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SIR JOHN LUBBOCK, BART.
(AFTERWARDS LORD AVEBURY)
FIRST PRESIDENT OF THE ROYAL ANTHROPOLOGICAL INSTITUTE

ADDRESS TO HIS MAJESTY THE KING

1 We, the President and Council representing the general body of the Royal Anthropological Institute, present our humble duty to Your Majesty and take occasion of the one hundredth anniversary of the foundation of the Ethnological Society, the precursor of this Institute, to assure Your Majesty of our loyal attachment to Your Majesty's Throne and Person.

From the earliest days of the Institute problems relating to the culture and welfare of the less advanced peoples of Your Empire have been the subject of continued investigation both by the Institute and by its individual Fellows. We are well aware of Your Majesty's deep interest in all that pertains to the well-being of Your subjects, and we hope that in the future, as in the past, we may be able to contribute to the knowledge upon which depends the just and benevolent government of all Your peoples. In particular, at this great epoch in the history of Your Empire, it is our desire to place unreservedly at the disposal of Your Majesty's advisers and servants the knowledge that has been gained by the Institute in the years since its foundation, so that it may assist to the full when the time for peaceful reconstruction shall come.

We pray that Your Majesty may be granted a long, prosperous, and happy reign over the peoples united in allegiance to the British Crown, and may shortly see a victorious end to the present conflict.

J. H. HUTTON, President.

W. B. FAGG, Honorary Secretary.

CENTENARY MEETING OF THE ROYAL ANTHROPOLOGICAL INSTITUTE. Saturday, 30th October, 1943.

2 The one hundredth anniversary of the foundation of the Ethnological Society was observed by a special all-day meeting of the Institute on 30 October. The morning session took place in the rooms of the Royal Society, Burlington House, and the afternoon session at the Institute's house, 21 Bedford Square, W.C.1.

The President read the loyal address of the Institute to His Majesty the King, and the gracious reply of His Majesty conveying his thanks to the President and Council for their expressions of loyalty and goodwill, his appreciation of the valuable work which the Institute has carried on for so many years, and his best wishes for its fruitful progress in the years to come.

The President briefly surveyed the present position of the Institute, the difficulties caused by the war, and the important work to be done with the return of peace. His address is printed herewith (MAN, 1944, 3).

Sir John Myres was unfortunately prevented from illness from delivering his address on A Century of our Work. The address was read by Dr. H. S. Harrison, and is printed herewith (MAN, 1944, 4). A vote of thanks was proposed by Mr. H. J. Braunholtz, who expressed in the warmest terms the gratitude and appreciation of the Institute for the long, unwearying, and outstanding services of Sir John to learning and to the Institute, of which he had been Hon. Secretary, President, Chairman of the Executive Committee and for long a member of the Council; he had initiated and founded MAN, of which he was the first and also, since 1931, the present editor. The motion was carried by acclamation.

The meeting then adjourned for lunch and proceedings were resumed at 1.30 p.m. The Right Honourable Lord Hailey gave an address on The Role of Anthropology in Colonial Development (MAN, 1944, 5). Sir Arthur Keith (Past-President) moved, and Lord Raglan seconded, a motion of thanks to Lord Hailey for his paper.

The meeting adjourned to the Institute's house, where four papers were read and discussed on aspects of the future of Anthropology: by Dr. G. M. Morant on Physical Anthropology, Professor V. Gordon Childe on Archaeology, Mr. R. V. Sayce on Material Culture, and Dr. Raymond Firth on Social Anthropology. Each paper was followed by a discussion. The meeting adjourned for tea.

Those present at the Royal Society were about 200, and at the Institute about 120.
ADDRESS BY THE PRESIDENT, PROFESSOR J. H. HUTTON, C.I.E., Sc.D.

Wartime restrictions limit us to an austerity celebration, but the welcome we offer to our guests is no less genuine for that, and one of them, that great administrator, Lord Hailey, is to address us on the special place of Anthropology in colonial development, and I will take this opportunity of expressing the pleasure and gratification which we all feel at the presence among our other honoured guests here to-day of Field-Marshal Smuts. I have also to express our great regret at the death of Sir Aurel Stein, our Huxley Lecturer in 1934.

We are both a national and an international body, and we have consequently suffered not a little during the war from loss of members, from the interruption of communications, from the intermission of field work, and from the curtailment of teaching. This we hope may be made good with the return of peace. And when that wished-for event does take place, there is a great deal of work for us, as anthropologists, to do.

The present distresses and confusion of the world are due in a great degree to ignorance, prejudice, and misunderstanding, and to the deliberate perversions of truth which are thereby made possible. In the building of a better world in which knowledge of our fellow-men may lead to the understanding and tolerance which spring only from knowledge, anthropology, the science of the study of man, has a great part to play. Unfortunately it is still in this country the Cinderella of sciences; few of our universities give it much recognition; our schools ignore it. This Institute of ours has always been handicapped, and never more than now, by lack of funds. We need funds to keep up our library and publications, to finance field-work and research, and to make our accumulated knowledge readily available to all people; but at present we have difficulty in maintaining the essential routine administration of the Institute.

In regard however to training and research, I am glad to say that owing to the generosity and public spirit of Mr. Emslie John Horniman, who died last year, we shall be able to do something. Under his will we have been bequeathed in trust a substantial sum to create the Emslie Horniman Anthropological Scholarship Fund, in regard to which I cannot do better than quote from Mr. Horniman’s will his own words defining the object of his bequest: ‘The reason why I wish to form the Emslie Horniman Anthropological Scholarship Fund is because I am convinced by wide travel that the scientific study of subject races is of the greatest importance in their government and vital to the British Empire as well as to the health, happiness, and progress and good government of the coloured races throughout the world and that such study is at the present time not sufficiently encouraged by those charged with this task nor easily available for those whose professions bring them in contact with such races.’ I cannot here go into details of the administration of this Fund, but the conditions are liberally drawn; they provide for university studentships, intended particularly for persons serving in the colonial empire, and are open without distinction of sex, creed, or colour to persons of British nationality. Here is a beginning; we can but hope it is the harbinger of more, and that the future of the Royal Anthropological Institute will be more than worthy of its past.

A CENTURY OF OUR WORK. By Sir John L. Myres, O.B.E., F.B.A.

Though the Royal Anthropological Institute was not founded till 1871, it is the direct successor of the Ethnological Society of 1843, after amalgamation with the Anthropological Society of 1860, and may justly claim now to celebrate on 30 October the centenary of the organized Study of Man in this country. And the main turning points in the careers of these societies illustrate the general course of events on a wide range of studies, from comparative anatomy of the principal human varieties, to comparative religion, sociology, and linguistics, and the whole range of the material arts with their archaeological perspective, so nearly co-extensive with human paleontology.

At first sight this Study of Man is no coherent or systematic science like chemistry or physiology, but rather analogous to geology and geography, which combine the method and the material of more specific branches of knowledge for the elucidation of problems of a secondary order, and especially involving relations of distribution in time and space. But it has been characteristic of British anthropology to insist that the peculiar nature of Man provides the same kind of common basis and definition for a coherent mass of information, and systematic study of this material by every available means, as the Earth provides in Geography, and not less because in Geography too it is the Earth as the abode of Man’ which seems to many geographers the difference between their study, and geology or terrestrial astronomy.

American anthropology follows the same line of thought and development; partly because in the New World, as in the British Empire, there has been so great a wealth of opportunity for the regional study of more or less self-contained and self-determined varieties of Mankind, so that analytical studies of
structure, language, material, and social equipment has been continually challenged and tested by fresh discoveries in the field; whereas in most European countries, less well provided with 'aborigines,' the special sciences which contribute to their study of Man have developed independently, and lost their common basis of humanity. It is also this common objective, which has given to much British and American work a disciplinary and educational value, which has at long last determined the position and function of the principal anthropological institutions and schools, as the outlay of an academic discipline which might claim in due time to be \textit{Literae humanissimae}.

Though both physical anthropology, and the elements of ethnology, and what is sometimes distinguished as 'cultural anthropology,' had long been studied discursively, in classical culture, and from the Revival of Learning, there were many convergent instigations to more systematic treatment in the early years of the nineteenth century.

The romantic movement, and the revolutionary movement which emerged from it, gave the same impulse to humane studies as to the physical sciences. In both the cry was 'back to Nature,' at whatever cost to convention or authority. Anatomical studies reformulated old problems of the origin and significance of human races and varieties. Comparative philology indicated processes of modification and replacement among languages, and relations of heredity between them, seductively like those of a pedigree, and sometimes correlated regionally with major racial types, Semitic with Arab, and the like. The Danish archaeologists combined typological classification of implements—stone, bronze and iron—with the stratigraphy of the peat bogs where they were found, and especially with changes of flora and climate. Cave-finds in France and England associated implements with antediluvian fauna, and even with human remains. Comparative mythology, in dangerous alliance with philology, led on to the interpretation of social and political terms in kindred languages, to a comparative sociology, and a linguistic paleontology. And the common factor in all these new studies was the notion of development, and series of events in time.

There were other considerations, more practical and controversial. The abolition of slavery was a corollary of the Rights of Man within one human species. But what if zoologically there was more than one human species, of separate special creation and independent place in Nature, like that of the domesticable animals, over whom human dominion seemed to have biblical sanction? Was not \textit{black} man, in fact, the 'natural slave' as defined in Greek philosophy? To some the American Redskin seemed to present a similar problem, as the economic expansion of the West went on. On both sides zoological arguments were brought in to support philanthropy or to challenge vested interests, and it was long before this kind of 'applied anthropology' became obsolete.

There was also the practical question, what was to be done with the 'black brother' after emancipation. Was he improvable into something not so far from white? What was the relation between physical and mental characters in Man, and what could be done to perfect Nature's work by scientific processes? It is significant that most of the early British anthropologists were practising doctors, and James Cowell Prichard, the most eminent, was a Commissioner in Lunacy, with a high repute in questions of the moral and legal responsibility of the insane. Several were also members of the Society of Friends, and Thomas Hodgkin was the founder of the Aborigines Protection Society in 1838. Other philanthropic agencies, the Negro Emancipation Society and the British African Colonization Society (both of 1834) collected information and used it as best they could. Another foster-parent, for obvious reasons, was the British Phrenological Society (see \textit{MAN}, 1944, 10, below).

The earlier history of the Ethnological Society has been so fully told elsewhere that only essentials are necessary here. It was never a populous or influential body, and owed its existence and successes to a small group of original and devoted men, nearly all dependent on professional careers, and very few of them even affluent. On many occasions the same persons appear as the active members of the Geographical or Zoological sections of the British Association, sometimes for specific discussions for ethnology, and this summer and winter partnership, never quite effected in any other section, makes it difficult to trace the origin of some projects, except personally.

In 1839 Prichard addressed to the British Association a warning, already needful, 'On the extinction of 'some Varieties of the Human Race,' and appealed for prompt and organized effort to record this vanishing material. It was the first of a long series of such appeals, to forestall both the disappearance of aboriginal societies altogether, and the no less fatal effects on aboriginal customs of contact with colonists, traders, and missionaries. For the guidance of intending travellers and of observers already in contact with natives, the British Association appointed a committee to draft a pamphlet of \textit{Instructions to Travellers} in which the whole programme of anthropological and ethnological research was set forth; an original and stimulating directory, and the direct predecessor of the well-known \textit{Notes and Queries on Anthropology} which have for many years been printed by the British Association, but sold and distributed to travellers by the Anthropological Institute.
It was the first example of a type of handbook of which the most famous is the Royal Geographical Society’s *Hints to Travellers*.

On 22 June, 1842, Prichard again addressed the British Association *On the Relation of Ethnology to other Branches of Knowledge*, with the outline of an inclusive programme of advanced study and objectives for research; and on 20 July the prospectus was issued for an Ethnological Society, signed by Richard King (1811–1876), a pupil of Thomas Hodgkin at Guy’s (M.R.C.S. 1832 and Hon. M.D. of New York), who had been surgeon and naturalist to Captain George Back’s expedition to the Great Fish River (1833–35) and published a book on the Esquimaux in 1844. He was the first secretary of the subsection for anthropology in the British Association.

The first meeting was held early in November, 1843, with King as secretary, and Admiral Sir Charles Malcolm (1782–1855) as president. Malcolm had been Superintendent of the Bombay Marine, the precursor of the Indian Navy; he had created a distinguished school of surveyors, and devoted much of his leisure to the Royal Geographical Society, and to the organization of charities. Meetings were held at first in Hodgkin’s house in Lower Brook Street, then at 27 Sackville Street in rooms rented at £120; later, from 1859, at 4 St. Martin’s Place, W.C.2., where the National Portrait Gallery now stands. Both Hodgkin and Prichard seem to have been generous financially; the latter published his *Natural History of Man* in 1843, and died in office as President in 1848. Another good friend was James Crawfurd (1783–1848) who had used the opportunities of a medical career in India and Malaya, and returned home in 1847 to devote himself to Oriental languages. King returned to Arctic exploration in 1850, wrote an account of the long search for Franklin (1855), published a memoir on the Lapps (1871), and was a member of the first council of the Anthropological Institute.

Another pioneer, on rather different lines, was Robert Knox (1791–1862) who graduated in medicine at Edinburgh in 1814, served as army surgeon at Waterloo, studied in Paris under Cuvier (1769–1832) and Geoffroy de Saint Hilaire, and organized the Museum of the Royal College of Surgeons at Edinburgh (1825), collecting material under the adventurous conditions of the time. Passionate and heterodox, he greatly damaged his own prospects; he lectured volubly on the *Races of Man* in many places, and wrote copiously in the press, rendering much erratic help to the Society, and in 1860 he became an Honorary Fellow and Honorary Curator of its Museum. He held strong polygenist views, but deemed the origin of races to be beyond human enquiry. His influence therefore waned when Darwinian evolution was popularized.

Very different are two anthropological pioneers of the next decade. John Beddoo (1825–1911) of Bridgnorth graduated in medicine from University College, London (1851), and studied in Vienna. Hospital service at Renkoi in the Crimean War extended his earlier studies of hair and eye colour (1846) to Mediterranean peoples, whom he continued to study in the docks of Bristol and Cardiff when he went into general practice. His massive material on *Stature and Bulk of Man in Great Britain and Ireland* (1870) and *The Races of Britain* (1888) has been supplemented, but not replaced, by the work of the British Association’s Committees for an Ethnographical Survey and for Anthropometric Measurements. He was an early and active Fellow of the Ethnological Society, and a foundation member of the Anthropological Society (1860) and it was under his presidency of the former (1860–71) that the schism was reconciled and the Anthropological Institute inaugurated.

George Rolleston (1829–1881) combining classical scholarship with anatomical distinction, served like Beddoo in the Crimean War, and as Linacre Professor at Oxford amassed a valuable collection of crania, elaborated later by Arthur Thomson and Leonard Dudley Buxton. He submitted his system of brain-classification to the British Association at Oxford (1860) and supported Huxley in opposition to Owen at Cambridge in 1862. His Royal Institution lecture (24 June, 1862) is another turning point. With William Greenwell (*British Barrows 1877*) he established by copious excavation the racial history of Britain on the same sure foundations as the racial distributions outlined statistically by Beddoo.

But the leading mind in ethnology during what may be characterized as the Darwinian period was that of Thomas Henry Huxley (1825–1895), whose learning, judgment, and skilled advocacy made him a second founder of the science in Britain, and moreover the leading spirit in an evolutionary movement far outranging his own anatomical and zoological contributions. The notions of natural selection and survival of the fittest were applied to arts and crafts by General Pitt-Rivers, in archaeology by John Evans and Augustus Franks, in institutions by Sir John Lubbock, above all in tradition, ideas, and beliefs by Edward Tylor, whose establishment at Oxford (1883), through Rolleston’s influence, was the first academic recognition of the new Study of Man.

The practical issue of American slavery revived old controversies and gave scope to the enthusiasms of James Hunt (1833–79) who joined the Ethnological Society in 1856 and was its Secretary 1859–62. Fresh light on the origin of Man came from the paleolithic discoveries of Boucher de Perthes, verified by Prestwich and John Evans in 1859; the Neandertal skull had been found in 1857, and the cave of
Aurignac was opened in 1860. But Hunt's enthusiasm failed to rouse the Ethnological Society, and in 1860 he founded the Anthropological, edited the *Anthropological Review*, and published translations of Waiz and Gerland, the leading ethnologists in Germany, and of Gastaldi on prehistoric Swiss and Italian lake-dwellings, a new and copious source of material for typological and stratigraphical studies alike. The Anthropological Society loved discussions, and ranged far afield to Women's Rights, the Irish Question, above all the Negro Question. Its first chairman was Sir Richard Burton. On the old zoological ground of a plurality of species, Hunt defended slavery at the British Association in 1863; where with Huxley's support a subsection was established for Anthropology under Section D (Zoology). But Hunt was combative and difficult; he resigned the presidency of his society in 1867 but remained its 'director' till his premature death in 1869.

The Anthropological Institute.

The way was now open for reconciliation. The Negro Question had been settled by the American Civil War; Huxley in the chair of the Anthropological Society, and Beddoes of the Ethnological, rallied men of good will on all sides, and in 1871 was established the Anthropological Institute of Great Britain and Ireland with Sir John Lubbock as its first president. For his portrait, published in 1877, see Plate A. With the financial help of the British Association revised *Notes and Queries in Anthropology* were published, and the Anthropometric Committee of 1875 gave much-needed definition to physical anthropology, and its annual measurements of the members of the British Association did much to popularize statistical treatment of the problem. Originated by Francis Galton, this migratory equipment for anthropometry was the precursor of the Galton Laboratory at University College, London, and of the systematic study of Biometry and Eugenics in London.

When the original library and museum, behind the National Gallery, were pulled down, the good offices of the President of 1883–5, William Henry Flower, secured an appropriate home in the upper part of the Zoological Society's house, 3 Hanover Square. 'Man' as men said, climbing the winding staircase, 'was the 'crown of the animal world.' The arrangement, however, was nearly disastrous to both institutions, for the weight of exhibits from the first excavation of Stonehenge (1900–02) irretrievably damaged the building, and hastened the transfer of the Zoological Society's offices to Regent's Park.

By this time the close association of the Institute with the staff of the British Museum, inaugurated by Augustus Franks and happily perpetuated by Charles Hercules Read and others down to the present time, drew the Institute into a succession of abodes in Bloomsbury, the last of which is 21 Bedford Square.

Under the energetic presidency of Sir William Ridgeway (1909–10) further efforts were made to interest the Government in ethnographical surveys of native races, but with little result. The Institute was however granted the status of a society under royal patronage and title.

The war years 1914–18 brought diminished income, increased expenses, especially in publication, and some restriction on meetings. Both the *Journal* and *Man*, however, were maintained in the usual style.

Joint Committee.

On the resumption of normal work, Sir Richard Temple, the Indian antiquary, an old supporter of the Institute, laid before the British Association a project for a central Institution for the studies covered by the Institute's work, as the basis for co-ordinated research. The Association summoned a conference of representatives of all universities and other societies and institutions engaged in every kind of anthropological research and teaching, which recommended (in 1922) that the existing Institute was the proper nucleus for such an organization, and that co-ordination would be best effected by a Joint Committee for Anthropological Research and Teaching, established in 1923 (essentially in perpetuation of the initial conference), the administration of which should be left to the Officers and Council of the Institute as executive. A full review was published of anthropological and kindred departments, collections, and other facilities, and on all subsequent occasions when fresh projects have been put forward it has been customary for the Institute to refer them to this Joint Committee and consequently to act as the accredited representative of British expert opinion of these matters. In this capacity the Institute made representations to the Royal Commission on the National Collections, and to subsequent conferences, for the establishment of a National Folk Museum; to the Colonial Office on the need for ethnological training for civil servants, and for opportunities of study-leave for advanced work and the publication of field studies. The Joint Committee has also stood behind the Institute in its difficult negotiations for the establishment of International Congresses, of which more must be said later.

Research Committees.

The earlier years of the Institute were a period when public interest in many aspects of the Study of Man encouraged the foundation of special and separate societies. It has long been the policy of the Institute to offer every facility for the conduct of such special enquiries by standing committees reporting to its Council, making use of its offices and library, and
collaborating with independent bodies as required. In addition to its Indian Research Committee, for example, the Institute took over from the veteran Sir Richard Temple the publication of the Indian Antiquity with expert Indian and British assistance. Other Research Committees, like those of the British Association already mentioned, have dealt with the Ethnological Survey of Great Britain; with the standardization of Anthropometric Technique—now merged in the Anthropometric Committee of the International Congress—with proposals for an Imperial Oriental Museum, for a Folk Museum like those of the Scandinavian countries for the preservation of typical buildings, implements, and furniture, and for the excavation of Derbyshire caves. More recently a Standing Committee on Applied Anthropology has suggested and supported proposals for more intensive study of native culture, especially in Africa, and for more systematic training and opportunities for research for Colonial officials.

Fellowship.

Of the organization and current work of the Institute it is only possible to give an outline here.

Like other learned Societies of the last century and before, it has always been a centre of informal resort as well as of systematic proceedings, enabling the more active and accessible Fellows to compare notions and projects; and in this connexion mention should be made of the dinners, between Council and evening meeting, long eaten appropriately at Pagani's Restaurant in Great Portland Street, a well-known resort for such purposes. It was long customary also to exhibit small collections and hear a brief account of them, before the regular paper was read. But the growing difficulties of London transport have restricted these opportunities.

The terms of membership have not varied much. The Ethnological Society had a lower rate of subscription for country members out of reach of the library, and recently, like some other societies, the Institute has admitted student-members at a reduced rate, up to graduation. This privilege is not, however, so widely used as might have been expected. A valuable class of foreign Local Correspondents—replacing the older Corresponding Members—pays no subscription, and receives MAN free, on the understanding that communications are sent for publication from time to time.

Like all learned bodies, both the Ethnological Society and the Anthropological Institute have owed much to the devoted services of these assistant secretaries, who have usually had to undertake also the responsible duty of librarian. Especially notable were the long tenures of G. W. Bloxam (1879–1894) and Miss Katherine Martindale (1915–1941), the latter still gratefully remembered by many Fellows and visitors. Others, such as Northcote Thomas, H. S. Kingsford, and E. N. Fallaize passed on more rapidly to other posts; the last-named became Honorary Secretary (1920–1930).

Journal and Library.

Besides participation in its proceedings and public meetings, the Institute provides for all Fellows two invaluable aids to advanced study, its library and its publications. The library is especially rich in the earlier literature, and in current periodicals, mostly obtained by exchange. Through a generous benefaction from The Carnegie United Kingdom Trustees it has been carefully catalogued, and associated with the Central Library for Students, whereby the rarer books are made accessible under due safeguards to workers at a distance or unconnected with the Institute. For a while, this and other benefactions made it possible to maintain a whole-time librarian, and the names of past librarians, Professor Gordon Childs, Professor A. M. Hocart, Miss Rachel Fleming, and Mr. F. J. P. Gaskin are sufficient evidence of the value of such an expert member of the staff, so long as maintenance was practicable. To restore this librarianship should be one of the major efforts of the Institute.

The Journal, with its predecessors, Ethnological and Anthropological, is a monument to a century of British anthropological research. It has owed much in recent years to generous subsidies from the Rockefeller and Laura Spelman Rockefeller Trustees, and has been twice enlarged to provide for more adequate illustrations. Its maintenance must be always a first principle of the Institute's policy; inevitably also a very heavy charge on its funds. For contributions too bulky for inclusion in the Journal, there has been since 1902 a series of Occasional Papers, some of which have been in wide demand.

Man.

In 1901 the Institute ventured on a second periodical publication of a more popular kind, the full story of which has not been told hitherto. About 1885 the weekly Academy, which had maintained a more learned and scholarly tradition, side by side with the older Athenaeum, lost support and ceased to appear: it had had a strong archaeological as well as literary side. Flinders Petrie, himself too much engaged in Egyptian excavation to conduct such a paper, raised a modest guarantee fund, and asked me to organize and edit it under the title Man, to be (as the prospectus put it) a counterpart to Nature for the humanities. Though there were numerous promises of help, it was disconcerting that so many were on the understanding that this or that subject should not be included, and
the project remained in suspense till I became Honorary Secretary of the Institute in 1900. The size of the Journal had been increased in 1898 to allow more ample illustrations, and it appeared now half-yearly instead of quarterly. It had also become the custom to fill up the half volumes with shorter Miscellanea and some reviews of books. The Council agreed to increase the amount of these Miscellanea, to print them in instalments in advance, with a full-page plate in each monthly part, to issue these parts free to Fellows under the title Man, and to sell them to the public; and the guarantors of the proposed periodical Man put their fund, and the title, at the disposal of the Institute. The first number of Man appeared in January 1901 with a coloured frontispiece, and publication has been continuous, though wartime restrictions have temporarily reduced the number of pages. In 1903 the guarantee fund was closed, the free issue to Fellows ceased, and the Institute assumed full responsibility for the publication. No other learned Society has undertaken a periodical quite of this kind, and the Institute has benefited by a large number of books received for review and added to the library, and by an economical means of exchange for many anthropological publications not adequate for exchange with the Journal.

Medals and Grants.

To commemorate the anthropological services of Thomas Henry Huxley, the Institute founded a Huxley Memorial Medal, which is awarded annually to a British and a foreign anthropologist alternately, with the privilege of a public lecture by the recipient, which is printed in the Journal and separately. The long series of these lectures includes many valuable contributions to all aspects of the Study of Man. The Institute also awards annually a Rivers Memorial Medal, for distinguished field-work, in memory of one of its most brilliant presidents, who died in office prematurely just as his great abilities seemed to be finding fresh scope in the service of social anthropology. The Rivers Memorial Fund, administered jointly by the Institute, the Folklore Society, and the British Psychological Society, makes grants from time to time for anthropological research and publication. The Wellcome Medal, founded by the late Sir Henry S. Wellcome, a constant friend of the Institute, is offered annually for the best essay on the application of anthropological research to social services.

Under the will of the late Emslie John Horniman the Institute administers also a well-endowed trust for the maintenance of graduate students of anthropology at any university, but the operation of this unique and invaluable foundation has been deferred by the War. The fund is also available for grants in aid of publications or reports by past or present holders of studentships or works under the Trust.

International Relations.

One of the first privileges and responsibilities of any national institution, especially in the sciences, is to maintain friendly co-operation with similar bodies in foreign countries. The Ethnological Society was not quite the oldest of its kind, the Paris Society having been founded already in 1838, but it was fortunate in the numbers of its early Fellows who had either travelled and studied abroad, or whose work attracted the attention of foreign colleagues. The long list of Honorary Fellows, and more recently of Huxley Medallists, proves that this intimacy has been maintained; and in recent years a considerable number of foreign workers, some of great distinction, have been adopted as guests of the Institute, and enabled to continue their studies.

In the years between 1918 and 1938, it fell to the Institute to take a very active and responsible part in the international organization of anthropological, ethnological, and prehistoric studies. The earliest of these international congresses was concerned in 1867 for the comparative study of the material from Swiss, French, and Italian lake-villages, which as we have seen had greatly interested Hunt's Anthropological Society. From 1861 to 1913 a long series of such Congresses was maintained, with ever-widening inclusion of general anthropology. They were usually held at intervals of three or four years. A similar Congress of Americanists also met every other year, and alternately in the New World and the Old. In 1912 the Americanists met in London, and the Prehistoric Congress was to meet in Geneva in 1913.

At the London meeting Alfred Maudslay, president of the Anthropological Institute, and a pioneer of Central-American archaeology, proposed that the two congresses should so far co-operate in future as to hold the Prehistoric Congress always in the years when the Americanists met in Europe, with a concerted programme of discussions. This gave to American colleagues, already numerous, the fullest facilities for meeting Europeans. The proposal was accepted by the Prehistoric Congress at Geneva, and set down for ratification at the Congress arranged for 1916 in Madrid. This Congress was cancelled by the War, but the London executive committee remained in being, and the fortunes of the Prehistoric Congress lay in the hands of its own standing Bureau.

But before any action could be taken, a fresh and disastrously political intervention happened. The Écoles d'Anthropologie of Paris and of Liège, both primarily established for research and teaching, obtained a subsidy from the French Government to organize an 'International Institute for Anthropo-
logy' with permanent headquarters at the Paris École, officers of French nationality, a Council with twenty-four French members against four of any other nationality, positive exclusion of 'enemy' nations, and the express programme of 'purifying' anthropology from heresies originating east of the Rhine. Other countries were to have 'national offices' to promote the aims of the Paris Institut, and the Royal Anthropological Institute narrowly escaped this fate. The only alternative seemed to be to revive the pre-war Congress through its Geneva Bureau on its old strictly international basis; and at the Amsterdam meeting of the French Institut the representatives of the Royal Anthropological Institute, who were also delegates of the British Government, secured the promise of friendly conference between the old and the new organizations. But though after long negotiations the old Bureaux deliberately severed all connexion with the Paris Institut, the president of the latter, Louis Marin, of extreme political views, and later a member of the administration of Laval, suppressed that decision, and announced to his followers the absorption of the old Congress in the Paris Institut, which remains unchanged in constitution and practices.

Fortunately, however, help came from a quite different quarter. The pre-war International Congress of Archaeology, inaugurated at Athens in 1904, found its scope over-wide, and at Barcelona in 1929 it was amicably agreed to discard Prehistoric Archaeology. It was also by this time clear that Anthropology and Ethnology required an independent Congress, and that Prehistoric Archaeology could now safely stand alone—Influential conferences at Berne (1931) and at Basle (1933) in which the Royal Anthropological Institute, with its long experience of these negotiations, was able to contribute substantially, succeeded in establishing both Congresses, with a synchronized timetable, which included the pre-war co-operation of the Americanists, who were to meet in Europe in the year when a Congress of Anthropology and Ethnology was held, and in America when it was the turn for the Prehistoric and Proto-historic Sciences, whose objectives were distinct. It was a further contribution, that our Institute, with the support of the Joint Committee, and especially of the Society of Antiquaries, was able to invite each of the new Congresses to hold its first session in London (Prehistoric 1932, Anthropological 1934). The following sessions—Prehistoric at Oslo 1936, Anthropological at Copenhagen 1938—were also fully successful. The third Prehistoric session (Budapest 1940) was cancelled by the War, and the third Anthropological (due in 1942) must await the restoration of amicable intercourse. But it will be clear, from this long and rather intricate story, that our Institute may find it necessary to undertake once more a leading part in the restoration of international amity and collaboration, in the many urgent problems both of research and of its application to current necessities, in which the Institute itself has been so long and intimately engaged.

