

Journal of the Madras
Geographical Association.

VI, No. 1. ~~April~~
~~July 1925~~
July 1926.

DL

Ugm 2111, N 26 mg
N 26. 1. 1

196835

THE : : :
MADRAS : : :
GEOGRAPHICAL :
ASSOCIATION :

Office of the Registrar
of Books, Madras.



VOL I, BULLETIN No. I

1. Inaugural Meeting.
2. A Plea for a School of Geography at the University.

PUBLISHED BY
THE M. G. ASSOCIATION,
Y. M. C. A.
VEPERY, : : MADRAS.
Price Rs. 1-8-0

THE MADRAS GEOGRAPHICAL ASSOCIATION.

RULES.

1. The name of the Association shall be 'The Madras Geographical Association.'

Objects.

2. The objects of the Association shall be :—
 - (A) To promote geographical knowledge ;
 - (B) To secure for geography its proper place in the High School, the University and its constituent and affiliated colleges ;
 - (C) To help to improve the methods of teaching geography ;
 - (D) To work for a school of geography being started ;
 - (E) To promote studies about South India from various standpoints.
3. These objects shall be secured by :—
 - (A) Holding meetings and conferences, and publishing periodicals and occasional bulletins ;
 - (B) Organizing geographical exhibitions and excursions ;
 - (C) Helping in the preparation of geography books in the languages current in the Presidency ;
 - (D) Forming a central library of geographical literature, and collecting maps, charts, plans, models, slides and instruments ;
 - (E) Providing for circulation to members, of books, periodicals, and other collections ;
 - (F) And by such other ways as are deemed necessary to effectuate the objects of the Association.

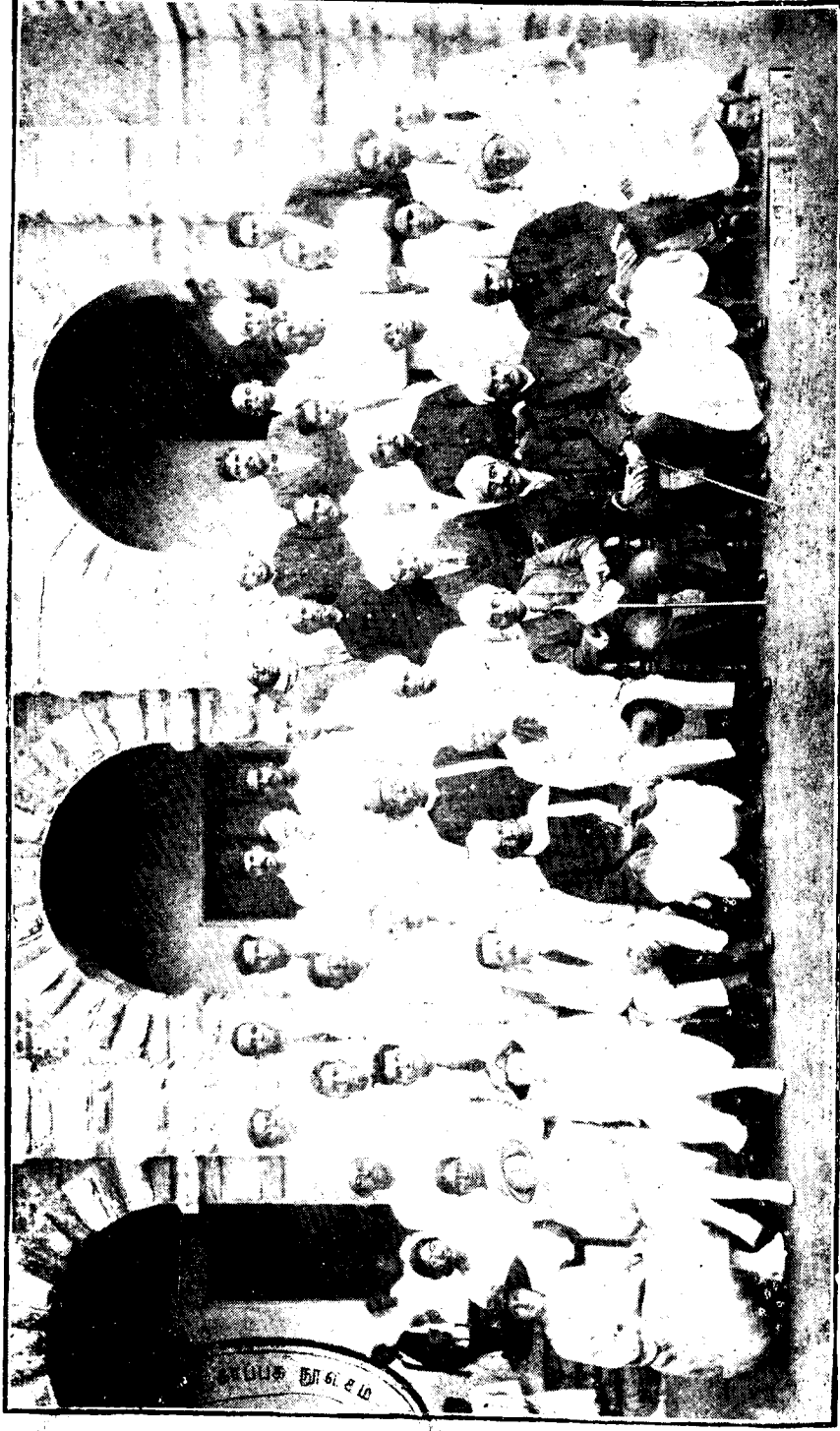
Membership.

4. The membership of the Association shall be open to all those who are interested in the promotion of geographical knowledge or in the teaching of geography.
5. There shall be two classes of members, honorary and ordinary.
6. Honorary members are those who shall be so elected by the council by the majority thereof present at its meeting. They shall be exempt from liability to pay subscription, and shall have all the privileges of ordinary members, except voting.

Continued on page 3 of the Wrapper.

THE MADRAS GEOGRAPHICAL ASSOCIATION

INAUGURAL MEETING, 16TH MARCH, 1926.



196835

152

1926 MARCH 16

Office of the Registrar
of Books, Madras

1925

The Madras Geographical Association.

The Madras Geographical Association has been established in Madras for providing a Geography centre there, by those who have come under the spell of *Modern Geography* and have realised its supreme value as a cultural discipline and as a practical introduction to the study of the World of To-day.

At their meeting held at Willingdon Training College, Madras, on the 31st March 1925, it was decided to form a Geographical Association at Madras, in order chiefly to promote the study of Geography, in South India, and also, of South India. It was then resolved that an invitation should go forth to all that might be desirous of helping in this object, and to settle necessary details and measures at a meeting, later on, of all those interested, who would become members of the Association.

A Committee was appointed for the purpose. This Committee in its Circular stated as follows :—

“Geographical studies occupy a commanding position in every educational system of the civilized countries. In Great Britain, the Universities have Chairs of Geography; the highest degrees may be taken with Geography as the subject; and even for the I.C.S. Examination, Geography is one of the many optionals that may be presented. In various other ways also—Societies, Magazines, Museums and Schools of Geography—practical effect has been given to the abiding place Geography holds in the activities of the nation. As a potent instrument of liberal education in schools and colleges, Geography is unique, in that it is both the handmaid of all the sciences and their common meeting-place. Its intense practicality and touch with the real facts of life round about, invest it with special importance, helping to make practical men of the students.

“It is, however, a matter for regret, that Geography has not, as yet, come into its own, in South India. It is, therefore, doubly necessary, for those who feel its importance, to gather together in an Association, to help in winning for it its proper place and in setting its studies on right lines. In and by such an Association, teachers may exchange notes, observers may speak of their observations, notes of lessons may be circulated, books, maps, plans, charts, models and diagrams may be made *easily* available, lantern lectures may be arranged for, excursions undertaken, and specialists invited and heard. This central organisation will thus gather together much useful knowledge and diffuse it and make it available far and

"wide, even to those living in outlying towns and districts, remote from access to the currents of modern geographical thought."

The response was encouraging. The Committee reported on the formation. It framed the Rules; and arranged for the *First Formal Meeting* at the Senate House, Madras, on 19th February 1926.

The following ladies and gentlemen were present at that Meeting.

PRESENT.

Mr. S. Lakshmana Iyer.	Mr. S. V. Krishnan.
" R. Krishna Rao Bhonsle,	" D. Manuel.
" Rao Bahadur.	" L. R. Sundaresan.
" M. S. Sabhesan.	" S. Gnanachariam.
" V. R. Narayana Iyer.	" V. N. Visvanatha Rao.
" K. Karunakara Nair.	" G. Mahadevayyar.
" T. S. Venkatadri Iyer.	" N. Krishnamachari.
" V. K. Sourirajan.	" N. S. Narasimha Ayyangar.
" K. Ramaswami.	Miss. J. M. Gerrard.
" R. Ananthanarayanan.	" E. D. Birdseye.
" C. N. Duraiswami.	" F. A. Baker.
" K. Venkataraghavachari.	Mr. K. K. Raghavacharya.
" Indra Mohan Palit.	" M. Subramaniam.
" D. Michael.	" N. Subrahmanyam.
" Janab Syed Ameeruddin.	" W. Duraiswami Ayyangar.
" S. Rajarathnam.	" A. Appadorai.
" D. W. Wolfinden.	" E. W. Green—(Chairman).

The Madras Geographical Association was then formally constituted with the ladies and gentlemen then present. The rules framed by the Committee were adopted; and the Working Council was asked to consider the financial aspects of the starting of a Journal. With the election of office bearers, that meeting came to an end.

The Inaugural Meeting came off on Tuesday, the 16th March 1926, at The Presidency College, Madras; the Hon. Sir C. P. Ramaswami Aiyar took the chair and Dr. J. H. Cousins M.A., D.LITT., delivered the Inaugural Address.

The meeting was favourably noticed in the Press: and the leader of The Madras Mail, which is subjoined as Appendix A to the report of the Inaugural Meeting, will be read with delight.

The Working Council has issued a Memorandum on the Establishment of a School of Geography at the University.

The proceedings of the Inaugural Meeting and this Memorandum are printed in this number as part of the Transactions of the Association.

The Frontispiece reproduces the Group Photograph taken just before the Inaugural Meeting.

THE INAUGURAL MEETING OF THE MADRAS GEOGRAPHICAL ASSOCIATION.

The Madras Geographical Association held its Inaugural Meeting on Tuesday the 13th March 1926 at 5-30 P.M., at the Presidency College, Madras.

