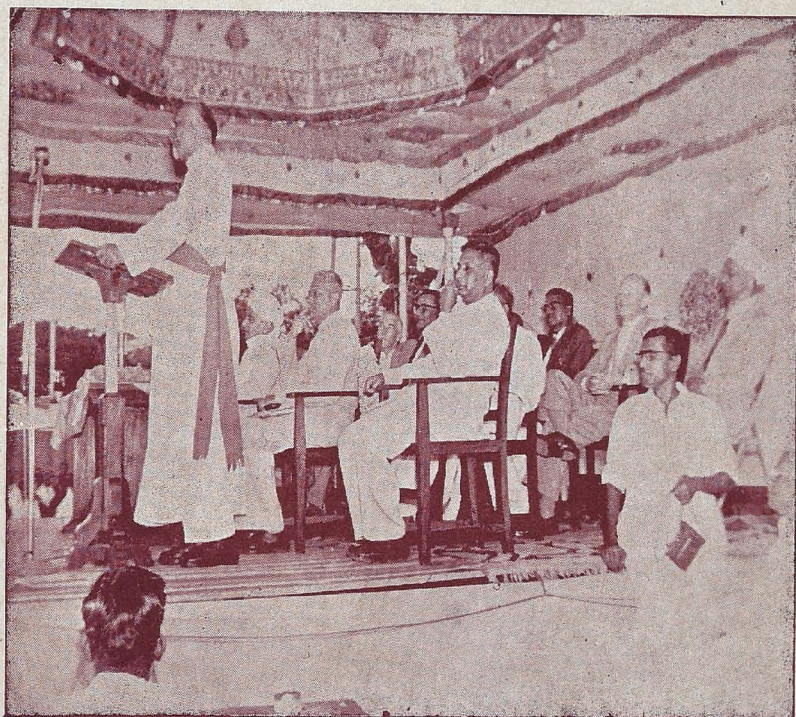
Titles and back volumes of periodical were selected by expert committees on different subjects for the library and the selections were sent to the India Wheat Loan Office for bibliographical checking and then these order forms were forwarded to the United States by the Wheat Loan Office at Delhi. Bibliographical tools for selection of books were supplied to the Librarian and the Faculty to make wise selection of books. Since Public Law 480 specified that Wheat Loan funds must be used to purchase American books, a good number of books and back issues of learned periodicals of American origin called "The Lincoln Collection", were purchased under the Wheat Loan funds through the kind offices of CARE.

BIRTH OF POSTGRADUATE STUDIES AND RESEARCH IN MADURAI

Dr. A. L. Mudaliar, Vice-Chancellor of the Madras University, while requesting Dr. C. D. Desmukh to declare open the library building said, "He always held that the University stood not merely to produce



S. GNANAMUTTU
Librarian



Inauguration on 2-2-1957
Dr. Sir C. P. Ramaswamy Iyer
laid the foundation, *

graduates for filling up clerical posts but for something much higher,—to make the young men and women contribute to the material advancement of the country”. It was in this context the idea of starting University Centres came up.

The Madras University Extension Library which was started with an idea to promote library service at the southern part of the Madras state, for the Undergraduate and graduate levels turned its course with the starting of postgraduate courses in Madurai and the establishment of Research Departments by the University of Madras during the year 1958. Every University Library ought to be a research library and ought also to provide for the undergraduates.

The starting of the postgraduate studies and research departments at Madurai in the branches of Chemistry, Mathematics, Physics, Zoology, Economics and Tamil needed careful and wise selection of books and periodical for the postgraduate and Research levels. Hence book selection committees were formed for different levels and books and periodicals were purchased for the library by team work of Senior and Eminent Professors on various subjects. From 1958 until this date the major funds of the University Grants Commission and the Madras and Madurai University Funds were utilized for building up the collection of these six research departments.

BIRTH OF THE MADURAI UNIVERSITY

The hope expressed by Dr. C. P. Ramaswami Aiyar, while laying the foundation stone that the Madras University Extension Library would be a source of light, sweetness and happiness not only to the people of Madurai, but to the entire south came true by the birth of the Madurai University in the year 1966, under the stewardship of our first beloved Vice-Chancellor Dr. T. P. Meenashisundaram.

CLIENTELE OF THE LIBRARY

The clientele of the Madurai University Library are students (under-graduates, graduates, post-graduates, research scholars) and the Public comprising doctors, engineers and lawyers. Till 1961, this library

was catering to the needs of the under-graduates, graduates, post-graduates and research scholars who were residing in Madurai and those who were residing within a radius of 50 miles from Madurai. The library also catered to the colleges situated within this limit by enrolling institution members by issuing 50 books at a time.

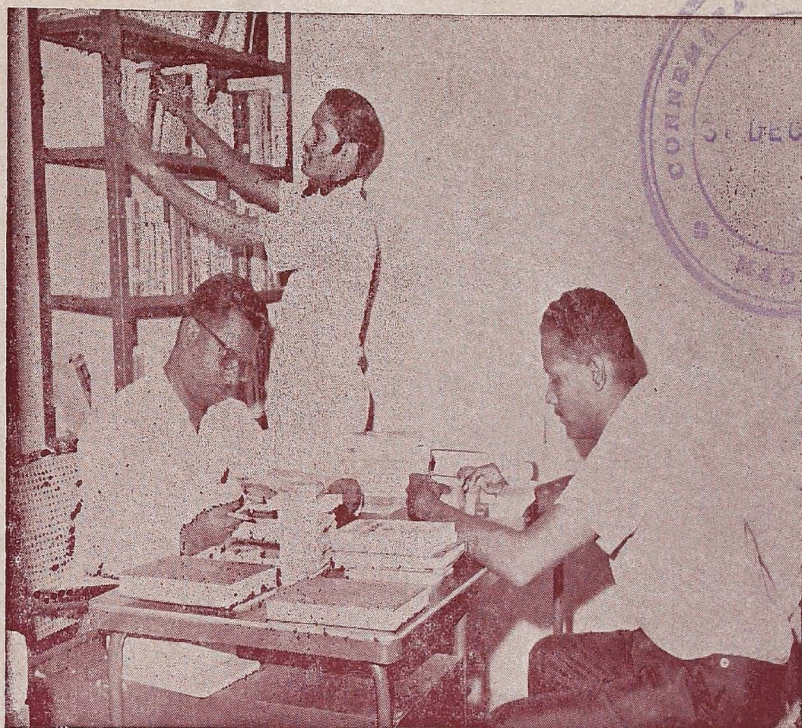
The Birth of the Madurai University opened the doors of the Library still further and at present this library caters to the needs of all residing in the Madurai University area and to all institutions affiliated to the Madurai University.

INTER LIBRARY LOAN AND THE AUTOMATIC SHIPMENT PROGRAM

The library helps those who need certain books, periodicals and theses which are not available in the Madurai University Library by getting their requirements from other libraries, not only in India, but also from other parts of the world. Moreover for wise selection of books, the library adopts the automatic shipment program, under which latest books of foreign origin on different subjects as soon as published are sent to the library on approval basis. A book is not a capsule to be swallowed whole but instead a book is one of the many tools with which the scholar can forge ideas for himself. Thus the automatic shipment plan gives an opportunity for the professors and the scholars to browse through the latest books published and thus make their selection for purchase.

MICROFILM SERVICES

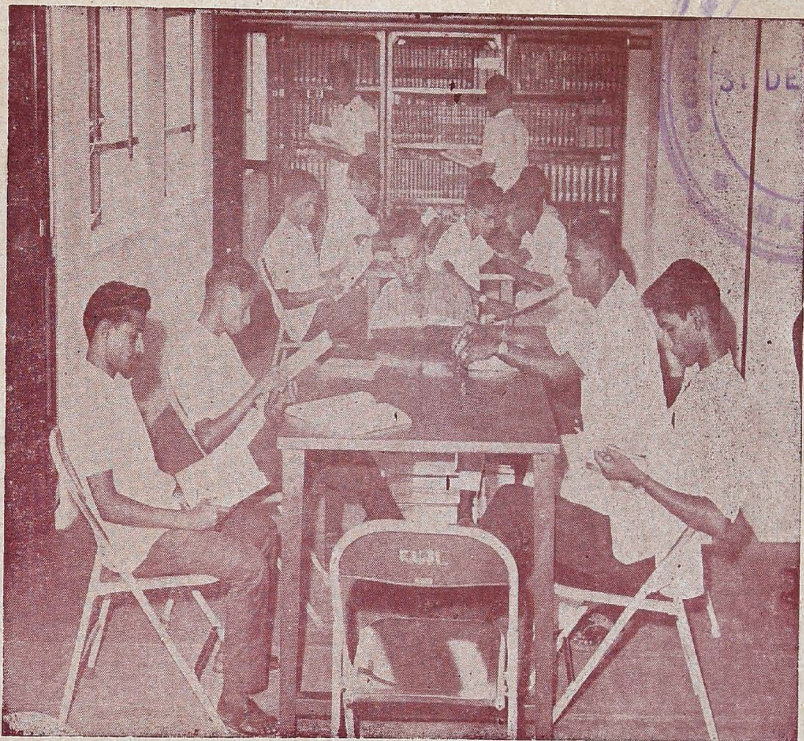
The Madurai University Library possesses a microfilm unit through which any business record, back issue of periodical, Ph. D. dissertations and many unpublished and mimeographed research reports can be reduced to $\frac{1}{16}$ to $\frac{1}{64}$ the area of each page when it is photographed on standard 35 millimeter film. The library also possesses a Microfilm reader for reading. These facilities are being fully utilized by the Research scholars attached to this University. This Micro unit helps the library to add a great deal of rarer material to the collection. The library also helps the scholars by obtaining microfilm strips of rare materials, translations etc. from INSDOC.



OUR STAFF AT WORK

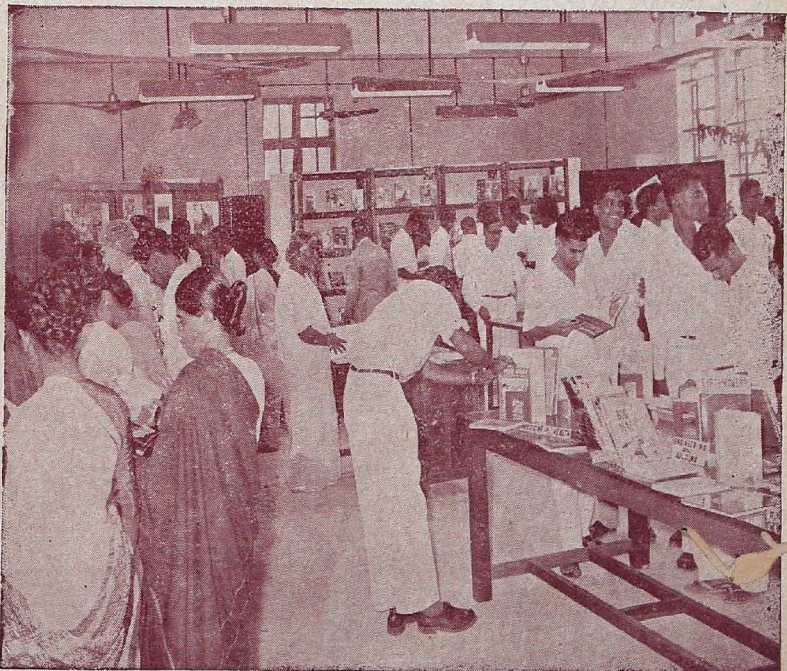
.....adding more books every day.....





OUR READERS

.....an investment in future.....



U. S. I. S. BOOK EXHIBITION

OTHER PARTICULARS

The library is kept open from 8 a.m. to 8 p.m. on all days. The scheme of classification used in the Madurai University Library is the colon classification of Dr. S. R. Renganathan. The library adopts open access system thus permitting readers to go directly to the shelves which is an obvious and effective means for making books physically accessible. Reference service is one of the main functions of the library and both ready reference as well as long range reference services are facilitated to the reading public as well as to those engaged in research.

The library now possesses a total stock of 34,391 books and subscribes to 177 learned periodicals. A list of the books added to the library every week is published in the Sunday edition of the local daily, "The Indian Express", for the benefit of the reading public. Moreover a stenciled copy of the books added in different subjects every month is sent to all the affiliated colleges of the Madurai University. The library staff also prepared bibliographies on specific topics or subjects on request.

To strengthen the text-books collection the library is a member of the British Council Lending Library Scheme and multiple copies of text-books obtained through this scheme are given on loan. The library also is greatly indebted to the U. S. I. S., The British Council, The Asia Foundation and the Hindu for their presentation of valuable books and rare materials. Under the Book of the Month Club of the United States, the Library receives a good number of books. A detailed statement of the various grants, books added, the number of members, books borrowed etc., is given in the table.

TABLE

Year	Grants		No. of Vols. in the Library	No. of books received as gratis	No. of members	Visitors	Books consulted	Periodicals subscribed
	IWLEEP.	Univ.						
1957	50,000 \$	1,000	25,000	1,500	25	150	520	—
1958	25,000 \$	—	—	9,500	328	1,200	4,250	—
1959	—	—	50,000	10,750	57	9,921	13,288	—
1960	—	15,000	—	3,391	16	11,754	15,091	50
1961	—	„	60,000	18,001	16	15,252	15,764	100
1962	—	„	1,50,000	21,210	946	21,584	15,252	„
1963	—	„	40,000	23,267	34	27,857	30,215	110
1964	—	„	—	26,424	59	29,565	53,052	157
1965	—	„	—	28,889	16	33,813	60,678	„
1966	—	93,000	2,00,000	30,500	570	36,250	61,620	177
1967	—	70,000	4,37,000	34,391	519	43,125	70,232	„

IWLEEP — India Wheat Loan Educational Exchange Program.

Univ. — University Funds.

U. G. C. — University Grants Commission funds.

Productivity and Partnership in University Education

DR. S. R. RANGANATHAN,
National Research Professor in Library Science,
AND
Honorary Professor,
Documentation Research and Training Centre,
Bangalore-3.

1 What is Education

Education is the process of the development of a personality along its own lines, at its own speed, to its own fullness. The personality may be that of an individual or that of a Society — that is, a more or less coherent, interdependent, and organised community. Individual's education and Society's education are no doubt inseparable; and they are interdependent to a considerable extent. In spite of it, we can recognise some distinctive areas in individual's education and in Society's education.

2 Education of Individual

21 AGENCIES OF INDIVIDUAL'S EDUCATION

The chief agencies playing part in the education of an individual are: the individual having education (educand), the individual specifically helping the process of education (teacher), and the total environment (physical, biological, and social). Such a totality of the agencies shaping the education of an individual is described in the following episode in the BHAGAVATA-PURANA. Yadhu, the King, is crossing a forest. He hears

a sweet melody, evidently born of supreme delight. In a short while, he sees a radiant sage singing in ecstasy. He asks, "How, O Sage, did you acquire without effort the wide and clear wisdom by whose light you wander like a child?" The sage replies, "Many are my teachers, O King, whom I adopted by my own understanding. With the wisdom imbibed from them I go free from attachment". Then he names twenty-four teachers—from the stars to the wasp and the plant—and adds, "My own body also is a teacher. Knowledge from one source only can never be firm and complete". The PURANA does not specify what exactly the sage learnt from the wasp. But the French naturalist R. A. F. Reaumur did learn from wasps the possibility of making paper from the fibres of wood. He learnt this in 1719. He wrote about it to the French Royal Academy in the following words: They (wasps) teach us that paper can be made from the fibres of plant without the use of rags and linen and some of them invite us to try whether we cannot make fine and good paper from the use of certain woods". He adds, with great concern, "This study should not be neglected, for it is, I dare say, important. The rags from which we make our paper are not an economic material and every paper-maker knows that this substance is becoming rare. While the consumption of paper increases every day, production of linen remains the same. The wasp seems to teach us a means of overcoming this difficulty". During the time of World War II, bats taught an engineer the possibility of radar. Thus the education of an individual can be helped by any element in the totality of his environment. In modern times, libraries and books form one of the essential elements in that environment. They hold the intellectual deposits of the past. It is not possible for the class room to press into the service of the education of a student the whole of that deposit. But, the student should be given ample opportunity to draw by himself every possible help from the university library. The teacher should stimulate each and every student to go to the library. In the library itself, the librarian should take over the student and help him in quarrying from that intellectual deposit. Thus teachers and librarians should work as partners, in order to maximise the productivity of university education.