Epilogue.

Confronted on this occasion with the alternatives of a general survey of anthropological discovery and progressive interpretation, or of a record of ways and means, of services to learning, rather than the advancement of knowledge, I have deliberately chosen the humbler, not so much because it seemed more possible to deal with it summarily within these limits of time, as because it has long seemed to me that, great as have been the contributions of British anthropologists, working in isolation and with haphazard and inadequate aids, in comparison with what some other countries have offered, these contributions might have been so much more ample and coherent, if there had been that equipment, on the mechanical and material side, which a well-endowed, well-staffed, and well-directed Institute might have provided, during this first century of our science in Britain. The multiplication of special interests, and of special societies and departments to deal with them, does not relieve the difficulty, while it involves ever-increasing diversion of scanty funds from positive research to inadequate and unco-ordinated equipment. There could, I believe, be no more opportune and invaluable foundation, in this phase of replanning and revision of our resources, than a single Institution which should serve the societies concerned with the study of Man in the same way as Burlington House serves some of the natural sciences, but on an ampler and more organic plan. The association of the numerous special libraries alone would be a vast gain in utility and economy; a secretarial staff competent to deal with the emergencies of special research as they arise would set free time and energy which at present does similar work many times over. The provision of a few adequate lecture-rooms, and exhibition galleries for temporary occasions, would attract larger audiences, and give the publicity which it is so costly to achieve on a small scale. Above all, habitual collaboration between related interests, which has in the past been so fruitful where it has been seriously attempted, would, I am sure, enhance the energies and, above all, the good will of those who benefited by such facilities. Our contributions to the Study of Man hitherto have been notable, in the face of persistent poverty and inconvenience. Worthily installed and equipped, in these material ways, I am confident that they would make generous return.

A gentleman has been defined as a man who puts
more into life than he gets out of it. Fellowship of a learned society should have the same ideal and inspiration.

Mr. H. J. Braunholtz, ex-President, proposed a vote of thanks as follows:

First of all I am sure you will wish me to express our sincere regret at Sir John’s absence. No one, I am convinced, regrets his inability to be present with us to-day more than Sir John himself.

In proposing a vote of thanks to Sir John Myres I should like to express the Institute’s appreciation and gratitude for all that he has done for us over a long period. Admirable as was his account of our history, I detected an almost total omission, of his own personal contribution. Among all the illustrious names in our history no one has rendered more conspicuous service, not only to the Institute, but to Anthropology through this Institute, and through other bodies such as the British Association, and Congresses, both national and international.

This is the more remarkable when we consider the wide range of his interests, and the heavy responsibilities which he carried in other spheres, at Oxford, and in other institutions which have enjoyed his Presidency.

It is exactly half a century since he became a Fellow of this Institute. He was already contributing to our Journal in 1896 and was a member of Council in 1898. He was Honorary Secretary from 1900 to 1903, and Huxley Medallist in 1933. He has been Honorary Editor of Man for more than ten years, and was the principal agent in its foundation forty-two years ago. Under a period after 1903 when other duties and interests claimed his attention, and the Institute, to its regret, did not see much of him in the flesh, although we are aware that the cause of Anthropology was never far from his mind.

In all these offices he has given unceasing service, far more indefatigable than he could legitimately have been expected of him.

‘Good measure, pressed down, and running over’ has been his principle. Indeed, if there is one thing especially remarkable about Sir John, apart from the fertility of his mind, the acuteness and swiftness of his perceptions, the sanity of his judgment, and the range of his interests—i.e. it is his gluttony for work, his never-ending hard work—not merely for the more interesting and mentally refreshing aspects of it, but for the sheer drudgery of detail. No better proof of this could be given than the recent series of successful International Congresses, in the creation and organization of which not only was his the master mind, but the master pen in the actual drafting of secretarial detail.

I think that when we come to assess the value of Sir John’s work it may be concluded that, notwithstanding the brilliance of his original research and his literary contributions to many spheres of archeology and anthropology, his greatest service to science will have been in the field of these Congresses and all that they imply in the cross-fertilization of scientific minds. For this kind of activity he seems to possess a special genius. He has devoted much of his time and energy to providing and maintaining this machinery for the free personal intercourse and fruitful interchange of thought between scientists of all nations.

I had a good chance of observing his social talents when I travelled out on the same boat with him to the South African meeting of the British Association in 1929. During that voyage of a little over a fortnight, and in spite of some weather which was by no means wholly favourable to social intercourse, he seemed to have got to know and to have exchanged ideas with almost every passenger on the ship.

I should like, if I may, to give one more personal reminiscence, also from South Africa, as an example of his indomitable energy. We were travelling northwards from Pretoria by road, and had had what, for me at least, was a pretty trying day visiting various native reserves or ‘locations’ on the way, and interviewing administrative officials and native chiefs, and we eventually reached the mining township of Messina in the extreme north of the Transvaal just as it was getting dark. Some of us were glad enough to rest and relax. Not so Sir John. After a hasty meal and change of clothes, he turned out perfectly fresh to deliver a public lecture, lasting nearly two hours. I believe, on The Metals in Antiquity. It was in an open park on a balmy evening under a bright moon. As he moved to and fro across the dais he frequently intercepted the beams of light projected from the lantern, and his white shirt-front became illuminated with the bright colours of his lantern slides. As I watched the unusual scene, I could not help reflecting that the strange iridescence which thus suffused the lecturer’s form was symbolic of his versatile mind, which has never failed to throw brilliant light upon any theme to which it was applied, or to refract that light in many illuminating colours.

Sir John has set us all a shining example, and it is with great pleasure that I propose a vote of thanks to him not only for his address to-day, but also for his outstanding services to this Institute and to anthropology:

‘That the thanks of the Institute be accorded to Professor Sir John L. Myres for his address entitled A Century of Our Work, coupled with regrets for his absence from the Centenary Meeting, and for the illness that caused it.’

‘That the sincere congratulations of the meeting to Sir John for the Knighthood recently bestowed upon him be conveyed to him.’

‘That the meeting desires to express its cordial appreciation of the great services rendered to Anthropology and Archaeology by Sir John over a period of fifty years, not only as Honorary Secretary, as President, as Chairman of the Executive Committee, and as Editor of Man, at various periods, but in other less official capacities.’

I am sure you will wish me also to express our thanks to Dr. Harrison for his kindness in stepping into the breach at somewhat short notice to read Sir John Myres’ address.

Dr. Harrison’s record of service to the Institute has been in some respects similar to Sir John’s, and has lasted continuously for the exceptional period of nearly forty years. During that time he was Honorary Secretary for seven years, Honorary Editor of the Journal for over ten years, Chairman of the Executive Committee for a number of years, and President from 1935–37. Had it not been for his incorrigible modesty, he would also have been a recipient of the Huxley Memorial Medal, an honour for which he was nominated by the Council, but which he declined for reasons which, however good they may have appeared to him, were far from convincing to his admiring. However that may be, his wise counsel and constant devotion to our interests have placed this Institute deeply in his debt.

Dr. Harrison was, as most of us are aware, Curator of the Horniman Museum at Forest Hill, which, largely through his personal skill, developed into one of the most attractive museums of its kind. During that time he naturally made the acquaintance of the late Dr. Horniman, about whose significant bequest the Institute has just been informed by our President. Putting two and two together, I cannot help suspecting that there is some connexion between these facts, and that Dr. Harrison used his influence either directly or indirectly—and he has a very persuasive tongue when he wishes—to direct the Horniman Fund into the appropriate channels of this Institute.

For all these reasons I have much pleasure in moving this vote of thanks to him on your behalf.
THE RÔLE OF ANTHROPOLOGY IN COLONIAL DEVELOPMENT. By the Right Honourable Lord Hailey.

Some two hundred years ago, David Hume foresaw the creation of a science of man which, in his words, 'will not be inferior in certainty, and will be much superior in utility, to any other of human comprehension.' How far the science of man can be said to have attained certainty is a point which I must leave philosophers to debate; it may well be that the subtle and elusive character of the forces which actuate human behaviour forbid us to look for the type of certainties which students of the natural sciences are concerned to establish. But because social research engages itself with elements which are so difficult to evaluate, that does not necessarily deprive it of the utility which Hume sought to find in prosecuting the science of man.

I am concerned now to examine only one of the many fields in which studies of the type of those promoted by members of the Royal Anthropological Society can have a definite utility for those whose task lies in dealing with human affairs. But looking back on the long history of your Society, now so happily celebrating its centenary, I realize how significant a part interest in this particular field—the promotion of knowledge about the indigenous life of the Colonies—has played in its development. Let me recall that the inspiration which led to the foundation of the Ethnological Society in 1848 was due to that humanitarian movement which first manifested itself in the campaign which secured the abolition of slave trade in 1807 and the Emancipation Act of 1833, and subsequently directed its attention to questions affecting the general welfare of the peoples of the dependencies. It was to the humanitarian movement that Colonial policy owed the doctrine of trusteeship which so long formed the guiding principle of those who sought to promote an enlightened outlook in Colonial policy. We may to-day feel that this doctrine needed a more constructive interpretation in order to bring it into line with the political and social conceptions of our own times. That is another part of the story into which I need not enter here. But there can be no doubt of the influence which it has exercised not only in the direction of our own policy, but in the formation of international opinion regarding the responsibility of Colonial Powers for the welfare of the peoples of their dependencies.

But there are also subsequent chapters in the history of your Society which have a bearing on the subject to which I am addressing myself. The issue which in the sixties of the last century divided the Ethnologists and the Anthropologists into two dissenting camps was fundamentally the same issue as that which also caused some doubt in the minds of colonial administrators as to the nature of the contribution which specialists in anthropological studies (and I am using that term here, as I shall do elsewhere, in its most comprehensive sense) could make for their guidance. I am not referring, of course, to the value which administrators, as individuals interested in the social or cultural evolution of mankind, might have placed on these studies. There were many who appreciated their value in this respect. That was certainly the case also in India, and I recall with some satisfaction that the honoured roll of your Presidents includes the names of three members of the Indian Services. But I am referring here to the extent to which it was considered that the administration, as such, could with benefit to itself either enlist in its service workers experienced in the technique of social research, or alternatively commission such workers to undertake specific investigations on its behalf.

One cannot overlook the frequent expressions of disappointment at the failure of those responsible for government policy to make a fuller use of the specialist in anthropological study. Addressing the Society in 1916 Sir Arthur Keith recalled that the Society had on more than one occasion approached Government, but had not found that those in authority had shown an intelligent sympathy with either its efforts or its aims. Speaking on the theme of the 'Science of Man in the Service of the State' Sir John Myres carried on the story to 1929, and though there were some instances to the contrary, the record did not differ materially from that of previous years. Nor can one be unaware that the attitude of the government and public bodies is felt to have had its reaction in the character of the recognition given by our Academic institutions to anthropological studies. It is not, of course, true that the content of academic education is entirely determined in this or any other advanced country by the extent to which those who have taken its courses can count on securing employment for their services. It is nevertheless true that if any particular field of activity, whether in the scientific, industrial, or public world, evinces a demand for a specially trained personnel, our academic bodies will sooner or later set themselves to provide it. The paucity of careers open to anthropological workers either in the universities, or in the government services, has been a frequent cause of complaint among younger research students. Not only is this discouraging to them, but it necessarily restricts the growth of a sound school of anthropological research, by driving into other fields of work men whose interests would otherwise have led them to this branch of study. That may be an argument of the market place; but it is an argument which has a very practical logic behind it.

Now I must recall again that I am considering here only one field of work in which the more systematic
use of the anthropologist may be justified. I do not here deal with projects, such as that for the extension of an Ethnological Survey, or for the institution of an Ethnological Bureau, to which reference was made in the Presidential addresses to which I have alluded. Looking to the colonial field, I think it will be found that somewhat wider use has in fact been made of the anthropologist by the administrations than is often supposed, and I shall subsequently refer to instances where this has occurred. You will pardon me if I interpolate here one experience of a personal nature, for it has some relevance to this matter. In the Annual Meeting of 1935 your then President, the Rev. Edwin Smith, expressed his regret that the announcement made regarding the undertaking known as the African Survey, of which I was in charge, described one of its principal objectives as an examination of the application of scientific knowledge to the problems of Africa, but did not, in doing so, make any reference to the science of man. He assumed, and perhaps he may have felt that previous experience justified the assumption, that our enquiry would be limited to the application of the natural sciences. That assumption was not in fact correct, but we had no reason to complain of it, for the result was to impel him to undertake that comprehensive study of the sources of our knowledge about Africa, which he embodied in the Presidential address of 1935, and which proved to be of the greatest value to the subsequent work of the Survey. If, however, one is able to quote more than one instance in which the administrations have shown some appreciation of the work of anthropologists, yet it would, I think, be true to say that the recognition of its value has come late in the day, and has not as yet led to any systematic demand for the services of research workers.

What are the reasons for this? If I examine them shortly here it is because I feel that this may have some practical value in assisting us to indicate the manner in which anthropology can now be of service in Colonial development. The reasons seem to be twofold, and can best be explained by considering, first, certain changes which have taken place in the direction taken by anthropological studies, and secondly, the modification which modern developments have produced in the objectives of Colonial administration.

To deal with the first point, it would clearly be beyond my purpose to attempt to review the stages through which anthropological study has passed, or the modifications in technique which have ensued. I could not pretend to add anything to the review of a century of work that has been presented to you by a master hand to-day. I must confine myself to the significance attached to those changes by those who have viewed them mainly from the standpoint of an interest in Colonial affairs. At an earlier stage they saw anthropologists largely interested in comparative studies of different social groups, directed in the main to tracing the manner of their evolution, and they felt that the technique followed involved much that was irrelevant to the problems with which the day-to-day work of administration was concerned. They have, however, of more recent years seen the development of a branch of anthropological study which has a somewhat different objective, namely, the investigation of the manner in which societies work, rather than of the manner in which they have originated. It is in particular the technique necessitated by this branch of anthropological study which has appealed to them. Knowledge of the functioning of a particular culture and of the fundamental impulses determining human activities within that culture has demanded an intensive study carried out in the main by field workers, and it is from the experience gained by such workers that the administrations feel that they can find assistance in solving the practical problems with which they are faced.

So much for the developments within the range of anthropological study. Let me turn now to the modifications which circumstances have produced in the objectives of colonial policy. Broadly speaking, there have been three different stages in the development of the dependencies. The initial stage was one in which the primary consideration was the introduction of law and order and the provision of those more rudimentary services which would enable the community to begin to develop the natural resources of the country and to build up its own economic life. In the older colonies, such as Ceylon, or in conditions such as were presented by the West Indies, that was, of course, in many ways a less exacting task than was encountered in Africa or Malaya or some of the Pacific Islands. The second stage is that in which the more essential requirements of development may have been met, and the administration is faced with the problem of assisting the indigenous communities to advance their social life and to better their standards of living, using that term in its widest sense. The third stage is that in which the progress made in social life is judged to have afforded an adequate foundation for political advance, and attention is increasingly directed to political issues.

Now no one could doubt that in the first stage of colonial rule the administrations would have gained much if they had possessed a fuller knowledge of the customs of the people and their traditional institutions. That was perhaps less conspicuous in some of the Eastern countries where the conditions, though novel in many ways, did not offer a complete contrast to conditions in Europe, and where the administrations could in any case count on the association of an
educated native community in the Crown services. It was perhaps less conspicuous also in Malaya, where the system of rule involved the extension of administrative control over Sultanates which retained a considerable measure of political independence. But it was undoubtedly conspicuous in Africa and in some of the Pacific Islands, where administrations encountered cultures which were to them of a novel type, and where they did not find personnel of a class which they could readily associate with themselves in the formation of the legal or administrative institutions of the country. The importance of this latter consideration will be appreciated by those who recall the history of the development of administrative rule in India. I do not suggest that its paths were always those of wisdom, or that it made no mistakes. But in some of its more important problems, such as the integration of the systems of Hindu and Muslim law with the conceptions of European law, or in legislating for the definition and recording of land rights, the Government always had available to it the experience of Indians who were well qualified to interpret to it the bearing which any action it might contemplate would have on the traditional custom or the outlook of the people. In one respect, it admittedly fell short, I mean in the adequate study of the requirements of those aboriginal peoples, who stand outside the orbit of the Hindu, Muslim, or analogous cultures which regulate the life of the majority of the population. But it was precisely here that the administration was not able to count on guidance from its Indian associates, whose traditions gave them as a rule little knowledge and indeed little sympathy with the culture of aboriginal people.

In the earlier stage of colonial development of which I have been speaking, the lack of knowledge of native custom and of the forces activating native society was responsible for many administrative errors. All students of colonial affairs must be conscious of them, and on more than one occasion the administrations have had cause both to admit and regret them. But I must here draw a distinction. In part these errors were certainly due to lack of knowledge. The attitude of South Africa to the function of bride-price in native matrimony, or mistakes due elsewhere to a misunderstanding of the nature of native land tenures—these may have been typical cases of errors due primarily to this cause. But errors of this class must be distinguished from those due to a more fundamental cause, namely, the failure to appreciate the place which indigenous institutions and the institutions of European civilization respectively must occupy in building up the future life of these communities. I can best illustrate this point by reference to two typical instances. The Rev. Edwin Smith's book *The Golden Stool* was effective in bringing home to a wide circle of readers the danger of disregarding the deep-seated attachment which native peoples have felt to their institutions. I do not say that this lesson was not needed. But I ask myself whether the Governor of the Gold Coast, when he proceeded in 1899 to Kumasi and demanded that the Golden Stool should be handed over to his possession as representative of the paramount power, was entirely ignorant of the mystical significance which the Stool possessed for the Ashanti people? He may not have had all the knowledge on the subject which the writings of R. S. Rattray have made available to us; but reverence to the Stool is a part of the general Akan tradition, and the Gold Coast Administration could not have been unaware of the sentiments of the Ashantis regarding their own Stool. There was clearly in this case something more than mere lack of knowledge. It has, again, often been said that the creation of "warrant chiefs" in South Eastern Nigeria was partly responsible for the widespread disturbances of 1927. That is doubtless true; but I doubt whether the administration of the time was under any illusion as to the fact that these men had themselves no inherent or traditional authority, and must draw from the official administration, rather than from popular support, any influence they could exert. They were utilized, because the administration had not yet learnt from its experiences elsewhere that seemingly amorphous institutions, such as village moots or clan councils, could be made of service as agencies of local government. Since it had not yet appreciated this fact, it did not exert itself to search for the somewhat obscure authorities which had sufficed to regulate the relations within the various groups concerned, nor did it endeavour to enlist the advice of anthropologists on the subject.

One could easily multiply such illustrations. Incidents of this nature certainly justified Mary Kingsley's reminder that mere goodwill is not enough; we ought to have such regard to native observances as would—in her words—'prevent us from engineering our good intentions in such a manner as to make them appear tyrannies and hateful to those whom we wish to benefit from them.' But that was a counsel of ordinary political prudence. It did not need extensive anthropological knowledge to enable us to appreciate the lesson. It would be at all events true to say that a relatively limited study of the facts of native life was enough to bring it home. I suggest that it is not enough that the anthropologist should be felt to be of help in avoiding errors such as will disturb the relations between the administration and the native population, or will prejudice the introduction of necessary reforms. The demand for his services will only arise in any effective form when it is
felt that they have a positive and constructive value. But we can in my opinion now claim that we are arriving at this position. Two developments, due to somewhat different causes, have combined to produce this result.

We have in the first place recognized that though external influences, coming either through the administration or from other sources of European origin, may provide a stimulus towards the kind of progress which we hope to achieve, yet the shape which progress takes must depend on the readiness and capacity of native society to adapt its traditional life and modes of thought to the changes which such progress may demand. It has become, therefore, of great importance to appreciate the character of the forces which regulate the individual and collective conduct of life in different cultural groups, and to note the manner in which they respond to the new forces with which they come into contact. Moreover, experience has shown the value, from many points of view, of utilizing traditional native institutions as a basis on which to frame the newer institutions on which an administration must depend in building up the structure of social and political advance. That is the fundamental principle underlying the system of Indirect Rule, some of the practical applications of which were illustrated in a paper contributed to your Journal by Sir Alan Pim in November 1938. This is not the place to discuss the merits of that system; if it has had many strong advocates, it has also had some critics. But there can, on the balance, be no doubt of its success where circumstances have favoured its adoption, as in considerable parts of Africa. The consideration which is of chief importance for our present purpose, lies in the fact that many administrations have realized that the successful operation of this system demands a far more intensive study of native institutions than a previous generation thought necessary, and that study of this type requires the special technique of the anthropologist.

The new interest shown by the administrations in studies of this nature has been further reinforced by some of the consequences flowing from the changes in the objective of colonial policy to which I have referred. The majority of the Colonies have now passed beyond the more elementary stage of administration; they have reached that in which the extension of the social services, and all that tends to the betterment of the standards of life, have become of urgent concern. The Colonial Office itself, as a former Secretary of State has said, is no longer concerned mainly in safeguarding law and order in the dependencies; it has become a Ministry of Health, of Agriculture, of Transport, of Labour—of all the services indeed which signalize the new conception held in our domestic politics regarding the function of the State as the guardian of our standards of life and as the primary agency for the promotion of nation-building activities. In the Colonies, this has directed attention to the need of research which in some cases must utilize the technique of the anthropologist interested in the functioning of social groups, and in others the statistical and other methods usually employed in cost-of-living surveys, the analysis of demographic movements, and the like.

Thus in planning for the improvement of nutrition, it is as important to study the place of food in the religious or cultural life of the people as it is to analyse their dietary. In the betterment of labour conditions, a consideration of the social effects of labour migration or of the detachment from traditional life involved in the transfer from village life to industrial conditions has no less importance than questions of pay or the facilities for collective bargaining. In agricultural advance, it is as necessary—perhaps even more necessary—to study the best way of adapting existing systems of landholding to the needs of a more intensive cultivation, as it is to introduce improved methods of cropping or the measures required to maintain soil fertility and to prevent erosion. The great part which the development of the system for the administration of justice can play in the development of the social and economic life of a colonial people is often overlooked by those who are acquainted only with the evolution of our own domestic system of law, which has all the appearance of recording changes in popular conceptions of morality or social relations, rather than of exercising a directive influence over them. Law must clearly have a more directive function in the Colonial field. But a general measure of popular acceptance is everywhere essential to the proper functioning of a system of law, and the adjustment of native conceptions of justice to meet the requirements of new economic and social conditions demands an intimate knowledge of the position of law among the complex forces which regulate conduct in native society and a careful study of the customary procedure for the trial of issues.

Let me take some further examples of a somewhat different range. If the true test of economic progress is not the increase of trade or industry, but the improvement effected in the general standards of life, then statistical surveys of the relation of living costs to earnings, and sociological enquiry into the influence of monetary incentives in the life of less developed peoples, are both essential to the correct adjustment of economic policy. Again, one could not hope to plan successfully for the improvement of the conditions of urban life without the assistance of investigations which adapt to colonial conditions the technique evolved in recent years for the study of
urban conditions in Europe. The direction of educational policy demands the application of knowledge for which we must look to a combination of the efforts of the psychologist and the specialist in social research. It will embrace subjects so diverse as the adaptation of intelligence or aptitude tests, the sociological mapping of particular areas selected for experiments in mass education, a study of the problems of adolescence in tropical populations, and an observation of the operation on more primitive people of modern systems of diffusing knowledge, such as the broadcast and the cinema. I will take one more example. The study of linguistics is an important factor in educational policy; but the services of the anthropologist are essential to assist the student of languages to determine the actual religious or social context of much of the terminology with which he has to deal.

I have approached this matter on somewhat different lines from those followed in the debate between the late Professor Malinowski and Sir Philip Mitchell, which, as many here may recall, was published under the title of 'A Rationalization of Anthropology and Administration' in the Journal of the International Institute of African Languages and Cultures, in the years 1929 and 1930. It took a somewhat controversial form; and though there is a stimulating air about controversy, it is not always the most economical way of arriving at truth. In this case each of the protagonists tended to draw, for his own purposes, an exaggerated picture of the position of the other. If the picture drawn by Sir Philip Mitchell of the anthropological standpoint was perhaps the less realistic of the two, he made some gains in the support he gave to the preparation of the study by Gordon Brown and Bruce Hutt, issued under the title of Anthropology in Action—an admirable illustration of the value of the collaboration of an anthropologist and an administrator. But though there is much of interest in discussions such as those to which I have just referred, I myself prefer to turn rather to the evidence to be obtained from a consideration of the cases in which colonial governments have of recent years called on the services of anthropologists, or where independent studies made by them have clearly been of use to the administrator.

An early instance of the use of the services of an anthropologist by the government will be found in the studies made by Dr. Evan Pritchard on behalf of the Sudan administration. Among typical instances of a later date, are the enquiries into the legal system of Bechuanaland by Professor Schapera, and into the adaptation for educational purposes of the regimental system in Swaziland, carried out by Dr. Beemer, both of which were undertaken at the request of the Protectorate administrations. I may quote also the recent enquiry by Dr. Margaret Read into the social effects of Labour migration and her association with the nutritional survey in Nyasaland, of Dr. Fortes in the inquiry into marriage law in the Gold Coast, of Dr. Stanner into land tenures in Kenya, and of Mr. and Mrs. Culwick into vital statistics and nutritional problems in Tanganyika. I have already referred to the study entitled Anthropology in Action which was carried out with the support of the government of Tanganyika. A Linguistic survey is being undertaken on behalf of the government of the Gold Coast by Dr. Ida Ward and was carried out on behalf of Southern Rhodesia by Dr. Doke. Not long ago the Government of Kenya sought to engage the services of no less than six anthropologists in connexion with the development of the resources of the Native Reserves, but this project was interrupted by the war. I may recall also that the Gold Coast Government seconded one of its officers, the late Captain R. S. Rattray, to carry out anthropological enquiries, and that similar action was taken by Nigeria in the case of Mr. P. A. Talbot and Dr. C. K. Meek, in each case with valuable results.

When I turn to the instances in which the independent research worker has contributed studies of value to colonial governments, it would be a somewhat embarrassing task to make a selection among the numerous works, including both more general surveys and special monographs, which have issued in recent years. So far as relates to Africa, I attempted in the chapter of the African Survey dealing with African social life to enumerate some of the studies which seemed to be of value to the different administrations concerned. Since then, there have been notable additions, particularly in the monographs primarily devoted to the study of culture contacts, issued under the auspices of the International Institute of African Languages and Cultures, and in some of the monographs issued by the London School of Economics. But the field is not limited to Africa; a full enumeration would include also studies of acknowledged value undertaken in Malaya and the Pacific Islands.

As you will realize, I have taken a very comprehensive view of the range in which anthropological studies have been, or can be, of use to those who have to plan colonial development. It may be that I have included aspects of study which may be felt to fall more strictly within the field of some of the allied branches of knowledge. This, however, is one of the standing difficulties which confront those who deal with the problems of research in the social sciences. It has certainly been the experience of the Committee appointed, as one of the results of the passing of the Colonial Development and Welfare Act of 1940, to co-ordinate research in colonial problems. The boundaries of different branches of the natural sciences
are sufficiently charted, and the committee found well organized bodies prepared either to advise regarding methods of research in their own branches of work or to undertake its execution. But in approaching the field of the social sciences, the Committee had not the same advantage, and I suggest that anything which you, or others interested in allied branches of social science, could do to secure a more effective organization, and a clearer demarcation of the spheres of responsibility for different branches of social research, would be of great service to those who seek aid in the solution of problems arising in these fields of knowledge.

But there are some other considerations, more directly germane to my subject, which I venture to commend to you. I suggest that one of the primary interests of those concerned in the future of the types of research with which we have been dealing to-day, must be to join in concerted measures by which their pursuit will be placed on a more secure basis. There have been suggestions made for the provision of travelling fellowships for students who desire to pursue research in the colonies, similar to those now provided for students in some of the natural sciences. That would be all to the good; but it is of equal importance that the pursuit of these studies should be encouraged by our academic bodies. One would be glad if our universities could be brought to recognize that these studies not only have a value on their own merits, but are a necessary part of our equipment for discharging our obligations to our dependencies. It is not unjust to say that the interest hitherto shown by British universities in this matter compares unfavourably not only with that of Holland but also with that of South Africa.

In the second place, I suggest that it should be recognized that acquaintance with the practical problems of colonial development is an essential preparation for undertaking social or anthropological research in the colonial field. No one would wish to prescribe for students of the social sciences, any more than for students of the natural sciences, the direction in which they can make their individual contribution to general knowledge. But the enlistment of their services by government would be an important contribution to the process by which these studies can be placed on a more secure basis, and it is inevitable that the type of research which will appeal most to an administration is that which has some bearing on its own problems. That, of course, has been equally the case in the application of the natural sciences. The student must be prepared to find that the requirements of the administrations do not take a common form. Thus in Africa attention may centre largely on enquiries into native institutions, the effects of cultural contacts and the like; in differently constituted areas, as for instance in the West Indies, the demand will be rather for research employing methods more resembling those now employed in investigating social and economic conditions in this country.

May I add here that some attention might well be given also to the manner of the presentation of the results of this enquiry? Every science must, of course, have its own terminology, and it will always present some difficulty to the layman. But I sometimes feel that the work of anthropologists would be more readily appreciated if they showed greater solicitude for the weaker brethren who desire to profit by their research, but are not equipped to deal with the more esoteric of their terminologies.

There is a further point. I know that in the past there was a belief in some quarters that the primary interest of the anthropologist must be in the survival, at any cost, of those traditional institutions or modes of life, the study of which occupies so large a part of his attention. But no one can seriously believe this of the anthropologist of to-day. If for the purposes of his study he may attempt a theoretical reconstruction of them, that is mainly for the purpose of estimating the manner in which they have reacted to the new influences which are being brought to bear on them. But it would be prudent if he, on his part, were to give special attention to the reactions of native life to the measures taken by an administration in pursuit of its programme of social and political progress. In certain respects native custom is fluid, and shows a great capacity for adjustment to external influence. Experience has shown that a ‘custom’ which results from administrative or legislative measures, can in certain conditions be as well established, and as readily accepted, as one which has a deep-seated basis in tradition.