PRESENT :—

Rao Bahadur M. R. Ry. V. T.	Miss S. Gomaz.
Krishnamachari, Diwan Bahadur	" M. A. Thambai.
M. R. Ry. S. Bhavanandam Pillai,	" J. Kadamba.
Rao Bahadur M. R. Ry. R.	" P. C. Srinivasan.
Krishna Rao Bhonsle.	" A. Devadasan.
Rev. A. J. Saunders.	" R. Crouston.
Mr. R. W. Ross.	Mr. D. W. Wolfinden.
" E. W. Green.	" D. Manuel.
Miss J. M. Gerrard.	" D. Michael.
" E. D. Birdseye.	Mr. S. V. Krishnan.
" M. W. Barrie.	" T. S. Venkatadri Iyer.
Mr. R. D. Anstead.	" V. R. Narayana Iyer.
" A. Swaminatha Iyer.	" N. R. Kedari Rao.
" M. V. Vellodi.	" N. S. Narasimha Iyengar.
" V. N. Visvanatha Rao.	Janab Abdul Khadir.
" N. Subrahmanyam.	Mr. S. Natarajan.
" N. Krishnamachary.	" K. C. Ramakrishnan.
" K. Narasinga Rao.	" A. Aaron.
" R. Seshagiri Rao.	" S. Chidambara Iyer.
" S. Viraraghavachary.	" G. Maha Ieva Iyer.
" A. N. Schwartz.	" K. S. Appasawmy Iyer.
" C. N. Duraiswami.	" M. Subramaniam.
" V. K. Sourirajan.	Dr. J. H. Cousins
" L. R. Sundaresan.	Rao Bahadur M. R. Ry. H. Narayan
" S. Lakshmana Iyer.	Rao.
Miss P. Narayana Kutty Amma.	Mr. A. K. Krishnaswami Iyer.
" S. Kurivilla.	" Sarangapani Ayyangar.
" R. Job.	" Venkatachalam.
" P. Lakshmi.	" S. Muthukrishna Iyer.
" P. Santappa.	" G. V. Sithapathi.
" S. Venkataratnam	" A. K. Venkatesan.
" F. A. Baker.	" K. K. Nair.
Mr. Sankar Singh.	" Indra Mohan Palit.
" S. Rajarathnam.	" K. Venkataraghava Chari.
" R. Ananthanarayanan.	" B. Sanjiva Rao.

The Hon'ble Sir C. P. Ramaswami Aiyar and seventeen others (whose names could not be noted).

Rao Bahadur M. R. Ry. H. Narayana Rao formally opened the Session; and in moving that the Hon'ble Sir C. P. Ramaswami Aiyar do take the chair, spoke as follows :—

"Ladies and Gentlemen,

"It is my pleasant duty to-night to welcome you on behalf of the Association. Before requesting the Hon. Sir C. P. Ramaswami Aiyar to take the chair, I desire to speak briefly on the *place of Geography*, since this is our first meeting.

"It was only two months ago, Sir P. C. Roy deplored that there were first class M. A.'s, ignorant of the bare elements of Geography; and Sir Michael Sadler when he was in Madras, related some of his talks with the B. A.'s, which left on him similar impressions.

"Macaulay in his historic minute insisting on English Education for Indian youths, poured his ridicule on Education based upon ancient Oriental Classics pointing, among other things, to 'Geography made up of seas of treacle and seas of butter.'

"Like most things of Macaulay, we have here confusion of issue, and exaggerated half-truth. For, one might, with equal truth, point to Western Classical and Mediaeval beliefs—to the Elysium, the New Atlantis, the Griffin, the Unicorn, the fire-eating Salamander, or 'the Anthropophagi and men whose heads grow beneath their shoulders.' It is as if one tried to seek in the Atlas, Laputa or Utopia and fix on 'this solid' world, Falstaff or Tartuffe, Rosinante or Sindbad's Roc, or the Phoenix that 'Solitary bird, that ever rises from its ashes.'

"The real issue, the true contrast, is not between Oriental classics and Western classics; but between Ancient Education and Modern Education.

"In imparting that modernity, which we all desire so intensely, no study offers itself as the best avenue to it as Modern Geography.

"From Macaulay to Michael Sadler it is four generations; but the fact is that Geography is still one of the persistently and consistently neglected subjects. Whatever may be the case regarding the much-travelled Anglo-Saxon race, Geography is a double necessity to the Indian, who is untravelled and has been in isolation for long. To ignore Geography is to live like frogs in a well.

"Here, let me clear some underlying misconceptions.

"Geography, as studied until lately, merited the reproach, levelled at it, of making boys cram place-names, lengths of rivers, and heights of mountains. It was so in England itself, and, *therefore*, in the Madras University. It was, at any rate, something, even on that footing. And until 1911, there was the What-and-where Geography which was compulsory for the Matriculation; there was also the How-and-why Geography, and this was a subject for the Intermediate, then called the F.A., forming, as examination subject, a compulsory alternative to the compulsory Physiology. It managed to escape the Madras prejudice against Geography, by virtue of the sonorous name of Physiography—no less than Huxley himself having written a well-known text-book under that name.

"Between 1905 and 1910 there was a radical change in England, and, *therefore*, also in Madras; but, while the English change was for the better, the Madras change was for the worse.

"The year 1911 is a landmark in Madras Education. Then, when the Matriculation Examination was supplanted by the Secondary School Leaving Certificate, Geography was suffered to have a secondary place in the Secondary School and was banished from College, the mask name of Physiography having been, by that time, torn off its face.

"This was wholly unfortunate. For, it was just about this time that Great Britain had founded the Oxford School of Geography, and mainly under its influence, remodelled her Geography studies. Falling into line with other countries of the Civilised West, she has given Geography the pride of place in school, has recognised Geography as a subject by itself for the Tripos, and has placed Geography on a par with other subjects presentable for the Indian Civil Service and other Higher Services; and almost every University there boasts a School of Geography.

"Madras, which takes her cue from England, did not, unfortunately, *hear it*. The Madras prejudice against Geography has been found impossible to overcome, during these fifteen years. Many earnest workers have thrown up the sponge in sheer disgust.

"Modern Geography attained its form in Germany, through the labours, three generations ago, of Humboldt the naturalist and Ritter the philosopher; and they created between them a School of Geography that has won universal fame. The German School has led the way and has maintained the first rank, with such brilliant names as Ratzel and Suess.

"Fully one generation later, Reclus and Vidal de la Blanche did similar work in France. It was one generation later on still when, owing to the labours of Prof. Patrick Geddes at Edinburgh and Prof. Herbertson at Oxford, Great Britain came into line. The place of Geography in the British Isles and in the British Empire is secure, *with the sole exception of India*.

"The need of a School of Geography is obvious, when the scope and nature of Geographical studies are considered. Geography is a science, by virtue both of its aims and of its methods; and a distinct science, at that, with an individuality of its own, by virtue of methods peculiar to geographical thought. The principle of spatial distribution, the principle of co-ordination, the principle of causality, with the building of conclusions upon concrete facts alone, underlie the studies. There is no science that is self-contained, with the possible and doubtful exception of Mathematics. Geography builds upon materials furnished by all other sciences; takes her data from almost every other science, as well the human sciences of Sociology, Economics, or Politics, as of the natural, like Physics, Chemistry or Biology, which latter alone are called, 'Science', in Madras. It is clear that Geography has to be very

"progressive, keeping up with the march of mind in all these directions. Now, all the scientific studies in a modern state are concentrated at the University and the University controls the scientific life of the nation. It is therefore an imperative duty resting upon the University to have a School of Geography in order that geographical studies be vitalised and be a reality. Otherwise, Geography will be reduced to the despicable position of purveying the second-hand thoughts of abroad.

"An Association like this has its place and mission, alongside of whatever the University may care to do or not to do. There is need for an institution of Geography co-ordinating effort of school with school, of school with college, of college with University, of progress at home with progress abroad, of teachers with scholars, and of learned men with the general public. Our aims are not mainly academical nor pedagogic. We wish to promote intensive studies about South India and interpret South India to us.

"Both Dr. Cousins and Sir C. P. Ramaswami Aiyar have travelled wide over the fields of Literature and Art, as well as over lands and seas. Dr. Cousins has surveyed mankind from Erin to Nippon. He was intimately connected with the moulding of Geographical studies for Ireland; and his association with Prof. Herbertson lends an additional charm to our meeting. Having lit his torch at the Oxford School, he now lights the torch at Madras with special appropriateness. Sir C. P. Ramaswami Aiyar, with his Hydro-electric schemes and Irrigation schemes and with the Portfolios of Railways and Waterways, is actively helping in the moulding of the life of the people in South India, which, in short, is *making Geography*.

"I request the Hon. Sir C. P. Ramaswami Aiyar to take the chair."

The motion was seconded by Mr. E. W. Green and carried.

Sir C. P. Ramaswami Aiyar took the chair, and called on the Secretary to make a statement.

The Secretary (Mr. N. Subrahmanyam) next made this statement:—

"Sir Ramaswami Aiyar, Ladies and Gentlemen,—

"It is customary, on an occasion like this, to present at this stage, the report of work done in the previous year. To-day, it is my pleasant duty, because we are just at the very beginning, not to glance backwards but to look forwards.

"The idea of an Association of the kind has been forcing itself on many an earnest mind, especially as there has been a deplorable neglect of Geographical Studies, in this side of India. My learned friend, Mr. M. Subramaniam, and I had many a discussion about it, but it was not until last year when Miss Gerrard threw herself into the idea, in her own eager way, that a start was made.

"Mr. Green, from the moment it was broached to him, has been all help to it, watching over its progress and giving it his counsel, time after time. A preliminary meeting was held last year; the Committee appointed by it reported on the formation; and here we are at last—the Association duly constituted and in sessions for its Inaugural Meeting.

"The sphere of usefulness of an Association like this is dependent, in the first instance, on the wide support that it receives, on the subscriptions and donations it secures, on the excursions it organises, on the publications it issues, and on the collection and circulation of books, maps, slides and such other objects of geographical interest that it is able to obtain and diffuse. We trust that sooner or later, all this will be forthcoming. But the usefulness of the Institution depends, in much greater measure, one may say almost entirely, upon the diligence of members and their substantial contribution to thought. The Association solicits and welcomes contributions from every quarter and in every shape. Only so will the Association have good work to its credit and fulfil somewhat of its mission. It is fervently hoped that the Association will go on, with everyone contributing to its work."