22 ANALYTICAL VIEW OF INDIVIDUAL'S EDUCATION

Further, the education of an individual implies the development of the physical, mental, and intuitional sheaths of the personality of an

individual. The development of the mental sheath implies the development of three sub-sheaths — emotion, memory, and intellect.

23 INTUITION AND PHYSIQUE

We know precious little of intuition. We cannot speak of its development or of its education. At any rate, we shall assume that it is out-of-bounds for any normal educational organisation as we have today.

24 NOURISHMENT OF PHYSIQUE

The development of the physical sheath, the vital body, of the individual normally depends on nourishment — its quantity, quality, and regulation. At the level of university education, there is nothing for the teacher to do in the matter, except in the case of a student specialising in medicine, particularly in nutrition, beyond informing the student about the need for proper nourishment and about the hygiene going with it. But the ideas on nourishment and hygiene are continuously being improved. Therefore, each and every student should be inculcated with curiosity to know about them throughout his later life through published documents on the subject. Hence, even at university stage students should be habituated to use the library for this purpose. In other words, the class room and library should become partners in providing for the proper development of the physical sheath, in order to maximise the productivity of university education.

3 Mind

31 SUBLIMATION OF EMOTION

The development of emotional sheath at the university stage takes the form of the sublimation of the lower emotions into higher ones. In the class room, this is usually helped by interpreting books on Literature, Biography, and Travel. But the areas of interest of the students will differ from student to student even as their faces do. In the class room, only a general average approach is possible. But the interpretation in the class room should rouse sufficient curiosity in the students to make them pursue in the library the study of Literature, Biographies, and Travels in the respective areas of specific interest to each. In the selection of such books and in the occasional help to be given in the study of such books by the several students, the librarian will have to play as important a role within the library as the teacher does outside it. Further, the teacher and the librarian should co-operate in organising and correlating the work in the class room and in the library. Thus, teachers and librarians should work as partners in the education of the emotional sheath, in order to maximise the productivity of university education.

The development of memory sheath at the university stage takes the form of the enrichment of memory with new facts and ideas. In the class room, this is usually done through talks — and very often, alas, by dictation of notes — on new facts and ideas. But the class room time is seldom sufficient to convey all the facts and ideas necessary even for the time being. Further, the facts and ideas are ever changing. In the “Camel Theory” of education the implication is that the university education should fill the memory of each and every student with information on all the facts and ideas needed all through his journey through life. This is obviously impossible. The memory of no one can be capacious enough to hold all the facts and ideas of the past, the present, and the future. Therefore, a more important aim in educating the memory sheath should be to inculcate in each student the capacity to enrich his memory further, from time to time, both in the university stage and in later life, by the use of “Externalised Memory” — that is, books and other documents socialised for the purpose in the library. The library is indeed externalised memory. Thus, in the class room the teacher should not attempt to fill the inner memory of the students with everything likely to be needed at any time. But, he should only stimulate curiosity to find out facts and ideas from the library, when they are not carried in his memory. On his part, the librarian should follow this up and so organise the externalised memory in his charge and so help the several students that they can pick up from the documents in the library whatever facts and ideas they need at any time. Then alone the enrichment of the memory of the individual will be possible all through his life. Thus, teachers and the librarians should work as partners in the education of the memory sheath, in order to maximise the productivity of university education.

35 SHARPENING OF INTELLECT

The development of intellectual sheath at the university stage takes the form of sharpening of the intellect. At this stage, the sharpening of the intellect is more dominant than anything else. The intellectual capacity of individuals varies widely. In terms of intellectual scale we can say that the difference can be as high as one hundred and as low as zero. In general, it is only those at the upper end of the intellectual scale that receive university education. It is usually a small percentage university-going age-group — viz, 18 to 23. In India, for example, it was one per cent in 1950–51 and two per cent in 1965–66. About 100 years ago it might have been less than 0·1 per cent. In the case of the others the maximum possible sharpening of intellect would have been received by them at the school stage and it is likely to increase only very slightly in later life and even that only in exceptional persons. It is convenient to magnify the top most tiny range into a much larger scale extending

from 100 to zero. Let us call this the second scale. Roughly speaking, a saturation point will soon be reached in the sharpening of the intellect in the case of those who are in the lower half of the second scale. Probably those between the points 90 and 50 in the scale may admit of further sharpening. But even in their case the maximum sharpening can only fit them for taking part in developmental research in a team and under guidance. Perhaps the top ten per cent in the second scale may admit of further sharpening so as to make them fit for independent research leading to new ideas or techniques. We do not yet have any method of sorting out the university students and placing them in the right places on the intellectual scale. Therefore, in the matter of sharpening the intellect, university education has so to speak to shoot in the air. Further, in this high region of the intellectual scale "individuating particularities" in the development of the intellect are very pronounced. The working of the teacher's own intellect cannot serve as a sufficient model or stimulus to all the students. Most of the students will therefore have to pick out their models and the stimulating peers from elsewhere. These may be contemporaries living elsewhere outside the university and even in other countries, or persons of the past ages in whatever country they might have lived and died. These models and peers cannot be contacted by the students in person. They can derive the benefit of such models and peers only from the deposits of their intellectual working and achievements housed in the libraries. There is no doubt, however, that extract of milk cannot be as nourishing as whole milk; similarly, there is no doubt that the contact of intellectual extracts cannot be as nourishing as the contact with living men. But for the obvious reasons of impossibility and/or impracticability, the students have necessarily to be guided by the books and periodicals in the libraries. The teachers' function in the class room and the laboratory is to stimulate curiosity in the students sufficiently and then turn them on to the library for the further sharpening of the intellect. When the students reach the library, the librarians should take them over. They should also organise the reading materials in the library in such a way that each student gets what he needs pin-pointedly, exhaustively, and expeditiously. In whetting and nourishing the curiosity of the students, therefore, the librarians will have to play as important a part as the teachers. More than that, they should be in close collaboration. Thus the teachers and the librarians should work as partners in the education of the intellectual sheath, in order to maximise the productivity of university education.

4 Education of Society

41 KORZYBSKI'S EPIGRAMS

The penetrating analysis made by A. Korzybski in his *SCIENCE AND SANITY* in 1933 gives a good background to the study of development of organisms as schematically represented in the diagram in Sec. 1. It leads

to education of Society as an inevitable corollary to the education of the individual. It will take too much space to explain the background of development and education provided by him. It should be read in his above-mentioned classic. Therefore, I shall merely reproduce here a short version of his three epigrams on the subject. They start with the development of plants and lead on to the development of Society. They are as follows :

1 Plant can bind only Energy. It can only build its Physical Body. But there is an upper limit to the size of Plant Body in Space.

2 Animal can in addition bind Space. Therefore, it can in addition build Herd. But there is an upper limit to the extension of Herd in Time.

3 Man can in addition bind Time. Therefore, he can build Culture. But there is an upper limit to the reach of Culture, in Mind.

NOTE :—It is in building the culture that the education of society comes in.

TO THESE THREE, I SHALL ADD THE FOLLOWING

4 Seer can in addition bind Mind. Therefore, he has a Holistic Awareness. Further, there can be no upper limit to the capacity of "Holistic Awareness", in intuition. For, intuition is single and not multiple. Therefore, the question of binding intuition does not arise. Therefore, Holistic Awareness is the ultimate.

42. TERMINOLOGY OF THE SCHEMATIC DIAGRAM IN SEC 11

The terms relating to the individual given in the schematic diagram in Sec. 11 will be easily understood. But some of the terms relating to Society require a word of explanation; for, each of them has many meanings. The meaning in which each term is used in the diagram and in this paper is given below :—

- 1 Society = A community in which the members are interdependent, cooperative, and practice division of labour.
- 2 Polity = Structure, organisation, and development of Society.
- 3 Group emotion = The emotion of Society as a whole as against the emotion of any individual in it. For example, the mutual emotional attitude — such as fear or hatred — between one nation and another. Also the emotional attitude between one group and another within one and the same nation.

- 4 Culture = The sum total of the thought and the emotions of Society developed from the very beginning of that Society. It is usually seen in the social practices and folklore. Nowadays it is also found recorded in books and periodicals. It is in this sense that culture in Society correspond to memory in individual.
- 5 Team research = Research done collectively by a team of persons within a nation or in the world at large. Team research should also be relay research — that is, each team should carry forward from where the earlier team has left. It is necessary to maximise the knowledge in Society so as to secure its well being and continuing improvement of Society.

43 ENLARGEMENT OF SOCIETY AND OF ITS AREA

The “Herd” of the animal kingdom, does not get very much enlarged beyond certain limits. The area of a “Herd” also does not get very much enlarged. But it is not so in the case of man ; in this case, it can comprehend the entire humanity and cover the whole earth. In the case of man, we have replaced the term ‘Herd’ by the term ‘Society’. The latter is a generic term. As the size of the Society and its area increases, it is denoted by different terms such as,

1 TRIBE :

When the Society is smallest in size and area.

2 KINGDOM :

When several tribes get merged into a single Society of larger size and area. For example, the Chola and Pandyan Kingdoms of the Medieval Period in Tamil Country.

3 STATES :

When several kindoms get merged into a single Society of still larger size and area, common language being one of the factors bringing about the merging. For example, the Tamil Country, that is, the present State of Madras now being renamed ‘Tamil Nadu’ or ‘Tamilaham’.

4 MULTILINGUAL COUNTRY :

When several unilingual States get merged into a single Society, contiguousness of area being one of the factors bringing about the merging. For example, India and USSR.

5 CONTINENTAL COMMUNITY :

When several countries get merged into a single Society occupying a continent of a comparable area. Examples of incipient forms are : Pan American Union and European Community.

6 WORLD COMMUNITY :

When several countries of the world get merged into a single Society occupying the whole or nearly the whole world.

In spite of exceptions and reversals from time to time, the above trend may be taken to be general and ultimate. The merging of Societies at each stage has been due to various natural causes and not to deliberate plan or conscious education towards it. Perhaps, the last lap of the merger, where political and economic barriers have to be broken, a deliberate plan and the education of the Society towards its realisation are likely to come into play. Perhaps, the United Nations represents the incipient stage of such a process.

5 Education of Society

All along there has been some education of Society as a necessary implication of the education of the individuals in it. But there has been little recognition of distinctiveness in the education of the Society. In the polity of Society, for example, university education as such has not done much. Democracy is widely influencing the structure, organisation, and development of polity. As a result of democracy, the sovereignty of a State is basically distributed among the citizens in equal measure. But it is all virtually bought off once in a few years by a few that become rulers for a specified period. But the change in structure and the development of polity is really influenced by Society as a whole. These things take place only in times of revolution. But in a few countries there is emergence of some evidence of the whole Society having some control over it. Again, in group emotion, it is only in very recent years that something is being attempted at the university level in the direction of sublimating group emotion from the destructive ones to beneficent constructive ones. But generally speaking it is entirely the emergence of some powerful individual thrown forth by Society at intervals that has been largely sublimating or vulgarising group emotion. Mahatma Gandhi is an example of the first kind ; and there are several examples for the second kind. In regard to the development of group memory or culture, some effort is being made to externalise it from folk memory through development of public museums and libraries. In regard to team research, something of this kind was attempted atleast within a single country during World War II. But generally the secretive and the competitive spirit continues to thwart the collective intellectual development of Society through team research. The university education has yet to enter these

regions in the distinctive areas of the education of Society. When it does, there can be no doubt that it will not be productive unless a full partnership is established between the class rooms and the libraries in the universities.

6 Increasing Productivity in University Education

61 ELIMINATION OF WASTAGE IN UNIVERSITY EDUCATION

Increasing productivity in university education is in essence equivalent to eliminating wastage in that stage of education. Before 1920, hardly any Indian graduate was registered for research. In 1951, only two per cent registered; and in 1965, three per cent. In UK it is five per cent; and in USA and USSR it is ten per cent. These figures give a rough measure of the great wastage and the poor productivity in our university education.

62 REFORM IN UNIVERSITY EDUCATION

To increase productivity, not only the teaching methods should be reformed as indicated in Sec 2 and 3 and their sub-divisions but the examination system should also be changed. When the universities were started in India in the middle of the nineteenth century, the purpose was to pick up the best brains in the country and fit them for the administration of the work of the Government. Neither the development of the whole man nor the development of the Society was thought of. It was only the topmost intellectuals that were taken into the university. The Annual Reports of the mid-nineteenth century of the Directors of Education in India bear testimony to this. Inspectors of schools used to visit the high schools. One of their main items of work was to pick out the best brains among the students. In fact, the annual reports mention names of such brilliant boys picked out for government service; Sir T Muthuswami Ayyar is an example. They were naturally men with terrible memory. Examination was designed essentially to test memory. This had its reaction on the teaching method — anticipation of questions, dictating of answers to them in the form of notes, and dependence on cram books. Even in the case of problems that require discussion and arguments, the very arguments were dictated as notes. And practically all the students would reproduce the same arguments. As an examiner I have seen this. For example, fifty years ago, a candidate gave a correct proof to a geometrical theorem and pathetically added at the end of his answer, "I do not know whether this is correct, but I have fully reproduced what the teacher dictated"! During the last forty years, I have found the same phenomenon in a different form in the answers of post-graduate students of library science. For several years, I used to set a question on one and the same topic with, however, a different slant in each year. The candidates were asked to write on the topic from the angle of that slant. But each year the candidates would write one and the same stuff,

without any variation, evidently taken from the notes dictated by the teacher or by the books crammed. This has been my experience with most of the universities. This implies stuffing the memory and not at all sharpening the intellect. This method of examination should stop. In fact, where memory is involved, the students should be allowed to get the information from the library during the examination. I have personally experienced this being done in some of the universities in Europe. All the other questions must be geared towards finding out the reasoning or the intellectual capacity of the students. About fifty years ago, the Cambridge University used to set an amphibious question paper in mathematics as a transitional measure. The question paper contained two sets of questions marked A and B. The students had to answer either all or most of the questions in Sec A — they were memory questions — OR one question thoroughly in Sec B — this answer would require a systematic development of some topic from the very foundations to the result stated in the question. When the examination system is reformed in full measure along these lines, the teaching method will change from memory filling to intellect sharpening. Then the University Library will come into full play. But today, a teacher wants merely to “Finish the Syllabus”. For that purpose, from the first day to the last day he rushes through the syllabus without even time to look up the faces of the students. But fifty years ago, the teachers themselves were examiners. Most of the class hours would be spent in a very light way. After the question papers were set there used to be a few “Special Classes”. In a typical “special class” the professor will take a text-book and say, “Omit pages 1 to 50, pages 50 to 60 are important...” However, to increase the productivity of university education there is absolutely no need to “Finish the Syllabus”. The correct method of teaching should be to develop a few items in the syllabus collectively with students by discussional methods, thereby put them on the way to learn the items in the syllabus, and then leave them to help themselves by individual as well as team work in the library — the teacher and the librarian should now and again watch their work and set them on better lines whenever found necessary. Lecture hours should be reduced to minimum — I would say not more than one lecture a week. And these lectures should be inspiring ones and not repeating of books. At all other hours instruction should be individual and occasionally it might be given in small groups. This reform is necessary to increase the productivity of our university education.

63 REFORM IN UNIVERSITY LIBRARY

Another important reform is to reassess the place of the library in university education. It should not any longer be continued as a ritual appendage. It should be woven integrally into the life of the students and teachers in the university. There should be as much education within the library as within the class room. To effect this, the librarians and the teachers should work in partnership. To make this possible the library

staff of the university should have a specialist (here, by 'specialist' is meant one who is specialised in the subject atleast for the first University degree and preferably for the first post-graduate degree and not necessarily for the stage of research degree") in each of the subject areas taught in the university. Of course, they should also be graduates in library science. Then only the librarians can continue and supplement the education of the students from the point where the teacher left them in the class room. Book selection should not be an administration ritual to be decided by extra-academic consideration, but it should be done jointly by the teachers and the librarians. It should be based on what is anticipated to be taught during the year.