One word in conclusion. My own interest in this matter is not that of one who can make any kind of claim to an expert knowledge of anthropology, but arises from a real concern for anything, coming from whatever source, which can assist the course of colonial development. But that is an interest I share with an ever-widening section of the British public. There has never been a time when there has been a more genuine concern that we should rightly discharge our responsibility for the welfare of our dependencies. There has never been a time when there has been a keener recognition of the need for the application of scientific knowledge in their development. If attention has hitherto been directed largely to the openings presented for the application of the natural sciences, we must now realize that development can only be successfully achieved by a partnership in which the social no less than the natural sciences play their part.
Sir Arthur Keith moved a vote of thanks to Lord Hailey not only for the solid fare of his address but for coming amongst the Fellows of the Institute on the occasion of their centenary. The privilege of moving this vote came to him as the senior of those who had occupied the presidential chair. He might also lay a distant claim to the privilege in the circumstance that Lord Hailey's father and he were Fellows of the same college—the Royal College of Surgeons of England.

He regarded Lord Hailey's address as marking the beginning of a new era in the relationship between the professional administrator or governor, and the professional anthropologist in the cultural, social, or evolutionary sphere. Perhaps the failure to co-operate hitherto was as much the fault of the anthropologist as of the administrator. Anthropologists have been too afraid of the 'rough and tumble' of practical life, too much attracted by the academical side of their subject, for the academical, being removed from the practical affairs of life, was free from the passions which arise when ways and means are discussed. Anthropologists had still to learn that statesmen, or all who were responsible for the destiny of a tribe, a people, or a conglomeration of tribes and peoples, were—or at least should be—anthropologists. And a good anthropologist should also be a good statesman—a deviser of wise policy—a politician.

Lord Hailey was not merely an administrator. How could one who had graduated in the most instructive anthropological school on this earth—the Empire of India—fail to be otherwise than proficient in anthropology? In India the whole gamut of human evolution, from lowest tribe to highest caste, was still very vivid and alive. And if there were another school of anthropology which could rival India it was the continent of Africa with peoples of a hundred sorts grouped into thousands of communities grading from wild tribes to multi-tribal states. Lord Hailey had graduated also in the African school; as an anthropologist he was a 'double first.'

The Future of Physical Anthropology. By G. M. Morant, M.D.

The distinctions between physical anthropology and other branches of the science of man are fairly clear-cut. Physical anthropology is the study of man from a zoological point of view. Its theme is the biological history of mankind, and its object is to reveal man's origin and to trace the course of his descent.

It is convenient to distinguish three branches of the study. The first is concerned with man's place in nature, that is to say 'it deals with the status of man as a member of the animal kingdom. Discussion of this question can be traced back to classical times, and the modern phase of it had its beginnings in the writings of zoologists and anatomists some three or four hundred years ago. About a century ago embryologists and physiologists began to make their contributions to the anthropological problem, and even after Darwinian theory affected it profoundly. More recently it has been affected by genetical facts and theories.

An authority has said recently: 'The question now arises whether we are likely to gain any more certain knowledge regarding the genetic affinities of man and the anthropoid apes by further comparative anatomical studies of existing forms.' The answer to this is 'probably not.' The position seems to be much the same in the case of the bearings that the studies of physiology, individual development, and behaviour may have on the taxonomic problem. In spite of notable advances made in recent years, it may be doubted whether the further study of living forms in any way will ever throw much clearer light on man's origin and descent, though this is likely to be a fertile field for future speculation. Advances in genetics, too, may clarify interpretation of the evidence, but by themselves they are not likely to reveal the course of human descent in any detail.

So far as can be seen at present, our more precise knowledge of man's place in nature will depend principally on the slow accumulation of new fossils representing the earliest human and related non-human forms.


The third branch of physical anthropology is concerned with the biological relationships of the communities of this modern era.

The subjects to be studied are a series of skeletons—necessarily very limited in number and size—representing past populations, and living people who might be examined in almost unlimited numbers if facilities were available. The records of these two kinds are already very extensive, but there are still many gaps. If a descriptive survey was made of the late prehistoric skeletons housed in our museums we should have enough evidence to provide a reliable outline of the racial history of Britain in the past six thousand years. The position with regard to the existing population of the island is less satisfactory. England is among the few countries in Europe for which there is no comprehensive anthropological survey of living people. There are two needs here, and the Institute might well take steps to satisfy them when conditions permit.

Apart from blood groups, no new kinds of descriptive techniques have been adopted by anthropologists in the past few years, or, if they have, they are not yet widely used. The classical ones have been elaborated and refined in that period, of course, and they can still be supposed suitable for the object in view. There is a need for effective standardization of those techniques. When conditions again permit international discussion of such matters, it is to be hoped that the Institute will resume and intensify its efforts to achieve such standardization.

Methods of treating and interpreting the records obtained have been transformed in the present century owing to the development of statistical procedure and of the science of genetics. Application of these new disciplines has led to the gradual abandonment by specialists of the earlier concept of race in man, and a striving towards a new concept which promises to be irreconcilable with all popular ideas regarding the topic. There has been little recognition of the change, because the research workers concerned have not paused to make their half-formed views readily intelligible.

It seems to me that the time has come when anthropologists must fully recognize fundamental changes in their treatment of the problem of racial classification. The idea that a race is a group of people separated from all others on account of the distinctive ancestry of its members, is implied whenever a racial label is used, but in fact we have no knowledge of the existence of such populations to-day or in any past time. Gradations between any regional groups distinguished, and an absence of clear-cut divisions, are the universal rule. Our methods have never been fully adapted to deal with this situation.

The idea that a modern population can be analysed in terms of ‘pure races’ which are presumed to have existed at some former time must also be abandoned completely, in my opinion, because both the genetical and statistical examinations of the situation show that no such analysis is possible. We must again accept the conclusion that direct evidence of a paleontological kind, in the form of series of skeletons, must be available before we can hope to disclose the course of racial history in any detail. The new disciplines go far towards showing the anthropologist that his earlier concept of race must be recast. At the same time they show how the involved problem might be treated in a systematic way. The adoption of a new nomenclature might pave the way towards a new racial classification.

The three major divisions of physical anthropology are concerned with three successive stages in human evolution. After they have been considered an attempt may be made to outline the natural history of man considered as a whole. The effects of variation, selection, race-crossing, population movements, and all the factors that influence the growth and decline of populations—such as disease, nutrition, environmental conditions, social institutions and customs—should all be taken into account in a synopsis of man’s biological record. The writing of such a synopsis is the ultimate aim of the physical anthropologist: it is an immense task and no one has seriously attempted to undertake it yet.

The future of physical anthropology may be considered from another point of view. Advances in such a specialized department of knowledge made in a particular country must depend principally on the provision that is made for teaching and research in universities. Before the war there were three university posts for physical anthropologists in England—a Readership at Oxford held in the Department of Human Anatomy, a Lectureship in the Department of Anatomy at Cambridge, and a Lectureship at University College, London, in the Department of Eugenics. Owing chiefly to war-time conditions, the first of these posts is vacant and the holders of the other two are otherwise engaged, so that there is now no one in Great Britain who has a whole-time appointment as a physical anthropologist. It may be hoped that the functions of the three posts referred to will become fully operative when our educational services become normal again.

For several years university courses in physical anthropology have been given by teachers who were appointed primarily for some other purpose. This is so today in the Department of Geography at Oxford, and in the Departments of Anatomy in all four Scottish universities. The study has benefited greatly from these part-time activities of interested teachers. All students of it will remember, too, the valuable contributions made by many British scientists—most of whom were anatomists—from Edward Tyson to Sir Arthur Keith.

All this has been to the good. But it has fostered a belief, perhaps, that physical anthropology can safely be left in the hands of enthusiasts who are primarily specialists in other subjects, so that no special provision need be made for its teaching and research. There is an obvious danger here. When, owing to increasing specialization, the physical branch was largely separated from other branches of anthropology, it became a sideline in departments chiefly concerned with other studies, whether these be cultural anthropology, anatomy, geography, or eugenics. There is no security in such a state of affairs. All will be well under departmental heads who are interested in physical anthropology, but their successors may have no special interest in it. If this is so they will be loth to see part of the limited resources of their departments diverted into the side channel. This is not a fancied danger but one which has been illustrated more than once. In fact the study of physical anthropology in this country has no established position yet. It is the Cinderella of the anthropological family with no house of its own.

The study of the physical history of man may be considered to be inadequately supported in our universities, but in other spheres in which it should be recognized it has no standing whatever. The British Museum of Natural History is the only large one of its kind which has no department of anthropology, and no member of
its staff is appointed as an anthropologist. Study of the native peoples of the British Empire from a physical point of view still receives no official recognition, except to a very limited extent in India. In this respect it must be admitted that we have been the least progressive of the colonial powers.

So far I have been commenting on what may be called pure physical anthropology. This is the academic study of the biological history of mankind. It is pursued for its own sake with the object of increasing knowledge, and it is of Practical, not of practical, value. But the data and methods of the study may be applied to practical affairs in various ways.

In the first place there are many group problems dealing with human biology and population questions which the anthropologist can help to investigate. In the interpretation of medical and demographic statistics for a particular country the racial factor is one which should be taken into account. This can only be done if an adequate anthropological survey has been made. The survey will provide standards of size and weight for adults, which are of interest in connexion with problems of nutrition, constitutional types, diseases conditions, and the assessment of physical fitness. Extension of the enquiry to cover children, and to provide comparisons between different social classes, is obviously desirable.

In June, 1939, a committee of this Institute was appointed for the purpose of urging the authorities to undertake an anthropological survey of missionaries. Negotiations having this object in view were suspended when war was declared. If the survey had been made its results would undoubtedly have been of considerable military value. The head and body measurements recorded by anthropologists, or adaptations of them made for special purposes, give information of value to designers of military equipment, including clothes, aircraft, tanks, and submarines. Or if the things are made, the data in question will show how men can best be selected for special duties. This is the second way in which physical anthropology can be applied.

The third sphere of application is of a very different kind. One of the major activities of the physical anthropologist is the racial classification of modern man on the basis of body characters. He usually finds that his conclusions are entirely different from the dogmatic statements regarding the racial constitution of particular populations made by writers who ignore scientific discipline. Since certain racial dogmas have acquired great political significance in recent years, a rational exposure of their fallaciousness may be of considerable practical importance. This matter is being considered at present by our Committee on Race and Racism.

The problems of anthropology are more diversified than those of any other science. Its needs are manifold and there is no difficulty in finding new lines of enquiry which might be pursued with profit. We may confidently anticipate that in the future, as in the past, the Royal Anthropological Institute will constantly strive to lessen the gap between what is and what might be.

**Discussion.**

Ms. K. L. Little deplored the lack of public interest in physical anthropology and commented on race prejudice in this country and the need for further study of race crossing.

Professor Daryll Forde said that the lecturer had not mentioned that the comparative physiology of native peoples, including their nutrition in particular, falls within the scope of physical anthropology.

Dr. Morant, in reply, expressed the view that this topic should be counted as applied rather than pure physical anthropology, though it is obviously of interest to the student of human evolution.

Mrs. C. B. S. Hodson referred to the connections between anthropology and human genetics, race crossing being a concern of both studies.

Mr. S. E. Mann and Mr. V. Brefford spoke.

**The Future of Archaeology.** By Professor V. Gordon Childe, F.B.A.

Human institutions are conditioned by past events; their functioning can only be fully understood in the light of history. For this reason, if for no other, archaeology must be an integral part of the Science of Man. Moreover, it is the abstract, and therefore potentially scientific, aspect of human history as contrasted with literary history, which, dealing essentially with individual persons and events, can less easily be made the basis for scientific generalizations. In fact this Institute itself has contributed in no small measure to making archaeology a science in the British Isles. I might easily confirm this by a retrospective survey of its publications and its presidents. But this afternoon we are concerned, not with the past, but with the future.

Now the century just past has witnessed the creation of a scientific method for archaeology and primarily, apart from the invention and elaboration of techniques, the establishment of a rigorous but workable basis of classification. The basis had to be threefold, the classification tridimensional—functional, chronological, and cultural. Thanks to collaboration with another branch of the Science of Man to be dealt with by R. U. Sayce (MAN, 1944, 9), the main categories of the first classification have been pretty exhaustively enumerated; we are no longer puzzled as to what a 'celt' was used for, and have reduced to modest dimensions our oddment box of "ritual objects." In chronology a provisional order has been established though there are still very serious ambiguities to be cleared up. New techniques that have been developed during the last two decades—varved-clays, pollen-analysis, tree-rings, pebble-counts—open up vistas for their clarification that must be explored more fully. And still better methods must be invented. But we may hope that the existing lacuna will in time be filled in, and in the meantime make use of the available scheme with its defects.

The cultural classification is a more recent development. The earlier students of man's past, and especially those recruited from the natural sciences in the great days of Darwinism, conceived of human progress as a linear development—a method of approach that found its classic expression in archaeology in de Mortillet's system and in ethnography in Morgan's stages. But the historical inadequacy of such a way of looking at affairs is self-evident, if only because the archaeological material represents the adaptations of distinct human societies to different environments. The archaeological concept of a culture (culture-group or culture-cycle) is an attempt to return to the concrete complexity of historical reality and to do justice to differences thus far.

It has been fruitfully applied to remains of the geologically recent for the last fifty years, but has spread to the Pleistocene only during the last twenty. Breuil's paper on the Levalloisian (MAN, 1926, 116) is a landmark on the way to the application of the new concept to Lower and Middle Paleolithic remains in English-speaking countries. It presents archaeologists with an enormous but urgent task. The vast accumulations of palaeoliths amassed in private collections and public museums during seventy-
five years need revision and re-classification. And in the process the very basis of classification must be reviewed and refined. Even the primary division into 'core' and 'flake' industries is not universally accepted, and may not be universally applicable or exhaustive. Van Riet Lowe has queried its validity and the attempt to class the *Sinanthropus* industry or the Soan of Burma as flake-cultures seem to many forced.

So our classificatory work, especially in the third dimension, is far from being completed. Nevertheless it has advanced far enough even now to serve as the framework for sober attempts at 'explanation,' the formulation of generalizations to unify a mass of isolated data. Hitherto explanation in prehistory has been largely in the mythographic stage. It likes to postulate and multiply inadequately documented entities whose scarcely credible migrations shall 'explain' observed changes in culture and similarities in flint-work, ceramic decoration, or sepulchral architecture between remote regions. But are not 'Children of the Sun' from Egypt, or Pre-Vikings from the Baltic, products of the same mythopoetic fancy as created the fairies and giants of Celtic and Teutonic folklore to construct the same monuments, albeit now informed by wider geographical knowledge, a more systematic psychology, and a more comprehensive ethnography? I do not wish to suggest that migrations and diffusion are not legitimate objects of archaeological study. On the contrary, they are vital historical processes, but they must be studied by more rigorous means and inferred only from concrete data. The physical anthropologists have made the Beaker-folk historical and their migrations scientific fact by the study of their skulls. Fayence beads from Wessex graves make some sort of contact between distant Britain and the East Mediterranean world objectively certain, and such contact is a precondition for diffusion; only when it is established by minute attention to the inconspicuous material relics that were actually transported by man from place to place can diffusion as an explanation of similar rites or motives be more than an attractively plausible speculation.

Archaeology will be more scientific, and more historical too, when it can ask not where a given society or culture came from, but how that society, already partially defined by monuments and relics, developed where we find it—in fact, what it did. Our Soviet colleagues have recently shown how a prehistoric society may thus be studied as a functioning and developing organism and so have effectively linked archaeology with the fourth branch of the Science of Man, with social anthropology. The excavations at Köln-Lindenthal and Little Woodbury illustrate the same linkage, but they show too that for the sociological interpretation of a culture the total excavation of domestic sites is essential. Test-pits and barrow-digging were necessary to establish the chronological sequence and the boundaries of cultural groups, *i.e.* of societies. But where a framework has been thus constructed as in Great Britain, Northern and Central Europe, Greece, Egypt, and Mesopotamia, archaeologists should now concentrate their resources on the excavation of a few sites, selected as representative in accordance with a well-thought-out plan, supplemented by test excavations at equally selected sites, for the verification of well-considered hypotheses, as Collingwood has urged.

Since we want to trace the development of societies, the sites selected must represent every period and not be confined to the prehistoric. Indeed I anticipate quite as striking results from the extension of the scientific archaeological methods now used chiefly by prehistorians to Classical and Byzantine Greece, Islamic Syria, Buddhist and Maurya India, and medieval Europe, as from the spatial extension of archaeological exploration. It is absurd that we know more about an Indian craftsman's tools in the IIIrd. millennium than in the third century B.C., more of the domestic architecture of neolithic Thessaly than of Periclean Athens! Only when such lacuna have been filled in, so that we can compare, for example, average housing conditions and technological equipment at successive periods in time, shall we be justified in venturing on historical generalizations to the nature, direction, and rate of progress even in these domestic histories.

Eventually we may even reach some practical conclusions—and utility seems demanded to-day. Potsherd or flint implements that can already be fitted into our chronological classification have been brought by travellers from sparsely populated wastes like Makran and Seistan. They suggest that these wilderesses may once have been more thickly settled, and so prompt the hope of colonizing them again. But the inference is precarious. A survey based on surface finds and test pits may disclose the area of settlement and the relative distribution of population but may be deceivingly interpreted in terms of density or population; ten 'chalcolithic' mounds may represent only ten isolated farms in a valley now farmed from a single village of fifty households. Only when a typical mound has been entirely excavated and compared with existing settlements can reliable inferences be drawn as to the density of past populations in comparison with those of to-day. Whatever the practical results of such investigation, the archaeological treatment of population questions once more unites archaeology and social anthropology. The fruits of that treatment are already visible; we can form a more reliable estimate of the population of Olynthus, that has been scientifically excavated, than of classical Athens, whose history is so much better known from literary sources. Cementing in such ways its alliance with sociology, while maintaining its traditional relationship with technology and human paleontology, archaeology will continue to find a natural place within the unity symbolized by the Royal Anthropological Institute.

**DISCUSSION.**

**Mr. M. C. Burkitt** deplored undue emphasis on the cultural side of archaeology at the expense of essential typology and technology. The classification of palaeolithic industries into core- and flake-industries was only a rough and ready distinction, for convenience and without final validity. In applying nomenclature, it was important to be perfectly clear about the areas to which reference was made.

**Dr. Clark** deplored a false antithesis between the study of objects and the study of societies, since the first was merely a means to the second. Pits and holes were significant not in themselves, but only in so far as they could tell us of ancient society.

**Professor Childe** agreed that typology and technology were the essential groundwork of archaeological study, but held that there was scope for more interpretative work by those who had mastered them.

**The Future of Social Anthropology. By Raymond Firth.**

What I have to say here about the future of social anthropology is mainly a personal view. I think that most of my fellow anthropologists—using the term here and in what follows to apply to the social branch of the study alone—will agree with me about the nature of the major problems that lie before us, though
they probably will not see the resolution of them in quite the same way.

Social anthropology is a scientific study of human culture. Its interest is in the variety of men’s rules, conduct, and beliefs in different types of society, and in the uniformity (as for instance in basic family organization) which underlies all societies. It is not concerned only with the different forms of customs all over the world, but also with the meaning these customs have for the people who practise them. Values are part of their material for examination. But social anthropology not only studies human culture; it is itself also a part of human culture. It studies social processes, but it is also a product of social processes. Hence it has changed its material and developed its methods as world relationships have changed and developed. In the future it may do even more, and may probably be expected to enlarge its scheme of values in so doing.

In theory social anthropology ranges over all human societies. In practice it has tended to restrict itself to those societies or parts of society which could be examined as small units, by direct observation, or ‘field work.’ Anthropologists used to be interested mainly in primitive people, the so-called savages. But during the period of its history as a science, roughly for the last hundred years, there has been world-wide expansion of trade, of political interests, of missionary and philanthropic effort. Primitive tribes have lost much of their isolation and many of their ancient customs. The bicycle and the sewing machine have reached the heart of Africa; the Solomon Islands and New Guinea are torn by the shells and bombs of civilized warfare. The modern savage is as likely to be found in the Gestapo as in the jungle. Anthropologists have begun to re-orient their study in like measure. They are now more interested in how cultures change, how people adapt themselves to new tools, to new economic situations such as the chance of working for wages, to new education, and new political and religious ideas.

The tide is still on the flow. After the war we can expect a speeding up of communications; a drive for better nutrition, health, and living conditions; an increased rate of growth in desires for self-government. These and many other movements will give anthropology still more complex problems of change to study. The old domain of the primitive will shrink still more.

I would like to try to clear up a common misunderstanding here. It is sometimes said that anthropologists want to keep primitive peoples as they are—as a private museum or laboratory for study; for aesthetic reasons, because we like them ‘unspoiled’; or, more subtly, because we want exploitation of them to continue. Now we do not object to studying isolated tribes on the fringe of civilization; they show us forms of institutions not found elsewhere. We often like what we find there; most of us have the pleasantest memories of our friendly relations with the people and have admired the spectacular and the beautiful in their ceremonies. But problems just as interesting, and people just as pleasant and often more stimulating, are to be found in the changing cultures in modern Africa, the Pacific or the Far East. We do not want to keep the people primitive; we know (perhaps better than most) that it cannot be done. But what we do stress is that people do not live by money alone; that development, even if it means higher wages, better food, and more education, may not be enough. People need a system of common values to give meaning to their lives; community institutions which they respect, which they can follow, and above all which they themselves can run efficiently. Too often in the past ‘development’ has meant break-up, not build-up. The anthropologist is interested scientifically in the breaking up because it helps him to see how the society works, where the strains come, what yields first. But just as he is interested in the primitive, because it shows him one kind of society in comparatively stable equilibrium, so also he is interested in the African or the Pacific islander of the future, who, he hopes, will form part of another wider kind of society, with another kind of stable equilibrium. To put it summarily;—scientifically, the state of a society is indifferent to us; there are problems to be studied at all levels. From the personal point of view we prefer integrated to disintegrating societies, believing in the value of co-operation and common ideals and institutions on as wide a basis as possible. This point leads on to consideration of the future of anthropology as an applied science, and to the role of the anthropologist in relation to development policies, which I will take up a little later.

But this question of building up new forms of society has wider implications. After the war we are expecting changes of great magnitude in the countries with old civilizations, whether mainly rural or mainly industrial. In Europe, China, and Japan, for instance, quite apart from what may happen to political frontiers, some basic social and economic readjustments will probably take place. Some will be concerned with achieving greater social equality; ultimately, we hope, with the aim of setting relationships between the members of a group on a firmer foundation. Others will attempt to promote more stable relationships between groups. Still others will try to give a more definite meaning to social life itself. Already ‘social security,’ ‘the reform of education,’ ‘international co-operation,’ the colonial theory of ‘partnership,’ the ‘recall to religion’ have become labels for sets of ideas of this kind. Whatever will be done along these lines, they are phases of a great attempt to build up new social entities which shall be more stable than the old, by creating new, wider, and more complex relationships.

Here there would seem to be work for the social anthropologist. He can study these efforts at change, see their effects on the life of the people, and estimate how these new developments are likely to operate. He may expect to find him sooner or later studying the effects of industrialization on a rural community in the Balkans; what happens in an English village if a new agricultural policy is put into operation; the relation between religious belief and social structure in an English cathedral town; or the effects of mass education and a new land system on indebtedness among Chinese farmers. The official recognition of organized religion once again in Russia will offer him a fascinating example of a fundamental problem—how far religion is a stabilizing factor in a national group life, and what degree of integration it has with other kinds of values and ritual behavior.

For anthropology to participate in this scientific field for the future, I think some points stand out. Social anthropology obviously cannot do the job alone; collaboration with other social sciences is necessary, and will have to be worked out more thoroughly than it has been till now. Anthropology will also have to organize the international contacts in its own sphere more widely, and more systematically. We shall hope to see expert anthropologists coming forward from a great range of countries—Chinese, Africans, Americans, Europeans (not forgetting Russians from outside Europe too),
Indians, and Indonesians will be needed, not only to study the problems of their own communities but also to give that useful comparative outsider's analysis of each other's problems. Often, it is to be hoped, they will co-operate in teams on the actual field work, or as bodies of advisers on defining a problem and the best methods of tackling it. This of course demands more training facilities and more research centres, especially outside Europe and America. It also demands more funds.

Greater precision in methods will also be needed; more planned research, more co-operative research, and more quantitative research. By planned research I mean here especially the study from the outset of problems of the anthropologist may be backed up more systematically than is at present usually the case, by that evidence of numbers which gives the range and the frequency of the facts observed. Much of the anthropologist’s work has hitherto in what may be called micro-sociology—the study of small groups or of small units in larger groups; of how relationships operate on a small scale, in personal terms. The approach of the professor sociologist, who usually handles his material on a larger scale, may be termed macro-sociology by contrast. I think that the most valuable contribution of the social anthropologist may well still lie in this micro-sociological field. His experience has given him perhaps more than other social scientists the knowledge of how small units work, and he can provide material for testing on this observational level the wider sociological generalizations.

But anthropologists, again from their experience in living among small groups of people, have formed theories about how cultures work as wholes—how the main kinds of human activities fit in together; the relation between ideas and action, between belief and ritual; what part tradition plays in the life of a people, and so on. Such theories can be used to supplement and perhaps to qualify generalizations arrived at by other social sciences.

In the production of these theories the methods are those common to all sciences of systematic analysis and synthesis by process of logical inference. Hypotheses are formulated, observations are made to test them, the results are classified, and generalizations are produced and made to serve in their turn as fresh hypotheses. These generalizations can hardly yet be called laws of human society. They are few, simple, and not precise; they express tendencies rather than universal principles; they are not yet clearly isolated from their descriptive context. They deal _inter alia_ with social structure and its functions; the relation between types of family and types of economic organization; the tendency for social activity to seek compensation and ultimately to reach an equilibrium. Unlike the natural scientist but like other social scientists, the anthropologist can rarely make his observations in conditions of controlled experiment; he is always dealing with many variables at once. For experiment he substitutes comparative observation of social situations and social processes, in different places or at different periods of time in the same place. But like all scientists the anthropologist must make certain assumptions.

There are two main kinds of assumptions to which I should like to refer briefly here. There are the assumptions of fact, made in the course of abstraction from the raw material of observation; such, for instance, are ideas about what is most typical and most significant about what is being observed. Such assumptions can often be checked and corrected if need be by further observation and analysis. But there still often remains an unresolved personal residue, based on one's own particular experience and interpretation. For example, one's view, as to whether or not the class struggle is basic to the structure of the society one is studying, conditions one's analysis and presentation of results. The other kind of assumptions form part of our general structure of values; such are ideas about what should be the aims of science, or the aims of social life, or what is the very nature of reality.

Here it seems to me comes one of our great problems for future examination. It will affect not only the theory of social anthropology, about which I have been talking so far, but also the practical application of the science. On the theoretical side, perhaps, the problem is less difficult. If one holds one view, but admits that an alternative set of assumptions is possible, one can state both, and draw the corresponding sets of inferences accordingly.

But the practical side is more difficult; one cannot promote two opposed policies. An anthropologist may, say, not believe in God or in a soul which continues after death (except in so far as they exist as social constructs) though he sees how religion is a cohesive force in social life, providing standards of value and guidance for conduct. Is he to support the teaching of Christianity on these latter grounds, though its beliefs rest on what he regards as a fiction? As far as I am concerned, I would prefer to encourage the spread of secular education and the teaching of science—including social science? If he believes, as I do, that private control of large-scale capital enterprises is not in the best interests of a society and that the State should take charge of them, how far can he join in a policy of development which may tend to perpetuate the condition to which he does not subscribe? There are signs that anthropologists will be asked to take an increasing share of work on practical problems, and I think we are all glad that it should be so. In providing background studies of social conditions, in helping to diagnose causes of friction or of ineffective carrying-out of programmes, in predicting what will probably be the results of a given measure, the anthropologist should be able to contribute more than he does at present. There is also a large field of common ground—of nutrition, of education, of improvement of economic and social conditions, where either as scientist or as human being he will almost certainly feel justified in lending what practical aid and advice he can. But there may be still some aspects of the application of his methods where the issues are not so clear. The political implications of colonial government, for instance, despite the far-seeing and progressive analysis by Lord Hailey, still need clarification; the anthropologist may have his doubts about them, or differences of view on ultimate aims. Freedom of action must be reserved to the anthropologist if he is to
participate. It is his duty to state his position in terms of his own ultimate values and assumptions, and it is his right to determine how and where he will apply his results. This general problem of values is of course common to all sciences, but particularly manifest in the social sciences.

There is one practical end, however, which is perhaps even more important in the long run than those of colonial development, though in some ways it is linked with them. This is the general diffusion of knowledge about other peoples and about ourselves. It is the province of social anthropologists as well as of other social scientists. Ignorance and prejudice about other peoples—particularly peoples of a different colour—is widespread, and it is part of our job to try and break it down. To most people ‘science’ still means physics, chemistry, and other natural sciences; but the sciences which study human nature and human culture will also have to be recognized as necessary in the understanding and rational control of man’s social life. As far as anthropology is concerned in this spread of knowledge, attention will have to be paid to the mode of expression—a point to which Lord Hailey has already referred. To my mind we shall have to divide off more clearly our specialist from our non-specialist publications. Our science can afford to be more technical, and probably shorter and better; and we shall have to help the public by talks and books in non-technical language to appreciate what anthropology is, what the work of an anthropologist means, and how his results apply to present-day problems.

In all this work the Royal Anthropological Institute will have its role. It will be a forum for discussion, a medium of publication, a library, and an information-centre as at present. It will, we trust, be even more a medium for international collaboration, and an adviser on research. But one of its most important functions should be to make known to a wider public the meaning and the value of the science, and its contribution to human understanding.