Sir C. P. Ramaswami Aiyar next called upon Dr. J. H. Cousins, M. A., D. Litt., to deliver the Inaugural Address. Dr. Cousins then spoke as follows:—

"Ladies, Sir C. P. Ramaswami Aiyar, and Gentlemen,

"I am rather appalled at the position that I occupy to-day, standing here to give the Inaugural Address of an Association which is unique not only in Madras Presidency, but in India itself; because there are a large number here, to whom Geography has been an intimate study for a good many years in which I have been neglecting it, not through want of interest, but through stress of other circumstances. And, I feel rather a humbug in a way, in being in this position—not a humbug as regards my intense interest in the work for which the Association stands, but as regards the actual contemporary contribution that one daring to give the Inaugural Address of such an Association should be expected to have made. My connection professionally with Geography is now, I regret to say, a matter of ancient history. It goes back before 1913 when I left Ireland, though I have since done some little geographical teaching in India. At the same time, I suppose, there is, as the first speaker said, some special link or 'charm' in having present at such a meeting one who had an intimate association with the late lamented Professor Herbertson of Oxford. I was associated with Professor Herbertson when he came to Ireland in 1912 to conduct a summer school for teachers of geography in the Royal College of Science in Dublin. As a result of my work as geography master in the High School, Dublin, and my publication of a text-book of modern geography, I was appointed his demonstrator for the course;

and when his work finished, I was appointed in the same capacity to Professor Grenville Coll, the great geologist.

"But passing away from personalities, I would first emphasise the fact that the inauguration of this Association is in the nature of a protest: that is, a protest against the general undesirable attitude of indifference with regard to a very important element in educational systems, materials, and methods; an element which always evokes enthusiasm from those who know really anything about it. But in addition to this element of protest in the movement here inaugurated, there is, what is more important than mere protest, a very definite intention to embark upon constructive activity which will bring before the minds of those who have the power to influence educational schemes, something of the reality that is involved in the study of Geography. Already, I have heard a few remarks preliminary to this meeting, which indicate that quite the same illusions are abroad, in both official and non-official circles, here as in other countries, with regard to what Geography is. In endeavouring in this address to dispel some of these illusions, I shall have to repeat many things that are platitudes to those who know; yet it is necessary to do so in order to illuminate those who do not know.

"What is the place of Geography in Education? The first answer to that would be glibly, the place of Geography is *all over the place*. I harbour the belief that education will never become truly educational, until it is given what we may technically call a geo-centric basis; that is, until it centres itself in the world we live in. But, before we can give a reasoned answer to the question, 'What is the place of Geography in Education?', it is necessary to remind ourselves as to what Education really is.

"A new life comes into existence. That new life is endowed with all kinds of powers, some latent, some already slightly developed; all sorts of predilections, racial and otherwise, from heredity; all sorts of innate desires demanding satisfaction. If such an individual was let loose, without any kind of control, amongst other individuals similarly uncontrolled, the end would be disaster. There could be no human progress, unless, out of the accumulated experience of life, the elder generation was able to pass on, to the members of the next generation, that experience of life which had taught them that there are certain activities that are inimical to the life of the community and the individual, and certain other activities that are beneficial. Education in this sense may therefore be defined as the sum total of human experience to be passed on to the next generation; and the purpose of education may, from the human standpoint, be defined as an effort, not only to give scope for development to the latent powers of the new individual, but to put those developed powers into harmonious relationship with his and her environment. I think that is a fair working definition of Education.

"Now, the application of that definition of Education to Geography is this: that the environment of each individual has two

"main aspects; *first*, the human environment into which it comes and with which it is most intimately associated; and, *secondly*, the natural environment, out of which both the elder generation and the new generation get the materials for their sustenance. These are the two aspects, the historical environment of humanity and the natural environment of humanity. In a strict sense, Geography deals mainly with the latter. And Geography may be defined as *the Science of Human Environment*; but relegating the study of the human side of that environment to history, and taking the natural side as the special field of its practical and theoretical study. We cannot read history truly save in the light of Geography, and Geography has light shed upon it from the past history of humanity.

"Now, this natural environment of humanity that is the subject of study in geographical education has three special groups, which are easily carried in one's memory, and which give a framework through which one can contemplate the vast mass of interacting factors in our environment and see them without panic, in an orderly and illuminating manner. If we look around us and question our environment, we shall see that there are certain factors that are inevitable to our life, that can be grouped under the general heading of *passive factors*, that is to say, the factors related to the composition of the world under our feet; the material composition of the earth, and the orders into which the substance of the earth has been built up. In every study, there is always the material or substantial aspect; but in Geography it is an aspect that calls for study under the two familiar names of Geology or the substance of the earth and Geography, as it is ordinarily regarded, that is, the regional distribution of land and water on the surface of the earth. In scientific terminology, we have thus the substantial or material side of our study. In the philosophical terminology of India, we have the '*thamasic*' or inertia aspect.

"But associated with the first aspect of our environment we have a group of other factors which we may call the *active factors*, factors which act upon the materials of our life and change them into other forms. The active factors in our environment are obviously, the meteorological factors; the factors that relate to the weather and the climate, two terms which have a different connotation. A visitor to Ireland grumbled: 'In Ireland you have no climate; you have only weather.' There is scientific truth in this apparently jocular conjuring with meteorological terminology; 'climate' being the more or less constant quality, and 'weather' the condition which varies from day to day, sometimes from hour to hour. These active climatic factors may be called the energetic factors in our environment, the '*Rajasic*' factors of Indian Thought.

"These passive and active factors have produced, by their interaction, another group of factors with which humanity is intimately associated. This third Group, I shall call the *vital factors* in human environment, the factors of life. Without the

"influence of climate on rock substance, we would not have had the soil that is so useful for growth; we would not have had the ultimate development of the principle of growth through *humus* in the soil; and life as we know it, would not have come into existence. This third group of factors, which has worked up to the stage in which humanity can exhibit its powers, is the high peak of geographical study: the 'consciousness' aspect of it, or to put it in Eastern terminology, the '*Sathvic*' aspect. Under the caption of *vital factors* you can extend as far as you like into the geographical study of human culture, observing the differences that arise because of geographical circumstances.

"Such is a rough sketch of the field of geographical study, divided into three areas, which we can separate for purposes of study but which are always interacting, always in immediate association with one another.

"Now, the study of these factors in a geographical system of education leads, as I found in my work as a teacher, and, as I feel sure, all teachers of practical geography have found, to three special kinds of satisfaction: (1) a satisfaction of the knowledge side of the students and myself, (2) a satisfaction of the cultural, and (3) the substantial satisfaction of the practical side. And I would like to develop somewhat these three aspects of satisfaction that arise out of the teaching and learning of Geography for the encouragement of those who are working at Geography, and for the information of those who do not realise what it stands for.

"With regard to the knowledge aspect: the gathering of details of information from the ends of the earth as well as from one's own local area and the sifting and co-ordinating of these leads to wonderful illumination of the mind. When I was in Brussels in 1925, I visited the *Palais Mondial*. It is a huge building divided into twelve rooms. You entered room No. 1 and saw pictures and models of the early geological history of the solar system, and then went through a succession of rooms in which every graphical, pictorial and plastic means was used to give the observer a clear idea of the various stages of developing environment and civilisation through which humanity had passed and is passing. India was there, liberally represented; and it should bring shame to us to know, and realise, how people in other parts of the world know everything about us, and we little or nothing of them, especially in the geographical sense. In that vast compendium of geographical and history study, there were thirteen million card references—the result of a lifetime of devoted enthusiasm and industry for a subject of knowledge which Indian educational systems have hardly begun to look at. And this is only one of many geographical activities in other countries.

"Such a collection of knowledge enables us to realise the enormous extent to which geography controls human evolution and expression. In the North of Ireland, for example, where I was born and lived till I was twentyfour, we had the idea that we were the finest people on earth. We were energetic and full of initiative. But

"when I grew to years of discretion and took my holidays in the South-West of Ireland, which is mild and foggy, I found that my North Ireland energy, the product of a bracing climate, gradually faded out, and I became one with the group of the Irish who are referred to as the lazy Irish. Then there are areas of extreme cold where life is not at a high state of tension; and there are areas of extreme heat where also life cannot be active. In the intermediate areas which change from heat at one season to cold at another, a rapid adjustment of one's clothing and activities is induced. You will see people selling sun-hats at one time of the year, and at another selling snow-shoes. But while you are wearing the snow-shoes, the merchant has to anticipate the sun-hats, which must be made for the next season. This alternation works towards developing an alertness of mind by necessitating the exercise of anticipation, preparation and organisation. The great business organisers belong to the temperate zones, the zones of variable climate. Their children who overflow into the zone of extreme heat retain the habits of their parents; but the virtue which they claim for the habit belongs originally to Nature. The philosophies of India are as much a matter of temperature as of temperament. These instances are only typical of what is taking place everywhere with regard to the influences that control the different activities and expressions of humanity. When this fact is realised, so-called vices and virtues assume a different complexion. They are seen as climatically influenced expressions of racial temperament which elaborate themselves into differences of all kinds, even up to the expression of the highest thing in humanity itself, its spiritual consciousness. Such a study ought to be to make the nations understand and sympathise with one another as various groups of one great entity, the human entity, all labouring under this limitation and control. Such is a brief glance at the knowledge aspect of geographical education.

"The second satisfaction, that of culture, that arises from the study of Geography, is to educationists of the utmost importance. It touches the definite influence that geographical study has upon the new being who comes into existence; who will go on acting in one way or other and who has to be shepherded into proper paths towards harmonious relationship with the rest of the flock. In a proper geographical system all sorts of observations have to be made regarding the three groups of factors already spoken of. Now, observation leads to alertness and watchfulness of mind; and children rapidly develop these faculties when they are given the opportunity. I could tell you many stories about little ones I have noticed both East and West, who were lacking in initiative, but who, when they found a teacher who encouraged them, became bright and happy children. A slight touch of the pleasure of geology used to bring me loads of stones from children whose vacation had been enriched by interest in Mother Earth. The stones were mostly useless geologically, but educationally they were gold.

"Observation necessitates record, and one of the most beautiful things in education is to see children developing this faculty. Children delight to make plan of their houses, of the next street and ultimately of larger areas; and thus they develop a fine capacity of recording details accurately. They may make mistakes and their conclusions may be wrong; but I have found examples of complete efficiency of observation and record even in the very young. At Madanapalle College, we studied weather forecasting, and the students became able, in a rough way, to tell what tomorrow's weather would be. We watched a cyclone one year, and deduced its origin, career, and end—official details some days later entirely confirmed us. There was no mystery about it, it was just a matter of knowing and applying plain facts. The inspiring influence on both teachers and students of such observation, deduction and application to the facts of life, is a cultural power of very great importance which Geography offers to education.