7 Faith in the Development of the University Libraries

71 FAITH IN FUTURE

India has now before her the negotiation of a steep ascent in her march forward — much steeper than many of the countries that had developed earlier. In spite of their having only a mild ascent, those countries are paying very good attention to reform the relation between the teaching faculty and the library staff in the universities. This reform has already succeeded to a remarkable degree. One measure of that success is that the university graduates entering into the industries or the government service in the country have already pressed for and succeeded in getting specialist libraries for their use. This is already enriching library science and library practice. A particular form of this enrichment is now denoted by the term 'Documentation'. As a feedback, university libraries also are beginning to do documentation. In India, we have been taking a very important part in the development of documentation in particular and of library science in general. Some of our new ideas are being put into use in the more developed countries. What we want is that our own university libraries and specialist libraries should adopt them and improve their service. In the past, the status and scale of salary of the university library staff was too poor to attract able intellectuals into the profession. This was both the result and the cause of there being no realisation of the importance of library in a university. Fortunately, it was possible for me as Chairman of the Library Committee of UGC to persuade Dr C. D. Deshmukh, the Chairman of the UGC, to put the status and the scale of salary of the university library staff on a par with those of the teaching and research staff of the university. This will soon have the effect of attracting truly able scientifically tuned intellectuals to the man-power of the university library. The UGC has also recommended my staff formula by which the strength of the staff of a university library is made adequate to take the work-load comfortably; and this has already been implemented in most of the libraries. However, I am aware that all the universities have not yet implemented the UGC scale of salary. The implementation

of the recommendation of the UGC can be quickened by the library staff of such universities demonstrating the vital importance of library service in university education. In all probability, the move for the increase of the scale of salary of the librarians in India is traceable to such a demonstration given thirty years ago in a pioneering spirit by the staff of the Madras University Library, in spite of its average monthly salary having been only about Rs 80.

72 FAITH IN THE YOUNGER GENERATION OF LIBRARIANS

The university people often remark that in spite of the revision of the scale of salary, there is little appreciable improvement in the quality of the service given by some of the university libraries. If this be true it is understandable to some extent and the university people should be a little more patient to get the full benefit. For, the immediate beneficiaries of the new scale of salary had already crossed the middle age; and it is difficult for them to develop a new outlook and to give new forms of service, and for this purpose to learn or themselves to design new techniques. The new generation will certainly acquire themselves better. The timelag involved is inevitable in any human organisation. But it looks as if there is danger of the clock being set back, and that instead of progress, regression might set in by giving up the latest library techniques and going back to the outmoded century-old foreign ones. Letters reach me almost every week from one young librarian or another quite unknown to me, mentioning this danger. These letters say that a few of the older librarians almost coerce them directly or indirectly and by threats or rewards to go back to old techniques. Here is a typical description of such an attitude on the part of the senior librarians, taken from a letter received a few days ago from a young librarian quite unknown to me and was defying such a coercion: They "might be putting a blundering cog in the running machine, but the young generation well understands it." They "speak their own language ... modesty forbids to disclose the name of a veteran librarian who rebukes those who seek his advice 'Leave the job if you follow CC.' But we are not discouraged by such remarks and pity those who speak like this." My own feeling is that this is only a short passing phase. My faith is that even such veteran librarians would soon take to heart the advice contained in the following lines in *THE PROPHET* by the Syrian poet Kabalil Gibrah and in the *EARTH* by Frank Townshend respectively.

1. "And tho' they are with you yet they belong not to you,
You may give them your love but not your thoughts,
For they have their own thoughts.
You may house their bodies but not their souls,
For their souls dwell in the house of to-morrow which

You cannot visit, not even in your dreams.

You may strive to be like them, but seek not to make them like you.

For life goes not backward nor tarries with yesterday."

2. "There shall freely grow within them (Young Librarians), apart of the spirit of all things; which is, in itself, perfection and truth.

But if you seek to mould and to form children (Young librarians),

You will but succeed in warping the vessel which life has made for itself ;

and so restrict life's growth."

73 FAITH IN UNIVERSITY EDUCATION BECOMING HOLISTIC

University education should aim at holistic education — that is, all round harmonious education. At the university level, a person becomes specialised. From the angle of the individual it is inevitable. For, no individual can comprehend the entire universe of subjects ; and further, this universe is ever expanding. From the angle of Society such a specialisation is necessary. At the same time holistic education would administer a warning. Specialisation should not degenerate one into the described by the cynic as a person who knows more and more about less and less until he knows everything about nothing. To benefit by this warning of holistic education, the work in the class room and the laboratory on one side and the work in the library on the other should be blended in a proper way. To do this, the teachers and the librarians should become partners, in order to achieve full productivity in university education.

8 Experiment in Holistic Education

81 EXPERIMENT IN THE DRTC AT UNIVERSITY LEVEL

Since 1962, the Documentation Research and Training Centre at Bangalore (=DRTC) functions as a laboratory for improving the blending of education of the individual and of the Society on the one hand and the holistic development of the individual in all the three mental sheaths of his on the other. The students are all post-graduates. In the life of the students and teachers of this Centre there is all pervasive partnership between class room work and library work. Sharpening the intellect is done through methods of class room discussion, essay work accompanied by tutorial meetings, weekly colloquia, and annual seminar. There are very few lectures or one-way talks. Practising the use of externalised memory is ample. Wherever possible, project for team work are set. This helps a good deal in minimising secretive habit and competition in work,

and in maximising anonymity in the achievement of the team. The members of the DRTC family — teachers as well as the students — feel the joy of this method of university education. Some of the old participants of this Centre come back for a reunion during the annual seminar ; and they testify to the superiority of the DRTC method to the traditional method of memory filling with very little partnership between the class room work and library work.

82 EARLY EXPERIENCE IN THE EXPERIMENT

I began my teaching career in 1917 in the Government College in Mangalore. Providence guided me to effect, from the very beginning, partnership between the class room work and library work. The College was kind enough to purchase for me several copies of several books of the text book variety and of general books and to form a class room library. This gave a new experience to me as well as to the students. Then I went to the Government College, Coimbatore, in 1920. That College too provided similar facilities. When I went to the Presidency College, Madras, in 1921, it was possible to introduce this kind of partnership between class room work and library work right up to the honours standard. All along I have been often hearing from old students words of appreciation of this method. They testify to the advantage they received from it. They also say that the total result of it has been of immense benefit to them in their journey through life.

83 EXPERIMENT IN THE SITU AT SCHOOL LEVEL

A few years ago some, who had been my colleagues in the teaching profession in the earlier years, set up a Research Cell in the South India Teachers' Union. They took up this problem of library-centred education as a subject for experiment. In 1962, a few select teachers spent a few weeks with me in Bangalore and in the Ramakrishna Vidyalaya in Coimbatore District to prepare for this experiment. At present, Controlled experiments has been in progress in a few schools. The results are being assessed from time to time. The essence of this experiment is

- 1 Replacement of mass-lecture by individual instruction ;
 - 2 Replacement of memory filling by development of thinking power ;
 - 3 Replacement of textbook-centred, teacher-centred education by library-centred, child-centred education ; and
 - 4 Replacement of secretive and competitive outlook by the spirit of team-work and relay work among the students. This should be so extended to the university level that teachers and librarians become partners, in order to maximise the productivity of university education.
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"The Growth of Librarianship and the Role of Librarians"

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THE growth of librarianship is inextricably linked with the development in the production and publication of books. In the earliest period, when the books were written on baked clay tablets as in Chaldea, on papyrus (a material made from the pith of a reed that grew in the valley of the Nile) as in Egypt, on tablets made from bamboo fibre or on silks as in China, and on dressed skins or prepared palm leaves as in India, duplication and preservation of books were the major problems. Professional scribes and calligraphers, who served not only as copyists but also as preservers of books, solved the twin problems of that period to a great extent. In fact, the scribe, who received manuscripts and preserved them with care by wrapping them up in parchment cases, evidently for the benefit of scholars, was the prototype of the modern librarian.

In the third century A.D. books began to change their form. Instead of being continuous rolls, the pages were folded and stitched

and bound together in wooden boards, which were generally ornamented. This made the preservation of books a little more easy; but the problem of duplication still remained without solution. During the Dark Ages, when there was little original authorship, it was in the monasteries that books found their only safe lodgment and willing hands to copy them. In most monasteries there was a room called the scriptorium where the work of transcribing was carried on. The monastery scribes wrote with quill pens and produced as many duplicate copies of books as humanly possible. Besides, the monks in monasteries tried to preserve the books by covering them with skin of the deer and by various other methods. As a matter of fact, the great Charlemagne, who appreciated the work of these literary works, granted the rights of hunting to certain monasteries in order that the monks might provide themselves with material for the covers of their books from the skin of the deer. Thus, the monks in these monasteries, who endeavoured to preserve the books and to supply as many duplicate copies as possible to the scholars, played the role of a modern librarian.

But, the scribes of the earliest period and the monks in the Middle Ages, who were more or less librarians of their respective periods, did not administer the libraries (collection of books) properly, for only a privileged few had access to these collections. The monks in the monasteries were extremely reluctant to let in information-seeking lay scholars for perusing manuscripts found in their collections. They seemed to care more for the preservation of books and manuscripts than for making them available to all readers and scholars. This extreme reluctance was probably due to their genuine fear that constant use of manuscripts by large number of scholars might result in irreparable damage to, sometimes even loss of, manuscripts which could not be replaced very easily because of the difficult process of duplication. This attitude of the monasteries, however, earned the disapprobation of many lay scholars, and one mediaeval puritan, referring to this attitude, sarcastically remarked. "Some possess the sacred books and have them as if they had them not. They shut them up in their book-chests. They pay attention only to the thinness of the skin and the elegance of the letter. They use them less for reading than for show."

The literary work of the monasteries, the art of calligraphy and book making perfected by them, and limited librarianship practised by the monks came to an end when printing was invented by Gutenberg. The industrial revolution and the printing machine brought a revolution in the literary field. The Scribes were replaced by the printing machines. The duplication work was rendered easy; and the quantum of publications increased tremendously. Many writers, who were hitherto considered as minor authors and who were finding difficult to get receptive audience, found ample opportunities to place their works before larger reading

public. Thus, the world of scholarship, which received great impetus from the industrial revolution, grew to an incredible extent.

This remarkable growth in the world of scholarship created organisational problems to the librarians. Besides, the growing nation that every individual had right to know or read whatever he wanted accentuated these problems. Consequently, librarians could no longer remain, as in the Middle Ages, a mere passive custodian and preserver of books. In addition to these functions he was called upon to organise libraries actively in such a way as to make it more useful to the information-seeking readers. Thus, there was a phenomenal change in the role of a librarian in the post industrial revolution era. The mediaeval concept of "limited librarianship" was abandoned, and the librarian was considered as one of the essential links in the world of scholarship. He effectively met the challenge of the time and tried to organise, huge collection of books bibliographically with an avowed purpose of making the library as useful to the readers as possible. In order to carry on his new mission, he planned his own techniques, created his time saving devices and invented his own tools.

In the later part of the 19th century, when the librarian was still busy testing his techniques, trying to sharpen and improve his devices and adjusting his tools, periodical publications came into existence. Subsequently, they showed a remarkable capacity for growth. Within the period of two world wars in the 20th century the periodicals reached their perfection both in quantity and quality. This new phenomenon in the literary field brought fresh problems to the librarians. Book is evidently a bibliographic unit, but a periodical is a composite of many bibliographic units. Though physically a periodical issue is one, because of difference in the thought contents of the various articles in the issue, each article in it is considered as a separate bibliographic unit. Therefore, in case of a volume the diversity of thought contents would be much more, and consequently bibliographic units would be many. In view of these facts, librarians felt that the library techniques and tools they used to organise books were inadequate and not sophisticated enough to control the periodical articles. But, despite the awareness on the part of librarians about the inadequacy of their tools and techniques, they failed to act promptly to tackle the situation. This failure on the part of librarians seems to have weakened the professional efficiency.

As a matter of fact, preparation of periodical indexes is an effective answer to the problems created by the publication of numerous periodicals, and it is undoubtedly one of the legitimate functions of the librarians. But, the librarians hesitated to embark on this scheme. So, some private agencies stepped in and took up this function and made it a profitable business. No doubt, the failure of the librarians to perform this function

might be traced to inflexible machinery and organisational structure of the libraries, professional immaturity, lack of trained personnel and financial assistance, etc. But, it cannot be gainsaid that this failure caused considerable damage to the prestige of the profession. It is therefore, no wonder if this failure of the librarians, caused some doubts in the minds of the people about the ability of the librarians to function effectively and made the people so feel sceptic about the entire profession. It must be born in mind that librarians can hardly hope to function effectively in this age without performing the function of preparing the periodical index- for in the absence of such indexes large body of contemporary materials that pass through the hands of librarians may remain beyond the reach of the readers, and in such an event the librarians would be performing, at best, the role of physical custodians of the material as in the Dark Ages.

In this modern period a definite change has taken place both in research trends and in the pattern of demand for books and information – supplying materials. Now, not only the scholar in educational institutions are increasingly interested in spending their major time in libraries in search of their research material but also people in business, industries, etc, depend very much on libraries for information which are necessary to carry out research work in their respective concerns. The materials required by the latter category of people are definitely different from the traditional books. They, in fact, need more of reports, patents, pamphlets and similar other materials. And these materials are often found in the form of manuscript, typescript, photo offset, photostat, microfilms microcard, photographs, charts, and in similar other forms. The facts also show that the growth of these types of materials is much more than the growth registered by the traditional books in this age. Obviously, therefore, the change in the research trends in the pattern of demands for materials and the phenomenal growth of non-traditional materials mentioned above have created new problems to the librarians. Evidently, traditional library techniques have been found insufficient to meet the new challenge, to organise new types of materials and to serve the new types of clientele. However, as every new situation creates fresh opportunities for men of action, this new situation created an immense opportunities to subject specialists, who are known as Documentalists. The Documentalists have been able to organise these new types of materials and serve the new clientele and thus meet the new challenge successfully. They have done their job effectively with the help of techniques and tools, which they took from the armoury or tool-box of the librarians and on which they affected some superficial improvements. However, the fact that Documentalists are mere subject specialists and the fact that they worked on borrowed techniques have been denied by the Documentalists, for they have considered themselves different from and even superior to librarians. Much controversy has arisen on this point.

This controversy in a way helped to invent sophisticated and non-conventional instruments, namely, computers to retrieve relevant material from the mass of materials. These computers have been of much help since then, to specialists to find their materials quickly. Thus, the problems created by the modern age have been solved to a great extent by modern techniques and instruments devised by the librarians.

The foregoing analysis deals with the problems generally faced by the librarians all over the world from time to time and how they have been solved in different periods. But, the Indian librarianship, in addition to these general problems, has to face many other different problems. It may be noted that it is only recently due to the efforts and pioneering works of great personalities like Dr. S. R. Ranganathan and Dr. B. V. Kesavan the profession is recognised in India. Yet it has to go a long way to establish itself more fully and firmly. Its progress is beset with many difficulties, which are peculiar to Indian society. First of all, social and economic backwardness in India made the luxurious growth of library profession well nigh impossible. Secondly, indifference of the government and top administrators in institutions towards the profession not only created a feeling of helplessness in the minds of librarians, but also made them suppliants for favours from those who govern even to carry on their work in the library. Thirdly, due to paucity of funds, defects in organisational set up and lack of institutionalised publication of various types of material, collection of materials by librarians in India has become a very difficult task. Finally, another disturbing feature in India is the ever decreasing clientele who could make use of the materials collected in the libraries. Annual reports and some of the reading habits surveys show that the number of people, who use the libraries, is decreasing. It is now common knowledge that even the research students in the universities are not making use of the libraries fully. Probably many of them are not aware of the availability of the material and facilities provided in the libraries. This is because the imparting of knowledge is not library oriented in India. In fact, many institutional libraries in this country are only ornamental in character and not utilitarian in their set up. Therefore, the Indian librarian has to undertake the onerous task of drawing more and more clientele into library halls and to educate them in making use of the libraries. This is truly an additional burden he is compelled to shoulder while his counterpart in the otherside of the world is trying to invent better methods to quicken the service and to keep pace with the readers' changing needs and habits.

All these problems, which confront the Indian librarianship, need not make one to feel despair about the position of librarians in India. The difficulties can be easily surmounted if the librarians and more especially if new entrants into this young profession keep away from professional groupism, shed certain complexes, develop broad professional outlook and keep aloft the high ideals of the profession. By their devotion to duty, by

their readiness to serve the clientele and by displaying their resourcefulness in devising effective techniques and methods not only to help the users of the libraries to the maximum extent but also to keep pace with the changing needs and habits of the readers, if the young librarians prove their indispensability in the world of scholarship, there is no doubt that the indifferent attitude of the government and of the administrators of institutes towards the library profession would eventually change, the financial difficulties would not be felt in the same magnitude as is experienced now, the number of users of libraries would increase most probably in geometric progression and the librarian profession in India would attain self-respect and great prestige which it enjoys in ample measures in other parts of the world, more particularly in the United States of America.