**Discussion.**

Mr. A. Digby stressed the importance of studying tools as physiological objects, or extensions of the bodily mechanism, and pointed out the relevance of this aspect of material culture studies to the work of the industrial psychologist.

Miss Datta-Majumder thought that too much emphasis was laid on objects as such, and that a more dynamic point of view was required.

Mr. H. J. Braithwaite deprecated the tendency to deify pure science unless it could show some practical utility.

Mr. Clark, referring to Mr. Braithwaite’s point, contended that the results of scientific work might have cultural as well as mere material utility, and that this was the justification for ‘pure science. The study of the material culture of modern Europe was an important aid to the interpretation of archaeological data.

Dr. Margaret Mead assured the meeting of the collaboration of American anthropologists on the general lines indicated by Dr. Firth.

Miss Lawrence stressed the importance of collaboration with the nations of Eastern Europe and elsewhere.

Mr. Datta-Majumder thought that the invasion of anthropology by the colonial development idea was a concession by objective science to imperialism.

Professor Forde strongly deprecated the increasing tendency of social anthropology, like the other branches of the science, towards excessive specialization and divergence into independent compartments with a growing lack of liaison between them. There could be no real barriers between the branches of anthropology; the enormous body of accumulated anthropological knowledge rendered essential some degree of specialization and probably no one man could hope to master the whole field, but the Institute had a vitally important function to perform by acting as an integrating force and a forum for discussion and liaison between the branches.

Mrs. Hodson urged the need for anthropologists to clear their minds of all preconceptions.

Mr. Kousai asked for an assurance that British anthropologists did not postulate any inherent inequality between the different races.

Dr. Firth gave a categorical assurance to the last speaker, which was heartily endorsed by the meeting. He expressed his disagreement with Professor Forde on the issue of integration versus specialization, maintaining that the four branches called for entirely separate disciplines, and that the ties of social anthropology were with sociology, rather than with physical anthropology or archaeology.


9 Progress usually takes place gradually by many small steps. The members of the Royal Anthropological Institute are too experienced to expect me to cut a new channel that will give an entirely new direction to our researches. Nor would it be possible to sketch in fifteen minutes a complete syllabus for the study of material culture. Moreover, progress does not take place evenly along the whole front; our main effort is shifted from time to time from one sector to another. I shall, therefore, deal with only a few matters which I think need special attention in the near future. There are, of course, others, equally important, which will not be time to mention.

In the first place, I should like to say a few words about museums. Many regional and national museums already exist in this and other countries, e.g. the Maori collections at Auckland, the Tasmanian at Hobart, the Bushman at Cape Town and Kimberley, the Basque at Bayonne, the Breton at Vannes, the Welsh at Cardiff, the Danish at Lyngby, and so on. Some countries, however, have fallen behind. There should be a large museum in Nigeria to illustrate the great variety of West African cultures; the Sudan should have its completely representative collections, and much more should be done in East Africa. Southern Rhodesia is setting a good example.

The regional museum has several functions to perform.

1. It must preserve things that are rapidly disappearing. . . . all records of the past . . . are part and parcel of the great national self (Rev. H. Longueville Jones: Arch. Camb., Vol. I, 1846). Basutoland neglected this duty with the result that its cultures are now illustrated best in Pietermaritzburg, thanks to the foresight of the Natal Museum. In Britain we have only been in time to save part of what has disappeared during the last few centuries.

2. We owe a duty to the future to hand on collections illustrating the present. Ethnologists would give much for a comprehensive set of artifacts made two hundred years ago in the Scottish Highlands, Wales, or elsewhere in these islands.

3. The great mechanical inventions of the latter part of the eighteenth and early nineteenth centuries had snapped the thread of the old craft traditions and the succeeding period was (and still remains) one of artistic anarchy which showed itself in a gradual deterioration in all forms of industrial art (Memorandum submitted by the British Institute of Industrial Art to the Royal Commission on National Museums and Art Galleries, Interim Report, 1928, p. 18). This was written about Britain, but it applies, unfortunately, to many other parts of the world.
By illustrating a people's achievements in the past, we can provide a sound basis for future developments that would be well rooted in their proper traditions. The Scandinavian countries have obtained much benefit from their regional collections. The efforts being made to re-develop Maori craftsmanship must depend to a great extent on museum material, and similar efforts in West Africa will be seriously handicapped unless good collections are readily accessible. The British cotton trade realizes that its export trade after the war will depend largely on the quality of its designs. Recently there was at the Colour and Design centre in Manchester an exhibition of British, French, and other eighteenth-century textiles lent by the Victoria and Albert Museum. It was intended to help modern designers, because, as was said, good designs do not come from nowhere. The designs of yesterday influence those of to-day, and those of to-day affect those of to-morrow.

Regional museums are, however, not enough; there should be others with wider scope, situated at important centres, especially where there are universities. Apart from their obvious importance as centres of research, they can do much to promote understanding between superficially different peoples. A comparison of our craftsmanship with that of the Haida, Navaho, Pueblo, Bushmen, Goldi, etc., must inspire us with that respect which is the foundation of sympathy and understanding. The Russian museums may do much to lessen the cleavage between 'civilized' and 'uncivilized,' between European and non-European, representing as they do a vast assemblage of European and Asiatic cultures.

We may hope that the British Museum, situated at the centre of a great commonwealth of free peoples, will be second to none in the richness of its collections and in the dignity of their display.

The formation of collections in museums is, of course, only one of the tasks that lie ahead. There are many aspects of our subject that require thorough investigation. For instance, the effectiveness of implements is closely related to our control of environment, and, therefore, helps to determine the standard of living. The ineffectiveness of home-made implements in the Highlands during the eighteenth century helped to make cultivation inefficient, and this led to impoverishment, and stunted growth in cattle and people. Similar problems are being faced nowadays in Africa, and await treatment in eastern central Europe. The study of material culture is, therefore, of practical importance. Improved equipment is necessary for the adequate nourishment of many peoples abroad, and for our own prosperity at home; it is one of the means of preventing over-population.

On the other hand, the effectiveness of modern implements has done away with much cooperative labour. The mechanical reaper and binder has replaced the large teams of harvesters, and brought about the decay of communal feasts and rites, just as the passing of the sailing ship has killed many customs and beliefs.

When we turn to the ecological side of material culture, we cannot fail to be struck by the need for much more work. Something, of course, has been done in Africa, in which connexion mention may be made of the work of Gerard Lindblom and his colleagues, of Ankerman, Montandon, Schaeffer, Kirby, and Schofield. Nevertheless it is not possible for a few scholars to make an ecological survey of a whole continent. The present state of affairs in Africa is as though we had made a preliminary triangulation; the complex topography has still to be put in, and this will involve going carefully over all the ground, a task none of us will see completed.

It is curious that the situation should be little better here in Britain. The work which has been actively carried out by Mr. James Hornell and Dr. Iorwerth C. Peate is well known to us. Nevertheless there is scarcely an object, not even the familiar half-timbered house, the distribution of which we could show accurately on a map. Now, important distributional studies were in progress in several countries before the war, and we shall have to consider whether Britain is to co-operate or is to be represented on European maps by a series of blanks. If we decide to keep abreast with work done abroad, we shall require many helpers and a good deal of organization.

Ecological studies must first begin with recording and analysis; then we can proceed to map-making.

It may be that a given object will have several varieties, e.g. coracles, sethe-sneads, house-thatch (grass, straw, rushes, broom, bracken, heather, turf). Sometimes we find a tool being replaced laterally by another, e.g. the wimble in the British Isles and the skirt in Central and Northern Europe. The facts of distributions should be explained, if possible, by local differences in the environment, by social and economic status, sex, age, or occupation; or by historical factors. The birch-bark shoes were apparently introduced to Sweden by settlers from Finland. Pipe-decays for ducks seem to have come from Holland to England in the late seventeenth and early eighteenth centuries.

Nor must we overlook seasonal variations, for some elements of material culture, like the components of a plant association, appear and disappear during the course of the year. Clothes, foods, and implements follow in succession with seasonal occupations.

Studies of this kind require careful work out of doors, and an intimate knowledge of local conditions, and they will often involve a considerable acquaintance with the natural sciences. It is desirable, too, that the investigator should follow the actual boundary of a distribution in the field, whether in Europe or some other region.

Furthermore, we must follow up wherever it leads and not confine ourselves to some restricted, modern, political area. Our dead-fall rat-trap seems to belong to Central Europe; the outrigger canoe has a wide distribution in the Pacific and Indian Oceans; the half-timbered house ranges from Brittany through Holland and Germany into Denmark and south-west Sweden. Our mole-trap has close parallels in the Nicobar Islands, in East Africa, and about Bering Straits. The absolute necessity for much co-operation is obvious.

Sooner or later the ethnologist is bound to run into the time factor. Distributions vary from one period to another; they expand and contract. The retreat and disappearance of an element may be nearly as interesting as its origin and diffusion. Moreover, many problems only take shape after distributions have been established. Why are there similarities between certain artifacts used in the Pyrenees and in Scandinavia, between ornaments from the Balkans and North Europe? Why is the three-legged Welsh chair like one that occurs in Serbia? Are such things to be explained by convergence, or by the intrusion of a Central European culture that has pushed an older one away to the two flanks? History and prehistory must come to our aid.

Innovations are historical facts. There are innumerable modern examples to be studied all over the world. Sometimes we know the actual individuals responsible for changes in the past. Chaka introduced the stabbing
assegai and shock tactics to South Africa. It is believed that a daughter of the Earl of Peterborough, who married the eldest son of the Duke of Gordon in 1706, was the first person to introduce agricultural improvements effectively into the north of Scotland. The work of the Skelton family on duck-decays in England and Ireland is well known. The fact that we have forgotten the names of the numerous craftsmen who have brought about changes does not alter the fact that, as Sir Kenneth Clark said in a recent lecture (Manchester, 22 October, 1943), nearly all changes of style in the past can be traced to individual artists.

One change may bring others in its train. The adoption of glass windows in Norway in the seventeenth century let more light into the living rooms and encouraged the application of carving and painting to beds, cupboards, and chairs, and the use of coloured hangings and carpets. Sometimes it is possible to make lists of traits that are linked geographically and characterize a particular region, such as the birch-bark shoe, the 'stump chair', the 'pillarbooth', the fábo-dáit, etc.

It is extremely important that we should study changes actually happening, in this country and overseas. What individuals initiate change? under what circumstances? how is the innovation received? what adaptations does it undergo? what are the consequences? what influences favour stability of types?

Conservatism among the Shetland Islanders strongly resisted the introduction of the kelp industry because they thought it would destroy the fishing and make the women barren; but the change brought in money, improved standards of food and housing, and made the people more independent. On the other hand, it led to a neglect of agriculture, and exposed the people to disaster if prices should fall.

Such topics as the foregoing lead us over to history, psychology, and sociology. They involve studies of crafts and guilds, beliefs and general ways of living, rites and co-operative labour, economic and political circumstances.

When we have obtained from distribution-maps more suggestions about what may have happened, and when we have learned from actual observation more about how things happen, we shall be better able to study such things as culture areas—if there are such things—and the histories of various cultures. It is only necessary to read the titles of papers read at almost any gathering to realize how strong and how essential is the historical element in our studies. Among the topics that frequently recur are the History of Agriculture, the Origins of the Circumpolar Cultures, or of the Higher Civilizations of America, the Megalithic Complex, etc. Indeed, the whole problem of distribution and diffusion is a historical one, in the wider sense.

**ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS**

*Foundation Meeting of the Ethnological Society, 1843.*

10 Phrenological Journal, X VI, 1843 (Edinburgh), p. 197, under heading 'Intelligence': cf. Medical Times and Gazette, 11 February, 1843.

Ethnological Society. A meeting of gentlemen engaged in scientific pursuits was convened on Tuesday evening at Dr. Hodgkin's, in Lower Brook Street, for the purpose of forming an Ethnological Society, on purely scientific principles, for investigating the natural history of civilized as well as uncivilized man. Mr. Greenough

In conclusion, I should like to express my opinion that ethnologists who study pre-literate peoples in distant countries and those whose chief interests are in Europe should maintain close contact with one another. In fact, practical field-work in this country, whether in connexion with material culture, tradition, or beliefs, should be a valuable preparation for similar work overseas.

**DISCUSSION.**

Mr. H. J. BRAUNHOLTZ said we seemed to be arriving at a state of mind where science could only be justified by the usefulness of its applications, and one almost felt obliged to apologize for pursuing it for its own sake. 'Pure Science' was at a discount.

As a Museum man he was much interested in Mr. Sayce's views about future museum developments, and welcomed his suggestions. He would only like to underline and amplify certain points contained in them.

First, he thought the emphasis 'culture contact' on the material arts and crafts had never yet been adequately set forth in our museums. But they might prove to be no less instructive both to the administrator and the trader than the more abstract features of 'culture contact.' The story would prove to be mainly one of deterioration, at least in the first stages and until a compromise between the old and new techniques had been established.

Secondly, he would like to see some attempt by curators at assessing 'values,' both aesthetic and practical, of particular specimens or groups of specimens. This would be more appropriate to the popular part than to the students' section of the museum, since the public was in need of some guidance in these matters. The public would gain both instruction and an added respect for natives' skill and ingenuity and character, if we showed their best products alongside those of 'civilized' cultures, with notes on their comparative merits from the point of view of beauty, durability, and adaptation to function. It would become apparent that the finest specimens of almost every kind of handicraft were to be found not in the so-called higher cultures with their mechanized techniques, but among the less advanced peoples—for instance the textiles of ancient Peru, which had never been surpassed anywhere at any time. Such a comparative display would provide a wholesome lesson, such as could best be taught in a museum.

Finally, Mr. Braunholtz agreed that there was great scope in the future for the provision and development of museums in the colonies, particularly in Africa. He deplored the fact that the recently established Institute of West African Arts and Industries did not include a museum, as had been Mr. Meyerowitz's intention (MAN, 1943, 86). Some provision for preserving typical specimens of native handicrafts in their unmodified state was particularly desirable in the case of an institution, whose very raison d'être was to improve them out of recognition. A museum or repository should form an integral part of such an institution from its inception. It would be too late to begin collecting after the new technology had been introduced and adopted by the native peoples.

carried unanimously. Dr. Hodgkin, Mr. Greenough, and Mr. Richard King were appointed a sub-committee, with power to add to their number, to take into consideration the bye-laws and regulations necessary to be adopted, and to report thereon at a future meeting. The objects of the society would be to collect, register, and digest, and to print for the use of the members, and the public at large, in a cheap form, and at certain intervals, such new, interesting and useful facts as the society may from time to time acquire; to accumulate gradually a museum of the varieties of mankind, and of the arts of uncivilized life; a library of the best books on ethnology; also voyages and travels, as well as all such documents and materials as may convey the best information to persons intending to visit foreign countries—it being of the greatest utility to those who are about to travel to be aware of what has been already done, and what is still wanting in the countries they may intend to visit; to render pecuniary assistance, when the funds will permit, to such travellers as may require it, in order to facilitate this particular branch of their research; and to correspond with similar societies that may be established in different parts of the world, with foreigners engaged in ethnological pursuits, and with the most intelligent British residents in the various remote settlements of the Empire. The admission fee is proposed to be £2, and the annual subscription £2, or both may be compounded for by one payment of £15; but the first 200 members are to be exempt from the payment of the admission fee, and their composition will be consequently reduced to £12. When 200 gentlemen have announced their intention of becoming members, a meeting will be called for the purpose of electing the officers of the society; and then, but not before, will the subscriptions become due. In the meantime, those who are already enrolled as members are at work reading papers, publishing transactions, and collecting materials for a museum.


Anthropology should take a leading interest and a practical share in all future construction and reconstruction of human society. If it is to do this satisfactorily, its chief aim, now and for some time to come, must be to study the conditions which affect the behaviour of large contemporary populations and to understand how they work. It must be able to say what are the probabilities that if a particular group is subjected to certain specified conditions these will issue in a particular type of behaviour. Whether such behaviour is desirable is not anthropology’s concern. But it is its concern to help to say what must be done if political or other considerations indicate that a particular development of large-scale behaviour is to be sought.

There are four main lines of approach to anthropology. They are:

1. The collection and study of the distribution of measures of human physical characteristics, such as the size and shape of the head. This is called physical anthropology or anthropometry.

2. The study of the effects upon group behaviour of general environmental conditions, such as climate, natural economic resources, lines of transport, and the size and movement of populations.

3. The consideration of the products of the natural knowledge current in any group and expressed in such activities as house, or boat building or in its forms of art. This is often called the study of ‘cultural material.’

4. The survey of a group’s psychological possessions, its traditions, beliefs, current customs, and ideals. This is often called ‘social anthropology.’

In recent times a great amount has been learned about those human measures which are most closely related to social behaviour. For example, it is now possible to say what are the chances in this country that an individual of a given intelligence level will be found within a particular industry or professional range. The possible range is a large and varied one for people in the middle levels of intelligence, but becomes far more specialized at either extreme. If we could collect measures of intelligence level and their distribution for groups within which new or changing occupational developments are required, we could begin to predict what directions of industrial and professional expansion would be most likely to be successful.

Obviously this cannot be done by using intelligence measures alone. But it is now becoming possible to obtain reliable measures of many simple human capacities which lie at the root of a large variety of skills, such as are also required for particular directions of industrial and professional development.

Largely under the stimulus of a world-wide war an immense amount has been learned about the effects of general environmental conditions, and, more important still, of how these effects can be safely and successfully counteracted. Modern scientific invention has vastly altered the social significance of lines of transport, and, with this, of natural economic resources and of the size and trends of population.

Anthropologists have usually been more interested in early than in late developments of natural knowledge and material culture. Here again, however, nothing has more profoundly affected social life everywhere than the inventions of present-day physical and biological sciences.

To bring them within the scope of the study of material culture is now a task of paramount importance.

Even in the far more shadowy field of a group’s psychological possessions the same development is taking place. A large variety of methods for the more reliable collection of evidence about group traditions, beliefs, motives, ideals and the like are being somewhat sporadically used. Exaggerated claims are apt to be made for all of these. Nevertheless, they demand the sympathetic, if critical, attention and exploitation of the anthropologist.

In every direction of main anthropological interest the story is the same. If anthropology is to make good any claim to take an important part in the planned reconstruction of society, team work of a more intimate and a wider character than has so far been achieved will have to be organized. Many of the methods required must be the work of physical and biological scientists, each engaged in his own field. Since the data required are extensive their use must almost always be directed by the expert statistician. But somebody must bring them together and study their relation to problems of large-scale human behaviour. That is the anthropologist’s task, a key task whether for the understanding or for the guidance of man’s destiny.
Broadly speaking the most important problems of social organization in the post-war period will all be connected with the unparalleled 'contact of cultures' which will occur. Everybody knows that when two or more differently organized social groups come into working contact changes of culture occur easily in some respects, and are violently resisted in others. There is a curiously recurrent tendency, especially on the part of the ardent social reformers, to strike first and openly at particularly resistant points of any contrasting culture, very often because they stick out and look prominent, being possessed only by one party in the contact. The history of colonization has shown again and again what disasters may follow, and the post-war world will offer a wonderful opportunity for further illustration. It is a matter of the greatest practical importance for any governing authority to learn what principles determine the 'hard' or resistant, and the 'soft' or yielding points of its own and of alien cultures. That there are such principles is certain. They can be discovered only by well-directed and patient team research, demanding a knowledge of the distribution of fundamental human functions throughout the group concerned; of the ways in which these are affected by current conditions belonging to the environment, of the influence, especially of recent developments of scientific invention and consequent changes in material culture, and of the ways in which group traditions, beliefs, and ideas can be most readily and permanently affected. Such research ought now to be developed and encouraged on a wide scale. If the science of anthropology rises to its present opportunities it will not only gain in vitality itself, but it will present itself as a practical illustration of that kind of co-operative combination of divergent interests which lies at the foundation of all enduring progress in the history of Man.

Honorary Fellows of the Royal Anthropological Institute.

12 Article 14 of the Institute's Articles of Association provides that persons eminent in anthropology 'abroad may be associated with the Institute under the title of 'Honorary Fellows' ; they shall be elected by the Council under the same conditions as laid down for members, but shall not be liable to any annual or other contribution, and shall not be deemed to be members within the meaning of the Memorandum of Association. Honorary members shall have the same rights as members, with the exception of that of voting at general meetings.'

The following is the list of Honorary Fellows, but it will be understood that absolute correctness cannot naturally, in present circumstances, be assumed; many addresses cannot be regarded as accurate.

1938. Bucher, Peter H., Dr., D.S.O., M.D., Ch.B. Bernice Pauahi Bishop Museum, Honolulu, Hawaii. (*)
1940. Chi, Dr. Li. Institute of History and Philology, Academia Sinica, Kunming, Yunnan, South-West China.
1924. Christian, Prof. Dr. Victor. VI Mariahilferstrasse 1A, Wien.
1924. Efmenko, Professor P. P. U.S.S.R.
1928. Friederici, Dr. G. Hagner Allee 50, Ahrensburg, Holstein, Germany.
1938. Gimpera, Dr. Pedro Bosch. The University, Mexico City.
1930. Heye, George G., Dr. Museum of American Indian (Heye Foundation), Broadway—135th Street, New York.
1924. Hodge, F. W. Dr. Director, South-west Museum, Highland Park, Los Angeles, California.
1931. Krooher, Prof. A. L. Dept. of Anthropology, University of California, Berkeley, California.
1934. Lowie, Dr. Robert H., Ph.D. Professor of Anthropology, University of California, Berkeley, California.
1937. Lundborg, Prof. H. Jernbiogtattan 22, Uppsala.
1925. Mauss, M. Marcel. 2, Rue Bruller, Paris XIVe.
1922. Obermaier, Prof. H. Madrid.
1923. Orsi, Dr. Paolo. The Museum, Syracuse, Sicily.
1940. Paso, Dr. Alfonso. Instituto Nacional de Anthropologia e Historia, Zacatecas, Mexico.
1926. Rivet, Dr. P. National University, Mexico City.
1932. Speiser, Professor Dr. Felix. St. Alban Vorstadt 108, Basel, Switzerland.
1929. Tallgren, Prof. A. M. Finska Museum, Helsingfor, Finland.
1941. Tello, Dr. Julio C. Lima, Peru.
1925. Thurnwald, Prof. Richard. Libellenstr. 17, Nikolasee, Berlin, Germany.
1922. Vasconcellos, Dr. José Leite de. Museu Etnologico Portugues, Belem, Lisbon.
1933. Wissler, Dr. Clark. Curator, Department of Anthropology, American Museum of Natural History, New York.
1943. Zábratnucb, Professor S. U.S.S.R.

Guest Members.

By a resolution of the Council in February, 1941, it was decided to institute a new category of Fellows—Guest Members—for the duration of the
training courses for service in the Netherlands East Indies. "Summary of an address by Dr. W. Huender to an International Discussion Meeting, 24 February, 1943."

The first travellers to the Netherlands East Indies for the Oost Indische Compagnie were purely commercial, but when Government assumed responsibility for the welfare of the population, a need was felt for special training for Netherland officials. In 1819 prospective officials were placed under the supervision of Javanese district chiefs (Wedono) for better contact with the people, and study of native languages. There was already in Java an effective system of local government, which was gradually adapted to modern ideas, and supplemented by Netherland civil servants working with or over the native rulers.

In 1834 an institution was founded in Soerakarta for the study of the Javanese language, but it was closed in 1843, and the training took place at the Royal Academy at Delft, in three grades of instruction. In 1864 an Institution for Indological studies was opened at Leyden, and another at Batavia in 1867; but Delft met competitors with a practical course of its own. Leyden in turn was closed and reopened, and in 1902, when there were four candidates for every vacancy, the Delft institution was transferred to Leyden, and in 1907 candidates were previously selected for their general capacity, and guaranteed an appointment if they qualified in examination after the degree course of three years. One-third of the number for whom there were vacancies were selected in the Indies from local applicants and trained with the candidates selected in Holland, acquiring thus valuable experience of the mother-country. In 1913 this system quite superseded the provision of the William III Gymnasium at Batavia for civil servants. Further, the Indies Administrative Academy at the Hague offered to selected officials, after several years service, a two years' course qualifying for the highest posts in the administration of the Indies; but this Academy was closed in 1921, and a more academic and scientific system was devised.

There are now two courses of training: (a) a four years' course of East India Law, with ethnology, economics, statistics, Malay or Javanese language, institutions of Islam, archeology and history of the Indies, and comparative colonial history; leading to the degree of 'master of law'; and designed for judicial appointments; (b) for administrative posts, a five years' course, followed by a thesis, including similar subjects, but leading to a doctorate, with either economics or languages as a major subject.

Criticisms of this curriculum reflect alternative views as to the relative value of general character and wisdom, or of specific learning. Both are necessary; and insight and tact are inbred, not academic accomplishments. In practice, the courses inspire love for the future career, and interest in it and the native population and institutions, especially as much of the fundamental study of these institutions has been done at Leyden itself.

Meanwhile, however, at the University of Utrecht an Indological faculty was established in 1925 by the Entrepreneurs' Council, representing unofficial views of industrial, agricultural, and commercial circles in the Indies, less interested in the extension of native influence in public matters. It drew some students from Leyden, but has not attained the same scientific reputation. Students from both schools are eligible for appointments.

Special provisions have been made further, temporarily for second-rank administrators trained in the Indies; for linguists, with a 'doctorate of Eastern letters'; for medical officers, engineers, agricultural, and forest officers; for the army, which is separately organized, but trains its officers with those of the Netherlands army at the Royal Military Academy at Breda; for the staffs of private enterprises; for missionaries; and for Netherland girls who through marriage will make the Indies their home. And to promote knowledge of the Indies and interest in their welfare, much attention is given to lectures and courses at the Colonial Institute at Amsterdam, especially for teachers, and to study-visits of such persons to the Indies.

What happened in History. By Gordon Childe. London (Penguin Books). 1943. Pp. 256. Price ninetepence. This is a book which has been needed for some time; for the contributions of archaeology and of special branches of history—especially economic history—have put much documentary history in a new and more intelligible light. In previous writings, Professor Childe has himself done much to present and interpret this new material, in prehistoric and oriental studies. Here he restates and amplifies the social and economic aspects of these, and carries the story on into Greek and Roman history. This is the more useful, because classical studies have been under ill-informed and unfriendly criticism, and have also been usually defended by scholars least acquainted with the foundations, economic and social, of
the civilization of the Mediterranean world, and especially with its inevitable limitations, and the causes of its eventual collapse.

In general, Professor Childe attributes a larger and more fundamental element in that civilization to the cultures of the Near East than was customary for a while under the influence of discoveries in prehistoric Europe; and this enables us to see how the leading ideas and social institutions, of Babylonia especially, were transmitted from Crete in company with metallurgy, agriculture, and other elementary arts. How this penetration was effected he does not clearly show, leaving us with a kind of 'Zimbabwe problem' for the origin, for example, of the Minoan regime in Crete.

As far as iron-working and, especially to the cheapness of the new metal, he attributes the rapid spread and profound social effects of the first iron-using culture, but he leaves again unexplained its first diffusion, and does not closely correlate this with historical changes, the consequences of which he has to discuss later. It cannot now be assumed, for example, that the new metal and the new types of sword and fighting axe originated in the same culture or region; consequently the contributions, for example, of Danubian invaders of the Aegean—if such there were—need to be analysed afresh, and cross-currents or alternatives must be examined.

On the social revolution which created the Greek city-state, there is at first sight no archaeological commentary possible; but the sporadic distribution of cremation deserves discussion, as a clue to the extent and character of the interpenetration of tribal groups in the earliest stages of 'political' unification. The remains have been Greek worshippers and their gods also thrown some light on the social outlook of those worshippers on one another. In a period where the archæological record is still so fragmentary 'what happened in history' may sometimes be provisionally presented from other points of view.

Rather late in the day, Marxist interpretations of ancient society are coming fashioning. Though they do not perhaps give us the final picture, they have thrown much light on the subject, and will perhaps reveal more, as the old evidence is re-examined. But there are pitfalls, especially in regard to the changing conditions of property-ownership and of labour, and most of all as to Greek and Roman slavery, where it is essential to distinguish an earlier phase when there was a real shortage of labour, and 'hands' were collected where they could be found, and a later phase when it became the social function of slaves and free labourers alike to maintain in relative (if not complete) leisure a cultivated but unproductive minority. Greek economics devoted much attention to the sources and the acquisition of raw materials, but little to that of expenditure. There were indeed so few ways of expending great wealth, when once the capital needs of the city state were satisfied, and of these the most expensive were the almost incessant wars, and the substitution of mercenaries for citizen armies. Huge sums also were immobilized in fortification, from the moment when the Athenian seapower collapsed and the danger of attack from Persia reappeared.

An interesting index of advancement used repeatedly by Professor Childe is the comparison of 'built-up areas' of ancient cities; but account must be taken both of the extreme simplicity of ancient domestic life, which permitted what we should consider overcrowding, and of the inclusion, for military reasons, of much unbuilt land within the great walls. Medieval Persian and other Oriental cities illustrate the same point, and likewise the walls of Roman Silchester.

Professor Childe's account of the long decline of Greek-Roman culture follows in the main the lines of Rose, but he has many points to add in detail. He ends his story with the barbarian and Arab invasions, which applied the rude test of external force to the crumbling fabric; but it is to be hoped that he may some day carry his interpretation further. Medieval history is in even more need than ancient of this kind of archaeological commentary.

[January-February, 1944.]


This valuable and entertaining book, the contents of which are better indicated by its sub-title—'An Anthropo-

logist looks at America'—is issued under the auspices of the Council of Intercultural Relations which has lately been established in the United States, largely through the activity of Gregory Bateson, Dr. Mead's cousin. It is not only a book which that a detailed description is impossible here; some of the more striking extracts provide a better means of review. As Dr. Mead points out, the research underlying its teachings was not done in the United States, but in the field (p. 9). She investigates the strong and the weak points of the American character, and looks at it not whether to ascertain how likely they are to be helpful or harmful in winning the War and in building up a better post-war world.