"Such study also, strange as the statement may appear, offers a means to the true expression of the emotional nature of the student. If the emotions cannot find natural expression, they will unfortunately find unnatural expression; and I have found that a keen interest in picking up interesting stones and watching the weather is a splendid vent for the accumulating energy, especially of boys, a very fine way of allowing them to work off the creative energy that is growing in them. From such study we develop an emotion of reverence for the Great of Life that permeates every atom of the life that is manifested in us. When I went to Oxford to call on Dr. Herbertson, I had to wait for him to finish his lecture. He came out with his cheeks red and eyes shining, and said, "I have had a grand hour!" A grand hour, lecturing on Geography! Herbertson was a scientific mystic, looking out for the signs of one same life permeating everything, and then with the grasp of knowledge and the skill of the scientist, taking facts and presenting them to the student in such a way that Geography ceased to be a dry subject, and became a magnificent spiritual romance.

"In such high enthusiasm we have a fine influence in cultural development. Moreover, out of reverence for the Supreme Life, we develop a collateral respect for all other lives that are contained in It. Not long ago I saw a group of small boys at a properly conducted school, observing, not killing, a rat which had got into a particular place in which it could be seen. That is the kind of humanitarian influence that geographical study can bring to us. There is also a physical cultural aspect to geographical education. The gathering of local details as to rocks, soil, vegetation, and the sub-human and human denizens of a district means a good deal of healthy walking. And in the collecting and recording of facts and examples, there is a fine opportunity for the exercise of team work and labour distribution which exerts a controlling influence on the growth of the personality of the student.

"Then there is a third satisfaction, the utilitarian aspect of geographical education. A good many people, indeed, think that Geography is a matter of commerce, of production and consumption. It is that; but, as we have now seen, it is much more than that. There are certain aspects of 'Commercial' Geography which are not quite so healthy as one would like them to be, such as the utilisation of geographical knowledge for purposes of mere exploitation of races and Nature, for wholly selfish gain. But in the highest sense the utilitarian aspect of geography brings together the human family as consumers and providers of necessities. Herein lies a wide and fascinating field of study—not of commercialised geography, which educationally is almost valueless, but of the Geography of Commerce which studies the interactions of human needs and Nature's provision for such needs, and in the vast organisation of production, transport and distribution, discloses the forces that are at work towards the achievement, through present interdependence, of future human unity.

"Now, I must pass on to give you a summarisation for the information of the teachers here as to how geographical education can be worked out. We are not looking only to bring Geography as a subject in the University. Our ultimate aim is the geographising of all education; the attainment of the geo-centric attitude of relating everything to life in its deepest sense. The whole study can be put into a single paragraph:

"Changes of temperature, caused by the movements of the earth, set up movements in the atmosphere which are felt as winds; these, according to their direction, are wet or dry. These climatic influences, acting on materials of the habitable surface of the globe, have awakened and developed the latent powers of growth and life both natural and human.

"The question of the order in which the three factors of environment should be studied will have to be answered according to circumstances. In Ireland where wind and rain are a constant menace to life and its pre-arrangements, the natural answer of the young student to the question: 'What is the most prominent natural feature in your life?' is—the *weather*. But in India, with long periods of climatic stability (even in the wet monsoon to which one grows accustomed), the answer may be otherwise. But the order, active, passive and vital, follows the order of nature. Whatever be the variations set up in natural phenomena by the movements of the earth and the tilt of its axis, these variations hang upon the primary fact of heat derived from the Sun. That fact is perpetually before the student. It has placed the Sun God at the centre of every religious system either in personification or metaphor. Its effects and implications are ever ready to the hand of the teacher. It is the natural way of approach to the study of environment, and to the development of habits of correct observation and true judgment.

"Whatever be the order of study of the factors in environment, there must of necessity be both a quantitative and qualitative gradation to meet the needs of the growing consciousness of the student. It is not proposed that the study should follow a straight line moving from one group of factors to the next over a number of years. It should be carried out in a series of concentric circles, each circle enclosing a complete survey of the whole field of environment at its own particular degree of simplicity or complexity. These circles of natural environment will correspond with the circles of human environment. That is to say, the materials of observation will first be drawn from local sources. The method will be empirical, based on the experiences of the student. This will lay the foundation of the inductive or scientific process of the mind which examines observed facts and from these derives principles. But the study will naturally lead to comparisons, and these will be drawn from a wider area of environment than the local, viz., the National and in due time the International. As the circle widens, principles acquired from local observation will be applied and corrected. Thus the deductive or philosophical process of the mind will be healthily developed. In the later stages, when the mind of the student has found wings, and can soar to the skies without fear, the study of the more subtle and remote elements in supermundane environment will complete the materials of Geocentric education and give the data for the synthetical study that belongs in its fulness to the college career of the student.

"It is not necessary in this general study of principles to work out a detailed curriculum and time-table. It may, however, be said that these principles are not mere theorisings. I have myself worked through the method here outlined both in Ireland and India, and know the enthusiasm, attention, accuracy and speculation that it evokes in both students and teachers. Its effect on collateral studies is very marked; the memorisation of names and facts is expedited; the necessity for the calculating and recording of interesting details adds zest to the learning of language and mathematics, and provides a training in accuracy of observation, completeness and clearness of record, and soundness of judgment.

"But while we do not enter here into details of school machinery we shall set out the components of the Geocentric study in three concentric circles which may be sub-divided according to circumstances.

"PRIMARY STAGE: *Active factors*: Use of the thermometer; school records and graphs of temperature; use of barometer and records of pressure; use of rain-gauge and hygrometer, and records; interrelationship of temperature, pressure and rainfall; local seasons. *Passive factors*: Local irregularities in land surface; elementary surveying; modelling; composition of local rocks; boundaries and directions of local river systems. *Vital factors*: Local natural

"vegetation and wild animal life related to seasons; collection of plants and shells; sketches and photographs; local population and village organisation.

"SECONDARY STAGE: *Active factors*: Influence of altitude, latitude and sea on temperature; exchange and comparison of records with other schools in the National area, and comparison of statistics from other countries; mapping of areas of temperature: same as regards pressure; same as to humidity; interrelation in seasonal changes over large areas, e.g., monsoon; forecasting. *Passive factors*: World relief; railway routes; chain and table survey; map projections; geological history; fossils; metals; soils; world drainage; basins of oceans, depths, tides, currents, trade routes. *Vital factors*: Cultivated vegetation and domesticated animal life as influenced by the above; distribution of population related to climate and relief; agriculture, industry, commerce, social organisation, culture, religion.

"ADVANCED STAGE: Synthetical study of national, regional, and continental areas under the above aspects, with statistics, graphs and maps.

"It will be seen that such a Geocentric scheme of education co-ordinates the natural and human sciences, and by this co-ordination imparts illumination and warmth to both. It introduces the student in a natural and interested manner to subjects, such as astronomy and botany, in which possible specialisation will be stripped of the limitations and want of balance that now trouble particularised study. And this Geocentric education, made vivid by association with the study of human evolution, and ennobled by the realisation of its sacred purpose of releasing the imprisoned ego into full and happy associated life, has within it the power of lifting humanity towards higher degrees of individual and collective experience.*

"If these things that I have said are true, and I know that every teacher of real Geography will say that they are true, there is something very curious in the fact that Geography is where it is in the curricula of the Schools and Universities of India. For all substantial purposes of education, it might as well be omitted. We have no option in our life on earth. Geography in all its aspects is compulsory on every one of us every day. It should be equally compulsory in education, if a full cultural development of humanity is to be achieved. But education in India, as elsewhere, is not yet at the level of being a true cultural institution. It is almost entirely vocational; it prepares candidates for the public services, whereas it should be developing all-round individual for Public Service; it fits people to earn a living, but makes little or no effort to encourage them in the splendid adventure of wealthy, happy, informed, intelligent life. The tendency of an incomplete education towards priggishness is lamentable. I had a student of the weaver caste once.

*Dr. Cousins has fully worked out these ideas in his Tract on *Educational Fundamentals*, The Brahmavidya Library, No. 7, Madras.

"When I installed looms to develop an industrial education, I said to the weaver-boy, 'Now you have a grand opportunity to help other students by teaching them weaving.'" With a dignity that was intended as a rebuke to my misunderstanding of his purpose in being a student of mine, he said: 'Excuse me, sir; I am being educated.' Educated! Rather, being puffed up, and lifted to an eminence of mental mediocrity from which to look down on reality with false contempt! That is one of the commonest and most obnoxious effect of bad education. It stresses the clerical and non-productive aspects of life, and does not look to that great other aspect of productivity on which the total wealth of a country depends. "We have therefore got to do something to give an idea of dignity to geographical education. The Universities could give that dignity, but unfortunately the Universities labour under very grave illusions with regard to geographical education. They have not got any idea of what it means. In my first, and, as it happened, my last appearance in the Academical Council of the Madras University, I had to speak against a resolution before the Council to the effect that the establishment of a School of Geography was not desirable! Happily, so completely reactionary a resolution was defeated. A similar resolution was defeated the following year, and there is an opportunity for the geographically-wise members of the Council to agitate for a School of Geography. If a completely equipped school cannot at once be started, at least a Chair of Geography be established, both in the Madras and Andhra Universities. It should be the business to carry this matter forward and to convince educational authorities that an academically worthy syllabus leading up to a B. Sc. degree in Geography can be presented. A collateral work can be the establishing of some geographical laboratories. For a few rupees you can get sufficient paraphernalia to give a good intelligent start of the geographical work. One would not want to make it so fine as that extraordinary Museum of Geography in Berlin. Is it too much to ask some wealthy Indian or group of Indians to give a sufficient endowment to make such an organisation possible, either through this particular Association or ear-marked in the Madras University in its new era, or in the Mysore University, or the new Andhra University? So far as I am personally concerned, it is my intention to act on the fresh impetus which the formation of this Association has given me, by starting in October next a geographical laboratory in the Brahmailaya Ashrama at Adyar, of which I have the honour to be Principal, and to place its work at the disposal of the Madras Geographical Association."

The Hon. Sir C. P. Ramaswami Aiyar, then, said:—

"In the first place, let me say, that I count myself fortunate in having been here this evening, and listened to the wholly practical, and yet so finely emotional speech, made by Dr. Cousins to us, in

regard to the inauguration and maintenance of a School of Geography. It is getting so late, that I would fain have resumed my seat, after thanking Dr. Cousins for the illumination that he has vouchsafed to many of us, and for the many ideas that have been implanted in us during his instructive discourse. But I find, somewhat to my consternation, that I am expected to deliver what is called a Presidential Address. I have, however, too great sympathy with people who are anxious to go home, to start on a formal Presidential Address at this time. But let me make a few—very few—observations on some of the matters which have struck me during the course of the remarks.

"After thanking Mr. H. Narayana Rao for the very kind words with which he introduced me to the audience, it strikes me that I must just say a word upon the first sentence which emanated from Dr. Cousins. He said that he—a specialist in this subject—he said that he was a kind of 'humbug,' while it seems to me that I have not yet arrived at any definite conclusion as to what particular epithet would be applicable to me for having the temerity to embark on a new and uncharted sea.