Thus, it is evident that the concept of librarianship has undergone a tremendous change, that is, from the medieval concept of "limited librarianship" to the theory that librarian is one of the essential links in the word of scholarship. During the course of this change librarians had to face many challenges thrown up by industrial revolution and progress of science and scientific inventions. But, the librarians transformed every new challenge into a new opportunity to devise new library techniques and methods in order to administer the collection of materials and to serve effectively the reading public and made themselves extremely useful and even indispensable in the world of scholarship. It is this dynamic role of the librarians which brought immense self-respect and prestige to the profession. No doubt, in India the profession has to face certain odd situations. But they are not insurmountable. If the librarians in India act with a little more imagination the profession can be made more respectable and indispensable in the world of scholarship. So, in consonance, with the change in the theory of librarianship modern librarians all over the world are dutybound to play a dynamic role and not to play a dynamic role and not to remain as mere passive physical custodians of books and other materials stored in the libraries. What this dynamic role means in the modern world is succinctly described by a veteran librarian, Jerse H. Shera, thus: "The primary responsibility of the librarian is to make of himself an expert in bibliographic organisation. He is not a keeper of the records of the human adventure against the ravages of time, nor is he the presiding officer of a "people's university". Certainly, he is not an executive who orders the professional lines of subordinates for the pure joy of practising administrative theory. Rather, he is a bibliographer in the widest and wisest possible sense, a practitioner of bibliographic organisation. Let librarians then apply themselves to the problems of bibliographic organisation, become once more the acknowledged leaders in the largely uncharted world of subject bibliography, and in the stern discipline of documentation, not only achieve a new professional self-respect but rediscover their true purpose in society".

Inter - Library Loan and University Libraries

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INTRODUCTION

NO library can claim to be self-contained, whatever its stature may be. Inter-library lending and borrowing is unavoidable. This policy of give and take is called "Inter-library Loan". Reynolds has rightly pointed out that "Inter-library Loan is a technique by which one library lends materials directly to an individual through another library. In essence, therefore, it is merely a means through which a library may broaden its lending service to include those materials which are made available by other libraries". In other words, this can be explained as a service which helps the readers to get the desired material, whatever its nature and contents may be, through the surest and quickest means from another library. Phenomenal increases in the quantity and variety of reading materials, and financial inadequacy to purchase everything that is published by any particular library, have accelerated the urge and necessity of resorting to some co-operative measures, and as we all know, inter-library loan facilities is one of them.

IMPORTANCE

Since independence India has made rapid strides in the field of science and technology and the need for well-equipped libraries is still

keenly felt to catch up with the advance technologies of the West. A well-equipped library covering all subjects is quite impossible due to the inadequacy of the financial resources. To meet the requirements for materials and to fulfil the demands of research workers and scholars, the Inter-library Loan facility is a device through which the various projects undertaken by research scholars can progress unhampered. Hence the Inter-library lending system plays a vital role in the scientific and technological development and progress of the country.

PROCEDURES

A number of procedures are followed in libraries for the exchange of materials. Mainly speaking there are three methods commonly followed in India.

The first method is to borrow from those libraries where greater possibilities exist for the availability of the material. The success of this method depends upon experience and some insight.

The second method is that of trial and error. In this method libraries are tried one after another till one succeeds in getting the required material. Most librarians generally follow this procedure in the beginning.

The third method is that of sending the request to all known libraries at one and the same time.

The first procedure is undoubtedly the most satisfactory. The proper source for the requirement of a document must be ascertained with the help of directories, bibliographies, catalogues etc., before a request is made.

PROBLEMS

There are numerous difficulties in implementing this scheme successfully at the national level.

The inadequacy of reference tools such as directories, bibliographies, catalogues is the first and foremost difficulty to be noted in this juncture. These materials assist the librarian as well as the scholars in locating a document without trial and error or random method. These tools facilitate the service exceedingly well.

Another problem we face now-a-days in lending books is that there is no proper uniformity in lending and borrowing the books on an inter-library loan basis. Different practices are followed by various libraries which create unnecessary delay and trouble in getting the required material within a reasonable time, and this causes an unnecessary burden on the scholars in pursuit of their knowledge.

Since India is a vast country, an effective inter-library loan service is restricted by the distance between any two well equipped libraries. Immediate supply of material is not always possible.

In view of the above problems a liberal and uniform policy should be followed to facilitate an inter-library loan service. Each library should be prompt to help another.

RULES FOR INTER-LIBRARY LOAN

In the light of the above few major problems, the University Grants Commission has recommended the following set of rules for inter-library loan.

- (1) The libraries in the country should be willing to take part in the scheme for Inter-library loan.
- (2) Normally, materials which cost less than five rupees and are available for purchase, should not be requisitioned on Inter-library loan.
- (3) The lending libraries may refuse to send any material which is rare.
- (4) The lending libraries may delay a loan, till the demand from its own readers is satisfied.
- (5) The borrowing library should pay the to and fro charges.
- (6) The borrowing library should make good any loss or damage to the reading material while in transit or in its charge.
- (7) The borrowing library should conform to such other conditions as may be imposed by the lending library, for example,
 - “The book should not be lent out of the premises of the borrowing library”; or
 - “The number of readers who use the books should be reported;” or
 - “The book should be returned before a specified date or immediately on demand”.

MADURAI UNIVERSITY LIBRARY

Madurai University Library offers its services to the reading public on all days from 8 a.m. to 8 p.m. This library gives much importance to reference service to the readers who seek immediate reference on any subject either through person or phone. Moreover it assists research scholars in finding the required materials. It provides a microfilm unit through which any back issue of periodical, business record, Ph.D. dissertations and many unpublished and mimeographed research reports can be reduced to forty to sixty times in the area of each page when it is photographed on standard 35 m.m. film. This micro unit helps the library in adding a great number of rarer materials to the collection and helps also the scholars by making available microfilm strips of rare materials, translations

etc., from INSDOC. Further the staff of the technical section are always willing to help and are helping the research scholars, University departments etc., in their bibliographical and indexing work relating to their theses and articles.

In addition to all these valuable services, this Library gives special attention to the research scholars and University departments in procuring Documents on demand from other libraries all over India and abroad within a reasonable time. In getting the required materials for the research work of the Madurai University, other librarians of the various University Libraries are also co-operating with us in lending the required materials without any hesitation or delay.

The following statistical information proves the way in which this library helps the research scholars and departments in their research projects by providing materials to them within a reasonable time through the Inter-library Loan.

No.	Title of the book or Journal	Total of books lent	From whom it is borrowed	To whom it is lent
1	A thesis on Mathematics	1	Yale University	Maths. Dept. Madurai University
2	High resolution nuclear magnetic resonance	2	American College, Madurai	Physics Dept.
3	Corps Locaux	1	Punjab University Library	Maths. Dept.
4	Journal of fisheries Research board of Canada	9	Director, Central Marine Fisheries, Mandapam Camp	Zoology Dept.
5	The origin and history of the Bengal Language	1	Decan College, Poona	Vice-Chancellor, Madurai University
6	South Indian Palaeography	1	-do.-	-do.-
7	Jesuits in Malabars	1	University Library, Madras	Tamil Dept.
8	Problems of marketing of farm products in Maharashtra	1	University Library, Bombay	Economics Dept.

CONCLUSION

A lot of money is being spent right now in India to bridge the technological gap between our country and the West. To ensure success the needs of the research scholars and educationists are to be fully satisfied by providing the desired materials through this simple devise of Inter-library exchange methods. Realising the importance of Inter-library loans, we must not be contented with mere talk but should take positive and concrete steps in giving a real shape to this system. If a uniform policy as recommended by the University Grants Commission is followed by all the libraries at the national level, it will be an asset to all the research workers and educationists by paving the way for the scientific and technological progress of the country.

—: O :—

O, let my books be then the eloquence
And dumb presagers of my speaking breast ;
Who plead for love and look for recompense
More than that tongue that more hath more express'd

SHAKESPEARE

SONNET XXIII

The Library Scene in the Madurai University and its Affiliated Colleges

BY
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Books - good books at the right time and in sufficient number are the prerequisite of an educational institution worth its name. University education in India and elsewhere lays great stress on the importance of providing the Colleges and Universities with adequate library services. The end of all librarianship is to bring books and readers together. These are the three standards with which this study attempts to describe the library scene in the Madurai University and its affiliated colleges. The findings are varied with one extreme showing total inadequacy and the other with facilities far more satisfactory.

The present library of the Madurai University was opened in December 1957, as an extension of the Madras University Library. At a time when capital cost on libraries is raising to an unprecedented height the Library has built up an appreciable collection of 35,000 volumes within a short span of 10 years. Yet, compared with its counterparts spread across the country the Madurai University Library has not passed its stage of infancy.

The book budget of the University Library during the last ten years has registered a steady increase from a bare ten thousand rupees in 1958 to Rs. 1,31,000 in 1968. Viewed against the functional basis the current budget is sufficient, for it meets the requirements of seven departments. However the per capita approach (vide discussion under colleges) to determine the quantum of annual finance would indicate the need for more money. The non-recurring grant of the University Grant Commission, its appropriation spread over the plan periods, helps to acquire initial reference collection and back runs of learned periodicals.

A continuing policy of acquisition based on the twin principle of economy and relevance to the academic programme of the university is maintained. Though the decision on what should be procured is the responsibility of the departments, the Librarian and his staff are in a position to foresee the requirements of the teaching faculty.

The Library receives notification by way of publishers' catalogues of about 50,000 new titles a year, a third of world's production. Besides, national bibliographies and book reviews are scanned through. The Librarian, in consultation with the teaching staff arrives at the information requirements of each department. The selection and acquisition is a continuous programme aimed at the helpful utilisation of the book budget. The average influx to the library stack is calculated to be three hundred books a month. Gifts from foreign cultural missions and information centres have accounted for 12% of the total collection.

The need for a set of scientific journals is widely recognised, for modern research is heavily dependent on the intercommunication of new findings in the journals, proceedings and pamphlets published by societies. Every year the allocation of funds for journals is proportionately increased and kept at 35% of the total budget. During the financial year 1967—68 a total sum of Rs. 40,000/- was spent on subscribing to 222 journals.

The processing of books in the Technical Section is done in a routine which is streamlined to ensure maximum efficiency. The challenge posed by the constant increase in book stock and the subsequent problems of maintenance is met by newer methods. The new books, after being classified and catalogued, find their place in the stack room within a fortnight. Bibliographical reference service through phone and in person, a periodical *News Letter*, weekly notification of latest additions in the *Sunday Standard*, preparation of bibliographical lists on demand and the microfilm documentation are some of the specialised services the Library is engaged in.

A cursory review of the membership roll and the issue statistics of the University Library shows wide diversities in the reading habits of the

intelligentia in Madurai. The local reading-public who are not directly connected with education or teaching constitute half the total members of 1216, while the students form the single largest group totaling 30%. Of the total student members the majority is from the professional colleges. The former demand light literature for recreational reading while the latter show a decided preference for text books. The research scholars and the teaching staff of the University form the next largest group whose literature requirements are always at research level. Of the 250 books issued on an average per day, half the books are on literature and two thirds of the rest deal with humanities. The demand for scientific information, though less conspicuous, is steadily growing.

Coming to the library scene in the affiliated colleges, wide variations exist in the nature and the extent of the library service to their students. Information on facilities available in the college libraries was collected through a questionnaire. The questionnaire was designed to elicit information on the adequacy of library services in proportion to the student population. The response (60%) was not encouraging. Out of the total of 63 colleges 12 have readily responded; 29 colleges moved into action after a reminder and the remaining 22 colleges, roughly a third of the total, remained silent in spite of a second and a third request. (vide table).

The per capita approach to the library budget of a college, according to the Indian standards prescribed by Dr. S. R. Ranganathan is Rs. 15/- per student plus Rs. 200/- per teacher.* An ideal book budget on the above lines for an undergraduate library serving 1000 students and 50 teachers would be Rs. 25,000 a year. (The devaluation of the rupee announced after the evolution of the above per capita approach would plead for a higher rate). Of the total of 63 colleges that returned the questionnaire the book budget of 33 colleges fall far short of this requirement. Objective determination of funds for books either on a functional basis or a per capita approach is not found in as many as 25 colleges where the regrettable standard is a budget of Rs. 10,000 or below.

The book stock of all the new colleges are found to be neither comprehensive nor adequate in proportion to the student roll. Contrary to the recommendation of the U. G. C. Library Committee 10 colleges have no separate text book collection; in 21 colleges the number of current subscriptions to journals is pathetically small. This is the prevailing scene in almost all the newly started colleges where there is hardly anything like a library. The libraries in four teachers training

* Report of the Library Committee of the University Grants Commission, New Delhi 1965.

Colleges (the other three colleges did not return the questionnaire) are ill equipped and improvised in terms of a basic collection, finance, space and staff. Education, as a subject, is probably the most neglected curriculum as far as library facilities are concerned.

Keeping books under a closed access is a Victorian tradition that may increase the life-expectancy of a book as a physical entity. But it will defeat the very purpose for which the books are collected and shelved under the name of a library, whereas open access, though with a certain risk of loss, has come to be the norm of modern librarianship. Free access to books by students is denied in 26 colleges. In the words of the U. G. C. Library Committee it is an "anachronism to deny open access and to make the reader wait on the other side of the barrier till the book could be found from the locked cup-boards". The colleges, where open access is the order, have successfully widened the scope for library-centered-self-education and this can be seen by matching the academic distinction (in the examination) achieved by individual colleges.

The status and salary given to the Librarians in the colleges is the most distressing feature. The old, die-hard tradition of appointing clerical librarians and lecturer-in-charge Librarians is still in vogue. As many as 10 colleges have no full time librarians. In the total of 31 colleges that have a librarian on their pay roll four librarians are unqualified; 21 college libraries are run by do-it-all-librarians without any clerical assistance. Only in four colleges are the qualified librarians given a status comparable with that of their teaching staff. All the remaining 23 colleges, regrettably enough, adopt a varying pay scales that are not in keeping with the spirit of U. G. C.'s recommendations.

The library picture of the older colleges, with years of tradition behind them, and of the professional colleges, is very encouraging because the student-book ratio is high. Supported by an adequate and realistic budget, they have an extensive collection shelved in spacious buildings. They place no barrier between their students and books, and they confer academic status on their librarians.

The needs of the students of the Madurai University are being modified by changes in the curriculum. With the introduction of new courses of study the students are expected to read on a much wider scale. Libraries, in this context, must play a major role. The success of the University's academic programme is largely dependent on the effective upkeep of libraries. An efficient library system, based on the principle of cooperation among the affiliated colleges and the University is the need of the hour. The University's recent decision to recognise the college librarians on a par with the teaching staff is the first step in the right direction.

TABLE SHOWING THE LIBRARY SCENE OF THE AFFILIATED COLLEGES
IN THE MADURAI UNIVERSITY

Sl. No.	Name of the Library	Total No. of students	Total holdings			Text book Collection	Annual budget for books	Annual issues		Closed or open access	Librarian qualification and salary
			Books	Periodicals	Current Subscriptions			Students	Staff		
1	2	3	4	5	6	7	8	9			
Rs.											
1.	Aditanar College, Tiruchendur.	332	3,444	29	47	Yes	7,000	1,533	995	Open access system	—
2.	Agricultural College, Yanamalai, Madurai.	224	3,000	10	150	Yes	53,000	2,000	700	Open access	—
3.	Alagappa Chettiar Training College, Karaikudi.	100	5,128	200	12	Yes	1,900	1,800	450	Closed access	S. S. L. C. Certificate in Lib. Sc., 90-4-110-3-140.
4.	Alagappa College, Karaikudi.	1,717	26,580	—	65	Yes	15,960	19,633	2,135	Open access to P. G. students	B. Com. D. L. Sc. 225-10-275-10-350

5. Alagappa College of Engineering & Technology, Karaikudi.	833	10,853	1,250	60	Yes	16,000	10,000	3,000	Closed access	B.Com, D.L.Sc., 225-10-275-15-350
6. Alagappa College of Physical Education, Karaikudi.	208	1,756	120	13	Yes	2,000	1,200	225	Closed access	—
7. American College, Madurai.	1,531	27,832	2,740	66	Yes	8,080	14,918	2,315	Open access	M.A., Cert. in Lib. Sc., 400-25-700
8. Annammal Training College for Women Tuticorin.										
9. Arumugam Pillai Seethai Ammal College, Tirupattur.	789	2,303	10	10	Yes	9,480	4,750	656	Closed access	B. Com. B. Lib. Sc., 200-10-300
10. Ayyanadar Janaki Ammal College, Sivakasi.										
11. Causanel College, Kallikulam.										
12. Chatanatha Karayalar College Shencottah.										