An early question of Dr. Mead's is: 'Is the American success system flexible enough to adjust to changing con-

ditions?' (p. 69). According to early puritans, success was not regarded as the visible sign that one had so lived as find favour in the light of God' (p. 195). She asks 'How can you tell that a man is a success? Only by knowing how far he has come, how many he has passed, what he has in the way of power and possessions. What he is—as a man—is irrelevant, for to the Great Depression which could have deserved something rather than to have been a kind of person' (p. 68). And thus until recently the American child from the start wins praise and approval as he displays that he 'loves mother' not by loving her, but by eating his carrots and growing to be the tallest boy of his age on the block' (p. 110). He was expected from the start to 'out-distance the parent, to be brighter, stronger, more aggressive, more successful' (p. 155).

In those days the parents pretended to 'be a perfect practitioner of the virtues which they had to preach' (p. 133). In this present generation of young men discovered this hypocrisy and 'the belief in Progress is reborn in the minds of the young' (p. 134). Moreover, the present generation has been 'reared by members of a generation which betrayed a Cause which they had believed to be worth fighting for' (p. 117). In the last Great War the Americans ought to have saved the world, and they saved it and more. The general bringing of liberty and justice for all in their knap sack, 'The Liberation of Europe, from all the old dark wars and ways of life, that was the Cause in which we were willing to die... Why did we welch on that Vision, refuse to play, go home like sulky children' (p. 116), asking 'Am I my brother's keeper?' Lastly, can the 'Great Depression which could have become a great moral experience' (p. 163). But no prophet appeared, saying 'You have sinned, ye people of America, rich and proud and safe, you have left your brothers wounded and dying by the wayside, tossing them aside when they needed your hands and your brains. The way was plain before you, and you there were you punished' (p. 163). And so the present generation of children grew up, 'exposed to moral peril as no group of Americans had ever been exposed to before... Failure and Betrayal, not Success and Faith became' (pp. 119, 121) their watchword.

Dr. Mead believes, I conclude, that the present young generation has learned its lesson. If, instead of asking 'how to win power or how to avoid poverty,' it has realized that there is a right and a wrong and that goodness is transcendentally important, 'then we need not fear when we entrust our future into their hands' (p. 137). Their aggressiveness may be 'uncertain and undefined' (p. 193); the American idea of fair play may differ slightly from the British; the characteristic of boasting, which is 'very necessary' (p. 155) in America, may be traced back to the breakfast table where the children play the part of exhibitionists in consequence of the parents' expectations of their playing that part. All these, in contrast to the British breakfast table at which the authoritarian father is the exhibitionist. Such boasting is aroused when, as at Pearl Harbour, 'other people start pushing us around' (p. 157). But it excites American aggressiveness under its most favourable conditions of display.

Space is insufficient to describe Dr. Mead's wise comments on the weaknesses and handicaps of democracy in war and the means of overcoming them. Equally illuminating are the contrasts she draws between the totalitarian's and the democrat's attitudes to social planning and to social and natural science. Many of her fellow-countrymen will dislike her
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**MAN**

for an index; but it is profoundly thoughtful and provocatively suggestive.

CHARLES S. MYERS.

**AMERICA.**


This is a chapter each on the town of Písté, on personality traits and everyday activities, on maize production and animal husbandry, on physical and physiological features, and on demography and family history studies. Each of these topics is treated fully and there are many statistical tables.

Now, Chapter 1 introduces maize production, which throws strong light on the conditions of life in ancient times, as well as being a complete study of the present method of cultivation, which is more clearly described than in any other book which the reviewer has seen.

But the chapter on personality traits and everyday activities goes much further than might be expected from its title, and is in fact a useful and interesting, though brief, account of the present-day people of Písté—in fact a good piece of ethnographical literature.

Their personal character, dances, marriage customs, morality and family ties, beliefs, pathological traits, and general intelligence are dealt with, and illustrated by stories of actual cases which make the material very interesting.

Dr. Stegner has resided in Písté for purposes of investigation for regular periods in each of eight successive years. This gave him a great advantage in producing a full and balanced treatment of the ethnography, as compared with the more usual method of ethnographers who are only able once to visit a people of whom they have no previous knowledge, and are necessarily pressed for time. One is glad to note that the author takes a favourable and sympathetic view of the Maya. The book should be read by all who are interested in them.

The figures and plates add very much to the value of the work.

RICHARD C. E. LONG.


The Dutch West India Company received its charter in 1621, and began to colonize the Berbice River and its tributary the Canje in 1627. Part of the Dutch settlements, after a troubled history, was recognized in 1841 the Colony of British Guiana, but the outline and nomenclature of the district remained. The emancipation of the slaves in 1838 deranged the labour supply and also the land system; and what had been plantations became negro villages owning lands purchased with savings and managed as commercial companies.

From intimate local knowledge, during long years of mission work, the author (whose industry only ceased with his recent death) has described all the Dutch estates, and their long history, with many picturesque details, and indexed the names recorded on maps of all periods; a most laborious work, and fundamental for the social history which he contemplated but did not live to publish.

J. L. M.


This is a report on the important excavations carried on by Dr. Caso at Monte Albán. It is very fully illustrated and contains also excellent plans. The details of excavation are fully given, and the care taken in reconstruction is thoroughly pleasing.

One notices that the Zapotec, like all the other Middle American peoples, were constantly changing their buildings, either by pulling them down, or more often by overlying them with new constructions. As shown elsewhere by Dr. Caso, there is a clear distinction between Zapotec and Mixtec remains, and the Zapotec tombs were often plundered and re-used by the Mixtec who succeeded them; but strangely enough, in this report, we see that Zapotec tombs were sometimes plundered by the Zapotec themselves. The Zapotec occupation was ancient and comprised four ceramic periods, while the Mixtec occupation was much shorter and consisted of only one ceramic period.

The whole book is valuable, but a specially interesting part of it is that describing the excavation of the Ball Court and its differences from later types.

RICHARD C. E. LONG.

Ceremonial Costumes of the Pueblo Indians. By V. M. Roediger.

The text consists of a detailed description of the costumes worn by the Pueblo Indians at their dances, their methods of manufacture, and the symbolic value attached to each item. There are also sketches of the social organization and religion of these Indians.

The most important feature of the costumes is the mask: the Indian believes that he takes on the personality of the god by assuming the god’s mask. After the mask, the pigment with which the dancer’s body is coloured is considered the most sacred part of the regalia, and after being painted, a dancer is ‘not of this world’ until he has been ceremonially washed. Feathers play an important part, and all feathers used in ritual must come from the living bird.

The Indians have a conception of the duality of life, apparently analogous to that of the yin and yang of the Chinese. The colour blue, for example, is associated with women, and also with winter and the west.

The descriptions, drawn both from the literature and the author’s own observations, are on the whole excellent, though occasionally marred by specious generalizations, such as ‘in order to satisfy his aesthetic urge, man has always decorated himself in season with blossom, fruit, or leaf.’

The feature of the book, however, is the series of coloured plates. The costumes depicted are astonishing in their variety, and the author, who is also the artist, has succeeded in showing every detail and at the same time producing pictures of striking beauty. She has performed a great service to science by so recording these costumes, which are doomed to disappear before very long.

RAGLAN.

**ARCHAEOLOGY.**


This magnificent volume is one of a group of twelve projected by the Oriental Institute of the University of Chicago to present as a whole the work of the Oriental Institute’s Iraq Expedition in the Diyala region. That, in the midst of the greatest and most widespread war in the history of mankind, it should have been possible to produce such a work as this, with such technical perfection is a portent. A note to the effect that Mr. Seton Lloyd has been unable to read proofs owing to war duties is a reminder of the difficulties under which the editors have laboured. No praise could be excessive for the care and scrupulous accuracy with which the work has been carried out.

Various monographs have already been published by the Oriental Institute dealing with excavations at Tell Asmar and elsewhere, but here we have the first instalment of the full reports of the Iraq Expedition’s work in the Diyala region. The volume below is not restricted to any of the constructive details of the Khafajah temples, the Abu temple at Tell Asmar, and the Shara temple at Tell Agrab,
with a chapter on the inscriptions by Dr. Jacobsen, and a valuable chapter of conclusions by Professor Henry Frankfort.

An important result of the work is the extent to which it supplements and corrects Andrae's conclusions from his excavations of the Ishtar temple at Ur, and the theory presented in his book *Das Gotteshaus und die Orte der Götter* (Berlin, 1930). Professor Frankfort sums up the significance of the findings contained in this volume as follows: "The most significant fact emerging from a comparison of the older and more recent finds is the far-reaching agreement in lay-out and internal arrangements which exists between sites hundreds of miles apart. We may, consequently, claim that we now know the temple as built throughout the greater part of Mesopotamia in Early Dynastic times... we are made aware of a measure of continuity in Mesopotamia far exceeding that which earlier evidence had led us to suspect. The history of sacred architecture from the earliest settlement of the country down to Early Dynastic times now appears as one unbroken development in which a few features appear throughout as characteristic."

The basic temple plan revealed by the successive developments of the so-called Sin Temple at Khafajah consists of a long central room, or cella, which contains the altar placed against one of the short walls, a hearth, and a double entrance in the long wall at the end of the room farthest removed from the altar. From this simple shrine the rest of the complex of temple buildings has developed. It should be noted that, owing to the fact that Dr. Jacobsen has revised his *Formen des Urkhalas* dedicatory inscription, there is now some doubt whether the temple under discussion has been rightly designated the Sin temple, but the editors have preferred to retain the name as originally given.

A new term has been invented by the authors to describe the period covered by the first five Sin temples, namely, 'proto-literata.' The duration of the proto-literata period is computed to be about 400 years, and is dated either as from 3850-3450 B.C. (based on Jacobsen), or 3575-3175 B.C. (based on Sidney Smith). By this new term the authors intend to designate those cultural phases in early Mesopotamia history in which the major crises happened and the stage was set for the development of writing. The tone of the book is scholarly, and the authors are to be commended for their thorough research and clear presentation of their arguments.

PACIFIC.

**Report on the Fish and Fisheries of Lake Nyasa.**


This is an account of a fishery survey carried out in Lake Nyasa in 1939 in conjunction with the Nyasaland Nutrition Survey. The report should interest anthropologists in three main ways. The first is the description of the technological aspect of the lake fisheries, which are the result of two exceptions all owned and operated by Africans using their traditional equipment in the form of nets, traps, and boats. Secondly, there is a considerable amount of evidence on the place of fish in the local economy, both as food and as wealth, as well as of fishing as an important occupation. Thirdly, there are proposals for improving and enlarging the fisheries with a view to making dried fish more widely available as a much-needed source of protein in the local diet.

MARGARET READ.

**Good out of Africa: a Study in the Relativity of Morals.**


The theme of this essay is that social institutions should be judged by their survival value (including potentialities for further development) rather than by their conformity with a particular set of preconceptions. In particular, an ethical system which has not been conspicuously successful in Europe should not be forced upon the African. The author discusses the impact of Christian teaching upon the religious ideas of the Bantu, the breakdown of the tribal sanctions in the mining areas and the new economic opportunities of the individual, and the conflict between Bantu and European conceptions of family life. He has some interesting suggestions to offer as to the reasons why, in Tanganyika, Islam is competing successfully with Christianity.

For the most part there is nothing strikingly new in his generalizations. In a concluding chapter on the need for further research he urges consideration of the possibility that the African's hereditary traits may be found to differ from the European's in respects important to the moralist. If this proposition is put forward for serious consideration, it would be important to know whether it involves abandoning the view now generally accepted that moral sense is an acquired characteristic, or whether it postulates some hitherto undiscovered relationship between physical traits and morality.

L. P. MAIR.

**CORRESPONDENCE.**

**Cosmas and the Gold Trade of Fazooli.** *Cf. Man,* 1942, 30.

**Sr.—** In his article on *Cosmas and the Gold Trade of Fazooli* (Man, 1942, 30), Mr. G. A. Wainwright gives convincing reasons for thinking that the Axumite expeditions that used to go and obtain gold in nuggets like 'little lumpcs called tantraha' by silent barter for meat, iron, or salt in the land of Saus, were really going to Fazooli in Kasu, or Cush, the old name for the kingdom of Meroe. Fazooli probably was within the sphere of influence of Meroe. Even to-day there is an export of gold from that area; and my

Sin.—The accompanying photographs show two of the uses for which the bored stone is put to by the peoples of Eastern Abyssinia and Somaliland, among whom they are still made to-day. The photographs were taken in August 1941 while I was serving with the East African Forces in Eastern Abyssinia and British Somaliland. I was surprised to see this object used in this area, particularly as a digging stick, as I had always believed that apart from a few instances of the use of such stones by the Southern Bantu and by some Oongo tribes (Contribution à l'étude de la Répartition des Kwas au Katanga, by F. Cabu, Tervuren) they were used to-day only by the Bushmen of the Southern Kalahari and nowhere else in the African continent. That the Bantu did at one time use and make bored stones, of which quite a considerable number have been found in the sub-continent, is shown by Dr. A. J. H. Goodwin, who assigns those found above the 3,000 foot contour in the Northern Transvaal to a cattle-owning people. The only account of their manufacture within historical times, however, comes from the Ba Roko and Ba Boko who used such stones as weights on wooden or iron hoes, but not on the digging sticks ('The Bored Stones of Southern Africa,' Part I, by A. J. H. Goodwin, Comm. from School of African Studies, New Series, No. 1); so that their manufacture and use in Eastern Abyssinia by Somalis and Hargeisa is unique.

The Abyssinian stones would seem to have the following distribution: from the right bank of the Aucase gorge, that is to say east of the Rift, eastwards to Harar, Dire Dawa, and the borders of the Danakil desert, east of Harar to Giga Giga and beyond to the edge of the desert, south to the Danakil desert, and beyond the Hargeisa to the Abyssinian-Arabian border. We may say they are used only by the terrace agriculturists of the Harar plateau. I did not find them in use anywhere in Abyssinia west of the Aucase, where their place is taken by the simple plough. Their distribution, therefore, is limited indefinitely to the western Somalis, the Harari natives, and a few other mixed types, among whom of course they are also just as common, usually more so. This area of distribution would seem to bear out the statement as to their origin given me by my informant, a Somali from Hargeisa, who gave me the following information as to their manufacture and use:

All kinds of bored stone are in use, the one dagah—meaning simply 'a stone'—is used for digging gardens etc.; the other, usually a large stone, lubud, is used especially for digging a grave. The completely bored stick and weight for everyday use is known as dalibot. The stick, ulul, may be made from any suitable wood, and is pointed at the working end, sometimes, as in the photograph fig. 1, the point is protected by an iron sheath, the stick being thus a stronger counterpart of the Somali sheep-goat. The stone is fixed at the upper end of the stick, usually by forcing the stone down on to it, but sometimes by reducing the circumference of the top of the stick by cutting away the stone into the haft so formed; sometimes it is secured also with gum or bitumen. The stone itself, basalt or some suitable igneous or metamorphic rock, is usually shaped before boring by abrasion on any conveniently hard anvil, unless it should be sufficiently smooth and symmetrical when found. Stones with a hole already bored through them are readily to be found used, but I was informed that these were simply stones that had been made and lost by other Somalis. The stones, which are always of the spheroid or klish variety, are bored nowadays by using an iron hammer and chisel; first one side is hollowed and then the other, till the stone is pierced, so that the cross section shows typical hour-glass proportions; the hole and the stone are then polished with sand and the bore widened. Formerly the perforation is said to have been made with the fire stick, madag, presumably in conjunction with sand. The digging stick is used for breaking up small areas of ground for

A. J. ARKELL.
Fig. 1 was taken on the Harar plateau about ten miles from the city on the Dire Dawa road—the digging stick was being used by a Harar man who was breaking soil for planting bullrush millet. The stick was used, as can be seen, by grasping top and bottom with both hands and driving it into the ground at the same time pulling the working end towards the body thus tearing up a small clod of earth.

Fig. 2 was taken within the walled city of Harar itself, and shows the second use to which I found the bored stone being put. The stone was here attached to the end of a small pestle, again as a weight, and was used for pounding sarbuse in the mortar, a variety of leaf which when chewed produces a narcotic effect. The owner valued the whole pestle and mortar at one Maria Theresa dollar (1s. 6d.).

Since writing this account, my attention has been drawn to the following extract, the original of which I have not been able to see, from a paper in L'Anthropologie 1935, 'Boules de Pierre Perforées du Capésien et des Industries Derivées' by E. G. Gobert.

'La dongora est encore de nos jours en usage, en Ethiopie. C'est un pieu, armé à l'une de ses extrémités d'une pointe de fer, et chargé à l'autre d'une pierre arrondie et perforée. H. de Monfreid a conté tout récemment comment les Gallas s'en servent pour défoncer le sol. Le musée d'ethnographie du Trocadéro en possède plusieurs exemplaires.

'Deux autres, dont l'un est reproduit ici, ont été reportés récemment par H. Breuil. Leurs dimensions sont celles ci:

<table>
<thead>
<tr>
<th>Longueur des pieux</th>
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'Les Abyssins emploient la même méthode pour rendre plus lourds les pilons avec lesquels ils pulvérisent le tabac dans des mortiers de bois.' Le Trocadéro possède aussi un de ces mortiers.'

J. DESMOND CLARK,
Rhodes-Livingstone Museum,
Livingstone, Northern Rhodesia.
ROBERT RANULPH MARETT, D.Sc.
RECTOR OF EXETER COLLEGE, OXFORD

From the portrait by Henry Lamb, 1935, at Exeter College
Of late years the Rector's pupils throughout the world have been heartened by the fortitude with which he and Mrs. Marett have borne the loss of their ancestral home in Jersey, and that of their dear son Jack, a splendid and gallant young sailor of high attainment and higher promise. This same gallant bearing towards whatever may come in life has been communicated by the Rector's lifelong example and teaching to many of his old friends and pupils, and has had no small part in the success with which they have overcome obstacles and become confident in their life's work, not grieving or wasting time overmuch in dwelling on reverses, but ever looking forward to achievement of the good life.

He put life into everything and everybody. So vital was he that when we first heard of his sudden death at a meeting of the Curators of the Indian Institute, of whom he was Chairman, it seemed absurd to be alive when he was not. Seigneur, farmer and open-air sportsman, philosopher, classical scholar and archeologist, learned in law, wise in good humour, inspiring as a teacher, he was the ideal Anthropologist, in whom all these and many other manly qualities of mind and body were held in balance by a great and genial personality of moral and intellectual power. At home with all kinds and conditions of men, yet never other than himself, he had a profound understanding of the springs of human action, a wisdom imparted generously to his many pupils who became field workers and Officers of the Public Service, to their lasting benefit and that of the peoples whom they served, and which shone abundantly in his own life and writing.

As lawyer, philosopher, and anthropologist, and withal a man of deep human sympathy and understanding, he was well suited to compare ideal ethics with actual morality in all its varieties and phases, so as to discover how far human nature could reasonably be expected to practise what the philosopher preached. The first fruits of this endeavour were the Green Moral Philosophy Prize in 1893 for an essay on The Ethics of Savage Races, and the friendship of the great Tylor; the final outcome was a principal work of his lifetime, in his study of the springs of human action, both in Philosophy and Anthropology, to him always complementary subjects. Such investigation demands a synthesis of Natural Science with its judgments of fact, and of Moral Philosophy with its judgments of value. In writing and teaching he held the balance explicitly and strictly between the witness-box, the advocate's bench, and the judge, justice abominating perjury, and even mercy requiring the whole truth before the court missionary was allowed to temper justice.

Moreover, such a programme demands examination of premises, and a survey of the raw materials of ethics and religion, omitting no condition or phase of human development. Tylor had already made his famous minimum definition of religion as 'the belief in spiritual beings' when Myres asked Marett to read a paper at the 1890 meeting of the British Association at Dover. In that address he greatly widened the horizon of investigation of human conduct, arguing that primitive religion was wider, and, in some ways, a vaguer thing than the belief in spiritual beings, and without insisting on a chronological scheme, made a new category for those residual phenomena which a strictly animistic interpretation of rudimentary religion would be likely to ignore, or at all events, to misrepresent. Over and above what can be explained by human intelligence, there is the inexplicable and awe-inspiring, and such events or objects may be treated as though they had personality or will, with no notion that they are directed by a spirit or contain one. While such a condition of mind may be classified under the term 'pre-animism,' he avoided chronological argument in The Threshold of Religion by calling it 'animatism.' In the same work he proposed the use of the words mana and tabu which Bishop Codrington had introduced to European notice, the one for the positive aspect of the power that compels awe, whether impersonal, personal, or spirit, and the other for its negative aspect, signifying that the supernatural or sacred was not to be approached without due caution and by proper ritual. In his analysis of the relation between religion and magic, he maintained that the antithesis upheld in The Golden Bough disjoined atti-
tudes of mind which he believed to be organically connected, and concluded that both formed part of a single system which he described as ‘magico-religious.’

Early in his career he defined religion as the cult of the sacred (using ‘sacred’ in the sense of the Latin sacer) whose end is infinite good for all, and in all his teaching emphasized the importance of the study of ritual by which primitive peoples deal with the incalculable, or inexplicable matters which are beyond ordinary human skill and intelligence, and make themselves confident and at home in a world which affords a precarious living and many risks. Perhaps more than any other teacher he has emphasized the importance of feeling and doing, rather than of thinking in these rites. ‘Primitive man does not reason out his religion, he dances it out instead—using “dance” as a shorthand equivalent for the ceremonial activities of the primitive world in general.’ ‘It is necessary to look in the first instance to what he does, rather than to what he thinks and believes, because he himself is much more clear about what should be done than about why he should do it.’ He himself considered that the best and soundest of his teaching was exemplified in his Gifford Lectures of 1931–1933, later published under the titles Faith, Hope, and Charity in Primitive Religion, and Sacraments of Simple Folk. In the first he analysed the ambivalent emotions which may be called the raw materials of religion and ethics, and in the second book dealt with the way in which these are canalized by ritual to cement society together and maintain its confidence and will, not only to live, but to live well.

In concluding his first series of Gifford Lectures, he dwelt especially on Charity, ‘the purest because the least utilitarian of the virtues,’ and made it the keynote of his last substantial book Head, Heart, and Hands in Human Evolution. ‘Real progress,’ he said, ‘is progress in charity, all other advances being secondary thereto. The true function of religion is to enlarge charity, and therein is summed up its duty both to God and to man.’ This was also the theme of his Huxley Lecture of 1939, called ‘Charity and the Struggle for Existence,’ and underlies his defence of diversity and small or backward peoples in Natural Selection and the Lesser Folk, Hibbert Journal, April, 1943. In the Huxley Lecture he sought to determine the biological function of morality, and in particular, that of Charity as its crowning grace. Charity has its origin in mother-love, ‘seeing that such a trait connects the human species with many others of lower nature.’ Thus ‘Charity is the mother’s, while Justice is the father’s contribution to the moral life of mankind.’ ‘Charity and Justice are as the heart and the head—with, perhaps, Holiness as the soul—of the whole evolutionary movement to which our nature is subject.’

A great part of the Rector’s contribution to Anthropology was his part in founding the Diploma in Anthropology with the help of Myres, Thomson, and Balfour, their aim being ‘to achieve a wider synthesis of the various studies relating to Man than had ever before been attempted at Oxford, or perhaps anywhere else.’ For over thirty years, Arthur Thomson, later assisted by Dudley Buxton, taught Physical Anthropology, Balfour Prehistory and Material Culture, assisted in the teaching of Archaeology by Lees and Myres, and Marett Social Anthropology. Marett showed well his grasp of the whole complex in his book on Anthropology, and made a considerable contribution to a discipline outside his own section of the subject in his excavations of a Mousterian cave in Jersey, published in Archaeologia in 1911, 1912, and 1916, and in the Antiquaries Journal in 1940.

As a teacher, he was superb. Many times he spoke to us of the Australian totemic ceremonies as making the participants wise and good and glad and strong. We came from his lectures and tutorials and from private conversations with him in that spirit, and the fire continued to burn long after he had kindled it in us. We went from him realizing special abilities which he had seen and pointed out to us, and mindful of his humorous cautions to avoid such faults of temperament as would impair the value of the work he had inspired us to do. To all his pupils his Huxley Lecture gave the most solid satisfaction, since it so plainly manifested the man he was. Justice there was in plenty in his criticism, but Charity too, and the pleasant ruthlessness often alternated with sudden espousal of what was good in an unpopular or badly presented point of view.

One could not describe his method of teaching beyond mentioning the principles that guided his behaviour, for he taught no two persons alike. Even in lectures and classes he was constantly addressing us individually, quoting or commending any work we might have done on the subject in hand, or warning us of the dangers involved in certain of our projects or opinions with a pungent seasoning of comic anecdote, sometimes against himself. One of his valuable contributions to teaching lay in connexions he established with the Colonial and Foreign Offices, and in bringing Pro-consuls into classes both to listen and to contribute to discussion. He did not stuff us with details, but sketched out half a dozen life-works in a lecture, and hurried us off to work on great matters.

His wisdom was justified. Of his pupils who took the Diploma, over half are or have been in responsible positions in the Public Service abroad. Over a third have written such good books, or have done such valuable field work in Archaeology or Anthropology,
that they are known wherever their subjects are known. For the rest, little research is needed to discover that all have done or are doing useful and responsible work. None of the Rector's pupils could shirk responsibility; all were eager for it.

No brief memoir, even by a genius, could present the great qualities of a beloved teacher like the Rector to those who did not know him. Let us give thanks that he told his own story in *A Jerseyman at Oxford*, and that no biographer in future can obscure that vivid picture. It is a straightforward account, putting down the simple truth. In it we see the man we knew, full of vitality and lively good humour, brave and generous, honest and just, and charitable withal.

THE GREAT GAP IN THE ARCHAEOLOGICAL RECORD OF INDIA. By Harold J. E. Peake, F.S.A.

As readers familiar with the early history of India are aware, there is a gap in the archaeological record of that country. This gap begins with the disappearance of the Indus civilization in its Jhukar phase, about 1500 B.C., and ends with monuments erected in the time of Asoka, who ruled most of the peninsula during the middle of the third century before our era. It would not be correct, however, to say that there are no archaeological remains dating from this period, for there is one group of monuments and a few coins; there may possibly be other objects that fall within this gap, if only we could date them.

The period that we are considering, lasting for twelve centuries, is that which, according to the views of most students of Indian history, witnessed the arrival of the invading Aryans, coming from the north-west into the Punjab, their early settlement there and their gradual spread westwards towards the mouth of the Ganges. The only information that we have of these invaders is embodied in their sacred books. These were not written down at the time that they were composed, for writing was then unknown in India, but were committed to memory by the Brahmans, and only written down at a much later date, in this respect resembling the epics of Homer.

The earliest of these religious works is a collection of hymns known as the Rig-veda. These were composed between 1200 and 1000 B.C., and embodied in a canon about 890 B.C. They tell us much about the deities worshipped by the early Aryans, about the rituals they employed, but remarkably little about their secular customs and ways of life. In default of archaeological evidence we can do little to restore these pages of their history. Our first problem is, therefore, how to obtain this archaeological material.

It is not so long since similar difficulties faced the archaeologists of Europe and the Middle East, but by patient work an almost complete series has been obtained in most areas, dating from about 3000 B.C. to the present day. This evidence has been obtained in many ways, but in this country, and especially in Egypt, the first progress was made by the examination of graves and their contents. The three predynastic periods in Egypt were entirely reconstructed in this way, especially by the use of the method, designed by Sir Flinders Petrie, and called by him 'sequence dating,' which enabled him to place all the tombs in a relative chronological sequence.

What we need, then, in the first instance is to examine the graves of the early Aryans, but where are we to find them? No graves have yet been found that can be attributed to this period, except one group, to which reference has already been made, and which will be described later, but, since these lie in Bengal, they must belong to a relatively late part of the period.

How, then, are we to find these graves? There appear to be but three alternatives. First, to carry out intensive field work in the Punjab with many trial excavations. Secondly, to give up the problem as insoluble, and lastly to endeavour by speculation to form some idea of what are the visible vestiges of such graves and where they are to be sought.

The first alternative seems to be quite impracticable, especially at the present time, the second is a counsel of despair. I propose to adopt the third, and to use that tool which, as Huxley said, is 'always efficient—if not always an arm of precision—the scientific imagination.'

Now it is generally agreed that the Aryans invaded the Punjab from the north-west, and some believe that they had formerly dwelt in the mountainous parts of Afghanistan. There is much to be said, however, for the view that they had come from the plain to the north-west of the mountains, from the region around Balkh, whence, according to their traditions, their Iranian cousins set out for Persia.

The plain around Balkh is the end of a long area of light rainfall that stretches from the slopes of the Hindu Kush mountains to the eastern shore of the Caspian Sea. This must have been, as most of it is to-day, a great grassy steppe, connected by means of a dry steppe or desert, round the north of the Caspian, with a similar steppe lying between the Volga and the Dnieper.

Both these steppes are thickly dotted with *kurgans* or mounds. Some of these, like those at Anau explored by Pumpelly, are the sites of abandoned villages, but most of them are burial mounds. These mounds appear to be of various dates, though no great
number have been excavated; some are as late as the Middle Ages, others are of very early date and in some cases go back to neolithic times according to Bogdanov.¹

It seems reasonable, therefore, to assume that some of these burial mounds were thrown up by the early Aryans, and it would follow that, after their entry into the Punjab, they would continue their former custom, at any rate for a time, and throw over the grave, holding the body of their departed, a mound of earth, dug from a surrounding ditch. Such a mound, resembling what we know as a Round Barrow, was, I suggest, the earliest type of tomb or funeral monument erected by the Aryans after their arrival on Indian soil.

While this, I imagine, was the first type of tomb to be erected by the Aryans during the centuries immediately following 1500 B.C., it is not possible to describe the form used immediately after the curtain lifts in the third century. We have, however, a large number of monuments, some of them dating from this time, that may throw some light on our problem. These are the stūpas erected by the Buddhists to enshrine some relic of the Buddha or of a Buddhist saint, or alternatively to mark some specially sacred spot.