"The next observation that occurs to me is as to the very comprehensive manner in which Mr. Narayana Rao, after adverting to the fact that I had something to do with Irrigation, with Ports, with Transports, and things of that kind, said that I was 'making Geography.' These reasons might have been very satisfying to Mr. Narayana Rao, but not to me.

"Nevertheless, I may claim two titles to be here to-day, though not in the particular exalted position to which I have been raised by being the President of this evening's function. I now enjoy, but have also been a victim to, geographical study. During the days when I was a student, Geography, as practised and idealised by Dr. Cousins, was not the main feature of the system or curriculum under which we laboured, or shall I say, groaned. One result of my study has been that on account not so much of encouragements but more on account of penalties with which I was visited, I remember a few important facts vividly even to the present day. I remember, for instance,—I have never forgotten this from 1891—that the height of Mount Everest is 29,002 feet. I am clear on that. It was, on pain of falling below our general minimum, we had to remember it. I remember the exact length of the various great rivers of the world. Even now it is not clear where the Brahmaputra rises, but I was definitely told that the length of the Brahmaputra was 1895 miles, or some such figure. Geography so drilled into us was a congeries of isolated, dry, uninteresting, sporadic and dreary facts. If this had been my whole geographical education, I should have come here only in the role of a victim to protest against the apotheosis of Geography that has been effected this evening.

"But it was not, fortunately. My Geography, I suppose, the Geography of those who have spent sometime in the study of

APPENDIX A.

THE MADRAS MAIL of Monday 22nd March 1926, had an appreciative leader on the Inaugural Meeting, which we reproduce below :—

“Ge.....

“This is not a contraction of the trans-Pacific exclamation “gee whizz,” though that expression of surprise would not be unfitting to the subject that calls forth this article. “Ge” was the earth goddess of the ancient Greeks. “Graphe” was writing. Hence Geography. In the minds of the generation now using hair restorer the word will conjure up dreary hours of gazing on maps so far removed from reality that Mr. G. K. Chesterton, when a boy, got a shock, on first visiting Yorkshire, to find that it was not, as his atlas has taught him, coloured yellow. Other hours of memorizing capes and bays, imports and exports will also come wearily back. In the meantime much has been done to rationalise the study and teaching of Geography. The generation now at school is put into vital and interesting contact with the whole lore of Ge. Direct knowledge of the substances and forces that make up the world of human environment has put mere memorisation in a secondary place. Observations, excursions, and other means of linking the adventure of science and the imagination with life, make geographical study not only a study but a romance and an enthusiasm. Unfortunately this new aid to education applies hardly at all in India. A year ago a resolution came before the Academical Council of Madras University to the effect that the establishment of a School of Geography in connexion with the University was not desirable. A few days ago another resolution was introduced declaring such a school to be unnecessary. Both resolutions put the University behind the times, and happily were defeated. The way is clear for a positive resolution demanding a School of Geography. That the subject is on the way to recognition is shown by the formation of the Madras Geographical Association whose inauguration in the Presidency College a few days ago was marked by earnestness and determination. The Association is the first of its kind in India, and Madras may be proud of its initiative. Dr. Cousins in his Inaugural Address uttered a much needed protest against the tendency of education in India to turn students away from productive employment to the non-productive professions. It seems clear that the study of the earth, Ge, and its powers and mystery, as a prominent part of school curricula would tend to give more social respect to the fundamental work of tilling soil, and would induce students to labour diligently with a view ultimately to applying their furnished and trained minds to enriching their country and themselves by bettering agricultural production and distribution. The Universities can help this desirable psychological change by establishing Schools of Geography with diplomas, and ultimately giving the subject University status in a science degree based on geographical specialisation.

APPENDIX B.

Several of those present at the Inaugural Meeting sat for the Group Photograph which was taken at 5-25 P.M., on Tuesday, the 16th March, 1926. It was taken at the Presidency College, Madras, in the Open Court to the South of the Eastern Portico. Messrs. A. Ratna & Co., Madras, who took the Photograph, have made the block, and it is printed as the Frontispiece to this number. Here are the names of the persons in the Group :—

Sitting (from left to right) :—Miss F. A. Baker, Miss J. M. Gerrard, Miss E. D. Birdseye, (*Vice-President*), Mr. E. W. Green, Mr. S. Lakshmana Iyer, (*Vice-President*), Dr. J. H. Cousins, (*Inaugural Lecturer*), Hon. Sir C. P. Ramaswami Aiyar (*Inaugural Chairman*), Diwan Bahadur Mr. S. Bhavanandam Pillai, Rao Bahadur Mr. H. Narayana Rao (*President*), Mr. M. Subramaniam (*Member, Working Council*), Mr. A. Swaminatha Iyer.

Standing, First Row (from left to right) :—Miss Gnanavolivu, Miss Vedanayagam, Mr. D.W. Wolfenden (*Treasurer*), Mr. R. D. Anstead, Rao Bahadur Mr. R. Krishna Rao Bhonsle, Rao Bahadur Mr. V. T. Krishnamachari, Mr. N. R. Kedari Rao, Mr. R. Seshagiri Rao, Mr. L. R. Sundaresa Aiyar, Mr. Sankar Singh, Mr. D. Michael, Mr. N. S. Narasimha Ayyangar.

Standing, Second (and Middle) Row (from left to right) :—Mr. ———, Mr. S. V. Krishnan, Mr. M. V. Vellodi, Rev. A. J. Saunders, Mr. R. W. Ross, Mr. S. Veeraraghava Chari, Mr. D. Manuel, Mr. D. Thambusami, Mr. S. Rajaratnam, Mr. R. Ananthanarayanan.

Standing, Third (and Topmost) Row (from left to right) :—Mr. V. R. Narayana Iyer, Mr. K. K. Nair, Mr. T. S. Venkatadri, Janab Abdul Khadir, Mr. A. N. Schwartz, Mr. N. Krishnama Chari, Mr. N. Subrahmanyam (*Secretary*), Mr. Indra Mohan Palit, Mr. K. Venkataraghava Chari, Mr. V. N. Visvanatha Rao, Mr. B. Sanjiva Rao.

THE MADRAS GEOGRAPHICAL ASSOCIATION, MADRAS.
FINANCIAL BYE-LAWS.

The Working Council of the Association adopted the following Financial Bye-laws in April last :—

FINANCIAL BYE-LAWS.

Receipts.

1. For all moneys received, the Treasurer shall prepare a triplicate in carbon copies, one of which shall be sent to the party giving the money, another to the Secretary, and the third shall be kept by the Treasurer until audit.
2. The said sums shall be entered in consecutive order in a bound book with columns opened for the date, the serial number, the person from whom received together with his address, the purpose for which received (when specified), the amount, the date when acknowledged to the party.
3. The amounts received shall be classified under these several headings :—(a) ordinary subscription, (b) life subscription, (c) general donations, (d) donations ear-marked for specific purposes, (e) interest, (f) advances, and (g) unspecified receipts. Upon the ascertainment of the purpose of this last mentioned amount, the amount shall be carried to its appropriate heading.
4. All moneys shall be banked, as soon as practicable, in the Indian Bank, Madras, in the name of the Madras Geographical Association, and shall be operated upon by the Treasurer for the time being, whose name shall be intimated to the Secretary of the Bank by the Secretary of the Association.
5. Two accounts shall be opened, one of which shall be a general account for all moneys received and the other shall be for the Capital Fund as required by Rule No. 16.
6. At the end of every month, the amount falling to the Capital Fund shall be made up by the Secretary and the Treasurer, and in the first week of the following month, the transfer shall be made from the general account to the Capital Fund account.
7. The Treasurer shall keep with him, until the next audit, the bank pass-book and other bank vouchers.

Expenses.

8. The Secretary shall prepare, in duplicate, in carbon, requisition to the Treasurer for expenses of the Association, in which he shall specify the date and the purpose for which the amount is required, the original to be given to the Treasurer and the carbon copy to be kept by the Secretary.

9. Upon receipt of a requisition, the Treasurer shall, when the funds permit, draw from the general account and hand over the money to the Secretary, and such requisition and payment shall be valid discharge for the Treasurer. The requisitions shall be kept by him until the next general audit.

10. The Treasurer shall enter in his account under separate heading every amount so disbursed, in serial order, giving the date, and quoting the number and date of the requisition.

11. The Secretary shall keep in his hands as impressed cash a sum of Rs. 15 for meeting petty demands on emergent occasions.

12. The Secretary shall obtain as far as possible vouchers for every item of expenditure, and keep the same until the next audit after which they shall become part of the record.

13. The Secretary shall maintain an account-book, wherein he shall enter the date, the serial number, the amount received, the item of expenditure, and the amount spent.

14. The Secretary and the Treasurer shall balance their accounts from time to time.

15. At the end of every month, an abstract statement of receipts and expenditure shall be prepared by the Secretary and the Treasurer together, and shall be passed, by circulation, by the Working Council in the following month.

16. The Secretary shall have power to expend upon postage, printing, the holding of meetings, office stationery and other contingent expenses, in the absence of specific budget rules.

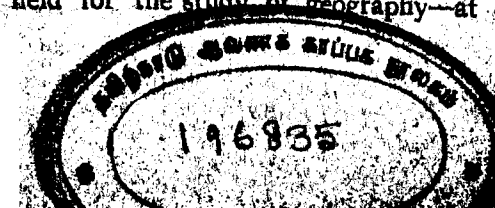
17. A separate stamp account shall be maintained by the Secretary.

18. Two members of the Working Council shall be appointed for the year to make monthly audits; and the monthly financial statements shall be countersigned by them.

19. Accounts shall be audited quarterly by a member who shall not be of the Working Council.

20. Separate rules shall be framed regarding the Capital Fund.

The Working Council, at the same meeting, resolved to place on record the useful propaganda carried on by the Secretary (Mr. N. Subrahmanyam) during the Recess, from 20—3—26 to 20—4—26. He lectured on Modern Geography, at Guntur, to the teachers and Inspecting Officers, of Guntur District (20—3—26) and at the Rajah's College at Parlakimidi in Ganjam District. Parlakimidi, he reported, offers a fascinating field for the study of geography—at one end



touching aboriginal life, and, at the other, receiving the impacts of modern civilisation, while diversifying itself with contrasts of hill and wood and plain, and of race and tongue. He delivered similar lectures at Vizianagram and Rajahmundry, visiting Tuni on the way. In North Arcot District, he took the opportunity to meet teachers of Elementary and Secondary Schools, rural and urban, and other leading men of the places. Kalambur, Polur, Arni, Vellore, Ranipet and Tiruvalam were visited by him. Such propagandist tour is helpful in quickening interest in Geography.

The Madras Geographical Association

Application Form for Membership.