Sl. No.	Name of the library	Total No. of students	Total holdings		Text book Collec- tions	Annual budget for books	Annual issues		Closed or open access	Librarian qualification and salary
			Books	Periodi- cals			Students	Staff		
1	2	3		4	5	6	7		8	9
Rs.										
13.	Christian College, Martandam.	1,298	3,586	—	29	Yes	13,030	6,500	3,000	Closed access M.A., D.L.Sc., 200-300
14.	Devikumari Women's College, Kuzhithurai.	369	2,080	5	6	Yes	5,000	1,000	800	Closed access B.Sc., B. Lib. Science., 200-10-300
15.	Fatima College, Madurai.									
16.	Gandhigram Teachers' Training College, Gandhigram.									
17.	Govt. Arts College for Women, Dindigul.									
18.	G. T. N. Arts College, Dindigul.	670	4,339	—	—	—	10,000	6,000	1,200	Open to final students B. Com., B. Lib. Sc., 200-10-300

19. H. K. R. H. College, Uthamapalayam	614	2,400	700	20	Yes	13,500	1,300	400	Semi- closed	—
20. Holy Cross College, Roach Nagar, Nagercoil										
21. Kamaraj College, Tuticorin	327	2,761	—	16	—	5,000	753	571	Open access	B.A., D.L.Sc., 225-10-275- 15-350
22. K. G. S. Arts College, Srivaikuntam										
23. Lady Doak College, Madurai	705	19,070	420	40	Yes	6,000	6,000	2,000	Open access	B.A., D.L.Sc., 300-25-600
24. Lakshimpuram College of Arts and Science, Neyyoor	507	1,691	—	20	Yes	5,000	9,600	1,920	Closed access	B.Sc., B.Lib. Sc. 225-10- 275-15-350
25. Madura College, Madurai	2,098	25,689	750	78	Yes	17,957	18,000	2,500	Closed access	B.A., B.Lib. Sc. 300-25-600
26. Madurai Medical College, Madurai	1,389	13,060	4,863	170	Yes	60,000	52,982	2,257	Open access	B.Sc., B.Lib. Sc. 180-10-300

Sl. No.	Name of the students	Total No. of students	Total holdings		Text book Collec- tions	Annual budget for books	Annual issues		Closed or open access	Librarian qualification and salary
			Books	Periodi- cals			Students	Staff		
1	2	3		4	5	6	7		8	9
Rs.										
27.	M. D. T. Hindu College, Tirunelveli									
28.	Meenakshi Govt. College for women, Madurai	613	3,283	23	—	4,200	1,700	1,200	Closed access	—
29.	Nazareth- Margoschis College, Pillaiyamanai	126	1,387	—	—	—	—	176	Closed access	Principal is in-charge
30.	N. V. K. S. D. Teachers' College, Attoor, Martandam									
31.	Palaniandavar Arts College, Palani	1,049	6,807	13	—	Yes	21,000	8,000	6,700	Closed access
										B.A., B.Lib. Sc. 225-10-275-15-350

32. Palaniandavar College of Indian Culture, Palani	58	4,083	140	37	Yes	2,000	2,700	820	Closed access	B.A., D.L.Sc., 225-10-275- 15-375
33. Painthamizh Kalloori, Dindigul										
34. Paramakalyani College, Alwarkurichi										
35. Parasakthi College for Women, Courtallam	420	3,650	—	—	—	8,000	800	500	Open access	B.Lib.Sc. 225-10-275-15
36. Pioneer Kumarasamy College, Nagercoil	291	1,200	—	16	—	10,000	3,000	450	Closed access	B.Lib.Sc. 225-10
37. Pope's College, Sawyerpuram	657	6,200	145	61	—	7,000	6,000	1,200	Open access	B.A., B.T.B.L. Sc. 225-10-
38. Ramasamy Tamil College, Karaikudi									to staff	275-15-360
39. R. D. M. College, Sivaganga	1,018	9,654	140	65	Yes	3,500	6,049	2,373	Open access	B.A., Cert. in L.Sc. 140-10+ D.A.

Sl. No.	Name of the students	Total No. of students	Total holdings		Text book Collections	Annual budget for books	Annual issues		Closed or open access	Librarian qualification and salary
			Books	Periodicals			Students	Staff		
1	2	3	4	5	6	7	8	9		
					Rs.					
40.	Sarah Tucker College, Palayamkottai	1,036	13,332	—	22	Yes	13,400	4,507	998	Open access B.Sc., Dip. Lib. Sc., 200 + D.A.
41.	Saraswathi Narayanan College, Madurai	321	2,002	—	25	Yes	10,000	8,000	600	Closed access —
42.	Scott Christian College, Nagercoil	1,672	28,444	—	70	Yes	14,000	10,505	8,364	Closed access B.A.B.Lib. Sc. 225-10-25
43.	Seethalakshmi Achi College, Pallattur.									
44.	Senthamil College, Madurai									
45.	Sethupathi Govt., Arts College, Ramanathapuram	368	2,114	—	17	—	5,000	2,800	548	Closed access Inter. Certificate in Lib. 90-4-110-3-140

46.	Sourashtra College, Madurai	347	2,130	—	19	—	6,844	2,168	932	Open access	B.Sc., B.Lib.Sc. 225-10-275- 15-350
47.	S. T. Hindu College, Nagercoil										
48.	St. Ignatius Training College, Palayamkottai										
49.	St. John's College, Palayamkottai										
50.	St. Mary's College, Tuticorin										
51.	St. Xavier's College, Palayamkottai	1,403	20,948	1,176	36	Yes	6,000	6,489	1,728		
52.	St. Xavier's Teachers' Training College, Palayamkottai	80	3,468	460	10	—	1,000	3,000	2,200	Closed access	
53.	Thiagarajar College, Madurai	1,666	22,673	690	90	Yes	20,060	16,700	2,500	Open access	M.A., B.L.Sc. 225-10

Sl. No.	Name of the students	Total No. of students	Total holdings		Text books collection	Annual budget for books	Annual issues		Closed or open access	Librarian or qualification and salary
			Books	Periodicals			Student	Staff		
1	2	3	4	5	6	7	8	9		
Rs.										
54.	Thiagarajar College of Engg., Madurai	1,041	15,063	464	102	Yes	30,000	21,494	4,095	Open B.A., D.L.Sc., access 225-10-275-15-350
55.	Thiagarajar College of Preceptors, Madurai	120	3,889	239	35	Yes	850	2,603	304	Open B.A., B.L.Sc. access 200-10-300
56.	Tirunelveli Medical College, Tirunelveli	147	1,200	1,600	—	Yes	1,98,000	—	250	Closed access
57.	Vellaichami Nadar College, Madurai	704	2,542	52	27	Yes	5,000	2,154	1,400	Closed access B.Com., B.L.Sc., 200-10-300
58.	Venkatasamy Naidu College, Kovilpatti	462	2,872	986	32	Yes	21,283	2,086	1,010	Closed access B.Com., B.L.Sc., 200-10-300

59.	V.H.N. Senthilkumara Nadar College, Virudhunagar	1,955	21,006	582	105	Yes	20,000	17,828	5,371	Open access to staff and P.G. Students M.A., D.L.S., 300-25-600
60.	Vivekananda College, Agasteeswaram									
61.	V.O. Chidambaram Teachers' College, Tuticorin	130	4,200	1,100	110	Yes	8,000	3,005	735	Closed access
62.	V.O.C. College, Tuticorin									
63.	V.V. Vanniaperumal College for Women, Virudhunagar.	497	3,810	22	17	Yes	7,100	5,987	1,237	Open access B.Sc., B.L.Sc 225-10-275- 15-350

The University and The Development of Human Resource

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1. Human Resource

11. NATION'S ASSET

Human resource is a nation's asset. It is its potential power for progress. The intellectual component of human resource is the most precious. It has to be carefully conserved, consciously developed and adequately utilised. For a developing society such as that in India, this is a matter of vital concern.

12. BASIS OF DEVELOPMENT

The primary bases for the development of intellectual resource are education and research. The two are complimentary to each other.

13. INDIAN VIEW OF EDUCATION

Education, in its broad sense, is concerned with the development of the individual's ability to cultivate and develop the fields of knowledge. It includes all the ways in which one person or group of persons may deliberately influence the behaviour of another person or group of persons. Behaviour may include knowledge, skill, habit, value, and attitude.

According to an Indian tradition there are four stages in the education of the individual. In the first stage he learns from his teacher, from his books, and from his environment. In the second stage he lives what he has learnt. In the third stage he meditates upon his experiences and what he has learnt and tries to extend the field of knowledge in which he has specialised. In the fourth stage he teaches others. This is a test of his understanding of the subjects; it is a means of sharing his knowledge with others and thereby facilitate the further cultivation of the field of knowledge; it is a social obligation; and it is his contribution to the advancement of society. Education, therefore, involves the three elements: learning, teaching and research.

14. SCOPE OF THE PAPER

In this paper the development and trend of education and scientific research in Indian universities in the post-Independence period are briefly discussed.

2. Change in Objectives of Education

21. BEFORE INDEPENDENCE

At the beginning of the present century, four universities were functioning in the country; and by the first quarter of the century four more were established. They were primarily examining and degree-awarding bodies. The Indian society having been in a state of cultural exhaustion for a few centuries, could not avail of higher education as a means of social progress. With a ten percent literacy, only the top centile of the community considered it necessary and found the facility to equip themselves with a university education. Barring the few men of genius, the majority sought a university education as a means of equipping oneself for the civil service. The objectives of higher education in the country were indeed limited. In many a case, therefore, whether it was for equipping oneself for the higher echelons of the civil service or to taste the 'real stuff' of higher education, the opportunity and facility could be found only outside the country.

22. AFTER INDEPENDENCE

After Independence, the particular pattern of society that India adopted as her goal, placed education in a new perspective. It became not merely an instrument to maintain the hard-won political freedom, important though that was; for, concomitant with and supporting this purpose, new social pressures were emerging. In this context, the spectrum of objectives of education widened. It was seen to be the basis of progress of a 'free' society at all levels and in all its phases. To hold our heads high, to march shoulder to shoulder with other nations as partners in progress, and to make our distinctive contribution to the welfare of mankind, education was recognised as the foundation to build on.

3. Expansion Phase

31. INCREASE IN NUMBER

The broad-based objectives of education in the awakened Indian society and the broad policies necessary for their achievement were built into and flowed from the Indian Constitution. The implementation of the directives to raise literacy to a higher level in a short time led to a considerable expansion of educational facility at all levels, in the post-Independence period. It will be seen from Table 1 that the number of institutions of higher education in the 18-year period from 1950 to 1967 is nearly double that in the 93-year period from 1857-1949 of the pre-Independence era. The data in Tables 2 and 3 show the increase in the number of higher educational institutions, students, teachers, and expenditure since 1950.

311 Table 1. Institutions of Higher Education.

S.N.	Period	Number of			Total
		Univer- sities	Institutions deemed Universities (UGC Act 1956)	Institutions of national importance (after 1956)	
1	1857—99	4	—	—	4
2	1900—24	8	—	—	8
3	1925—49	14	—	—	14
4	1950—67	31	7	8	46
	Total	57	7	8	72

312 Table 2. Post-Independence Expansion

S.N.	Particulars	Year			
		1950-51	1960-61	1962-63	1964-65 (Target)
1	Universities ...	27	45	55	58
2	Boards of Education ...	7	13	13	15
3	Research Institutes ...	18	41	44	50
4	Special education colleges ...	92	208	257	300
5	Professional colleges ...	208	832	1,077	1,200
6	Arts and Science colleges...	498	1,039	1,200	14,000
7	N. of students on rolls ...	403,500	986,000	1,162,000	1,528,000
8	N. of teachers ...	24,400	62,240	75,130	100,000
9	Direct expenditure ... (in million Rs.)	176·8	567·1	740·0	800·0

313 Table 3. Technical Education.

Particulars		1951	1961	1964
Institutions				
Degree ...		53	111	131
Diploma ...		89	209	264
Outturn				
Degree ...		2,693	7,026	9,456
Diploma ...		2,626	10,349	15,202

32 INCREASE IN VARIETY

With the extension of educational facilities to all strata of society not only has the number of persons admitted to the different stages of education increased rapidly, but they presented a cultural background, IQ, educability etc., that varied over a wide range at each stage. This is natural.

4. Some Problems of Sudden Expansion

Since we have started late, our pace has to be considerably accelerated to catch up with the educationally advanced nations. As a large number and variety of raw materials to be handled the problems are more complex. In the hurry, we may make mistakes, which can retard the progress considerably. Some of the problems of higher education in the country may be caused by one or more factors such as the following :

1. The facility for the adequate utilisation of the manpower – particularly the skilled, trained, and intellectual manpower – has to be carefully planned. The provisions in this regard have not always been satisfactory ;

2. Maintenance of the teacher-pupil ratio, at each stage of education, within the limits prescribed by sound theory and practice of education. The sudden expansion in student enrolment is posing problems ;

3. Good teachers in adequate number have to be made available, for each stage of education. This has been a ever-continuing problem ;

4. Keeping up with the developments in the universe of subjects particularly for a developing country is a matter of great concern. The advances in science and technology in particular are taking place today at a much more accelerated pace than what it was even a decade ago ; and

5. Keeping up with the changing requirements of the society while at the same time laying a sound foundation for education on the basis of whatever is seminal and lasting.

5 Reorientation

51. TEACHING TECHNIQUES

Some of the problems mentioned in the preceding section would call for a change in the approach to achieving our educational goals. For instance, a change from the classroom lecturer-centered text-book-centered teaching method to the more integrated library-centred method should prove helpful. It would be beneficial both to the pupil as well as to the teacher.

Different teaching techniques such as the discussion technique, project technique, colloquium technique, clinical technique, field experience and practical work, and combination of two or more of these should be experimented upon in the teaching of different subjects at different stages. Some may prove more helpful than the others in a particular context.

52. RESEARCH BY TEACHER

The teacher must keep up with the developments in his field of specialisation. Otherwise, only stale knowledge will be passed on to the student. It is not, however, sufficient to read about the advances. It is particularly important for the teacher in the graduate and post-graduate courses to engage himself continuously in research in his field of specialisation. Teaching and research go hand-in-hand. Without such an integrated approach, the teacher and the pupils will find themselves far behind the wave-front of knowledge and quite unprepared to make their contribution to their fields of specialisation, and to the advancement of society.

53. ROLE OF LIBRARY

In the integrated approach, the library and its services will be the base on which the superstructure of education will be built up. As a result, the opportunity for the integral development of the individual and of the community as a whole, will be better and the achievement of the social goals of education quicker and more economical. A number of documents on these aspects of education are available. Therefore, they are not dealt with in this article.

It may, however, be useful to examine briefly the development and the trend of research in Indian universities. We shall largely confine ourselves to the research in the natural sciences during the post-Independence period.

6. Research

In Sec. 13 it was indicated that Indian tradition in education includes research. Also in Sec. 52 the necessity for the teacher to engage himself in research has been pointed out. In the succeeding sections additional factors are mentioned to support that research is essential for the development of human resources.

61. SOCIAL PRESSURE

611. POPULATION PRESSURE

Each one of us is experiencing the effect of social pressure in the form of population pressure. This pressure is expected to increase, and not decrease, in the years to come. Natural resources are inadequately and unevenly distributed with respect to population concentration in different parts of the world. While such a prospect of the future is rather foreboding, man has faith that he will be able to feed, clothe, shelter and transport the teeming millions. He even hopes to make life more comfortable than it is today. He bases his hopes and calculations on the past achievements of science and technology. He expects to convert near-natural and artificial commodities into consumable commodities.

612. DEMANDS OF PRODUCTIVITY

Productivity demands efficient utilisation of all kinds of resources — principally human resources, material resources, and the thought resources of science and technology. Human resources we have in adequate measure but they have to be more efficiently utilised. In material resources we have to harness the available and science and technology can provide more. Advance of technology, in turn, depends on applied research. The basis for applied research is fundamental research.