Stūpas were at one time known as topes, a word corrupted from thūpa the Prákrit form of stūpa. In Burma such monuments are known as payodas and in Ceylon as dāgobas and in Nepal as chaityas, which like stūpas meant originally heaps or mounds. Sir John Marshall¹ believes that such monuments were originally funeral mounds or tumuli, and their form certainly suggests this origin. Several stūpas were erected by Asoka, but the most famous of these is the great stūpa at Sanchi, recently described by Stuart Piggott.⁵

The main structure of this stūpa is a hemispherical erection of baked brick, overlaid with a covering of white stone slabs; it has a number of interesting features to which we will return later. Sir John Marshall tells us that the original structure erected by Asoka, close to one of his famous pillars, was about half the size of the monument as it exists to-day, but that it was enlarged and received its stone covering about a century later, while the additional features were added in the latter part of the first century B.C. We can have little doubt that in its original form it either represented the form of the tomb usual at that time, or a monument elaborated from that form.

As the result of speculation and inquiry I had now discovered the forms of the earliest and latest of the tombs used by the Aryans during the period under discussion. It remained to trace the various stages by which one passed into the other. Again I set my scientific imagination to work.

¹. It seemed clear that the earliest tomb was made by throwing over the grave a mound of earth dug from a surrounding ditch. On the steppe, with its light rainfall, such a mound would quickly have been covered with grass, which would have prevented it from being washed away by such light storms as occurred there. On the other hand, in the Punjab the rainfall was heavier, and, what is more to the point, fell with exceptional severity during a short space of time. As a result of this the freshly erected barrow would rapidly be disintegrated and its contents swept into the surrounding ditch, and in a very few years the mound would have disappeared and the ditch become filled up. It would be noticed, however, that mounds made up of clay, especially stiff clay, would survive longer than those of loam, sand, or gravel.

². It seems likely that when this had been observed, the relations of the departed, especially if much honoured and beloved, would be anxious that the mound erected over the grave should be made of clay. If this were not on the spot, they might bring it from a distance if such material could be found not too far away. In such a case, since the material of the mound had not to be excavated on the spot, there would be no need to dig a ditch. It would add to the durability of the mound if the clay were beaten down firmly.

³. When clay had to be brought several miles, it would be convenient if lumps of this material were first dug out, then roughly shaped and allowed to dry in the sun before being transported to the grave. This in time would lead to the practice of making the mound of sun-dried bricks.

⁴. Sun-dried brick, however, is apt to perish under the influence of heavy downfalls of rain, so, where they had learned the art of baking bricks, the Aryans placed a covering of this new material over the core of sun-dried brickwork.

⁵. It was a natural step after this to construct the tomb throughout of a solid mass of baked bricks.

⁶. Then, for decorative purposes, such brick erections were sometimes covered with thin layers of worked stone.

Thus my speculations had reconstructed the various forms of the Aryan tomb during the archaeological gap, or, I should say, the probable forms, for I was unable to verify any but the latest. It was then that I sought outside assistance and consulted Professor J. H. Hutton, C.I.E., and Sir John Marshall, Kt., C.I.E., both of whom gave me valuable help.

Professor Hutton advised me to read Mitra's⁵ book on the Indo-Aryans and Block's⁷ paper on the Lurriya mounds. I did so and found in these much of what I wanted.

In a chapter on burial customs, Mitra quotes a
hymn in the eighth book of the Rig-veda. Two verses only seem to concern us and I give them in full.

4. 'I place this barrier for the living, on this occasion that no other may go beyond it. May they live a hundred numerous autumns, keeping death at a distance by this hill.'

13. 'I heap up earth above thee, and placing this clod of earth may I not hurt thee. May the manes protect this thy monument, and Yama ever grant thee here an abode.'

To the first of these verses we will return later, but the second clearly describes the erection of a heap of earth over the grave, No. 1 of our series, and this hymn was composed before 1000 B.C.

I then turned to Block's paper. It described the excavation of four out of a series of large mounds, without surrounding ditches, near the village of Lauriya-Navandgash, fourteen miles north of Battiah in the Champaran District of Bengal. He found that they consisted of yellow clay, almost as hard as stone, and that they had been originally somewhat hemispherical. The yellow clay was quite different from the whitish soil around the mounds, and had been built up in layers a few inches thick, each of them beaten down hard before the next layer had been put down. The clay had clearly been brought from the bank of a river, the Gandak, about fifteen miles away. Here, then, we have evidence of No. 2 in our series.

At a depth of from six to twelve feet the explorer found a small deposit of bones, probably burnt, and a small gold leaf with the figure of a standing female, probably Prithivi, stamped upon it. In the middle of each mound he found signs of a vertical shaft that had evidently held a large wooden post. He believed that the mounds were pre-Mauryan in date.

I have been unable to discover a case of form No. 3, built entirely of sun-dried brick, but Sir John Marshall has informed me that the core of the stūpa at Sarnath, near Benares, was built of this material, but covered with baked bricks, our form No. 4. There are several instances of form No. 5, built entirely of baked brick, and form No. 6, covered with a layer of worked stone, occurs at Sanchi and elsewhere.

Thus confirmation has been found for the existence of all the forms of graves that have been postulated, with the solitary exception of No. 3, the stūpa of sun-dried brick. It remains to suggest how these may be found. The mounds at Lauriya are undoubtedly relatively late, probably not earlier than the seventh century and possibly later. Judging by their state of preservation, we should expect that mounds of this type would to a great extent have resisted denudation, and would still remain heaps of beaten clay, though likely enough misshapen by the action of water. Such misshapen mounds should be sought for and excavated, in the hope of finding within them the remains of skeletons or cremated bones, together with accompanying or associated archeological material.

As to our first type, the simple circular mound with surrounding ditch, we have already seen that the heavy monsoon rains would have destroyed it completely, filling the ditch with the material originally taken from it. It may be, as Piggott has suggested, that in some cases the site has since been covered with a layer of silt, but this would only be in the neighbourhood of streams liable to flood, and in rare cases only would this layer be more than a few inches thick. In more cases the land would have long been under cultivation, but this need not prevent us from discovering the sites.

When a ditch, some four feet deep, has been filled up with loose material, it is usual for crops sown upon it to grow more luxuriantly than elsewhere in the neighbourhood. This is especially noticeable during droughts, when the crop survives here better than elsewhere, or immediately after rain, when fresh crops will start here more quickly than in the adjacent ground. Then the presence of the ditch should appear to those who look for it and would often be noticed by the cultivator, as was the ditch around Woodhenge by the labourers on the farm.

Block tells us that the ancient Prayogas, the Vedic books on ritual, state that the mound, made either of bricks or lumps of earth, should be built up to the height of a human body. This means that the mound was usually nearly six feet high and would have a diameter of twelve feet. To obtain earth for this the ditch would have to be about four feet wide, thus the diameter across the circle formed by the outside of the ditch would be twenty feet. Thus we need to search for evidence of rings, where the crops grow better than elsewhere—I will call them green rings—with an external diameter of twenty and an internal diameter of twelve feet. It is true that no such green ring has been reported, but rings of this type would probably only attract the notice of the peasants, who would be unlikely to discuss them with Europeans. Piggott tells us that none appear upon aerial photographs, but it is doubtful whether the whole of the Punjab has been photographed from the air, and unless the views were taken at the correct season, which would be a short one, it is unlikely that they would show up.

We must now return to the great stūpa at Sanchi to see whether it has any other story to tell us. So far we have only considered the great hemisphere of brick covered with stone. It is not, however, quite a true hemisphere, for the top has been flattened, and a square area has been enclosed by a balustrade of stone, resembling two such structures lower down, which will be described presently. In the centre of this was the Harmika or pedestal, on which was set the
chattrayashahi, or stone umbrella, a sign that the stūpa contained relics of the Buddha.

It seems probable that an umbrella was a sign of royalty, and it is likely that such signs in wood, and perhaps in bamboo, had been set up above the tombs of kings and princes. This may well have been the case at Lauriya, where Block found in the centre of each mound that he excavated a vertical shaft that appeared to have held the trunk of a tree. On the other hand the wooden columns at Lauriya may have been of the nature of phalli, and merely signified that the tomb was that of a male. According to Block the erection of such pillars was an early practice, and he gives a translation of the second Vedic verse already quoted, which differs from the rendering of Mitra which reads: ‘May the manes protect this thy monument, and Yama ever grant thee here an abode,’ while Block’s version is: ‘May the manes hold this pillar for thee, and may Yama prepare a seat for thee in the other world.’ Be that as it may, the umbrella seems to be the successor of a wooden post that was erected as early as 1000 B.C., if not earlier.

Let us now turn to the lower part of the stūpa. Here, a few feet above the ground, is a terrace, on the outer edge of which, surrounding the stūpa, stands a stone balustrade, with four gateways leading to the processional way on the terrace. A similar balustrade, also with four entrances, surrounds the base of the stūpa at a distance of some feet.

It is needless to linger over the strange gateways, for Piggott has described them and a model of one of them stands on the top of the stairs in the Indian Museum at South Kensington. I will only add that the cross-beams appear to me to resemble the yokes used for oxen, and three of them would be symbolic of six beasts. The balustrades are the really interesting features, for each post has three mortises cut into it, and in these are inserted three stone rails. This, as Piggott and others have pointed out, is reminiscent of timber construction and suggests timber prototypes. One such has, indeed, been recognized by Piggott around the temple at Bairat.

Such balustrades, formed of stone in a timber design, are usually found surrounding stūpas and the dāgobas in Ceylon, where they are known as Buddhist rails. The best known surrounded the stūpa at Amaravati and is preserved in the first room in the Cuttucka Museum; it was the model for the modern balustrade that adorns the centre of New Delhi. They also surrounded temples and sacred trees as well as sacred sites such as Buddha-Gaya.

There is no evidence from post-holes that such balustrades or fences surrounded the mounds at Lauriya, but they were not looked for and without special search would have escaped detection. We have, however, reason to believe that some such fence or fences surrounded the earlier Aryan tombs, for the first of the verses from the Rig-veda already quoted says: ‘I place this barrier for the living, on this account that no other may go beyond it.’ Mitra suggests that the barrier referred to stones, but rings of stones around a tomb are rare except in the Deccan. The Sanskrit word is Paridhi, which Dr. Whitney has translated ‘protection.’ In any case the context seems to imply some kind of fence, either to keep the living from descending the tomb, or the spirit of the departed from harming the living. The passage in the Rig-veda seems to indicate that the practice was an old one, and it may well have been in use by the Aryans before they set out on the wanderings that led them into the Punjab. It seems not improbable that, while still on the steppes, the Aryans, having buried some great hunter, placed a fence, or perhaps two fences, around the mound, lest the wild ass stamp on his grave, though it could not break his sleep.

3 Bogdanov, A., *Quelle est la race le plus ancienne de la Russie Centrale? Congr. Internat. d'arch. préhist. et d'anthrop.* (Moscow, 1892).
8 *Rig-veda*, Bk. VIII, M.X., II, 18.

STILT-WALKING AMONG THE MURIAS OF BASTAR STATE. *By Verrier Elwin. Illustrated.*

28 The use of stilts during the rains is common throughout central India and no doubt elsewhere,¹ and it has been suggested that the practice has some magical significance aimed at encouraging the crops to grow.

¹ The Geeree, says Col. Ward, describing the custom in Mandla, can hardly be called a festival: it is remarkable more for its absurdity than anything else, and is left to the children to celebrate. This they do by walking about the place on stilts for some
days, praising the institution of the Geeree, or stilts, as placing them above the necessity of walking in the mud; and finally, proceeding in procession to the two poles of either gosiya (Zizyphus xylopyrus, Willd.), or sarai (Shorea robusta, Gaertn, f.) about six feet high, to which foot-rests, called in Gondi dito-palk, are attached two feet from the ground. These are made of hollowed bits of châr wood (Buchanania latiifolia, Roxb.) which are filled with pebbles and fixed together round the poles either by nails or small wooden pegs called jabâin. The stilts are made at the Amavas Pandum early in the rains, which corresponds to the Hareli festival of the Hindus. During the rains, the village boys constantly walk about on their stilts, making a great deal of noise, as the pebbles inside the hollowed foot-rests rattle about. The only game they play on the stilts is still-fighting, when boys attack each other and try to bump each other off. They become expert in lifting one of the stilts off the ground and hitting another boy with it. They are also able to do very clever solo dances, hopping on one leg with the other raised from the ground.

Stilt-walking is permitted for a couple of months during the rains from the time of the Amavas Pandum until after the first 'New Eating' ceremony in the middle of August or a little later. This is called the Korta Tindana in Gondi and on the second day of the festival, which is known as the Hara Tindana or the day on which the people eat the leavings of the food that remained after the big day of the festival, a special ceremony takes place in connexion with the stilts. After this day it is taboo to use stilts at all. Grigon adds that among the Hill Maria there is a rule that stilt-walking is not only taboo during the rest of the year but also every fourth year.²

On the second day of the Korta Tindana the boys assemble and go round the village on their stilts holding bursundi plants in their hands. They dance in front of each house in turn, begging for rice, eggs, liquor and money, and sing:

Laya daya loon thi
Rai kedo beda the
Nana daka dharthe,
Gandri bursundi para para.

This may be freely translated, 'O stinking mosquitoes, run away to the fields of rai before our feet touch the threshold, for with branches we are hunting you.' As they dance, the boys beat the ground with their bursundi branches, as a result of which it is believed that stinging wasps and flies will not bother the village for the rest of the year.⁴

Then the boys go on their stilts outside the village to

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⁴ Russell records a Telg custom at the Pola Festival, when women bring branches of a thorny creeper which they call Marbod and sweep their houses, saying, 'O Marbod, sweep away all diseases, pains, coughs, bugs, flies, and mosquitoes.' They then carry the sweepings away outside the village. —Russell and Hiralal, op. cit., Vol. IV, p. 550.
where a stone stands on an ant-hill in honour either of Bhimul Pen, Dito Pen, or Gorondi Muttai. They go in procession round the stone seven times and the leader winds a string round and round it. He sends it. Four stilts are placed upright at each corner and a cord is tied round them. They offer eggs and chickens at the foot of this shrine, and tie the egg-shells in a string to the top of the stilts. They kill the chickens by hitting their heads on the ground, not by cutting their throats as usual. Then they cook the chickens and any other food that they have been given, and eat the feast and drink as much liquor as they have been able to collect. There is a rule that on this day they must not cook on a stone hearth, out of respect for the stone representing the deity, but should cut green pegs of sōja wood, drive them into the ground and put their pots on these.

There are various stories to account for the origin of this ceremony. In the Kondagaon Tahsil they say that, on the festival of Amavas, Lingo's brother, Bhimul, went out of his house to give salt to his cattle. His little son wept, crying, 'I want to go, too,' but as it was very muddy his mother Gorondi made him a pair of stilts and sent him with his father. When the village boys saw Bhimul's son walking on the stilts, they asked their fathers to make them also, but they

one of the boys some distance away and he himself presses his hand down on the ground to crack his fingers and says, 'Now we will see if you have really been helping us.' He picks up one of the eggs that they have begged from the village and throws it to where the other boy is standing. If the god is favourable, the egg does not break, and the other boy picks it up and throws it back. They do this three times. If the egg breaks, the leader picks up the mess and rubs a little of it on the penis of every member of the party in turn, saying, 'May we be free of itch and ring-worm.'

Then they all break their stilts and arrange them over the stone. Sometimes the stilts are tied in a sort of square and the foot-rests and pegs hung from

once. The boys used to bring their wounds to be cured, and their broken stilts for her to mend. At first she refused to do this but said, 'If they brought her eggs and chickens as payment she would do anything they wanted.' So ever since then boys give her presents once a year, and she saves them from falling, and the stilts from breaking.

Another version of the story attributes the origin of the practice to the notorious jealousy between Bhimul and his wife. There is always supposed to be bitter rivalry between them. In Bandar-Siuni, the Muriyas once dedicated a bull to Bhimul promising that they would sacrifice it to him if he gave them good rain. This made Gorondi very angry and her Siraha-priest called the villagers and said to them, 'Why have you been so stupid as to give a bull to my husband? Bhimul has gone below to dig roots and he won't be back for six months, so how can he do anything for you? Give me the bull and I'll do whatever you want.' So they sacrificed the bull to her and even before they had finished cooking it, before they had time to eat it, down came a torrent of rain. 'This is a grand old woman,' said the villagers, 'we must not forget her.' When the villagers began to honour Bhimul at the Amavas festival Gorondi got very angry but the villagers said, 'Don't trouble us; go and knock over any boys you may find walking about on stilts and break their bones and hurt them.' So Gorondi went out and bothered the boys by knocking them over and injuring them wherever she could until they went to consult the village magician. He told them that if they promised to honour Gorondi as well as Bhimul on the second day of the Korta Tindana Pandum she would give them no more trouble. Since then the boys of every village have honoured Gorondi in their festival and it is said that they never fall from their stilts or hurt themselves.

That this story is not universally known is shown by the fact that in some villages the broken stilts are piled up over the stone of Bhimul rather than of Gorondi and sometimes simply on a stone called Dito Pen which means literally the 'Stilt God.' But in most places stilt-walking is connected with Bhimul and his wife.

Bhimul is probably a very old aboriginal deity who has been assimilated with one of the heroes of the Mahabarata, Bhima, the strongest and most valiant of the Pandava Brothers. Under the name of Bhimsen this ancient god is worshipped all over central India and there are endless stories about him. Almost every fantastic rock or mass of stone is connected with his prowess. Bhimsen is also known as the rain giver. In Bastar, Bhimul Pen is sometimes described as one of the brothers of Lingo, the traditional founder of the Gond tribe. There is a regular festival in his honour and offerings must be made to him before the new crops can be eaten. When rain is needed, the villagers cow-dung his stone so that he will call for rain to clean himself. At the Divali festival the villagers put bark garlands round his stone. In some places offerings are made to him in order to ensure a good mahua crop.

4 For other references to Bhimsen see Grigson, op. cit., pp. 206, 215, 219 ff.; Crooke, Popular Religion and Folk-Lore of Northern India (London, 1896), I, pp. 6, 89, 250; II, p. 182; S. C. Ray, The Mundas (Ranchi, 1912), p. 98; Elwin, The Boiga (London, 1939), p. 59; Elwin, The Aghora (Bombay, 1945), p. 65; The Census of India, 1931, Vol. I, Part III B, p. 78 for the cult among the Nagpur Gonds; p. 236 for the Urali's idea that thunder is the result of a duel between the two Bhima in heaven; Thurston, Castes and Tribes of Southern India (London, 1912), Vol. IV, pp. 56 and 71 for the Koyi tradition that traces the origin of the tribe to Bhimador who while hunting in the jungle met a wild woman of the woods and married her. The Koyi dance is an imitation of Bhimador's pursuit of his enemies. Other legends about Bhimsen may be found in North Indian Notes and Queries, Vol. II, pp. 29 and 135 (for Bhimsen's romance with a Devi); Cunningham, Archæological Reports, Vol. XII; p. 53 (the pillar of Assoka near Betiya locally regarded as Bhimsen's walking-stick); Vol. XVI, p. 16 (the lion pillar at Bakhra known as the pole of the baskets of Bhimsen); an interesting and well-told story in Sterndale, Seoni (Calcutta, 1887), p. 97.

**RECENT EXCAVATIONS ON PREHISTORIC SITES IN SOVIET RUSSIA.** By Professor V. Gordon Childe, F.B.A., University of Edinburgh.

Recent volumes of Sovetskaya Arkheologiya (S.A.) contain full reports of admirably conducted excavations that throw new light on the Copper Age cultures of the Pontic steppes and their relations to those of adjacent regions.

1) Two graves in the Fatyanovo cemetery of Trusovo on the Istra north of Moscow, published in S.A., iv, pp. 301-3, establish a partial synchronism between the Fatyanovo culture of Central Russia and the Catacomb culture of the steppes to the south. Grave 4 contained, in addition to an appropriate vase and flint arrowheads, two arrow-shaft-straighteners, such as are so common in the catacomb graves of the Don-Donets region, and further south occur in graves of the Middle Kuban (or Kuban-Terek) phase. Grave 6 contained a stone battle-axe of the type termed by Ayrapesh Ablats-streitacht, another southern type, represented, for example, in a catacomb grave with typical vases at Cherevkov, Izm (E.S.A. viii, 61). These grave-finds give the most decisive answer yet available to what Tallgren recently described as the crucial problem of the relation in time of the Fat-
yanovo culture to the rich ‘palisommental’ cultures of the Caucasus. The former is at least partly contemporaneous, not (as Tallgren suggested in 1929, E.S.A., iv, 35) with the Early Kuban phase (Malik and Novosvodobnaya), but with the Middle Kuban (and that perhaps in its second sub-stage after hammer-pins had gone out of fashion) and with the catacomb culture of the steppes. It is significant that hammer-pins have never been found in catacomb graves nor yet associated even in the Kuban-Terek region with the peculiar incense-burners that we now know belong to the catacomb culture in its early classic form.

(2) A substantial contribution to the definition of the catacomb culture itself is made by Artamanov’s excavations of two kurgans near Vesely on the Upper Manych (an eastern tributary of the Don) published in detail with plans in S.A., iv, pp. 93–131. These not only disclose a new eastern province of the Catacomb culture and provide evidence for its subdivision, but also brought to light the earliest dated examples of artificial cranial deformation recorded in continental Europe.

Kurgan II contained over fifty deposits and had been built in two stages. The original mound, only 1-20 to 1-50 m. high, had been covered with a thick layer of mud brought from a neighbouring stream. It covered a burial in a deep pit that had probably been roofed with timbers. Though disturbed by subsequent interments, the primary grave goods were recognizable. They consisted of an ovoid vase and a tool of narrow-bone cut off obliquely at one end to form an edge. This patently represents a pit-burial (yanmya poogrebene) in Gorodtsov’s sense and thus confirms that author’s conclusion that such burials are in general older than the catacomb-graves.

At least five catacomb-graves (nos. 45, 47, 48, 49 and 51) were covered by the barrow after it had been enlarged to a height of 2-40 m. and a diameter of 38 m. by the addition of layers of very hard soil, quite different from the clayey earth under the primary mud covering. One catacomb, no. 51, had been dug after this enlargement, since its entrance-shaft cut through the whole mound. The rest may have been dug just before the addition was piled. They contained typical cord-ornamented catacomb-vases; in particular nos. 47 and 49 contained those remarkable ‘incense burners’ on cruciform feet that Tallgren discussed (E.S.A., iv, pp. 27–31) with reference to specimens found farther south in the Kuban-Terek valleys. His inference that they belonged to Gorodtsov’s catacomb phase is thus confirmed. Grave 49 also contained a curious funnel of red clay, that looks in the photograph like a barbaric copy of a Minoan ryhton. The skull of the skeleton buried in catacomb 47 was conspicuously macrocephalic as a consequence of deliberate deformation—what Zhirov (Kratiie Soobshcheniya, viii (1940)) terms annular deformation. A similarly deformed macrocephalic skull was found, again accompanied by an ‘incense burner,’ under Kurgan III in catacomb 30. Such cranial deformation has, of course, long been familiar from graves in Transcaucasia that are not earlier than the Late Bronze Age (Koban phase), and has since been found by Teploukhov in Andronovo-graves of the same sort of age in western Siberia. These examples from catacombs must be substantially older and indeed comparable to the Late Minoan instances from Crete (Dingwall, Artificial Cranial Deformation, 35).

The latest catacomb under Kurgan II (no. 51) and no. 31 under Kurgan III that had disturbed the earlier tomb, no. 30, both contained large globular vases of smooth clay, with sharply moulded spreading rims, but devoid of ornamentation. Such will serve to characterize a phase of the catacomb culture, later than that established by Gorodtsov’s excavations, but still apparently anterior to his Srubno ‘wood-chamber’ phase.

Finally, secondary burials in the mound yielded a series of plain vases, some probably Scythian in age or later, others recalling pottery of the late Srubno-Chelvinsk culture on the Lower Volga (E.S.A., i, 52 ff.).

(3) The examination of two kurgans at Usatova near Odessa by the Odessa Museum (S.A., v, 240 ff.), gives clues as to the relation of the Tripolye culture to the Ukrainian battle-axe culture and of the latter to the catacomb-culture farther east. Unfortunately no plans accompany the report, but the evidence derived from minute observations is very fully set forth, and in general carries conviction.

Under Kurgan II were two ‘cromlechs’ (rings of stones), 11-8×12-8 m. and 7-3×8 m. in diameter respectively. The principal grave was a pit, 1-4×1-6 m. and 1-2 m. deep, roofed by a stone slab and entered by a stepped ‘dromos’ (entrance-shaft) 1-4 m. long. The tomb thus reproduces the essential features of a catacomb, save that the chamber was roofed with a slab instead of being cut in the subsoil. It contained a skeleton on its back with the legs drawn up accompanied by a bowl of orange clay painted with patterns in black, a ‘goroshok’ (amphora) of black clay adorned with cord-impressions round the rim and vertical impressions on the shoulder, a necklace of bored teeth of dog or wolf, dark beads and white ‘(?!) paste’ beads, and three copper lock-rings. This furniture leaves no doubt of the overlap of the Tripolye culture with painted pottery of a stylistically late pattern and a ‘battle-axe culture’ characterized by corded ware.

The synchronism is confirmed by other deposits under the barrow; for the excavators’ meticulous observations have convincingly established the
sequence of ceremonies connected with the heaping of the tumulus. The first act was, it is asserted, the sacrifice of a slave whose skeleton was found, strictly contracted as if trussed up but unaccompanied by any offering, on the original ground surface close to the central grave. Both interments preceded the erection of the 'cromlechs,' as did the excavation of ritual and funerary pits found under the stones of the outer 'cromlech.' Pit 4, roofed with a slab that was itself covered with subsoil, probably the upcast from the central grave, contained a contracted burial furnished with a painted vase and a gorshok, i.e. an amphora with short neck, handles on the globular body, and cord-decoration—in fact a classical 'corded amphora' that might have been found in Bohemia or Thuringia. Pit 6 was also found filled up with subsoil supposedly taken from the central grave. It contained the protome of a bull, roughly carved in limestone, four figurines of 'unburnt clay,' pots ornamented with cord impressions and cord 'maggot'-ornament, a lump of ochre, five limestone beads, and five human teeth. Finally the central grave under Kurgan I contained a contracted skeleton accompanied by a battle-axe of stag's antler; the excavator calls it a 'mattock,' but the butt has been shaped like the hammer-butts of stone battle-axes. Secondary deposits under this kurgan contained fragments of typical painted vases including sherds of vessels, the remnants of which were found in pits under Kurgan II.

The Usatova burials seem to illustrate a composite culture in which old Tripolye traditions (vase-painting, figurines, bull-cult) had been blended with or overlaid by those of a battle-axe folk—barrow-burial, corded-ware, necklaces of bored teeth. While, judging from the fine coloured plate included in the report, the technique of vase-painting seems to have been maintained as well as at Petreny or Cucuteni B, the spiral patterns that characterize the earlier Tripolye ornament have been completely dissolved into mere wavy lines as at Koszylowce: we have reached the third and final stage in the development of the painted pottery in the Black Earth belt as traced by Passek (La Céramique tripolienne). At the same time the central grave under Kurgan II must be inspired by the same East Mediterranean models as the normal catacomb-graves east of the Dnieper. Usatova, lying near the coast, would naturally be exposed to such influences from the south, which may be more concretely attested in the paste beads from the grave, if these have been correctly diagnosed.

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IN THE WAKE OF THE 'ARGO.'  By Commandant Claude F. A. Schaeffer, D.Litt.

30 An archaeological five-year-plan has been brought to a successful end in Caucasian Archaeology. The building of a hydro-electric power-station in the upper valley of the Khram in Central Georgia involved the flooding of a considerable area of the ancient province of Trialeti, west of Tiflis, known to be rich in archaeological sites. The Committee for the Preservation of Monuments of Culture of the Georgian SSR decided on a five-year-plan of large-scale excavations. The research was entrusted to the Tsalka Archaeological Expedition which worked from 1936 to 1940 under the leadership of Mr. B. A. Kufitin. The director published in 1941 a preliminary report of the very important results, in a handsome volume of 230 pages with 132 text-figures and 126 plates—19 in colour—printed in Tiflis and published by the Institute of History of the Academy of Sciences of the Georgian SSR (B. A. Kuftin, Archaeological Excavations in Trialeti, I). Several copies of the volume (which includes an English summary of 15 pages) have reached this country, one of which was presented by the publishers to the Ashmolean Museum Library at Oxford.

It testifies to the vigour of Russian archaeology that such a publication could be undertaken at a time when the German invaders thrust their armies eastward in an attempt to seize the Caucasus and its mineral and other resources.

The sites examined by the Tsalka Expedition comprise settlements as well as burial grounds ranging from the Sassanid, Roman, and Hellenistic periods to the Early Bronze Age and the end of the Eneolithic. In the present volume, the first of a projected series, an attempt is made to determine the relative as well as the absolute chronology of the very rich new material, and to outline its main contribution to the Caucasian archaeology in general.

The province of Trialeti occupies the northern part of the tableland of the Lesser Caucasus, and is one of the richest centres of ancient obsidian quarrying. Prominent among its archaeological monuments are several forts with cyclopean stone walls crowning the Tsalka mountains as well as a great number of large size tomb-barrows (kurgans) situated on the adjoining plateau, which rises to 2,500 m.

Some of the forts (esp. Nardevan and Avranto) seem to have been built only in early medieval times (B. A. Kuftin, l.c., Pl. i, ii). Others, as the excavations revealed, overlaid chalcolithic settlements, e.g. Beshtasheni (l.c., p. 108–114, Pl. cxxi–cxxxv). According to the excavator, there seems to have existed a 'connexion' between those cyclopean fortresses and

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some of the great kurgans in the neighbourhood (l.c., p. 158) containing extraordinarily rich finds including gold vessels and jewellery, as well as astonishing painted pottery.

As I have shown elsewhere (Antiquity, 1943, p. 183) these barrows attributed by Mr. Kuftin to the Middle Bronze Age, before the seventeenth century B.C. (l.c., p. 165), belong to the Late Bronze Age and can be dated with a satisfactory degree of certainty between 1550 and 1400 B.C. They are therefore contemporary with the early Mycenaean civilization. Thus it becomes quite possible that some of the Georgian-Trialetian cyclopean forts have been built at approximately the same period as the similar fortresses or fortified palaces of Mycenae, Tiryns and others on the Greek mainland. As there is unmistakable evidence of Mycenaean influence in the funerary offerings deposited in the kurgans, the same influence can be admitted in the architecture of the cyclopean forts. Thus a reflexion of the Mycenaean civilization has illuminated the far-off western Caucasus, showing the way to the later Greek colonists at the northern and eastern shores of the Euxine Sea.