1. Name in full
2. Designation
3. Residence (or address for correspondence.)
4. Qualification (Academic)

The rules of the Association have been read by me. Herewith I send Rs. my subscription for the current year.

Station

Date

Signature

Proposed by

Seconded by

THE ESTABLISHMENT OF

A SCHOOL OF GEOGRAPHY AT THE UNIVERSITY.

Geography, as a University subject, holds, today, in civilised countries, a prominent place, in any scheme of liberal education. Its total neglect here has been due to various contributing causes, and it is the purpose of this Memorandum to draw the attention of the authorities to it, with a view to remedy this state, and to win, for Geography, its proper place in the University.

Geography, as now studied abroad in school and college, is entirely different from the dry-as-dust routine, which compelled students to pass through the treadmill of a text-book and memorize place-names and disconnected facts, statistical and other, in a dismal way. A revolution has taken place in this matter; and Geography, as studied there to-day, is the most vitalising of all studies, imparts reality to the concepts arrived at from other studies, comprehends all the factors of control, environment, and human culture, and is preoccupied with a rational understanding of other lands and peoples as well as one's own. Unlike the What-and-where type of work, which was the sole subject of geographical studies formerly, and which, as such, fell to general apathy, Geography, to-day, is concerned with the investigation of the Why-and-wherefore, and, what is more, with the seeking and finding of the Whence-and-whither, alike of Places, Peoples, and their Work. *

Some typical questions set elsewhere are added as Appendix A to this.

Here, in Madras, until fifteen years ago, Geography of the What-and-where type was a compulsory subject for the Matriculation; and, under the name of Physiography, it was the sole alternative given to Physiology, which otherwise was a compulsory subject of the F. A. Examination, the equivalent of the present Intermediate.

In the radical re-modelling of the courses, that came into effect in 1911, Geography was dropped altogether from College course, but has been continued as a compulsion for the Matriculation. Exceedingly few, however, are the candidates for the University Matriculation (about 30 in number), as compared with the vast majority for the Secondary,

* *Vide* De Martonne's *Geographie Physique*; Jean Brunhes's *Geographie Humaine de la France*; Russell Smith's *Industrial and Commercial Geography*; and Russell Smith's *Human Geography*.

School-Leaving-Certificate (for which there sit over 15,000 candidates every year). The neglected position assigned to Geography in the S. S. L. C. Course has reduced to the vanishing point the geographical knowledge of the student, who enters the University through the door of the S. S. L. C. The College student is thus very ill-equipped with that knowledge of the modern world, which is admittedly a *sine qua non*, and which no other subject but Geography (as studied in the modern way) can impart. Dismal memories of the old-time Geography drill in place-names and disjointed facts have raised such a wall of prejudice, that such of our educators as have not watched the revolution that its study has undergone, have been unable to appreciate, at its true worth, how powerful an instrument of education Geography is. To those that carry in mind such unpleasant associations, the word, 'Geography', scarcely, denotes all that Modern Geography stands for.

The subject matter of Geography is the wide earth, the high air, and the deep ocean, along with the agencies that play and interplay on them. There is not a science with which Geography is not intimately related. Other sciences deal with but some particular aspects of things, and view them from particular standpoints. Modern Geography receives as data the results of those special studies, builds them into a comprehensive whole, considers the inter-relations, and studies the consequences flowing from such data.

To take, for an example, the Arabian sandy deserts:—

The *Geologist*, who studies the history of the earth through successive epochs, accounts for how the sandy deserts come to be what they are and where they are; but the *Geographer* has to go further, and trace their influence on life.

The *Physicist* investigates the effects of a given condition of temperature, density, pressure, and humidity, and discovers how the presence or absence of some of these conditions accounts for the diversities of climate and weather. The *Geographer* has to know the places where such conditions obtain generally, and co-ordinate them; and he has to study, further, the bearings of such data on life there and elsewhere.

The *Botanist*, when he takes up the palm-tree, studies how the several parts of its structure function, and are adapted to their functions: and how several of the palms are children of the dry sandy tract. But the moment he passes from that, to consider their home and distribution, their habitat and oecology, he comes within the range of *Geography*. And the *Geographer* has to gather up the botanist's results and interpret the life of the regions.

Within the scope of the *Zoologist* comes the camel, and in his study of it, he finds how every part is fitted for the life it leads on sandy desert lands, and he has need of *Geography* for explaining its habitat. The *Geographer* has to know all this of the camel and trace its influence on Life.

The peculiarities of the people of desert lands, their tribes, their culture, their religion, come within the purview of the *Anthropologist* and the *Sociologist*, who undertake to describe the Races of Man. And they have to take note of the *Geography of the desert* for their interpretations.

The *Historian* takes up the tale, and relates how, at a certain epoch, Mahomed arose, and how the religion of Islam, springing from the deserts, spread over the globe, from the pillars of Hercules to distant Cathay. *Geography* studies the profound influences that are exerted by Islam, over the destinies of men in three continents, in their social, economic, political, and religious life.

All these data—the results of such special studies—are gathered up by the *Geographer*. His mission it is, to build up, into a synthetic and intelligent whole, these isolated and fragmentary pieces of knowledge.

Arabia, in the hands of the *Geographer*, becomes a real living picture in its totality. The desert sands, the oasis, the thorny shrubs, the date-palm, the camel, the Bedouins, their burnous, their tents and their caravans, their tribes and their Sheikhs, down to the Sherif of Mecca, with his late master, the Turk, and his present British Protector, the Holy Carpet and the Hedjaz pilgrimage, and the changes envisaged for them by the aeroplane, the railway and the automobile—all these fragments, the results of special studies of parts, are, by the *geographer* combined and blended into a consistent picture, each part exhibited in relation to the rest. No less than this is the function of the *Geographer*, and none but the *Geographer* does it. The oecological studies of the *Botanist* or the *Zoologist*, or the human studies of the *Historian* or the *Anthropologist*, when they make mention of Arabia, would use a word that is destitute of concrete meaning, but for the picture of Arabia so drawn by the *Geographer* and presented by him as a living whole. *

* For an instance, reference may be made to the description of Arabia by Buffon in his *Natural History*; or Gibbon's *Roman Empire*, Ch L; or Doughty's *Arabia Deserta*.

Thus, Geography is vital to the proper understanding of other sciences, physical, natural, and human. It draws from them its materials, and, in its turn, completes them; and those studies remain incomplete without them. It has itself a scientific method of its own, in the principles of *spatial distribution*, of *coordination*, and of *causality*. It treats of facts as it finds them. In the study of *Human Geography*, it lays stress on *Creative Evolution*, and describes the part that is played by man on the face of the earth, as well as the control exerted by nature over him. Both the physical and human aspects of the study have been neatly summarised as the *Science of Environment*, and as the *Epitome of Human Activity and Human Culture*. It is, in short, the master-key for understanding the conditions and diversities of human civilisation.

Modern Geography stands for all these things; and it is for this reason that Modern Geography holds its pride of place in the educational institutions of civilised countries. Its scientific method, its zealous search after facts, its tracing of cause to effect and of effect to cause, its co-ordination of disjointed facts, its constructive synthesis, its objective treatment, its effort at understanding one's own environment and its cultivation of thought about other lands and peoples—all make it an unrivalled instrument of culture and scientific training. The information it conveys is such as to equip one with a knowledge of the modern world, so as to enable one to understand it. Its method of connecting fact with fact gives one a needed training in perspective and proportion, and provides the background for specialised studies like Biology, Economics, and History. The study of mankind as a whole and in its divisions develops sympathy and understanding for other peoples, into whose lives it gives insight and knowledge. Its pragmatic insistence on concrete facts imparts reality to academical studies, and its rigor and method give discipline to the mind. The age we live in, is permeated with science, and Modern Geography brings one in direct contact with it, in its practical bearings.

The commanding world-position of Geography, in the Universities abroad, has, at long last, persuaded the Academic Council of Madras to resolve to admit it, among the optionals, in the Intermediate and to consider its inclusion in the optionals for the B. A. Even that may prove illusory, as happened to the subjects of the B Group and to the range of optionals in the C Group subjects of the S. S. L. C. Course, which turned out to be mere Hobson's choice.

There appears to be a lurking suspicion in the minds of some that Geography is a subject unworthy of academical place and honours.

What has been stated above, will, it is trusted, show that it is not a whit behind several of the studies which have been regarded as the Blue Ribbon of scholarship at the Madras University.

Appendix B gives a summary of the position assigned to Geography in several of the Universities abroad. And it may be noted here that in competitive examinations for the Imperial Services and the Indian Civil Service, Geography comes in, at least as equal with most other subjects. It is a matter for regret, that the remarks of the Commissioners are, that Indian students' knowledge of Geography is very poor. That is due, undoubtedly, to the downright contempt, with which Geography has been treated here. And it is a pity that an opportunity, such as Geography has afforded, should have been thrown away, while the agitation, all along, has been for real equality of opportunity with Britishers, among other things, in the matter of subjects, the Indians can present.

The recognition of Geography as a presentable subject for the Intermediate or even for the B. A. is no ground for shelving the question of the University establishing a *Department of Geography* or 'a *School of Geography*,' as it is called. The recognition of *History* as a subject of academical study, from the primary classes to the Doctor's Degree, has not ruled out the University from constituting a special Department of History. Nor has the University found its duty discharged, with the inclusion of *Economics* in the Degree Courses. A Doctor's Degree may be taken in *Mathematics*, and yet the need has been felt for the formation of a special Mathematical Department. Similar considerations are being applied to *Orientalia*, and *Philosophy*. While such is the case, the formation of a School of Geography cannot be brushed aside, on the bare ground of a B. A. Degree in it being permitted whether hereafter or now.

Estimates for making a start are given in Appendix C.

It cannot but be conceded that Geography as a fit subject of study at University is at least on as indisputable a footing as any of the subjects just mentioned. It has been pointed out above what a huge and complex mass of material, Modern Geography has to handle and organise; with how many sciences, it is intimately bound up; and from how many of them, it derives its data. Those sciences are each progressive, passing from the errors of yesterday into the truths of to-day, since the last word has never been said in science; and, as a result, the data of Geography are also progressive.

Geography is a living science, and must keep itself abreast of the latest achievements in science and knowledge.

Further, all the scientific life of the country, in the very nature of things concentrates at the University. The University is the centre of the scientific activities of the nation, and if it abandons its duty by Geography, no other institution can supply its place.

And it should be remembered, that Modern geography is not mere text-book lore, which, by a division of labour, master and pupil summarize and memorize until the day of examination comes round. Besides laboratory work of the most exacting kind, geography has to make field-study of things, and Cartography is to it what Drawing is to Engineering. (As an instance, it may be here mentioned, that some of the recent contributions to the world's stock of knowledge in Isostasy and Geodesy have been made by Britishers in the Survey of India.)