Research has then emerged as a decisive force affecting, if not controlling, the advancement of society. Developing countries are investing increasingly large sums of money in research and development. These social goals place a great responsibility on the institutions of higher education in developing the research potential. The research personnel required in the research laboratories, industrial undertakings, and teaching departments have to be supplied by them.

62. TRAINING GROUND IN RESEARCH

The university is an agency to spot out research talent. In fact, it has to produce nearly all the research workers of the country. Therefore, the quality of research done in the country will depend to a very large extent on the quality of the research done and the training in research given in the universities. To understand and to do research, it has to be experienced. Mere reading on how to do research is of little practical use. No amount of instruction on how to do research will either be of much avail. At best, the teacher can only lift the curtain, as it were, so that the student may see beyond and get inspiration from the challenge of the uncultivated terrain. He may also be guided in the different kinds of approaches to the different kinds of problems so that he does not waste away time and energy on trivialities. Research involves, in general, the sensing of problems, assigning priorities to the different problems to be solved on the basis of the context, identifying the data to be collected, learning the methodology and applying it for the collection of data, organising the data so as to facilitate the finding of correlation among them, learning about and applying the relevant mathematical, statistical, and other techniques for such correlation work, making inferences and formulating guiding principles, establishing models on the basis of the principles, and testing the helpfulness of the models through application to different situations. Further, research is not complete until the work is communicated to the peers in the field. Such communication has heuristic value.

Most of the leaders and decision-makers in nearly all walks of life and advisers on national scientific policy are now chosen from university trained persons. Therefore, an important task of the university is to impart to these potential leaders a scientific attitude in the performance of a task.

In several countries, the university undertakes some part of the total national research effort. The research personnel in the university also provide consultative service to other organisations, including the Government.

The recent Indian Education Commission has also made other specific recommendations in respect of research in the universities.

621. USE OF LIBRARY

In the different stages of research work the use of documented information is obvious. In fact, equipping oneself with the ability to make use of the available information is an important feature in learning to do research. The research worker's productivity when he is to do research later in research laboratory, industry etc will be greater if he acquires the ability to use the library and its services during his university career itself.

The Library Committee of the UGC has detailed the functions of the university library and the provisions to be made for the performance of these functions to the satisfaction of the Laws of Library Science, so as to facilitate the achievement of the goals of university education.

7. Trend of Research

71. DEVELOPMENT OF RESEARCH IN INDIAN UNIVERSITIES

The Acts establishing the first three universities namely the universities of Calcutta, Bombay and Madras in 1857 did not contain any provision for research. The universities functioned merely as examining and degree-awarding bodies. The Central enactments of 1904, 1920, the Madras Act (Patro) of 1923, the appointment of the Calcutta University Commission were among the major factors that turned the attention of the universities to the provision of post-graduate studies and research departments. For instance, the Monford Act of 1920 included education in the transferred half of the subjects delegated to the Constituent State themselves. The universities thus came under the care of an Indian Minister. The report of the Calcutta University Commission gave a shake up to the complacent mood of the universities. Some of the Indian ministries of education enacted new university law. The Patro Act of 1923 of Madras included, in addition to the training of persons for the civil service, teaching and research among the objectives of the university. Its pre-amble said : "Whereas it is expedient to provide for advanced work and the promotion of research...". To begin with, research departments were established for the humanities; then came the science departments which required costlier and more elaborate equipment.

72. DATA ON RECENT PROVISION

Tables 4 to 7 give different kinds of data on the provisions for research in India.

721. TABLE 4. EXPENDITURE ON RESEARCH AND DEVELOPMENT IN SOME COUNTRIES

Country	Amount in million Rs.				Approx % of GNP (1962)
	1959	1961	1964	1966	
India	263	483	600	841	0.3
Japan	3,900 ¹	5,151 ²	8,017	9,450	1.5
U. K.	6,687	8,863 ³			2.2
U. S. A.	83,030	105,300			3.1

¹ for 1960² for 1962-3³ for 1961-2

722. TABLE 5. EXPENDITURE ON UNIVERSITY RESEARCH IN SOME COUNTRIES

Country	Amount in million Rs.	Year	% of Total expenditure on Research
India	200	1963-4	33.0
Japan	1,623	1964	20.0
U. K.	443	1961-2	5.0
U. S. A.	9,000	1961	8.5

723. TABLE 6. ENROLEMENT IN UNIVERSITIES AND COLLEGES IN INDIA

Year	Total enrolment (x 1000)	No. of persons enrolled for scientific research	$\frac{c \times 100}{b}$	Per capital expenditure on libraries in Rs.
a	b	c	d	e
1950-1	357.6			11
1955-6	580.2			9
1960-1	999.4	2,200	.23	17
1962-3	1,083.0	2,420	.22	19
1963-4	1,184.7	2,600	.21	24
1966-7	1,520.0	5,000	.33	26

724. TABLE 7. RESEARCH PERSONNEL IN SOME COUNTRIES

Country	No. of research workers (x 100)	Total population in million	Working population 15-64 years in million	$\frac{b \times 100}{c}$	$\frac{b \times 100}{d}$
a	b	c	d	e	f
India	70.0	440.0	245.0	0.02	0.03
Japan	129.0	98.3	60.0	0.13	0.21
U. K.	211.1	53.4	34.8	0.40	0.61
U. S. A.	1,160.0	186.6	111.2	0.62	1.00

73. ASSESSMENT

There is considerable leeway to be made in the provision for research. But, there is no doubt, that there has been an increase in such provisions during the last decade, both in terms of money and manpower. The supporting library service too has been strengthened through the efforts and grants of the University Grants Commission. It is difficult to estimate correctly the value and the productivity of the scientific research either in terms of the work done or in the terms of the utilisation of the results of research. There are many intangible benefits of university research (*See also* Sec. 62).

However, the trend of research and a rough comparison of the achievements can be made on the basis of the number of research papers published. This method of taking census of the papers is not the only method of such assessment. But it appears at present to be a helpful one and demonstrated to be particularly so in comparative studies (5). In respect of research in the universities and colleges there is another factor which makes this method fairly adequate. In developmental and applied research done in the industry and in some research institutions, the objective may be to improve upon or develop a new technique, device or methodology, trouble-shooting, or to produce a new commodity or service. Therefore, the publication of a paper on the work done may not be a necessary part of the programme. On the other hand, in the university, to a very large extent — especially in a country where the university does not undertake much sponsored research — the result of the research may only be a paper. Therefore, a count of the research papers could help in comparative studies.

74. DATA ON RESEARCH PUBLICATIONS

Table 8 in Sec. 741 gives data on the number of papers contributed by Indian scientists and technologists in 1960, 1965 and 1966. The data for 1966 are based on an analysis of the first six issues of the *Indian science abstracts* for 1967. The data for 1965 are based on an article on Indian scientific publications by Rangarao. His analysis is also based on the *Indian science abstracts*. That article should be read for full details (7). The data for 1960 is based on an article by Rajagopalan (6).

741. TABLE 8. NUMBER OF PAPERS

Colon Class N	Subject	Approximate Number of Papers				
		1966			1965	1960
		Univer- sity	Other	Total	Total	Total
A	Natural Sciences (General) ...	5	5	10	7	6
B, BV	Mathematics and Astronomy ...	135	25	160	274	262
C	Physics ...	260	110	370	838	285
E	Chemistry ...	500	220	720	1014	700
G, GX	Biology and Microbiology ...	230	110	340	297	126
H	Geology ...	85	170	255	405	153
I	Botany ...	375	130	505	549	390
K	Zoology ...	210	300	510	497	295
		1800	1070	2870	3881	2217
<i>Applied Sciences</i>						
D	Engineering ...	120	250	370	770	602
F	Chemical Technology ...	90	250	340	444	664
HX	Mining ...	25	85	110	} 1497	5
J, JX	Agriculture and Forestry ...	450	875	1325		612
KX	Animal Husbandry ...	100	35	135	...	250
KZ	Medical Sciences ...	2000	950	2950	2840	1950
M	Useful Arts	200	200	319	125
		2785	2645	5430	5870	4208
Grand Total ...		4585	3715	8300	9751*	6425

* 3800 papers came from the universities

75. ANNOTATION

1. There has been a 50 percent increase in the total number of scientific papers published in 1965 over that of 1960.

2. In 1960, the proportion of the articles in the pure sciences and the applied sciences was 34 percent and 66 percent respectively; in 1965 this proportion was 40 per cent and 60 per cent.

3. In 1966, the proportion of the papers in the pure sciences from the universities out of the total number of contributions in the pure sciences was about 63 per cent; the proportion of the papers in applied sciences out of the total number of contributions in the applied sciences, was 45 per cent. The share of the university out of the total contributions in 1965 and 1966 were 40 per cent and 55 per cent respectively.

4. From 1960 in 1965, there has been a 70 per cent increase in the number of contribution in the pure sciences; 40 per cent in the applied sciences; and 55 per cent in the two fields taken together. The increase over the 1960 figures in the pure sciences has been mainly in physics, Chemistry, Biology, and Geology.

5. Among the applied sciences, 70 percent of the contributions from the universities has been in the Medical Sciences. These include a number of case studies also. Deducting the number of papers in the Medical Sciences from the total, the contributions in the other applied sciences from the universities will be only 33 per cent of the contributions in the pure sciences.

6. Among the universities, there is a marked difference in their research activity. There are some 70 universities, of which 25 had been in existence earlier to Independence. Of these, 13 universities have each contributed more than 100 publications in 1965. These universities are not the oldest nor have they better financial grants compared with the others (7).

7. In 1965 more than 50 per cent of the contributions by universities came from 8 universities.

8. Conclusion

1. The approach to the planning of education and the methods used in teaching have to be changed, because the objectives of education of the pre-Independence India has changed to those more suitable for a free nation with a socialistic pattern of society as its goal.

2. As this country has started late, considerable leeway has to be made up in a very short period so as to catch up with the educationally advanced countries. We have to keep abreast of the wave-front of knowledge particularly in science and technology in which the progress is extremely rapid. In this context a library-centered-education would be more suitable.

3. There is a growing imbalance between population pressure and the availability of essential commodities and services needed to feed, shelter, clothe and transport the millions. More emphasis is being placed in the provisions for science education and scientific research in order to accelerate the production of the materials and services needed for this purpose. In a recent science policy statement, it has been said that the number of research workers in the country should be doubled and that the expenditure on research should be raised to 1 per cent of the total national income in the next five years. To implement these policies the provision for the training of research workers in the universities must be considerably extended.

4. It is also necessary that the training given and the facilities available for scientific research in the universities are such that on joining an industry or research institution, the research worker is able to become productive with minimum delay.

5. Although through the efforts of the University Grants Commission the per-capita allocation for library service has been increasing over the last decade, the university library funds has to be increased several times more in order to meet the requirements of an expanded programmes of research and training of research workers in the universities.

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Books for instance, would obviously have a greater and deeper influence on those individuals who can take advantage of them. The cinema will not have that effect on them, nor the newspapers. In that sense, book reading is an influence powerful in its quality, provided one knew how to read and what to read. But quantitatively the number of book readers in India is pitifully and woefully small. It makes me sad to think what a small number of people in India read books, judging from sales.

JAWAHARLAL NEHRU

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Standard for a Book: The Tamils' View*


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1 Introduction

 “book”, for the purpose of this paper, is a written message of considerable length meant for public circulation and recorded on materials that are light yet durable enough to afford comparatively easy portability. Its primary purpose is to carry a message between people, depending on the twin qualities of portability and permanence. As such, the book transcends space and time to announce, to expound, and to preserve and transmit knowledge. Books have secured the preservation and dissemination of ideas in every literate society.

2 Position of Tamils

One of the great discoveries in Mohanjadaro and Harappa have established beyond doubt that the Tamil civilization is the oldest and the richest. So, it is but natural to expect a clear account regarding the book-a standard for a book from the writings of the Tamils. For want of time, only two leading works - 1. *Tholkappiyam* of *Tholkappiyar*, and 2. *Nhanuul* of *Pava Nanhthi* - have been taken for scrutiny as they deal elaborately with the problem involved in this paper.

3 View of Tholkappiyar

31. THOLKAPPIYAM

Tholkappiyar who might have lived between 1000 B.C. and 600 B.C. is the author of *Tholkappiyam*. *Tholkappiyam* is a monumental work in Tamil. It deals with the science of language and literature mainly and thereby gives a partial picture of the Tamilaham of its age.

32. WHAT IS A BOOK

This work refers to the book with the word *Nhuul* in *Ceyyulh iyal* chapter of *Porulh athikaram* and gives a vivid description of the soul and subtle body of the same.

“*Nhuul*” is said to be one which has a beginning and an end without being in contradistinction, the content being discussed collectively and separately in an elaborate manner by means of subtle expression”. (Verse 478).

33. FOUR KINDS

They say that *Uraivakai* (prose composition) is of four kinds which are (1) the verse and prose being intermixed, (2) the exposition of the meaning of the verses in an elaborate manner, (3) the imaginary story of continuous narration without traditional background and (4) the tale of wit and humour with moral import. (Verse 485)

34. EVALUATION

From the above, it can be seen that the Tamils view is very specific in designing the content of the book and detailing the different kinds of expression too.

4 Interpolators' View

41. MORE DETAILS

The grammarians and literateurs of the later period are not satisfied with the crisp definitions given regarding the contents of the book by *Tholkappiyar*. They wished to add some more details. To make the additions permanent, they interpolated their ideas into the already existing famous work *Tholkappiyam*.

42. INTERPOLATION

The verses 480 to 484, in *Ceyyulh iyal* and verses 648 to 665 *Marapu iyal* are said to be of that kind of interpolation. But they add some clarification.

5 View of Pavananhthi

51. PAVANANHTHI

On the other hand the Grammarian *Pavananhthi*, who is ascribed to the 13th Century A.D., wishing to end the controversies raging in the field of grammar and to regulate the course according to the need of the time to withstand the onslaught of the foreign influence, rewrote the rules of grammar in his work *Nhannuul*.

52. NHANNUUL

It is generally allowed by all who are at all conversant with Tamil literature that the *Nhannul* is perhaps the most philosophically and logically arranged Grammar of any language in the world.

53. CONTENTS OF A BOOK

In the introductory part of the work, he details vividly the contents of a book. Here the soul and subtle body of the 'Nhuul' is analysed.

If the nature of a classical work be analysed, it must consist of the following (Verse 4) :

1. Its possession of two prefaces (Verses 1 to 3);
2. Its capability of holding a place in one of the three orders of works (Verses 5 to 9);
3. The advantages to be derived by the reader in respect of one or other of the four grand objects of men (Verse 10);
4. Its savouring of one or more of the seven principles of authorship (Verse 11);
5. Its independency of the ten faults to be avoided by every author (Verse 12);
6. Its possession of ten beauties to be courted by every author (Verse 13);
7. Its consistancy with the thirtytwo niceties, the neglect of which affords room for criticism (Verse 14);
8. Its division into Ooththu, Patalam, and Cuuththiram (Verses 16 to 20); and
9. The description of its different commentaries (Verses 21 - 23).

54. TWO PREFACES

The prefaces are of two kinds namely General and Special: (Verse 2)

The General preface is to describe the nature of a work, the character of its author, the manner in which it is to be used, the qualities of the user and his behaviour during learning. (Verse 3).