As excavations at Ras Shamra have shown, the Mycenaean thalassocracy had succeeded in founding an establishment in the main North Syrian port of Ugarit, where a Minoan trade-centre of Middle Minoan II times had previously flourished. Emile Forrer has detected, in the Hittite texts, evidence of a probably Mycenaean hold on the south coast of Asia Minor. The finds at Hissarlik, Lemnos, and other places demonstrate the existence of Mycenaean settlers on the west coast of Anatolia. And now, at the far end of the sea route through the strait and the Euxine, traces of Mycenaean influence and apparently actual Mycenaean imports are revealed in Georgia and Western Transcaucasia.

The expedition of the Argonauts and the quest of the Golden Fleece, with which already Homer was acquainted, had been regarded by the ancients as a historical fact. But contrary to what they and also the modern historians seem to believe, the famous voyage did not recall an adventure which marked the opening stages of Greek commercial activity in the Euxine, but a far older incident, with which the Mycenaean seafarers of the middle of the second millennium have now to be credited.

There is another find which gives us a hint of the Mycenaean activities in the eastern Black Sea. It is the fine hematite cylinder-seal found in the Kuban region and published in the album of the Countess Uvarov (Cemeteries of North Caucasus (in Russian), p. 324, Pl. cxxxvii, No. 47). Identical seals are known from northern Syria, especially from Ras Shamra-Ugarit where they are included in layers attributed by Egyptian, Mycenaean, and other datable finds to the period between 1500 and 1400 B.C. None of this type of seal has hitherto been found along the overland routes from North Syria to the Caucasus through Asia Minor, or by the more eastern routes through Persia and the Talych. So we are entitled to admit that the Kuban cylinder had reached its destination by sea. It reached it precisely at the period when the Mycenaean traders, as we now know, drew alongside the Caucasian shores. So it was perhaps they who brought such oriental goods over from one of their Syrian establishments, the best known of which is Ras Shamra-Ugarit, where precisely such seals have been found. At the same period and through the same channel other Syrian seals were traded to the west and reached the Greek mainland, where they were deposited in the chamber tombs at Mycenae between 1450 and 1350 B.C. (A. J. B. Wace, Archaeologia, 1932, Pl. ix; C. W. Blegen, Prosopia, Pl. 146).

But according to the new finds from Trialeti, even the Mycenaean can no longer be considered as having been the first to reach the eastern extremity of the Euxine. In his report, Mr. Kuftin devotes the opening chapter (l.c., p. 3) to the description of a series of weapons and implements of an undoubtedly ancient stage of the Bronze Age, the antiquity of which had hitherto been under-rated. Among them there are several bronze spears with a massive shank bent at the end into a hook. This type of spear, first found by Sir Leonard Woolley in North Syria, and at Ur had been termed ‘poker spear.’

The particular kind of ‘poker-spear’ found, according to Mr. Kuftin, near Tiflis and at Zages in central Georgia (l.c., p. 157) is not directly derived from the Sumerian prototype of the middle of the third millennium. It descended from the special North Syrian type, the date of which, thanks to the numerous finds at Ras Shamra, is securely fixed between 2300 and 2000 B.C.

Tracing the distribution of this weapon in ancient times, it is possible to establish that none has until now been found along the above-mentioned Asia Minor or Persian land-routes. It therefore seems to have reached the western Caucasus by sea directly from North Syria.

This roundabout route was certainly more convenient for the general trade relations than the shorter land routes which had to negotiate the difficult Taurus or the mountains of Kurdistan and Armenia. On the sea route probably travelled also the oriental influences which have left their imprint on the celebrated silver vases of the Maikop kurgans, now datable to the same period as the Georgian ‘poker-spears,’ i.e. between 2300 and 2000 B.C.

At this period the Minoan seafarers had begun to trade along the coasts of the eastern Mediterranean and to exchange their goods, particularly painted
pottery against oriental products. As far back as the Middel Minoan I period (2100–1900 B.C.) and more frequently during the following period M.M. II (1900–1700) Cretan vases (especially of the fine ‘egg-shell’ kind) had reached Syria where they have been found on the coast at Byblos and at Ras Shamra and even in the interior of the country, at Mishrife–Qatna beyond the Orontes. On the Black Sea coasts and the Caucasus, no Minoan traces have hitherto been discovered. So we do not yet know whether the Minoans dared to pass the strait into the Euxine. But further exploration on its shores and in the Western Caucasus may well reveal who were the first seafarers to venture the journey of the Argonauts.

NOTES

1 The first news of the important excavations in Trialeti was given in this country by Professor Ellis H. Minns in Nature, July 1942, where a short account published in Kratkie Soobscheniya IIMK, VIII, 1–35 was summarized.
3 Schaeffer, Ugurca, I, p. 53: Ras Shamra–Ugarit et le Monde Egip. New M.M. II finds are announced in Syria, XX, 1939, p. 275.
4 B. A. Kuhin, loc. cit., p. 217; a spearhead (kurgan XV) identical with that of tomb X of Kephalari hill near Mycenae; C. W. Blegen, Prosoponia, Pl. 127, fig. 510—Gold beads (kurgan VIII) of the kind found in tomb XLIV of Kephalari; C. W. Blegen, loc. cit., p. 541—Gold discs used as pendants very similar to those found in the royal tombs at Mycenae by Schliemann; G. Karo, Schachtgräber, Pl. xxix—Lantern-shaped beads in the gold treasures of Nosiri from Colchis (Kuhtn, loc. p., fig. 105) and Partakhanakan near Kutais (loc. cit., p. 130) similar to those found in tombs with Mycenaean imports at Ras Shamra dated 1450–1350 n.c. (Schaeffer, Syria, XIII, 1932, Pl. ix, 2) and in actual Mycenaean tombs in Greece and in Cyprus (A. J. B. Wace, Chamber Tombs at Mycenae, p. 94, Pl. ix).
5 Byblos (Dunand, Fouilles de Byblos, I, p. 311, fig. 251, Pl. lxiv); Ras Shamra (above note 3); Mishrife, not recognized in the original publication by du Mesnil, Syria, VII, 1928, p. 324, fig. 41; but see Schaeffer, Éléments de Chronologie de Ras Shamra–Ugarit, in preparation for the Griffith Institute of the University of Oxford.

CAIN AND ABEL: THE CHOICE OF KIND OF SACRIFICE.

By G. D. Hornblower, F.S.A.

The story of 'The Two First Brothers,' in Genesis, chap. 1, has always presented problems and called forth various attempted solutions. The last of these, founded on researches into rites for the promotion of human prosperity, is by Professor S. H. Hooke, Folklore, Vol. L, 1939, pp. 58–65, who interprets it as a relic of a rite of human sacrifice formerly practised to assure fertility in the fields.

Etymology, in the easier, more popular forms that it so often takes, has proved mainly a treacherous support for arguments, even for such acute minds as Plato's; but that need not deter us from its use when we take for guide the good lexicography now available. A key is provided by the Hebrew word lechem which for long past has meant 'bread,' that is, flour baked in loaves. Lechem had originally the wider meaning of food in general—'sustenance'—and is translated thus, necessarily, in several passages in the Old Testament, such as Ps. 147:9; the English word 'bread' is exactly similar in this respect, as the N.E.D. explains. Again, in Aramaic, cousin to Hebrew, a papyrus from Assouan, in Egypt, edited by Cowley, mentions 'scorpion's food' with the word lachamu, which cannot of course mean 'bread' in the narrower sense. A rather special use appears in Ezek. 16:49, where the prophet declares that the iniquity of Sodom consisted in 'pride, fulness of bread, and prosperous ease,' that is, luxury in food and general living. In the New Testament, where the Greek artos replaces lechem, the wider meaning may be discerned, adapted spiritually, in the Gospel of St. John, 6:31–35, which honours Jesus as the 'Bread from Heaven.'

It may thus be seen that when in the distant past agriculture was greatly developed, replacing the earlier means of life by hunting or food-gathering, flour-bread became the universal 'staff of life,' and practically monopolized the old word. Its outstanding importance in peasant life is well illustrated in modern Egypt, where its common name is 'aysh, meaning no less than 'life,' while the classical name is khobz, that is, 'the baked.' Even now, in Spain, as the philosopher Santayana has told us, the word pan (bread) conveys to the Spaniard a warm, intimate feeling beyond that evoked by the word for God (Dios) which means to him, emotionally, much less than to the English—an interesting side-light on 'racial' psychology. In the East an oath taken on bread is still held to be most binding and is of common occurrence. Bread, in fact, has won, in certain times and places, a kind of semi-sacred aura, comparable, though in far less degree, with that of the potato in old Peru.

From bread we turn to meat. Reference to the New English Dictionary shows that its original meaning, which has not wholly died out, was food in general, exactly as with lechem, but has come to be narrowed in use to include only the flesh of domesticated animals, for which the exact term is 'butcher's meat'; use has dropped the qualitative epithet, just as, for example, in the word 'cheap,' shortened from 'good cheap,' that is, 'good marketing,' like the French 'bon marché.' (It may be of interest to note that in Cornwall 'meat' has been further modified to include beef, pork, and chicken, but not mutton.)

In Arabic, akin to Hebrew, meat is lahm, from the verbal root lkhama, meaning 'to tear flesh from the bones.' Its origin is evidently rooted in man's early
hunting stage, preceding by untold years the agricultural stage which fixed the usual meaning of lechem—one wonders whether the two words, so much alike (the ch of the Hebrew is a soft guttural as in the Scottish loch) may not have sprung from the same remote original in the primitive Semitic fount, undergoing a change—a slight one—in the medial consonant. In any case both words meant 'food,' but became specialized in different ways, the pastoral Arabs retaining the very early sense while the Hebrews modified it to fit the agricultural life to which they had settled down.

The explanation of our story may probably be found in the difference of development in these words. The Hebrews, despite their dependence on cereals, gave flesh-offerings to their god, or gods, whereas, like the ancient Egyptians, they should naturally have offered their own typical food. The plural 'gods' is used because the strict monotheism of the people was not firmly established even in the sixth century B.C., as we learn, with other interesting details, from the Aramaic papyri referred to above, as well as from other sources such as the speech of the dying Joshua when he, rather surprisingly, offered the Israelites the choice of various gods—Joshua 24. 14–23. Flesh-eaters like the nomads gave their own kind of food, and it might be expected that the Jewish agriculturalists, with their change of staple food, would modify their sacrifices accordingly; but, on the contrary, they retained the offerings of flesh. Such palpable inconsistency called for explanation which was forthcoming in the device, common to all old religions, of an etiological myth, pieced together, probably, from fragments of primitive tradition.

Cain, the would-be innovator, impelled by the newer ideas, offered a sacrifice conforming with them, while Abel, with the conservatism usual in religious matters, kept to the old ways and gained divine favour. The myth, indeed, accounted him a herdsman, thereby presenting a colourable excuse for his action, but the root of the matter lay in the unbending religious conservatism evident in the assertion of divine favour; this it was that made flesh-offerings the unchangeable rule.

Thus the story of Cain and Abel points, as we may most probably conclude, to the very fundamental change in human life from the hunting or pastoral stage to the agricultural, together with man's almost instinctive aversion from change in matters of religion.

A further meaning of lechem, as grain itself, is evident in the oft-quoted text of Eccl. 11.1: 'Cast thy bread upon the waters; for thou shalt find it after many days.' This is a late scripture whose author must have been well acquainted with the artificial irrigation of Babylonia; 'bread' in this context cannot mean the baked product of ground flour, but the grain itself, as man's sustenance, which, thrown on the reeding waters of an irrigation-basin, will presently produce a rich harvest.

Lastly, another meaning of lechem, vastly differing from the above, appears in the Old Testament as 'war.' It is used in this simple form in one text, Judges 5.8, but commonly in the participial form milchamah. The interrogative suggestion, made above, of a possible primitive connexion between lechem and lahm, may find some support in this meaning of the former word, for war, in its terrible primitive savagery, might well impress the early Semites as a 'tearing of flesh from the bone.'

AN UNUSUAL FOOD BOWL FROM MELANESIA.

32 The food bowl (fig. 1) illustrated in this article was acquired in Melanesia by the late Right Rev. Sir H. H. Montgomery, K.C.M.G., sometime Lord Bishop of Hobart, Tasmania, and father of General Montgomery of the Eighth Army. The legend attached to the bowl, which is in the Gwyn's Institution, Londonderry, is as follows: 'Royal Food Bowl, presented by Bishop Montgomery of Moville, Co. Donegal. The natives brought offerings to the King and placed them in this Royal Food Bowl.'

A careful examination shows it to be probably the most beautiful in artistic finish and the largest of its size to be seen anywhere in Europe. Codrington was the first to point out the unusual size of some of these bowls. This specimen is definitely Melanesian though the inscription does not state the place of origin; indeed, the Museum catalogue does not even mention the exhibit. Its total length is 171.4 cm.; height or depth 41 cm.; breadth 40 cm.; and it weighs 11.339 kg. It is of varnished lightwood well inlaid with mother-of-pearl and studded on its superior surface with crescentic-cut cachalot ivory.

Many Tamate societies derive their names from totemic symbols which are characteristic of the
Solomons. Totemism is definitely absent in those parts of Melanesia where secret societies flourish; e.g. Torres, Banks Islands, and New Hebrides.

Sharks, eels, and turtle are the usual secret societies in the Banks Islands and these marine animals are (curiously enough) totems elsewhere. There is, however, one actual totemic society in Vanikolo, the Kwet society which takes its name from an object, wumeto or 'bowl' which is its totem. It is assumed by most workers that the Kwet is probably not indigenous to the Banks Islands. According to Rivers, this wumeto has been undergoing a change during the last few decades... it is now like a model of a boat (e.g. fig. 1).

In San Cristoval,3 Solomons, there is no religious ceremony connected with the totem as such, but ample evidence that sacrifices were once offered, is the existence of the dara manu, i.e. 'sacred' or 'bird' 'bowls'; the large ones are called kava bowls in Fiji. They are all well carved and highly prized, and sacrifices are still offered in them. In this region of the Solomons, the double bird-fish bowl (fig. 1) is called a bonatana which is the specific name, dara manu being the generic. When the people go fishing, they place sacrifices in the bonatana for the fishermen to eat.

Fig. 2 is a smaller inlaid food bowl of hard wood dyed with a vegetable varnish. It comes from Ulama in the Solomons and is in the Lady Sargood Collection. It has a sea-gull (maahe) carved on it and is heavily inlaid with mother-of-pearl. Sacrifices are placed in it when people go to war, those going to fight eating from this bowl. It measures 49 cm. in length, 22 cm. in breadth, 12 cm. in depth, and weighs 0.9 kg. This heroes' bowl belongs to the corps d'élite.

The bowls are not necessarily clan-bowls, though their names bear clan-associations.

It will be seen from the illustrations that the decorative art of the Melanesians is of a very high order and

![FIG. 2.—AN UNUSUAL FOOD VESSEL FROM ULAMA, SOLOMON ISLANDS: IN THE LADY SARGOOD COLLECTION](image)

that fish and bird motifs predominate. Whether the present-day natives are as good as their ancestors of a few generations ago may be doubted, but no one will question the talent and aesthetic development of these earlier craftsmen who worked with primitive tools.

I wish to express my thanks and indebtedness to Mr. E. Harvey of the Gwyn's Institution, London derry, for permission to take photographs of the specimens, and to Lady Montgomery for kindly confirming my opinion as to the provenance of fig. 1.

References

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**ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.**

**Miss Durham's Eightieth Birthday: 8 December, 1943.**

The President said the normal procedure of meetings of the Institute would be interrupted for the very pleasant purpose of marking the occasion of Miss Durham's eightieth birthday, on 8 December. Some of her friends wished to congratulate her on her birthday and to show in a small but tangible way their appreciation of her long and untiring services to the Institute, and of her contributions to our knowledge of the peoples of the Balkans, among whom she had travelled and worked, and for whom she had done so much. Dr. H. S. Harrison had hoped to be able to make the presentation, but was prevented by illness; in his absence Mr. Braunholtz would have the honour of making it.

Mr. Braunholtz said: I have been asked to speak in the place of Dr. Harrison, who is prevented by illness from being here to-day; and as one who has enjoyed the privilege of Miss Durham's friendship for a good many years, I do so with very great pleasure, even though I cannot pretend to speak with the authority or the seniority of Dr. Harrison.

I well remember the first time I met Miss Durham. It was about thirty years ago. She came to the British Museum as a benefactor, bringing gifts; and those gifts, characteristically, were specimens from Albania. I was thus introduced straight away to two of the keystones in her life—her generosity, and her particular affection for Albania.

I am not here to speak of Miss Durham's achievements in and for Albania. She has been a foremost champion of that country's merits and its rights. The feats she performed there during the Balkan wars, feats of self-sacrifice and physical endurance in the face of appalling conditions, can only be described as heroic. To the Albanians she has become an almost legendary figure, credited with supernatural and even miraculous powers in healing the sick and expelling pestilence. Most places in Albania have some street, some hospital or other institution, I believe, which is named after her.
But I must not dwell upon this theme to-day. Is it not written in her many books about the Balkans, books which provide a penetrating study of the cultures of those countries, and of the political intrigues by which they were beset? It is about Miss Durham’s connexion with this Institute that I would say a few words on this occasion.

It was in 1908, thirty-five years ago, that she became a fellow of our society. That was before my time, so I cannot speak of the part she played in our affairs in those early days. But I do know from personal experience that ever since the last war she has shown a great and practical interest in us and devoted much energy and thought to our service. She has been an active member of our Council and our Executive Committee for a great many years, and an elected Vice-President (our first lady Vice-President, I believe) for at least two terms of years. She has contributed much to our discussions after lectures and to our publications. She has made a number of benefactions, giving valuable books to our library, including her unique albums on the Balkans; and she has founded a fund for the general purposes of the Institute.

While ministering to our intellectual needs, she has not neglected our physical comfort. I would call your attention to the comfortable chairs on which many of you are now sitting. They were not always here. No doubt many of you have grim memories of the old hardbacked chairs, which seemed specially devised as a purgatory for the wicked. However long the session—and they were sometimes long—however dull the lecturer, it was quite impossible to get a wink of sleep in those chairs. How different is the state of affairs to-day! In this kindly dispensation to weaker nature we may once more detect the charitable hand of Miss Durham.

But it is not only in such perceptible ways that she has laboured for our benefit. Behind the scenes, in ways unknown to most of us, unselfishly and unobtrusively, she has been constant in giving help. It is characteristic of Miss Durham that she helps people behind their backs, incognito, and she is most skilful in covering up her tracks. I could refer to several cases, but I must not mention names. Even at this moment I should not be surprised if she were engaged upon some fresh charitable schemes of this kind.

Our former Assistant Secretary, Miss Martindell, could have told us much about these activities behind the scenes if she were with us to-day. Not only did Miss Durham help to find us our former premises in Upper Bedford Place; but when the move there took place in great haste and and the library was dumped down all over the floor in unmanageable heaps, Miss Durham came to the rescue, sorting out the muddle and placing the books on their proper shelves—a piece of prolonged and hard physical work.

One could go on for a long time like this about her good works; but I hope I have said enough to indicate something of their nature and scope, and to show that they have not passed wholly unobserved or unappreciated.

When we heard that she was on the eve of her eightieth birthday, some of her friends and fellows of the Institute felt that it was high time to show our appreciation in a tangible manner. The results of those feelings, translated into concrete form, are here before you.

First, this envelope contains a small cheque, a mere ‘scrap of paper.’ We should like you, Miss Durham, to use it to mitigate the rigours of travelling in public conveyances, by hiring a taxi or private car whenever you wish to attend one of our meetings. We do not wish to exercise compulsion. We shall not audit the accounts. But, with all due respect, we must insist that you should for once restrain your charitable instincts and really use the money for your own benefit. If it enables you to attend more of our meetings than you could otherwise have done, we shall be amply rewarded.

Secondly, here is a kind of foot-warmer, which may serve as a friend in need when the severity of fuel economy proves excessive. Thirdly, some of us thought we should like to ‘say it with flowers.’

These are all the prizes, and now I have finished. In the name of the Institute we ask you to accept them as small tokens of our sincere appreciation of your services and of our good wishes for your future.

Just one thing more I have to add. In view of all your benefactions, we hope you will allow us to have your name inscribed on our Board of Benefactors, among whom you have so richly deserved a place.

Miss Durham replied as follows: I thank all my friends and colleagues for their kindness. Indeed the Institute need not owe me gratitude for any work I have done. I was urged to work for it to the best of my ability by the horrors that I witnessed in the Balkans during two revolutions and the war of 1912-13. It seemed to me that an Institute which studied the beliefs and customs of mankind, and disseminated its knowledge, must tend towards a better international understanding, and at least help to prevent such misunderstandings as lead to periodic blood-baths. So I have done what I could; and I wish the Institute’s work success.

The presentation consisted of—
1. a cheque for £5, with list of subscribers.
2. a sheepskin foot-warmer.
3. a pot flower.

Miss Durham has also sent the following letter to the Editor of MAN, in reply to the testimonial from the Anglo-Albanian Society sent through Sir Edward Boyle.

36 Glenloch Road, N.W. 3.
11 December, 1943.

The response to the appeal for a testimonial to myself on my eightieth birthday has been so surprisingly great that I cannot write to each kind contributor.

Would you spare a few lines in MAN to let me say how happy it has made me to find I have so many friends.

With many thanks to yourself and good wishes.

Sincerely,
M. E. DURHAM.

Contemporary Anthropology. Summary of a Communication by Dr. Margaret Mead: 5 October, 1943.

Two problems are of special importance to the social anthropologist: (1) training anthropologists who could combine effective research in the chosen laboratories of social anthropology, pre-literate societies, with effective and constructive functioning in modern society, without which social anthropology fails to make its full contribution to the body of developing sciences of society; (2) types of diffusion of partially developed social hypotheses and techniques of social investigation. The social anthropologist as the student of culture and of the inter-relationships between cultures should give careful attention to the difference between the diffusion of scientific methods in the social sciences and in the natural sciences, a difference dependent on the contrast between the role of the human observer in the natural sciences, where every effort is made to exclude
the personal equation—so that a British physicist and a German physicist, an American physicist and a Japanese physicist should all, provided they are properly trained, get the same result—and the social sciences where the human observer is an essential part of the observation and where, at least in all the partial and developmental stages of socio-science as psychology or anthropology, observers from different cultural backgrounds will necessarily arrive at different hypotheses, using different methods. Attempts to introduce a spurious objectivity into social investigations merely render the investigator's work sterile and make his effect on his own culture insignificant when it is not actually destructive. It is suggested that interchanges between developing bodies of social investigations—in countries like Great Britain, the United States, France, China, and India—should be rigorously scrutinized and that indiscriminate borrowing should be avoided. The emphasis should rather be upon fostering within each country a growing attention to the same areas of investigation, with each country encouraged to grow its own set of hypotheses from the ground up, rather than to borrow the hypotheses and methods of other countries. When students or more advanced workers use the methods of hypotheses developed by members of other cultures, this factor of cultural difference should be explicitly taken into consideration. Only by developing coherent and steadily growing bodies of social science within each culture can we hope to arrive at the necessary abstractions which will finally make possible a body of social theory which can be applied within any society without destructive results. It is suggested that one of the most reliable ways of assuring that social theory is rooted deeply in the culture is for investigators with primarily sociological interests to work closely with social practitioners—teachers, social service workers, physicians, etc. A scientifically based process of selective responsiveness to the findings of the parallel scientific groups in other cultures, combined with a vigorous cultivation of a closely related theory and practice within each culture, should be a valuable guarantee of an orderly development of the social sciences and a protection against the type of sterile relativity which is likely to generate monopolistic systems hostile to the organized use of the human intelligence.

The paper was discussed by Professor Daryll Forde, Dr. M. Fortes, Dr. R. Firth, Dr. Lucy Ernst, Mr. H. J. Braunholtz, Dr. D. Friedmann, Dr. Margaret Read, and Mr. Maung Ohn. Dr. Mead replied.


The Indianization of East Asia was probably a more far-reaching event in the history of culture than the Hellenization of Asia Minor. The fertilizing stream of Indian culture inspired the great sculpture of Java, Indo-China and Siam. As far as artistic quality is concerned, the sculpture of these countries was often nearer to perfection at the beginning than in the middle of a period. Historically, however, one may distinguish broadly three periods in the sculpture of Java, Indo-China and Siam. In the first, Indian prototypes prevail. Then comes a period of national synthesis, when striking local characteristics develop on the Indian foundation. The third period is akin to folk art, becoming naively decorative and increasingly remote from India.

The lecture was illustrated with examples of sculpture from each region and period, and endeavoured to explain their basic artistic qualities. It was not concerned with their archaeological and iconographical aspects.

The Polish Tartars. Summary of a Communication by Mr. L. Bohdanowicz: 7 December, 1943.

The Polish Tartars, numbering some 7,000, originate from the Golden Horde. Their ancestors began to settle in Poland from the second half of the fourteenth century as a result of the policy of alliance practised with regard to the latter by Poland. In settling them in the country, the Kings of Poland wanted to populate the deserted regions of the North. They guaranteed them complete religious toleration and granted them land in return for military service in case of war. Thus originally the Tartars occupied themselves above all with two professions—agriculture and war. In the course of time they became completely Polonized to such an extent that they forgot their mother tongue, and were indistinguishable from the surrounding Poles. Thus geo-political circumstances had determined their origin and the exceptionally favourable treatment by the Poles—an extraordinary thing during the epoch of severe struggles between Christianity and Islam at the end of the Middle Ages. The story of their history constitutes an interesting contribution to the history of the Golden Horde and also the, example of the possibility of perfect adaptation of a people of Asiatic origin to the conditions of European life.

The paper was discussed by Dr. S. A. Hzayyin, Miss M. E. Durham, Dr. E. J. Lindgren, Mr. H. J. Braunholtz, and the President, and Mr. Bohdanowicz replied.


Russia is one of the few countries of modern Europe in which heroic poetry is still recited by men and women who can neither read nor write. From the northern parts of Great Russia, and from the descendants of the early settlers in north-eastern Siberia an extensive repertoire has been recorded, which celebrates the deeds of Russian heroes from all periods of Russian history. The most important Cycle relates to the early history of Kiev and the warfare waged by the Prince of Kiev and his heroes against the Tartar hosts. Other cycles have grown up around the person of Ivan the Terrible in the sixteenth century, and Peter the Great in the seventeenth; and new poems have been composed on current events down to our own day.

The poems are transmitted orally, and are not strictly memorized, but extemporized afresh on traditional lines with each recitation. The poems and the technique of recitation are handed down and taught by highly specialized singers to their descendants or pupils. No musical instrument is in use in Great Russia, but the poems are chanted, and a considerable variety of tunes are employed. The reciters or singers are largely peasants and artisans, though in the past the poems undoubtedly circulated among people of a higher class. A large proportion of the singers are women. The poems are chanted in the evenings before an assembled company in the peasants' huts, and also during the daytime as the people sit at their work.

The origin of the poems is obscure. We have no certain evidence of their existence before the sixteenth century; though the oldest cycle of stories relates at least to c. 1100 A.D., and perhaps earlier. Their history
is bound up to some extent with that of oral narrative religious poetry recited by pilgrims, for which the evidence goes back to the fifteenth century. Moreover the narrative poems are not alone in the repertoire of the peasants of northern Russia. Perhaps the most elaborate extemporary personal poetry in the world flourishes in the same communities, and consists of dirges of a highly ambitious character, as well as wedding songs, and songs commemorating the dead at festivals which take place long after the event. These poems, on internal evidence, can be shown to be of aristocratic origin. Finally it may be added that the relationship of the secular narrative poems to early Russian historical records is one of great interest. It is too often assumed that the original composers borrowed their themes from written records, whereas it can be shown that in certain important instances early historians have derived their material from these oral narrative poems, which, before the days of newspapers, served to circulate news of current events, and to place it on a more or less permanent record.

The paper was discussed by Mr. H. J. Braunholtz, Mrs. Ruheimann, Dr. Christophersen, Dr. Hildburgh, Mr. W. B. Fagg, and Dr. Samson. Mrs. Chadwick replied.

OBITUARY


Through Dr. Walter Kaudern’s sudden and unexpected death, caused by a heart ailment, on 16 July, 1942, not only did Gothenburg’s Ethnographical Museum lose an efficient head, full of initiative, but Swedish science lost as well an outstanding figure, who through his tireless research won an ever-increasing reputation both at home and abroad.

Walter Kaudern was born near Stockholm on 24 March, 1881, and educated at the University of that city, where in 1910 he was made doctor of philosophy, his thesis being an anatomical investigation of insectivores and Lemuridae. He had previously worked much in geology, and in botany and geography as well he was academically well-trained and well-read.

Kaudern’s first expedition, to Madagascar in 1906–7, was for the purpose of making chiefly zoological investigations, and his work was carried on mainly in the north-western parts of the island. To the same section he also returned on his second expedition in 1911–12, but this time also included eastern Madagascar in his researches.

During these two expeditions Kaudern’s keen interest in the natives and their culture was aroused, as one can understand from the many details he relates about them in his comprehensive book in Swedish, På Madagaskar (Stockholm 1913). On his third expedition, which was to Celebes, which he began in 1916, returning in 1921 to Sweden with a collection of over 3,000 ethnographical objects, ethnography had completely captivated him, although the main purpose of the expedition, during which larger parts and most especially the central section of the island were investigated, was the study of the geographical distribution, and nature of, animal life. His purely ethnographical work during this expedition was based on a prolonged stay among the natives and a trained collector’s ability and keen powers of observation, an excellent foundation. A versatile man, Kaudern was also talented in drawing and painting in oils, and during this expedition he executed in the field his series of large oil paintings of the natives, of which several reproductions have been made.