Geography has to apply, to local conditions and facts, the principles arrived at elsewhere; only thereby, can it so act, as to make the knowledge, it seeks to impart, real and living. A Geography of South India, in the modern sense, is nowhere existing. None who have read Gabriel Hanotaux's *Histoire de la Nation Française*—the first two volumes of which are on *Géographie Humaine de la France* by Jean Brunhes—can dare to dispute this statement. Such a Geography for South India has to be built up, and it can be built up only at the University. To promote the knowledge of South India, one may venture to state, will not be thought beneath contempt, by a South Indian University. It is only by a special Department or School of Geography established at the University that the University can maintain, in its freshness, the knowledge that geography postulates—knowledge that is not the mere dead matter of text-books, but is a process of living thought, ever progressing and creative in character. Besides, a University Department or School of Geography would serve as a clearing-house of thought for this organic and growing subject, and would establish contacts and exchanges for teachers, scholars and workers, with one another.

These are some clinching arguments. It is hoped that the authorities entrusted with moulding the minds of this generation will realise the importance of Modern Geography, and establish without more loss of time, a Department or School of Geography, at the University.

APPENDIX A.—TYPICAL QUESTIONS ILLUSTRATIVE OF THE SCOPE OF MODERN GEOGRAPHY IN SCHOOL AND COLLEGE ABROAD.

1. From the Geography Diploma Papers of the University of London, July 1925:—

1. Write a short account of the origin of the salinity of the ocean. Discuss the regional distribution of the salinity of the ocean and show how the distribution affects the circulation of oceanic waters.

(Vth question of 1st paper on "Physical Basis of Geography.")

2. Describe the meteorological conditions shown in the weather chart A, and give a reasoned forecast of the weather for the next twenty-four hours.

(1st question in Practical Examination on "Physical Basis of Geography".)

3. Name the minerals and rocks D, E, F, G, H, J, K, L, M, N, stating the reasons for your determination and mentioning any economic uses to which they may be put.

(IVth question—ibid.)

4. A straight line has to be measured from a point A over a low hill to a point B, B being invisible from A. Describe how the line should be ranged and measured, so as to ascertain the horizontal length A B.

(1st question of 1st paper on "The use of Instruments".)

5. Write a geographical account of the area shown on the Ordnance sheet supplied, illustrating by diagrams.

(1st question of the IIInd paper on "The Use of Instruments.")

6. Discuss and illustrate from your experience in map-reading the value of a detailed drainage map as indicating structure and relief.

(IVth question—ibid.)

7. Describe and account for the distribution of population in the Japanese Islands.

(1st question on General Regional Geography.)

8. Describe fully the geographic conditions affecting the development of agriculture in British Columbia.

(IIInd question—ibid.)

9. Describe the geographical conditions, physical and economic, which are necessary for the production on a large scale of *either* rice *or* maize.

(IVth question—ibid.)

10. Estimate the relative importance of the mineral and the farming industries in the Union of South Africa.

(VIIIth question—ibid.)

11. Compare and contrast the "Mediterranean" climate of the Old World with the somewhat similar climates in the New World, accounting for the differences.

(IXth question-ibid.)

12. Discuss, in its geographical relations, the development of water-power in *either* the French Alps *or* Scandinavia.

(1st question of 1st paper on Regional and Historical Geography.)

13. Compare and contrast the ports of Hamburg and Antwerp in relation to their local facilities and to their respective hinterlands.

(VIIIth question-ibid.)

14. Estimate the economic importance to Japan of *either* Yezo *or* Chosen, explaining in what geographical conditions the area selected differs markedly from Mainland (Hondo).

(1st question of IInd paper on Regional and Historical Geography.)

15. Divide the Indo-Gangetic Plain into natural regions with special attention to crops and density of population.

(IInd question A—ibid.)

16. Write an account of the Punjab Irrigation Works actual and projected. Estimate the advantage that they have brought, or may be expected to bring, to India.

(IInd question B—ibid.)

17. Discuss land and water transport in China, with special reference to the distribution of coal and iron.

(IIIrd question—ibid.)

18. Explain carefully the conditions and the prospects of agriculture in Siberia, making some comparisons with Canada.

(IVth question—ibid.)

19. Write an account of the Japanese fisheries, and point out the physical conditions on which their existence depends.

(VIIth question—ibid.)

20. Describe the ports of Hong-Kong and Singapore, comparing their position from the strategic and the economic points of view.

(VIIth question—ibid.)

II. From an elementary American text-book of Geography entitled, "Unit Studies in Geography" by Rose B. Clark, in use among American children:—

1. One native soldier of India, who did good service in France, told some of our American boys that the thing that impressed him most in all Europe was *the fine breeds of cattle*. Can you give any explanation of that statement now? (Page 207.)

2. I have always heard that the people of India are very poor. I should like to find out why? (P. 209.)

3. Why is not this large country independent? Is it good for India to be controlled by the British or not? How are women treated in India? Just what is the caste system, and what does it mean in the every-day life of the people? (P. 209.)

4. Among the outstanding facts about India are considered the following:—"A land that juts into the sea but is not of the sea; a people who are land-minded and not sea-faring; a land crowded to the very margin of existence by a farming people, illiterate, weakened by their "mosquito climate", until their physical energy is scarcely three-fourths of the European or American; dominated politically by a small island kingdom of the temperate zone; with remnants of an ancient civilization and culture in some lines unsurpassed; with leaders arising whose intellectual and spiritual leadership cannot be questioned. An ancient people, difficult for the western people fully to understand, whose qualities of mind and soul we cannot but admire" (P. 210.)

5. India is the second most populous country in the world; its territory is large and rich. Why is it not independent? (ibid.)

6. Write two or three paragraphs on soils in India. Judging by her soils, could India produce great crops? How would this affect her chances for independence? (P. 213.)

7. What effect has the hot rainy summer on health and energy? Would mosquitoes thrive here? What advantage does the dry season offer? In what parts of India are the people at their best physically? (P. 214.)

8. Would famines be so serious in India, if there were more people engaged in manufacturing? Judging by their raw materials, and by the home demand for manufactured goods, what manufactures could develop here? (P. 215.)

9. Arrange for different members of the class to give short talks on such subjects as:—(b) preparing a meal in India, (c) a visit to a bazaar, (f) the story of a common gunny sack, (g) my experience as a caste girl or boy, (o) rice-farming in Burma, (q) India's great poet Rabindra Nath Tagore, (r) India's reformer Gandhi. (P. 216.)

III. From "Teaching Geography by Problems" by Ehrlich Smith, an American book for teachers:—

1. What has India done for Great Britain? What has Great Britain done for India? (P. 191.)

2. In Asia Minor, Smyrna is of considerable importance. Find out why and how Greece will profit by receiving it as a possession.—(ibid.)

3. Why did the Europeans settle in the southern part of Africa? What have European nations done to improve conditions in Africa? Why have they done these things? What is known as the "American penetration" into Africa, and when did it occur? (P. 195.)

4. "No nation can call itself independent unless it has command of the seven C's: coffee, cacao, copra, cotton, cane, caoutchouc,—(the last being credited with two C's)". Why does the United States need the seven C's? (P. 201.)

5. Why was Germany, one of the greatest world powers before the world war? (P. 234.)

IV. From Russell Smith's "Human Geography," An American text-book for boys:—

1. If India's caste custom be changed into Denmark's co-operative system, what progress would result? (Bk. II, Page 339).
2. Why have the people of India allowed their country to become a colony? Compare them in this respect with the Chinese and with the Japanese? (ibid, P. 340).
3. Since India had been under British rule, which has gained more India or England? Give arguments on both sides. (ibid. P. 340)
4. There is much unused water-power in the Himalayas. Would you rather own a power-plant there or near the Niagara Falls? (ibid—P. 340).
5. Why has not China become a modern nation like Japan? (Book II, P. 330).
6. How does it happen that Japan raises tea and silk, but the United States does not? What countries of Europe carry on intensive agriculture, somewhat as does Japan? Compare the houses pictured in fig. 483 with those in fig. 431. Of what material are they built? Why? Why is Japan the only country of Asia that is recognised as a world power? (ibid P. 323).
7. Why do England and Russia both covet possession of Persia? What conditions have produced the high development of rug-making in Persia? What has been the effect of wars and of jealousies of nations upon this region? (ibid, P. 301)
8. If you were a Filipino, would you rather be free, or a subject of the United States? Give three good reasons for your answer. (ibid—P. 348).

APPENDIX B. GEOGRAPHY IN FOREIGN UNIVERSITIES

I. University of Oxford :—The School of Geography in this University is too well-known to be given detailed description here. Under Dr. Herbertson, the Oxford School gave the impetus to modern geographical studies in Great Britain. The School was established with the assistance of the Royal Geographical Society in 1899. It was removed to its present premises, where lectures and practical work and tutorial instruction are given, and other geographical work is carried on. The library and map-collections may be consulted by members of the University daily.

The staff consists of the Reader in Geography, who is Director of the School, two lecturers, an assistant to the Reader and Librarian, and three Tutors. There is also a special committee for Geography.

Besides the Degree, there is a Diploma Course in Geography, at Oxford.

II. University of Cambridge :—Geography has an independent status, and there is a separate *Department of Geography* :—

There are a Reader in Geography (Lake); a University lecturer in Historical and Economic Geography; a Royal Geographical Society Lecturer in Surveying and Cartography.

There is provision for Geography in ordinary B. A., as well as in Tripos.

For ordinary B. A. there are 5 papers.

1. Physical Geography; 2. Historical & Political Geography; 3. Economic & Commercial Geography; 4. Cartography; 5. Essay; 6. Optional History of Geographical Discovery, or Races of Man.

1. *Physical Geography* :—Form and motions of the earth. Elements of climatology and oceanography; typical forms of land configuration, their distribution and modes of formation.

2. *Historical and Political Geography* :—The historical development and political partition of the different regions of the world with a consideration of the influence of their physical features. A more detailed knowledge of the Geography of a selected region; for 1925 Africa, for 1926 the Indian Empire, for 1927 Australia.

3. *Economic and commercial Geography* :—The economic growth of the different regions of the World, and the main lines of Commerce and Communication by land and sea in past and present times. A more detailed knowledge of a selected region; for 1925 Africa, for 1926 the Indian Empire, and for 1927 Australia.

4. *Cartography* :—The construction and use of maps. A general knowledge of the methods of exploratory surveying, excluding astronomical methods.

History of geographical discovery :—The outlines of the history of Geographical discovery, with special questions on a selected region or period; for 1925 the 19th & 20th centuries, for 1926 the fifteenth century, for 1927 the 8th century.