The Special preface must comprehend the following ; 1 the Name of the Author ; 2 his Mode of writing, 3 the Place in which the work may be used, 4 the Name of the work, 5 its position in the Classics, 6 the Subjects of which it treats, 7 those qualified to understand it, 8 the Advantage to be derived from its perusal, 9 the Time in which a work was written, 10 the Assembly before which it was read and by which it was sanctioned, and 11 the Cause that led to its production. (Verse 47-48)

55. THREE ORDERS

The works are of three orders namely Primary of Original, Supplemental or Secondary and Deductive or Explanatory. (Verse 5-9)

56. FOUR OBJECTS

The ultimate object to be aimed at in every work must be one or other of the following : 1 The development of the path to virtue ; 2 the exhibition of means of procuring wealth ; 3 the display of sources whence wordly felicity may be derived and 4 the making known the road to Heaven (Verse 10)

57. SEVEN PRINCIPLES

The seven principles of authorship are: 1 agreement with ; 2 renunciation of the opinion of others ; 3 a conditional or circumstantial reception of others' tenets in the absence of better authority – a neutrality ; 4 the enunciation of any genuine and novel discovery and the establishment of it by elucidation, proof, or argument, whenever it may recur ; 5 the maintaining one or other of two contrary opinions by ; 6 exposing the fallacies of the opposite party ; and 7 a strict adherence to one's own sentiments (Verse 11)

58. TEN FAULTS

The ten faults to be avoided by every author are: 1. paucity of words ; 2. profuseness of language ; 3. tautology ; 4. inconsistency or contrariety ; 5. the use of inappropriate words ; 6 unintelligibility of expression ; 7 too great simplicity ; 8 the introduction and discussion of irrelevant subjects ; 9 transition from sublimity of style or sentiment into meanness of expression or idea ; and 10rodomontade (Verse 12)

59. TEN BEAUTIES

The beauties to be adopted by authors are: 1. cohesiveness ; 2. perspicuity ; 3. agreeableness of style ; 4. the use of duly authorised words ; 5. melodiousness of numbers ; 6. profundity of thought ; 7. regularity of method ; 8 respect for standard authorities and avoidance of perplexities ; 9. sterling worthiness of subject matter ; and 10 conspicuousness of adduced examples. (Verse 13)

592. THIRTY-TWO NICETIES

Nicety signifies literally that power or capability of the mind whereby it dives into and makes itself acquainted with the nature or connexion of things (Verse 15). There are thirty-two niceties as such, the neglect of which gives room for criticism in every work (Verse 14)

593. OOTHTHU

Ooththu – or the division of a work which is known by this name among the best grammarians – is that in which kindered subjects are placed under the same head, just as pearls of the same description are strung on the same line (Verse 16).

594. PATALAM

That portion of a work which is called *Patalam* contains diverse and various subjects but still branches of one main stem (Verse 17)

595. CUUTHTHIRAM

A Cuuththiram contains as much matter in as few words as possible, and still the force and minuteness of the same is so unaffected thereby, that they appear as clear as the reflection of an object in a mirror. (Verse 18). It is of four methods i. e., 1. Fluviatic 2. Leonine 3. Raratic and 4. Aquiline. (Verse 19). They are of six kinds namely 1. complicate; 2. general; 3. special; 4. individual; 5. synthetical; and 6. exceptional (Verse 20)

596. COMMENTARY

A commentary is to contain fourteen particulars and they are : 1. the text itself; 2. the purpose of the text; 3. its several bearings; 4. the meanings of the individual words of which it is composed; 5. its divisions; 6. illustrative examples; 7. proposals of objections that may be raised against it; 8. answers to these objections; 9. explanatory notes wherever required; 10. analysis of the text; 11. its utmost extent; 12. the determined opinions of the commentator; 13. the advantage to be derived therefrom; and 14. citatory evidence. (Verse 21). This kind of commentary is of two kinds called KaNTikai and Viruththi (Verses 22 and 23)

6 Modern View

61. STANDARDIZATION

Now we are on the threshold of standardization. The necessity for standards in increasing numbers to regulate and coordinate rapid expansion of quality producing units with large scale utilization of indigeneous resources and raw materials and to eliminate waste as completely as possible is keenly felt all round. To achieve this we established the Indian Standards Institution in January, 1947.

62. DOCUMENTATION STANDARDS

The Indian Standard Institution was able to devote attention to the subject of documentation from the very beginning of its career by the setting up of a Documentation Sectional Committee. This was mainly due to the efforts of Dr. S. R. Ranganathan, the National Research Professor in Library Science.

63. ACHIEVEMENTS

The Documentation Sectional Committee has already formulated the following Indian Standards regarding books :

- 1 Is : 790-1956 Specification for general structure of preliminary pages of a book
- 2 Is : 791-1956 Specification for half-title-leaf of a book
- 3 Is : 792-1956 Specification for title-leaf of a book
- 4 Is : 793-1956 Practice for author statement in the title page of a book
- 5 Is : 794-1956 Practice for table of contents.

Another standard has received wide circulation. It is on "Standard Practice for the Presentation of the text of a book or an article in a periodical".

64. INABILITY

On the otherhand it was not possible to formulate so far a standard for creation of work as enunciated by the *Tholkappiyar* and *Pava-Nanhthi*. To be specific it is reported that area of creation of work is not amenable to standardization in the Evolute of Documentation in page 278 of Kaula, P. N. Ed. *Library Science today - Ranganathan Festschrift Vol. 1*.

7 Conclusion

71. GOLDEN AGE

From the above it can be seen that the idea of the Tamils regarding book was so stupendous even 2500 years ago that is during the period of *Tholkappiyar* which is the Golden age of the Tamils.

Even during the later period, the continuity of high thought was maintained upto the period of *Pava-Nanhthi*. That is why he is able to elaborate the ideas given by *Tholkappiyar* into vivid portrayal regarding the contents of a book, the beauties to be adopted, niceties to be considered etc.

72. NEGLECT

But, neglect of its study, the foreign influence in different aspects of life, the uninterrupted changes that took place in the land through the centuries, and last but not the least the lack of self respect in the field of language, literature and culture of their own on the part of the Tamils have made us to see that period with awe and wonder from the degraded position now obtaining among us.

73. HOPE

Now that position is changing definitely though slowly with the dawn of Independence attained in 1947. Only because of this, now we are able to discuss this paper in Madras under the auspices of the *2nd International Conference - Seminar of Tamil Studies*. Let us hope to regain the noble ideas and practise the same for the good of international understanding and peace.

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* Submitted to the Second International conference seminar of Tamil Studies, 1968, Madras.

American Libraries' Book Procurement Programme in India

BY
JOHN C. CRAFT

THE Library of Congress serves as the National Library of the United States. Many Indian scholars and librarians have visited it, utilized its collections for research and some have even worked on its staff. The fact that there is a Field Office of the Library of Congress next to the Shiela Theatre in New Delhi is, perhaps, not so well known. Many who have heard of the American Libraries Book Procurement Center, as this field office is called, do not know what it does. It is hoped that this brief article will help to make the Office better known in India.

The ALBPC, which for the sake of brevity will be used throughout this article to refer to the Field Office, was established in the fall of 1961 to supply Indian publications to selected American research libraries. For some time, American libraries had faced many difficulties in purchasing Indian publications to meet the growing scholarly interest in Indian studies in the United States. By the time information concerning a given publication reached the United States and an order was placed, in many instances, the book was out of print. For works in the various Indian languages, there was the added problem that librarians with a knowledge of Indian languages were difficult, if not impossible, to find in the United States.

The Government of the United States, through the sales of food grains and other products to India for rupee payment under PL-480, had accumulated substantial balances of rupees which exceeded the normal needs of the American Mission in India. There was thus a problem to be solved and a ready solution available. The Congress of the United States appropriated funds to the Library of Congress to set up an office in India which would act as a central acquisition point and, in collaboration with the Library of Congress in Washington, provide central processing and cataloging services. Similar offices have been established in Belgrade, Cairo, Dacca, Djakarta, Karachi, and Tel Aviv.

During the six and one quarter years which the ALBPC has been in existence, over 37,000 book titles have been sent to each of the original participants. Originally there were twelve libraries in the program. In July 1962 six other libraries were added and in July 1967 one more was added making a present total of 19 American libraries receiving comprehensive sets of Indian publications. In addition one library receives only government publications.

Approximately 21,000 titles are published in India each year. The ALBPC acquires about 7,000 or 1/3 of the total number published. The titles acquired are in all the constitutional languages of India and in languages such as Tibetan, Persian, and Arabic which are not included in the Constitution. Each working day the ALBPC processes over 500 kilos of publications. In addition to the books, over 3,700 serial publications including seventy newspapers are received.

In order to help libraries which do not participate in the program to find out about new publications, the ALBPC publishes a monthly *Accessions List, India* which is distributed free of charge to libraries throughout the world. If they wish any of the titles they can order them from a book dealer of their choice.

Almost all of the publications which are received come through various book dealers with whom the ALBPC has contracts. Efforts have been made to divide the purchases among as many dealers as possible. The contracts are generally on a language basis.

The full program as outlined above meets most of the scholarly needs in the United States. It does not meet all the needs, however, as there are other American universities with programs in Indian studies which do not participate in the program. There is also the undergraduate need and the general public interest which deserves to be considered.

In late 1963 a new program was started to supply a highly selected set of Indian English-language books and periodicals to over 300 other American libraries. The libraries selected to participate in this program included public libraries, junior college libraries, college libraries and university libraries. As of March 1968, 44 book titles and 34 periodical titles have been sent to these libraries.

As has been mentioned above, American libraries had faced great difficulties in purchasing Indian publications before the ALBPC was established. It was soon discovered that even operating in India did not mean that all the problems were solved. There are many small publishers who bring out worthwhile books but the tendency is for these publishers to try to sell the copies themselves, thus not making them available to other book sellers. The publications of the Central, State, and Union Territory Governments are also difficult to find out about and to acquire. Each year as the program has become better known, the coverage has increased but there is still room for improvement. Indian libraries are also faced with the same problems.

Being a central acquisition office gives the ALBPC an advantage over a library purchasing a single copy of a book. Since 19 copies of most works are purchased, its dealers have a profit incentive 19 times greater than they have in supplying a single copy. It should be stated in defense of the Indian book dealer that they often supply single copies at a financial loss. The work involved in finding out about a new title, purchasing it from the publisher, and supplying it to a library which expects a 10% discount costs more than the profit left to the dealer. This problem is exaggerated by the fact that most Indian publications have relatively low prices. It takes just as much work and costs a book dealer just as much money to sell a Re. 1.00 book as it does to sell a Rs. 100 book. The gross profit on the Re. 1-00 book will be 30 paise while on the Rs. 100 book it will be Rs. 30-00. If, however, he knows he will sell 19 copies of the Re. 1-00 book his gross profit will be Rs. 5-70.

It was decided that only works published after January 1, 1962, would be purchased. This decision was made for three reasons. First of all, funds were not available to buy all the older publications which were available, and, secondly, the ALBPC had no way of knowing what works the participating libraries already had and to buy older publications would have resulted in a great deal of duplication. We also did not wish to remove from the country scarce or out of print materials that rightfully and properly belonged in the libraries of India. We therefore confined our purchasing to current materials generally available to all who might be interested in them.

Many people ask if all the publications which the ALBPC sends to the United States are ever used and what influence the program has had on American scholarship. This is a difficult question to answer exactly. In any research library, some books may never be used, but the interests of scholars are many and varied and a good research library has to anticipate future demands. There is no doubt, however, that the universities which participate in the program are better able to train the scholars who will go to other universities to teach Indian subjects. In this way, and perhaps more generally through the English-language program referred to above, it is hoped that the ALBPC and centers like it in other countries contribute on a broad basis to the growth of international understanding.

Books, we know,
Are a substantial world, both pure and good :
Round these, with tendrils strong as flesh and blood
Our pastime and our happiness will grow.

WORDSWORTH

POETICAL WORKS PERSONAL TALK


Books have always a secret influence on the understanding ; we cannot at pleasure obliterate ideas : he that reads books of science, though without any desire fixed of improvement, will grow more knowing ; he that entertains himself with moral or religious treatises, will imperceptibly advance in goodness ; the ideas which are often offered to the mind, will at last find a lucky moment when it is disposed to receive them.

SAMUEL JOHNSON

THE ADVENTURER

The Library of 2000 A. D.

BY
GIRJA KUMAR,
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New Delhi-1.)

 new discipline has arisen on the horizon in recent years. It has been given the expressive name of Futuribles. The exponents of futuribles are to be found among natural, physical and social scientists. All of them attempt to predict the future shape of things according to the strictest principles of methodology.

A new book was published recently under the title of *The year 2000: A framework for speculation on the next thirty-three years*, by Herman Kahn and Anthony J. Wiener. The book attempted to foresee the world at the turn of the century. Scientific advances, international relations, social and economic developments come under the purview of the book. The next century will be the age of computer, according to the authors, because the computers will take care of all human requirements except for the thinking faculty. Perhaps the thought processes may also be taken care of by the machine, thus dispensing with the man himself.

The future of the library also came in for some brief discussion by the authors. The local library may be dispensed with because "eventually there will probably be computer consoles in every home, perhaps linked

to public utility computers and permitting each user his private file space in a central computer, for uses such as consulting the Library of Congress”* The proposal is not as far fetched as it may seem to most of us. With the improvements in computer technology possible by factors of thousands to millions in the decade or so, the possibility of providing instant ‘home-delivery’ service to every research scholar is not inconceivable within the next three or four decades.

The system would probably work in the following manner. The home of every research scholar will be linked by direct telephone to a central depository of all research materials in the country. Such a library will have all books, Graphic representation, original articles, book reviews, letters, notes and footnotes fed into the computer. Thus all the human knowledge to be found in a particular country will be recorded in a single computer. The scholar has merely to ring up the central depository which will transmit the necessary information, either books or extracts from them, by telephone-cum-television. The television will print off the relevant information instantaneously. The scholar can thus dispense with the book and the library in the new situation.

Let us take a concrete instance of a scholar who might undertake to write a thesis on the history of the famous Meenakshi temple of Madurai. He need not spend sleepless nights going through the records of Madras Government, archives of the district authorities, temple records, local histories of Madurai district and families traditionally associated with the temple. He has simply to approach the Central repository for South India located, say, in Madras. All the possible references to the temple could be printed off in no time by the computer in the Madras repository and handed over to the scholar. The scholar can thus proceed straight away to write his dissertation. He may save thus 75% of his time as well as be assured of not overlooking any relevant material. We may thus dispense with the library and the book, as well as most of the research scholars. Most of the fun in writing the dissertation lies in devoting considerable amount of time in searching the material. The future generations need not sweat over the collection of data so much.

The name of the late Sir Lewis Namier must be familiar to the students of history. He spent a lifetime studying the lives of the members of the House of Commons during the short span of 1754 to 1790. He compiled the following biographical information about each member of Parliament by wading through the parish records :

Name

Dates

Address

* Kahn, Herman and Wiener, Anthony J. *The 2000 : A framework for speculation on the next thirty-three years*. Macmillan, New York, p. 90.

Constituency
Birth
Parentage
Education
Marriage
Children
Succession to property
Offices held
Professional careers
Honours and title.

The meticulous study of the biographical data resulted in a completely new thinking about the eighteenth-century British history.

Sir Lewis may not have spent more than five to ten per cent of his working time in writing the classic study. The rest of the time must have been devoted to the laborious searching of data. The computer could have saved most of this time for utilization in the completion of several other works by the great master of psychological history.

The saving of time is very crucial in all research work involving original results. The well-known biologist, P. B. Medawar, has calculated that four-fifths of his time had been wasted due to the wrong leads. He has wistfully remarked that he would save this time, if given the chance all over again. These sentiments may best be expressed in his own words: "If I had scientific career over again, knowing from the beginning what I have learned since, I could have done everything I've done in one-fifth of time and this experience is by no means unusual."* Some of the time of Prof. Medawar could have been saved with the help of the computer. It is, however, to be noted that the computer is strong in repetitive operations, but weak in thinking processes. The operations of thought, God be thanked for the same, are still the province of human beings. But, how long!

Our traditional methods of research are positively out-of-date. So are the libraries and librarians who seem to live in the past. The force of circumstance shall make it incumbent equally upon the research scholars and libraries to discover new avenues of approach. Hands of those concerned in the matter are being forced by the knowledge explosion that is overtaking all of us. The knowledge explosion is already upon us and no less frightening than the population explosion about which the politicians and demographers of the world are so much exercised.

* Medawar, P. B. Scientific method. *Listener*, Oct. 12, 1967, p. 454.

The statement of the problem is always the first step in finding solutions to our difficulties. We shall contend ourself in the first instant to illustrate the dimensions of the problem. Only one periodical publication was published in the whole world in the second half of the seventeenth century. The increase in number of periodicals brought out took place in the following manner during the next three hundred years :

Year	No. of periodicals (approximate)
1750	10
1800	100
1850	1,000
1900	10,000
1950	1,00,000

It may be noted in this connection that the number of newspapers and periodical publications published in India during 1966, according to the report of the Registrar of Newspapers, runs into several thousands. It is obvious that the size of libraries must grow multifold before they can hope to cope with the situation.

The dilemma may be posed in another manner, by examining the output of literature in periodicals published in a single discipline, namely, chemistry. *Chemical abstract* is a standard abstracting periodical familiar to the student of chemistry. It contained some 2,15,000 abstracts from about 11,500 journals originating in 100 countries and in fifty-four languages. Thus a chemist who is foolhardy enough to go through the abstract of every single article published in *Chemical abstracts* in a year may find himself behind time in his reading by the time he is through with the previous year's output.