Races of Man :—The principle races of mankind, their migrations and present distribution.

Essays :—Subjects for an English Essay, not necessarily on the subject matter of the rest of the examination.

Geographical Tripos.

The Geographical Tripos consists of two parts. Part I may be passed either at the end of the first year or of the second year of residence, or in the case of a candidate who has already obtained Honours in some other Tripos, it may be passed at the end of the third or fourth year.

Subjects for Examination Part I.

Part I comprises the subjects in the schedule, together with a practical examination. Two papers of 3 hours each, in each of the first two subjects, and one paper of 3 hours in each of the remaining subjects. Total—8 papers.

Schedule :

1. *Physical Geography* :—(a) *The atmosphere* : Distribution of pressure temperature, and humidity, climatic zones and provinces, changes of climate in historic times. (b) *The Hydrosphere* : form of the oceans, configuration and depths of the ocean floors, distribution of temperature and salinity, tides, currents. (c) *Lithosphere* : Elevation and subsidence, shore-lines, process of denudation, deposition, and vulcanicity, and their effects upon topographical features.

Geography is a subject both for the Pass Degree in Arts and for Honours Degree. Economic Geography is a subsidiary subject under Economic Science. There is also a Diploma course in Geography.

Economic Ethnography is part of the course; and there is an interesting passage in the syllabus, defining its scope. It is defined as "embracing the study of the influence of Geographical environment in the life of the most important peoples, but giving prominence also to questions connected with labour power, and purchasing power, in case of non-European races, both before and after contact with European races, and questions connected with standards of living as affected by geographical conditions, firstly in pre-railway days from the period of the great maritime discoveries, and secondly, in more recent times."

VI. The University of Aberdeen:—There is a Reader in Geography, who is included in the Faculty of Science. Geography is recognised for a Degree Course in the Ordinary Class, Advanced Class, and Honours Class, as well as for B. Sc.—both Ordinary and Honours—with greater emphasis on practical work.

VII. The University of Glasgow:—In this University, there is a Lectureship in Geography instituted in 1909. Geography is included both in Arts and in Science Degrees. It is also a qualifying subject for B. Sc. Pass and Honours Degrees.

For the Ordinary class, qualifying for M.A. and B. Sc., the teaching is carried on by lectures, demonstrations, and practical laboratory and field-work. Lectures deal with the general principles of geography, and in outline with the peoples of the world, and their direct relations with their physical environment. Practical work includes reconnaissance, survey methods, delineation of topographic features, the interpretation of charts and topographic maps, and construction and use of climatological charts, distribution maps, and elementary morphometric methods.

As a qualifying subject for the B. Sc. Honours, "work proceeds by lectures, tutorial meetings, and practical, laboratory and field work, and includes the study in the field of a special problem. The curriculum is divided into two groups, one of which is to be selected by the students. These are:—(a) *Human Geography*: anthropo-geography, commercial and economic geography.—(b) *Physical Geography*: cartography, geomorphology—climatology and hydrography. Course (b) will be open only to those who can satisfy the lecturer of their mathematical attainments, particularly in the differential and integral calculus.

Students will be required to follow the periodical literature of the subject in German and French as well as in English."

VII. The University of Liverpool:—There is a School of Geography and there are a professor, two lecturers and a cartographer; geography is one of the optionals of Pass and Honours Degrees of B.A., and for the Degree of M.A.; and there is a Diploma Course in geography.

IX. The University of Leeds:—The University Staff includes a Reader and two assistant lecturers. Geography may be presented as a subject at the Ordinary Degree of B.A., the B.A. Honours, the Ordinary Degree of B.Sc., and the General Honours Degree of B.Sc., and at the B. Com., Pass and Honours.

X. The University of Durham:—In this University provision is made for Geography at Newcastle.

XI. Other British Universities:—Manchester, Birmingham, Bristol, Reading, Sheffield and Wales Universities have all provided for Degrees in Geography, and have Readerships and Lectureships, with special Departments or Schools of Geography.

XII. The University of South Africa:—There is a separate committee of studies in Geography as for every other subject, and it is included in the Board of the Faculty of Science.

The subjects for the Arts Degrees are classified into eight groups, and Geography is brought in the Vth group along with History subjects, while Economic Geography finds a place in Group VI along with Economic subjects. Candidates taking a qualifying course in Geography are debarred from taking a qualifying course in Economic Geography or Ethnology. Geography is among the major subjects in the curriculum in which three qualifying courses shall be taken. Candidates taking Geography as a major subject shall take at least one qualifying course in one of the following subjects—History, Mathematics, Physics, Botany, Zoology, Geology. Geography is also among the subjects in which M.A. Degree can be taken.

For Degrees in the Faculty of Science also, Geography is among the major subjects, in which three qualifying courses shall be taken. When Geography is taken as a major subject, at least one qualifying course in one of the following ancillary subjects shall be taken:—Mathematics, Physics, Botany, Zoology. Pure Mathematics and Geography may not be taken together as major subjects. There is a *Degree of M. Sc. in Geography*; and also, a *D. Sc. Degree*.

Among other things for the higher degree, the syllabus requires a dissertation on a region or a subject to be selected by the candidate and approved by the Committee of Studies.

Some aspect of the study of Africa is also included. The paper may be of a practical nature.

Stress is laid on the Geography of South Africa throughout the course.

XIII. The University of Sydney:—In this University, Geography finds a place as a subject of study, both in the Faculty of Arts and of Science for the Pass and the Honours Degrees. There is further an M. Sc. Degree and a D. Sc. Degree in Geography, as in other subjects.

Special emphasis is laid on Australian conditions. It is interesting to note that in the detailed syllabus of lectures for the third year, one part deals with the economic resources of Australia and discusses in detail "our (Australian) forest lands, savannahs and deserts; the distribution of minerals and their relation to lines of communication and to population; the controls determining the distribution of sheep, cattle, wheat, maize, oats, sugar, etc.; correlative studies of the resources of the various States; hydro-electric power; irrigation present and potential; future close settlement."

Part of the syllabus in practical work is as follows:—9 hours a week throughout the year must be spent in the Laboratory.

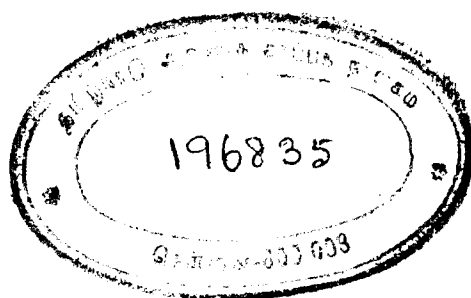
APPENDIX C—ESTIMATES FOR ESTABLISHING A SCHOOL (OR DEPARTMENT) OF GEOGRAPHY.

	Rs.
One Reader in Geography on a monthly salary of Rs. 250	3,000 a year.
Photographic, and artist's, work, by contract system or salary system	600 "
A draftsman on a salary of Rs. 40 per mensem	480 "
A combined shorthand-typist, clerk, and librarian on a salary of Rs. 35 per mensem	420 "
A peon on Rs. 16 per mensem	192 "
Scientific instruments, photographic and drawing appliances and materials, charts, maps, etc.	1,000 "
Books, journals, etc.	200 "
Total	5,892 "

Or in round figures, six thousand Rupees, approximately.

Y. M. C. A. VEPERY,
MADRAS.
15th July 1926. }

WORKING COUNCIL,
Madras Geographical Association.



PRINTED AT THE KESARI PRINTING WORKS, MADRAS.

by the major ... meeting.
an annual subscription of ... able in one
in two equal half-yearly instalments ... as option.

who pay an amount of hundred rupees in two years
MEMBERS, and they shall be exempt from payment
of any further subscriptions.

Officers.

9. There shall be the following officers for the Association :—
Patrons, Vice-Patrons, President, one or more Vice-Presidents,
Secretary and Treasurer.

Management.

10. The management of the Association shall vest in a work-
ing Council, which shall consist of the president, the vice-presidents,
the secretary and the treasurer as ex-officio members, and four
others elected by the general body, one at least of whom shall be
from amongst the mofussil members.

11. The *Quorum* for a meeting of the working council shall be
three.

The Powers and Duties of the Working Council.

12. The duties of the Working Council shall be :—

- (A) To receive and approve all applications for member-
ship ;
- (B) To arrange for the annual and other meetings of the
Association ;
- (C) To provide for the custody and utilisation of the funds
and other property of the Association ;
- (D) To appoint committees and assign duties to them ;
- (E) To act in all respects on behalf of and with the powers
of the general body, except when it is actually sitting.

13. The working council shall have the power, subject to the
veto of the general body, to issue, modify or rescind bye-laws, for
the regulation of the work and activities of the Association.

Miscellaneous.

14. The official year of the Association shall be from 1st Janu-
ary to 31st December, and shall be divided into two sessions.

15. The Annual Meeting of the Association shall be held in
December, when officers for the coming year shall be elected.

16. All membership subscriptions, all unspecified dona-
tions and of all ordinary subscriptions shall be carried to
the capital of the Association.

**THE MADRAS
GEOGRAPHICAL ASSOCIATION, MADRAS.
THE WORKING COUNCIL.**

EX-OFFICIO MEMBERS.

President.

Rao Bahadur M.R.Ry. H. Narayana Rao, Avergal,
M.A., I.E.S., (*Retired*)

*Emeritus Professor of Geology, Presidency College,
Madras.*

Vice-Presidents.

1. Miss Birdseye, B.Sc.,
*Dip. in Geography, London; Lecturer in Geography,
St. Christopher Training College, Madras.*

2. Mr. S. Lakshmana Iyer, B.A., L.T., M.E.S., (*Retired*)
Ex-Lecturer in Geography, Teachers' College, Saidapet.

Secretary.

Mr. N. Subrahmanyam, M.A., L.T.,
Lecturer in Geography, Teachers' College, Saidapet.

Treasurer.

Mr. D. W. Wolfenden, B.A., L.T.,
Assistant to the Headmaster, Bishop Corrie's High School, Madras.

OTHER MEMBERS.

1. Mr. G. D. Watkins, B.Sc., F.R.G.S., F.R. ECON. S.,
Headmaster, Christian College High School, Madras.

2. Mr. M. Subramaniam, B.A., B.L.,
High Court Vakil, Madras.

3. Mr. M. S. Sabhesan, M.A.,
Lecturer in Botany, The Christian College, Madras.

4. Mr. A. Aaron, B.A., L.T.,
Secretary, Y. M. C. A., Ooty, (Mofussil Member).

All remittances should be sent to—

The Treasurer,
The Madras Geographical Association,
Y. M. C. A., Vepery, Madras.

All communications should be addressed to —

The Secretary,
The Madras Geographical Association,
Y. M. C. A., Vepery, Madras.