Another interesting way of looking at things is to examine the growing size of libraries. The Yale University Library may be selected as an interesting case study. The book collection of the famous library has grown to 6 million volumes. The total collection at the turn of the century was the manageable figure of 361,000. What about the future shape of the university library on the assumption that it continues to grow at the present rate?" "The Yale library will in 2040, have approximately 200 million volumes, which will occupy over 6,000 miles of shelves. Its card catalog file - if it then has a cardcatalog - will consist of nearly three-quarters of a million catalog drawers, which will themselves occupy not less than eighty acres of floor space. New materials will be coming in at the rate of 12 million volumes a year, and the

cataloging of this new material will require a cataloging staff of over 6,000 persons".* Giagantism is a disease that can kill the university library. It has been seriously suggested by several authorities that the traditional university library will be obsolete by 2000 A. D.

The Yale University Library is only a middle-weight among the giants of the library world. The Lenin Library in Moscow and the Library of Congress are the leaders of the library world. The Library of Congress, for instance, has a stock of 42 million (including 113 million books and 18 million manuscripts) requiring 270 miles of shelving. The library authorities have naturally been concerned with the growing situation and they have already initiated a discussion to devise measures to meet the challenge implicit in the future.

The Library of Congress appointed a committee for automation of the library collections and service to face up to the knowledge explosion. The committee which submitted its report in 1963 made some interesting calculations.

The committee built up a model to comprehend the size of the problem in mathematical terms. The 42 million pieces deposited in the library were said to contain the equivalent of 10^{14} bits of information.* The Committee assumed that each piece in the library contained 100 pages. Each page may be said to have 1,000 words, with 5 characters per word. The total holdings of the library in terms of bits of information will work out in the following manner :

$$\begin{aligned} &42 \text{ million (pieces)} \times 100 \text{ pages (per piece)} \times 1000 \text{ words (per page)} \\ &\quad \times 5 \text{ characters (per word)} = 10^{14} \end{aligned}$$

What needs to be done is to feed 10^{14} bits of information (the holdings of the Library of Congress) into a computer occupying space encompassing less space than the area of an ordinary hall. The computer will retrieve information about any specific subject on command in the twinkling of the eye. Full books, chapters from a book, articles from a periodical or newspapers or a manuscript will be printed off for the reader. The material requested need not be returned to the library. The scholar may not waste his time by presenting himself at the library premises in person. He has only to telephone to the library of 2000 A. D., because his home is connected with the library as part of a larger computer system. All this may seem fantastic today, but it will not seem unreal for so because of the remarkable advances in technology.

* Leimkuhler, Ferdinand F. and Veville, Anthony E. The uncertain future of the library, *John Hopkins magazines* Fall 1967, p. 13.

* A 'bit' is the unit in which information is measured in communication and data processing activities. To encode digitally an average English word requires about 30 bits.

The debate in advanced countries questioning the very foundations of the present organisation of library is a very healthy symptom. There are clear signs of impatience with the libraries due to their inability to meet the demands of research scholars adequately and in time.

The sheer physical size of all major libraries is discouraging to assure friendly and personal service. The book does not seem to be the best vehicle for communication of human knowledge. The schemes of classification and cataloguing techniques are never adequate to answer the specific enquiry. The services at the library are too slow for the comfort of the scholar.

The time lag between the receipt of research material in the library and its availability to the reader is lengthening, in spite of the improvements made in the standards of library services in better libraries. The time factor is very crucial in research in natural and physical sciences because the new discoveries become dated almost as soon as they are announced. The scientists can hardly afford to wait for weeks and months, so that the research materials is processed in the library in the usual leisurely manner. In many scientific disciplines, the book and the periodical have begun to lose its pre-eminence in the field. Reprints are the order of the day. In the field of engineering alone, 32,800 pages of reprint were available as contrasted with 10,000 pages of periodicals during 1966. A complete overhaul of library organisation in advanced countries has become imperative.

Automation of the libraries is the answer. Computer technology has implicit in itself the solutions to the prayer of the librarian. The librarian will then turn into an information scientist. To underscore this fact, there was an announcement in the professional journals about the publication of the Encyclopaedia of librarianship and information science.

The future librarian will be a student of mathematics, logic, linguistics and information science, in addition to his having expertise in the discipline of library science. It may be more appropriate to say that the four disciplines mentioned above will form an integral part of training in library science.

What about the future of library classification? Many cassettes at home and abroad have been pronouncing its premature demise from the house tops. They are bound to be disappointed because the classification, though not in its traditional form, will lie at the root of future organisation of collections and service based upon computer technology. Few persons have grasped the significance of classification in the new scheme of things ruled by automation than Dr. S. R. Ranganathan,

National Professor of Library Science in this country. It is hoped that the organisations and individuals concerned with the development of information science will also turn their attention towards the advanced techniques developed in the theory of library classification in this country and elsewhere.

Pertinent question may be raised about the relevance of the discussion to this country. The broad answer is that like in other walks of life, there is something to be said for cart and computer ages living together in the same time sequence. The failure to adopt ourselves to the latest techniques may result in our moving backwards in relative terms with every step taken forwards. A visiting scientist, asked to comment on the progress of science in India, was said to have remarked that compared with the striking developments in science abroad, the Indians seemed to be travelling backwards. The present-day progress in science was not even adequate to keep up-to-date with the latest developments. Something is thus to be said for adopting the latest advances as in computer technology.

Several specific arguments may also be put forward in support of India applying automation to the library field. Documentation, compilation of union catalogues and the preparation of concordances are a few fields that may be brought under the purview of computer technology. The task of preparation of the definitive editions of the Indian classic may be expedited by applying the latest techniques of information retrieval.

Another field of direct interest to the politicians and educationist alike in this country is the advances in machine translation. It is reasonable to assume that machine translation will be available from all the major languages of the world, obviating the need for learning any other language besides the mother tongue. The integration of this country will become a fact, when we can translate from Hindi to other languages of India and vice versa. Machine translation will become in fact the instrument of integration of this country.

University Libraries in the United States of America*

ON virtually every college campus, the library is one of the central features of the academic landscape. The growth of the university library has paralleled the growth of the university. Harvard University started its library with 370 volumes, the gift of John Harvard for whom the University was named. It now has more than seven million volumes. Any university library normally doubles its collection every seventeen years.

A typical university library was formerly organized with a general reading room, a reserve book room in which books assigned for class reading were kept, rare book rooms for special collections, periodical and newspaper rooms, government documents reading room, and the stacks. A different basis for organization has been gradually evolving since 1940 however. In the university libraries of Brown University at Providence, University of Colorado at Boulder, and University of Nebraska at Lincoln, a new arrangement has been worked out to permit greater utility of library facilities. The improved arrangement provides three basic divisional reading rooms for the humanities, social science, and science. These rooms contain reference and bibliographic guides, journal files, and reserve books so that a student reading in the field of economics, for instance, may find all types of materials on his subject in one place.

In the newer university libraries, it is also customary to have special divisions for preprofessional and premajor students who do not require the resources of a research collection.

* Courtesy: U. S. Information Service, Madras

Most university libraries have large collections of state, federal, local, and county government, and United Nations publications. A special provision of the U. S. law regarding depository collections of government documents specified that "libraries of land-grant colleges and universities shall be federal depositories". At the present time, there are five hundred fifty-six such depositories.

The universities rare book collections are a part of its function of conserving knowledge. Many such collections are begun when the university becomes the beneficiary of a private collection. The extent of such collections depends on the University's research programmes, and the funds it has available to add to such collections.

The acquisition of foreign documents, necessary for advanced studies and research in world affairs, also represents a large part of university collections. Many libraries have exchange agreements with foreign university libraries.

The close integration of the library programme with that of the university may apply not only to university interests upon the immediate campus but to library interests within the community, state and region. Library privileges, as well as lectures, concerts, and special classes are available to the townpeople.

The university library in its relation to the university is considered one of the main centres of instruction, providing motion pictures, film strips, slides, collections and reproductions of paintings. The library has special short classes to familiarize both graduate and undergraduate students with the research and source materials available. It holds lectures and film showings on world affairs, and on technical subjects coincident with the university's programmes. It also works with the university bookstore in providing suggestions for the stimulation of reading. The Library Extension Service is an important division of the university library work.

Cooperation between university libraries is another activity and there are now several cooperative programmes in operation. These include inter-library loans, cooperative and centralized cataloging, surveys of library holdings, and cooperative photographic projects.

International library programmes are carried on through exchange of publications, and international conferences.

A Bibliography of Books and Articles

BY
DR. T. P. MEENAKSHISUNDARAN,
Compiled by
CYRIL ROYAPPA

(Dr. T. P. Meenakshisundaran is an acknowledged writer of great eminence. The range of his scholarship is wide and varied. It covers a variety of fields: language, literature, history and philosophy. His contribution to the Tamil language and literature is singularly unique. The underlying note of all his writings is a sense of grandeur and a unity of form to which the following is only a bibliographical key—Compiler.)

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Compiled by
S. JACOB DEVASIRVATHAM

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Commemoration bibliography of the first 1008 books published by the South India Saiva Siddhanta Works Publishing Society, 1961.

2. BIBLIOGRAPHICAL GUIDES TO INFORMATION ON EXCHANGE FACILITIES

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4. GENERAL BIBLIOGRAPHIES

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Readers encyclopedia : an encyclopedia of world literature and the arts, 1955.

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How to find out : a guide to sources of information for all arranged by the Dewey Decimal Classification, 1963.

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Books that changed the world, 1956.

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Bessie Graham's bookman's manual : a guide to literature, the complete guide to modern and classical literature in prints, with biographical and critical information, 1954.

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Bookman's manual : a guide to literature, 1958.

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Reader's adviser : an annotated guide to the best in print literature, biographies, dictionaries, encyclopedias, bibles, classics, drama, poetry, fiction, science, philosophy, travel history, 1964.

PRAKKEN. *Ed.*

Books in print, 1967 : an author-title series index to the Publishers trade list annual V.1. : Authors, 1967.

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Subject guide to books in print, 1964.

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Bibliography of medieval drama, 1954.

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International bibliography of economics, V. 5, 1958.

—: O :—

But words are things, and a small drop of ink,
Falling, like dew, upon a thought produces
That which makes thousands, perhaps millions think.

BYRON

DONJUAN

Educating the Educated

BY

C. G. VISWANATHAN, F.L.A. (Lond.)
University Librarian (Emeritus)
U. P. Agricultural University
Pantnagar, (Nainital), India.

THE caption of this contribution may seem not only presumptuous, but also a little overbearing. The views and facts presented will prove convincing of the appropriateness of the heading chosen.

The education—the formal education of an individual usually commences at the kindergarten level, passing through nursery, primary, secondary, higher, or university and specialised stages. Normally, an average student may be expected to successfully pass all these courses of instruction, by the time he is 25 years old. Can one state with confidence whether a person at this age of educational attainment be considered to have mastered the entire subject or subjects studied.

The examination—degree oriented education which is prevailing at almost all centres of education and training calls for concentrated study of the fixed ranges of subjects—the select reading material and laboratory experiments too—and leaves little time and initiative for a student, even if he has a longing to know, read, perform and understand something wider, deeper than the set limit of subjects and books.

This is a hard fact which educationists, faculty, librarians, and students – all – would admit with no reservation – so, where from does the real, free and scholastic pursuits commence. It is only when a person is out of the school or university campus, after properly receiving his education that he realises that he has still need for further education.

The *Unesco* in its Manifesto, 1949, has very appropriately stated that “the Public Library : A Living Force for Popular Education”. Librarians have always been in the forefront in shaping and ensuring the progress of community life, both in the past and present. Books and libraries provide a chance, almost freely to every man, woman, and child to develop intellectually, long after one has completed the study, an Information Bureau, a Continuation School, a Training School for Democracy. Libraries of today adopt an active and positive policy and play a dynamic part in the Life of the Nation. In short, one is inclined to believe that the index to the progress and forward march of a Nation can be found in the libraries maintained by it.

The general pattern of library services, all over the civilised world conforms to the categories :

(1) National Libraries, e.g. the British Museum with its specialised divisions; the National Library of India, Calcutta; Bibliotheque Nationale, Paris; the Library of Congress, Washington, and several others in Europe. These are repositories for books, periodicals, manuscripts, and documents relating to their respective countries. These are libraries of deposit under the Copyright Acts. Their collections are for consultation within their premises.

(2) Specialised libraries maintained by the ministries and government departments and Research Institutions, e. g., the Library of the Ministry of Labour, the Planning Commission Library, the Library of the Indian Council of Agricultural Research, the Library of the Indian Institute of Public Administration. These specialised libraries are as a rule wholly maintained by the parent body, and collect material, which has a direct bearing on the programme and functions of the organizations. Ordinarily the use of these specialised libraries is limited to the members of these bodies, but exceptions are liberally made in the interest of research conducted by other centres. Special libraries make a valuable contribution to the total resources available to students, scholars, and researchers. For instance, in the U. K., six hundred such special libraries are members of the *Aslib* (the Association of Special Libraries and Information Bureaux). The *Iaslic* (Indian Association of Special Libraries and Information Centres) has extensive membership of special libraries in this country.

(3) The Public Libraries, e. g., the Delhi Public Library, the Connemara Library, Madras and all other libraries maintained by Local Library Authorities, in the State of Andhra and Madras. These libraries provide for the intellectual, instructional, and recreational reading of the public and usually meet variety of demand and tastes of the public. They also provide a sort of reference service, and a lending service, and make available for consultation newspapers and periodicals of local interest. *A well organised public library service, takes care of children's reading.* A Children's or Junior Library is a normal feature of the public libraries in the U. K. Some times, public libraries are found to have valuable collections on a special subject, such as local History, or on Aesthetic subjects engaged by the local population served by the library. Students pursuing special study of such subjects will find these collections extremely valuable.

(4) The school and college libraries, e. g. The Presidency College Library, Madras; the Library of the Medical College, Madurai; the Central Hindu School Library, Varanasi. Libraries of these institutions are an integral part of the institutions which maintain them. The library service is limited to the students and teachers of the college or school, and the collection of books reflects the courses of instruction provided. These libraries are limited in their scope, resources, very often depend on the *bigger and more comprehensive collection of the University Library.*

(5) *University Libraries, e.g. the University Library, Madras, the Delhi University Library; the Lytton Library, Aligarh Muslim University Library.* The university library has to undertake the functions and duties of all the above categories of libraries. It is a repository of a large variety of reading material - printed books, and non - book material, like handwritten manuscripts, typewritten, recorded, and photographed forms - which has to be acquired organised and preserved irrespective of whether or not every item is being put to current use. "The value of the holdings of a university library is determined not only by their usefulness as instructional tools (teaching aids), but also by their research potential, a factor which it is not by any means easy to assess. As in the case of a special library, the prime obligation for a university library is to the members of the institution of which it forms a part. It has to satisfy the needs of the undergraduate, and must also meet the requirement of the graduate student who is embarking on research, and the much more complex and exacting demands of the mature scholar. Like the public library, the university library runs an extensive loan service, and has to undertake all the administration entailed in such a service. Thus it is seen that the duties which a university library is called upon to perform presuppose a wide range of resources, the employment of high-grade staff, professionally and academically qualified, and a high rate of expenditure".¹

In order to provide instant on the spot service, university libraries adopt a policy of decentralisation of its functions leading to the establishment of sectional libraries in each department more or less autonomous, with the Professor as its head. Sometimes, it is argued that there is dual expenditure by maintaining these sectional libraries. An objective assessment of the real advantages of maintaining such sectional libraries in the department will outweigh the material cost. A large collection of more than a million volume in a university library may not provide the same facility as a small, handy, and selective collection in a sectional library to the specialist.

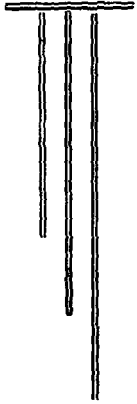
University libraries are not only to satisfy the present needs but they should also look to the future requirements as influenced by the ever expanding frontiers of knowledge. The university library of Madurai University, which is celebrating its Tenth Anniversary, will, it is earnestly hoped, successfully discharge all its responsibilities in the field of higher education, and in course of time, attain the bygone glory of the.....seat of Tamil learning of the Sangam Age.

Books are the legacies that a great genius leaves to mankind, which are delivered down from generation to generation, as presents to the posterity of those who are yet unborn.

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