In 1925–1938 Kaudern published five volumes in his scientific series Ethnographical Studies in Celebes, which was planned to come out in some ten volumes. His last work in this series, that on Art in Central Celebes, he was unfortunately never himself to see in print, in spite of the fact that he had worked for many years upon the manuscript and the drawings, etc., which are a part of it, and which, as was his custom, he executed himself. After 1992 when he succeeded Erland Nordensköld as head of the Ethnographical Museum in Gothenburg, he was forced to give more and more of his time to museum work and to the works he published in Etnologi och Studier, the periodical he began to publish in 1935. This publication, where exclusively ethnographical contributions, including longer theses, could be printed, he financed almost entirely from his own income, making thus a gift to Science and Ethnography which brought him no material return. It gave him pleasure, however, to put it at the disposal of both Swedes and foreigners.

The above-mentioned work, Art in Central Celebes, was however at the time of his death so far in proof and
manuscript that there seemed to be every reason for completing it. Provided that financial backing can be secured for it, the publication should not require a great deal of time since at present Mrs. Teres Kaudern, who was her husband’s faithful co-worker both on the last Madagascar expedition and the four-year Celebes expedition, is continuing with proof-reading, etc., and the undersigned is assisting her as far as he is able in order that Vol. VI of the Celebes ethnographical series may be completed.

As a museum man, Kaudern enjoyed a high reputation. He left little or nothing to chance, and demanded that exhibitions should be instructive and well arranged, to which end his artistic gifts were of great help. He worked also for organized system within the institution, and willingly supported all necessary improvements. The Ethnographical Museum of Gothenburg, during his régime, thus went through a series of changes for the better which cannot be overlooked. He put his heart and soul into his museum work as well as into his scientific activities, and his contributions in both fields will be long remembered. An exhaustive bibliography appeared in Etnologiska Studier 12–13, Göteborg, 1942. And Walter Kaudern himself will be long remembered among all those who learned to know and appreciate him as the simple and modest scientist, yet always seeking, and willing to fight for his convictions.

HENRY WASSÉN.

ARCHAEOLOGY.


This book works up into a bold general history the results of the Harvard Archaeological Expedition 1934–46 and those of earlier workers, notably the fine fruit of Dr. Praeger’s fifty-five years of research, still splendidly continuing. The age of the Sligo tools is considered doubtful; their authenticity is accepted. So there is no satisfactory evidence of Paleolithic man in Ireland. The first invaders are thought to have entered in early post-glacial times when the North Channel was narrowed by boulder clay lowland, since washed away, as was that of the Welsh and other coasts. Dr. Movius is concerned to fit his sequence to the glacial sequences, but is not too happy in his review, which needed the 1939 work of Brouil and more consideration of Soergel. His work becomes more helpful when he treats of raised beaches and stratigraphy (mainly Praeger), pollen analysis (Jessen), and implements (Burchell, Whelan, Harvard group). Late Paleolithic people are supposed to have reached a lowland now submerged and to have left flake implements which have been washed up by the invading Litorina Sea of the Boreal phase, but date before the maximum submergence. These implements, based largely on British Cresswellian (Armstrong), suggest development in N.E. Ireland and are described as the early and late Larnian cultures, the later ones having larger; more axe-like tools among stones. Movius rather unfortunately uses the name “Campaignian” for the next phases, for which we are no longer dependent on flints thrown up by the waves; we have factory sites; he thinks this is a new introduction giving tranche set and core-tools on sites directly overlying the raised beach of the Litorina Sea and therefore dating from the sub-boreal or phase of emergence; some pottery has been found. These men of the axe-factories are supposed to have pressed the Larnian survivals inland where the Bann culture occurs; pottery with megalithic-workers’ affinities has been found with the Bann tools at Newferry (In Derry). Movius’s story will no doubt be modified and enriched by future work, but its value as it stands is in its suggestive character as well as in its record and study of finds.

H. J. FLEURE.


Price 8s. 6d.

The numerous papers published by Dr. Evans previous to this book revealed some characteristics of the author: versatile interests, utmost simplicity of language, adroit interweaving of present with past, and the reduction of an almost unlimited amount of material to the common denominator. All this contributes towards the success of the author’s latest book and renders its reading most enjoyable.

Stressing the point of ‘ incontrovertible’ Irish heritage, Dr. Evans restricts his investigation to the peasantries which alone can claim continuous Irish tradition. ‘ In Eire 63 per cent. of the population is “rural dwelling,” that is, living outside “towns” with over 200 inhabitants. . . . ’ In Northern Ireland, despite its great manufacturing industries, farming remains the most important industry, and ‘ 50 per cent. of the population lives in rural areas.’ It seems peculiar that the various activities of the coastal population are as a rule not carried on by specialized fishermen, but by farmers and peasants to whom the sea offers an accessory ‘golden opportunity. . . . ’

The author sets forth the geographic and climatic conditions of Ireland. The landscape until the advent of the present century was in most parts a heathland, with the exception of the low-lying coasts and the marshy areas, which were inhabited by the prehistoric races. The climate was cold and wet, with frequent gales and storms, which made travel difficult. The author describes the different modes of transportation, and the various methods of communication, such as the salmon fishery and the seal fishery, which were important industries in the coastal areas.

H. J. FLEURE.

REPRESENTATIVE.

The cultural landscape of fields, fences, roads and buildings completes the survey. The plans of rural settlements and ‘booley’, or thatched peasant houses and farm buildings are elucidated. However typical they may be for Ireland, all the schemes correspond in so far with those formed by peasants in other countries: nothing is left to mere chance, everything is governed either by necessity or by tradition. Of great ethnological interest are the different modes of transport. In connexion with the ‘curragh’ it might not be without interest that in the Life of Brendan of Clonfert mention is made of the construction of a skin-covered coracle and also of a timber-built vessel. Dr. Charles Pflumer remarked on these passages: ‘Brendan and his companions seem to have built the former themselves, the latter was built by fabri et artifices.’

Admirable is Dr. Evans’s reserve towards the curious, the picturesque, the pseudo-romantic. No piece of furniture, no requisite for cultivating the soil, is too humble to be neglected from his unembellished descriptions, or from the very clear drawings made by the author himself; on the contrary, small things, whether we consider vehicles, livestock, fields, or villages seem to characterize Ireland. One astonishing feature is the almost inexpressible variety of spades.

The author’s broad view and flair for continuity become evident when he reflects on the gate pillars: ‘I like to think of the Irish rath defended and glorified by two white stone pillars at the entrance, though I confess that this finds no support in reports of archaeological excavations… The variety of styles and the superstitious beliefs connected with the pillars do strongly suggest that their origin is to be sought far back.’

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Dr. Evans is right and has only very slightly to modify his conception. An episode from the Tácín, one of the oldest and most celebrated Irish legends, suggests that there was originally merely one pillar-stone, the sanctity of which was protected by a taboo; this would explain why more importance is attached to the gateposts than to the gate:

"Cuchulain and Ibar push on to the dún, and they unharness the plough and drive it to the place where they stood at the bank and the river meets south of the dún of the mac Nechtá. And the little boy sprang out of the chariot onto the green. Thus was the green of the dún, with a pillar-stone upon it and an iron hand around that; and a bond for prowess it was, and there was writing in ogam at its joint, and this is the writing it bore: "Whoever should come to the green, if he be a champion, it is geis for him to depart from the green without giving challenge to single combat."

Foremost among the various theories of Dr. Evans, which can be confirmed by legendary evidence, is the pastoral predominance in old Ireland. Dr. Evans might perhaps reconsider his opinion on the agricultural calendar (p. 11) in the light of M. A. Murray's explanation for the division of the year in May and November: "it marks the opening of the breeding seasons for animals, both wild and domesticated.

"It therefore belongs to the hunting and pastoral period.

"It was pre-eminent in a pre-European memorial of the dead. It was believed that their souls had, on that particular night, left from the other world and roamed about or returned to their old homes. Valuable information concerning ancient notions of the relation between the dead and the living is contained in the manifold means of protection against the evil influences of the dead, in the different games, and the divinatory rites. Closer examination of the book, an indispensable introduction to Irish life and culture, will certainly appeal to a very large circle of readers. Books of this kind are badly needed all over the world, not only for the promotion of better understanding between nations, but also to bridge the widely spread cleavage between town and country.

E. ETLINGER.


All archeologists owe a considerable debt to Goodwin and van Riet Lowe for their valuable work on the problems of South African archaeology, and this short pamphlet on the method will be warmly welcomed. In the main it is a booklet to put into the hands of beginners, to assure that they start with clear identification of material, and to make them much of profit for the seasoned archaeologist. Goodwin deals briefly with the scope of prehistory, approaches, materials, interpretation, field-research, and technology. His sentences and paragraphs march with clarity and precision, each word doing double duty, and not a word too many. Thus his views remain in the mind like the glistening pearls of a bay. His treatment of subjects associated with prehistory and insistence on the student knowing enough about them intelligent to consult their exponents and use their evidence properly. A couple of small points occurred to the reviewer in reading the book devoted to the archaeological method. Many authors use the term 'horticul-tural,' but we have the word 'horticultural,' it seems better to use it as a contrast to the word 'agricultural.' Again, Goodwin rightly says that there is confusion between 'ethnology' and 'ethnography.' Here, too, it seems that ethnology can help. 'Ethnology' can be used in the anthropological sense of the word, and 'ethnography' the descriptive study of peoples and races, or cultures and human stocks and sites or groups can be reserved for descriptive studies of a particular people or race.

Goodwin is one of the few archaeologists who describe experimental work in the making of stone implements, a book, an indispensable introduction to the work of John Evans, Tylor, and Balfour, and is still experimental. It is work fundamentally necessary to the understanding of prehistory, and the reviewer welcomes Goodwin's insistence on this fact, and hopes that he will carry this section much farther in a future publication. The short section on geometrical forms disappointed the reviewer, but the main issue, though it is of theoretical interest. Our own work here has been done with flint, on what may roughly be called the Clacton, Levallois, and Branden types of cores, and on axe and arrowhead making, in all of which at present we are most interested. Sir Francis Knowles, who rightly insists on using in manufacture no tools except those of the kind found on ancient sites or used by primitive peoples of a more recent period. It is too much to ask the author to set his flourishing School to work on attempting to make implements of the different culture periods from the variety of stones used in South Africa, employing the primitive hammerstones and any other implements known from ancient sites or by primitive peoples? Admittedly, some of the experiments would seem to be a more laborious task than our own, owing to the less tractable nature of some of the material. But their publication would be of great service, and if present conditions continue, may be accomplished before we are able to publish what we have already done here and placed on exhibition.

T. K. PENNIMAN.

PACIFIC.


Nearly eleven months after the capitulation of the city of Manila and six months after the fall of Corregidor, Mr. Herbert W. Krieger, Curator of Ethnology, U.S. National Museum, gives a most interesting contribution to anthropology in publishing a condensed study of the peoples of the Philippines. His contribution of 92 pages contains a vast amount of important information in a very readable form, illustrated by two dozen good photographs and by four maps, about the population, its origin and destiny, and about their languages.

The author covers the subject thoroughly, dealing with the ethnological problems as his main issue, but in touching other points, both economic and agricultural, he shows that this study contains a starting point for another one especially treating these features of Filipino life. It is especially the last sentence of the 'summary,' which induces one to hope for more. In information, though, the majority of the Filipinos together with the mestizo and economically independent minorities look to the United States to remove the economic restrictions that gradually curtail, and after 1946
throughout the archipelago. Much is to be said for the use of this term as an anthropological definition as used by the author. It is to be borne in mind, however, that since the expressions 'Indonesia' and 'Indonesian' are used very often in a political sense, its use for anthropological purposes should be explicitly defined and well defined as is the case in this study. It might be interesting to investigate how far the political term 'Pan-Malaya' covers the anthropological 'Indonesia' as used in this publication.

In describing the Negro the author mentions the name of Aeta. Batau, or Atta used by the Tagalogs living in the plains of Luzon in speaking of the Luzon Negro. In comparing these expressions with the word item, it is a literary meaning, since the Malay, the expressions used by the Tagalogs work as an eye-opener; this is more so when one compares the name 'Batak' used for the Palawan Island Negritos to that of the 'Batak' in Sumatra. The Sumatra Bataks himself, however, has his own expression to describe 'black', which has no contact with the word item or hitam. It is the word biring (sambiring), the latter expression used for a special tribe of Karo Batak considered to have immigrated into the Karo Batak-land later than the four other tribes which occupy the mountain plains of the Karo Batak-land.

One point which needs further investigation is the relationship between the different dialects or languages described by the author as influenced by two main traits, the first being the theory of Blumenfeld and other European scholars explaining differences in speech, culture, and psychological characteristics by assuming a number of migrations to the Philippine Islands, the second-streamed by the author and correctly so — the environmental factors, where neighbouring tribes invariably affect each other’s speech and even to a certain extent inter-exchange some racial characteristics. It would be worth studying, however, if these two traits are the only symptoms by which the language problem of the Philippines is affected. It remains to be investigated whether the waves of migration, small or important, always took place by groups speaking their own vernacular. In one point there seems to be a strong indication that such was not the case. The influx of people in the Madjapahit period seems to have taken place by Malay-speaking Javanese arriving in the Philippines from Sumatra or even from Borneo. If this proves to be correct, it would throw a different light on the puzzling problem of relationships between languages and it would also give an indication why the mixture of the Javanese language is more prevalent in parts of the Philippines, where it should not prevail geographically.

These are only a few points brought forward to show clearly that this very remarkable study offers food for thought and for further investigation.

Let us therefore hope that Mr. Krieger may feel inclined to add another valuable contribution to the literature about the Philippines.

W. HUENDER.


Most of us know little about British dependencies, and nothing about those of other nations. Here is an excellent summary account of French Oceania, of which Tahiti is the most important island; the productive and European connexions; with an account of the contributions of the islanders both to their own defence and to the restoration of France.

J. L. M.

**SOCIETY.**


This is a flamboyant eulogy of an Indian economist whose voluminous writings seem to have considerable influence in Bengal. Benoy Sarkar was born in 1887, and grew up during the Swadeshi movement of 1905 when he refused a travelling scholarship to England to devote himself to his mother country. Later he retrieved that step by spending many years in foreign travel and study, which has enabled him to see Indian affairs in their relation to those of other peoples, and to estimate the degree of lag between their present phases of advancement and the advanced institutions for thinking and for research, and gathered a band of associates working on similar lines, including the writer of this sketch of his work. Excerpts from his speeches and writings, and from critical reviews of his books contribute to the impression of him as a learned, prolific and independent thinker, inclined to move far ahead of the bulk of the oriental world in his thinking. He has contributed most rudimentary efforts to control external nature. No excuse is needed, therefore, for a review of this book in MAN, or of Dr. Mannheim’s earlier volume, Man and Society in an Age of Reconstruction, noticed in MAN, 1940, 224.

If these chapters are rather loosely connected, and emphasize particular phases and aspects, the sub-title Wartime Essays of a Sociologist is sufficient explanation, and the best of reasons for collecting them thus. They are at the same time a frank and provocative statement of the claims and functions of sociology, and an invitation to other thinkers and observers, especially the economists, to give up the romanticism, to contribute in analogous ways to relieve the world’s present troubles.

Long and sympathetic study of British people and the ways of life has convinced Dr. Mannheim that Britain has the chance and the mission to develop a new pattern of society. If the calls on us to become aware of it and to act on it, here and now. At this new science of Human Behavior, the like, it advances in organized knowledge, puts immense power into the hands of those who have the will and occasion to apply them. This applies equally to totalitarian countries and to democracies. But social technique, though a bad master, is like all advanced science a good servant. Planning, propaganda and the like, are not necessarily evil, or necessary the instrument of minority rule. They are at the disposal of men of good will, and of us all, for the militant defence and advancement of Western civilization.

**CYLONIC:**

**The Mystery of the Stones of the Darling River Valley.**


This little book is Part II of a Series on the Customs of the Aboriginals of the Darling River Valley and of Central New South Wales, of which Part I dealt with the Burial trees. Cylons are the 'Cylindrical, conical and Combe Stones' published by R. Etheridge Jr. in 1916, and variously explained. Early settlers apparently knew these objects, but obtained no account of them from the aborigines. All except one, the Cylons from Hughenden, North Queensland, appear to be of primeval workmanship. They are from 6 to 17 inches long, of circular cross section, tapering to one end and flattened or even cupped at the other; and they are incised with many combinations of simple linear signs. Argillaceous sandstone is the commonest material, but many other rocks are used, often water-rolled pebbles. They are not commonly now than formerly, it is thought that they were buried, and have been exposed by denudation. Though commonest in the Darling basin they occur also as far afield as Melville Island off the north-east coast of Australia, and Woogin in North Queensland. Mr. Black is inclined to regard them as of ceremonial significance.

J. L. M.
This leads Dr. Mannheim to the 'crisis in valuation' which results from conflicting philosophies of life; to some sociological factors upsetting the process of valuation in modern society; and to the meaning of democratic planning in this sphere of valuation.

But a preliminary and urgent problem is that of youth in modern society; of the citizen-to-be, who if he does not make the valuation of himself, is most concerned with the values which will encompass his life in the future. This is the more urgent in Britain, because our people are as inarticulate about problems of youth as about everything else, and it is interesting that Dr. Mannheim has high regard for the effect of residential schools on the young, 'to make use of the gang-age and put an end to the invention of new life in our people. Here is sound psychological insight and practical handling of a major issue.

More generally, what sociology can contribute to education is a sense of social awareness, the conscious reference of detailed experiences to a general background—which is a more precise way of saying that education must be humanist and grounded in a Science of Human Behaviour—which has vital contribution to make to general policy in this (or any) crisis, and is the remedy for that partial awareness which is 'class-consciousness' in one sphere of action, and 'specialization' in other. All this again points to a 'third way' not totalitarian, not lesser-forever liberalism, but the 'new order of freedom and social justice.'

A convergent line of approach is through the ways in which society can help the individual. Collective adjustment must be preceded by what Dr. Mannheim calls 'group analysis' which becomes the individual case to the whole configuration of social institutions, and he refers to the experiences of Louis Wender, Aichhorn, Schilder, and others. This involves fresh methods in education, social services, and games.

The projected method is contrasted further with the Nazi 'group strategy' designed to break down those social groupings which are the structure and bond of normal societies and states, and especially to create 'the centres of emotional fermentation' which carry on this destruction. But again the remedy is in our own hands—to utilize the constructive powers of group existence, both among our own people, and when the time comes for restoring the victims of Nazism to wholesome ways of living.

The way is thus cleared for a 'new social philosophy' and Dr. Mannheim as a sociologist puts the straight question: 'Will Christianity associate itself with the masses or side with ruling minorities?' A thoughtful and sympathetic analysis of the accidental elements in the principal types of Christian teaching leaves us in no doubt whither Dr. Mannheim thinks that the right course leads for each of them. The presentation of the primitive doctrine as an idealization of agrarian society where it was literally possible to 'love one's neighbour' illuminates the whole question 'who is my neighbour?' in a capitalized and industrialized universe: 'Christian truth,' that is, comes as a direction and not as a rigid prescript; and planning for freedom need not stop short of religious experience. There is much in this chapter for students of ritual, of myth, and of religious associations in general. It may be read with equal profit with 'Islam' or 'Buddhism' substituted for 'Christianity.'

It will be seen that Dr. Mannheim's essay covers a wide range of topics, of direct interest to students of a 'Science of Man'; and applies much anthropological matter to the interpretation of current problems. It is presented with a quietness on other matters, and sympathetic appreciation of difficulties, and deserves very careful study and necessary action as the reader's judgment may dictate.

Two small slips of phrase may be noted: p. 11, l. 25, should not be depreciating; on. p. 118, ill. 26-28, the second between is superfluous.

JOHN L. MYERS.


This interesting book is the outgrowth of a national conference arranged by the U.S.A. National Council for the Social Studies and the National Foundation for Education in American Citizenship. Though primarily dealing with educational and civic conditions in the United States, it discusses them on lines so broad and humane, that it should be widely read elsewhere. The general plan is to state the contribution which each of the sciences most related to the supreme art of good citizenship should make to the training of citizens, and how it should be introduced into school and college courses.

Rather surprisingly—to except some anthropologists—anthropology heads the list. 'What is man that we should reverence of him?' is a question well worth considering; and the programme of study suggested by Professor Wallis stresses the essentials, and gives useful hints for the presentation of them: demand will surely create a need of the useful equipment. The connexion with sociological study is essential: 'it is always well to see ourselves as part of the human race, and the human race as part of ourselves.'

Economics follows, with three different presentations, and close link with Sociology at the end of the volume. In so varied a subject, selection of topics is necessary and involves judgment of values. The goals we really seek are power and freedom. These goals are not irreconcilable; but in some respects identical. Here is wholesome corrective to materialist determinism, to all sorts of socially legitimate power and the truth that makes us free. The first truth of economics is that it is concerned with the manipulation of resources which are inadequate to the satisfaction of very want: if it were not so, we might still be rolling each under his own lotus-tree. Here there may be a clear harkback to anthropological illustrations: for our present intricate culture was not put together in a day.

Geography, in the hands of Dr. Hartshorne and Professor Griffith Taylor, implements the broader generalization of economics in the world as we ought to know it. 'Geography is concerned with the abstraction, localization, and explanation of the data which relate man to his environment', with emphasis on localization and map-work. Some branches of geography having come to a dead end on the 'Geographical Tree,' we have to concentrate on those which are fundamental, with careful attention to demonstrable and therefore local land-uses. 'Geography, like charity, should begin at home.' The sketch of the new geography course at Toronto is full of interesting points. History, already well established in the curricula, does not offer many novelties; in general, 'history is man's memory and should be his defence' (p. 69); it integrates many departmental studies, but integration must come from within the individual student or teacher—a point not always observed.

Philosophy, for Professor Hocking, is everyman's study, not a specialized discipline for a few. A man's philosophy is 'the sum of his beliefs'; these have been formed all the time, and most of all in early years; and a men shall not of his philosophy. It is the duty of philosophy to aid people to discover the meaning of their lives. 'Men both acquire beliefs, and later examine them: and philosophy is 'guidance in the business of ret-thinking'; again with a view to personal freedom. Philosophy in fact is training for citizenship, and in modern Chinese education stands under that name along with literacy, hygiene, and farming. This technique of mature freedom needs to be acquired during adolescence, with the first impulses for freedom and to nationality, which it is its task to integrate. Beginning in the school, it should persist through the college course, and should be as an aid to 'election' among 'elective' subjects; just because 'people think they know what they want, without knowing why, or how to use what they want, when they get it. It is the only safeguard against a commercial and material civilization.'

Political Science is rightly treated as a preparation for citizenship, and as concerned with duties as well as rights; and with active participation in the life of the community. In this sense 'Ethics and Politics, at convenient distances of time were on the programme of Harvard College in 1643: may they long remain so! But they need trained teachers, and these are apparently still rare: a mere historian or handyman is no substitute.

Psychology in schools hardly means more than the elementary knowledge of mental operations which will signal and
may remedy those mental disorders which are beginning to be recognized as capable of treatment in their first symptoms. Formal instruction is rightly deprecated; what is needed is a sound mental hygiene, under sympathetic observation and tactful guidance, especially since home-influences can no longer be depended on as in the so-called 'lower' cultures. Here too training and clinical experience are essential in the teacher; most of all in the earlier phases of education. How much is still lacking is illustrated by the dearth even of school text-books.

Finally, Sociology in the present crisis will have to be more than a defensive training. It must have functional outlook and method, and there is room for practical courses in which the pupils do something more than 'make-believe' what their instruction offers: a most interesting example shows what can be done. Nothing makes a study seem so futile as inability to turn precept into practice.

On these lines, the correction of admitted defects in modern education will at all events proceed with clear objectives and intelligible method. To ensure coherence and systematic progress an academy or institute is envisaged which would 'marshal continuously the energy and genius of American citizens,' and—we may hope—not only in the United States.

JOHN L. MYRES.

AFRICA.

She deals with the political aspirations of the African, the disintegration of the African family, the importance of land and its conservation, and the different aspects of economic development in relation to African welfare. Particular attention is given to the question of education, both of the child and the adult, a subject on which Miss Wrong writes as an authority.

The conflict between different theories of race relations, the motives behind the segregation policy, and the keen awareness of many Africans of the danger of its extension, are briefly but effectively explained.

A concluding chapter discusses the opportunities for the Christian churches in Africa.

L. P. MAIR.

CORRESPONDENCE

The conclusion seems clear, that the symptoms are real, not imaginary in origin, and that illness of the mare results from inhalation of body vapours containing the sex hormone of the pregnant female during sleep. The conditions for the couvade may then be expected in any family, primitive or otherwise, in which the husband and wife live in close contact, rarely bathe, or sleep together with a lack of ventilation. Of course, in certain instances the symptoms may be simulated through social pressure because it is known in the tribe that such symptoms 'naturally' occur.

R. RUGGLES GATES.

Marine Biological Laboratory, Wood's Hole, Mass.

The Irish Stone Age.

Our attention has been drawn to a recent volume by Dr. H. L. Movius, Jr., dealing with the Irish Stone Age (Cambridge, 1942), in which he makes statements regarding the papers we have published on this subject. Since these statements are, no doubt unintentionally, misleading we desire to comment on some of them.

P. 106.—Dr. Movius regards it as 'extraordinary' that seven eolithic and lower palaeolithic types of flint implements (as identified by us) should occur in geological deposits in Co. Antrim. He is evidently unfamiliar with the fact that such an association of artefacts is not unusual in some gravel beds—in East Anglia for example—and is, indeed, only to be expected.

P. 105-7.—He claims that the striations on certain flint implements found by us in the Littorina Raised Beaches, and admitted by him to resemble glacial striæ, are the result of 'severe wave action.' This, so far as we know, hitherto unheard of claim is, however, put forward unsupported by any evidence; and, in view of the large body of knowledge on the striation of flint and other rocks, we can only express our surprise that Dr. Movius should have made it. We found numerous striated implements in gravel well up the valley of the Carey River which have never been subjected to wave action. But Dr. Movius, when confronted with these striations, does not hesitate to claim dogmatically, and again

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unsupported by any evidence, that these scratches have been produced by 'abrasion and heavy rolling.'

P. 107.—In his attempt to refute our claim to have found derived implements of Lower Palaeolithic age, in situ, in gravel of the Carew and Dun rivers, Dr. Movius states that this is not correct, since the deposits cannot date earlier than the Late Glacial period. Clearly Dr. Movius does not admit the possibility of the occurrence in these gravels of derived implements which long pre-date them. We would point out, however, that erratic rocks are present in these gravels. Does Dr. Movius wish it to be understood that he regards these erratic rocks as being of Late Glacial age?

P. 111.—Regarding the specimens described by us from Ballyconnell, Dr. Movius makes the following statement—

'in the Boulder Clays many broken and angular pieces of limestone and quartzite occur, among which, if carefully 'sorted out, many examples could be found analogous in all 'respects with the Ballyconnell specimens. Has such a 'sorting out' and detailed examination of these specimens ever taken place, and, if so, where are the results published? If this examination and comparison with the original specimens has not taken place, Dr. Movius's statement is scientifically worthless. But this does not prevent him from stating that 'the so-called implements from Ballyconnell are natural.' The solution of the problem of the antiquity of Man in Ireland will not be helped by such special pleading.'

Pp. 111—112.—Commenting on the Rosses Point and Coney Island specimens, Dr. Movius regards them as definitely human artefacts and enumerates characteristics of these objects which have convinced him of this. But one of the specimens found in gravel between Boulder Clays at Ballyconnell exhibits in full measure the characters present in the Rosses Point and Coney Island examples which Dr. Movius regards as of human origin. It would be of interest to know how Dr. Movius proposes to dispose of this disconcerting fact.

P. 107.—As an example of the unreliability of Dr. Movius's statements we would draw attention to the following. In his remarks on Rosses Point he says 'the jointing planes in the limestone are such that they would have prevented the 'formation of any sort of a cave, and the fallen blocks (beneath 'which we found more than 100 unrolled flakes and imple-'ments) were almost certainly produced by wave-action.' In 'regard to this all anyone has to do, to realize the absurdity of Dr. Movius's claim, is to examine the photograph (Pl. 1) in our memoir on Rosses Point which shows a sea-cave or shelter found in the limestone at that spot with a person standing within it. The horizontal bedding of the limestone lends itself admirably to the formation of such caves or shelters.

As to Dr. Movius's statement that the fallen blocks were 'produced by wave action' we presume that he meant that their fall was caused by this action. It would not be without interest to hear Dr. Movius's explanation for the presence of the unrolled artefacts on the rock platform beneath the fallen blocks, if the detachment of the blocks was due to wave action. Why were these comparatively light artefacts not swept away at the outset by the erosive action of the sea, and how was it that they escaped from being rolled and battered?

In conclusion, we can only hope that in his dealing with other aspects of the Irish Stone Age Dr. Movius has not shown the same inadequacy which, we regret to say, characterizes his treatment of what we regard to be the earliest traces of Man in that country.

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REFERENCES.
4 Burchell, J. P. T., and Moir, J. Reid, The Early Mousterian Implements of Sligo, Ireland, Harrison, Ipswich, Suffolk (1928).

Corrections: Centenary Number. MAN, 1944, 1—25.

51 It is regretted that some confusion arose in the reports of the discussions at the centenary celebration of the Royal Anthropological Institute (MAN, 1944, 6—9). The reports of the papers by Mr. Sayce and Dr. Firth became transposed and articles 8 and 9 should be read in the following order:

Article 8.—Mr. R. U. Sayce on the 'Future Study of 'Material Culture,' discussed by Mr. Digby, Mr. Datta Majumder, Mr. Braunholtz, and Dr. Grahame Clark (whose contributions, with the exception of Mr. Braunholtz's, were printed among those at the end of Dr. Firth's address).

Article 9.—Dr. Raymond Firth on the 'Future of Social 'Anthropology,' discussed by Dr. Margaret Mead, Miss Lawrence, Mr. Datta Majumder, Professor Forde, Mrs. Hodson and Mr. Korsah, Dr. Firth replying.

51. 1. For R. V. Sayce read R. U. Sayce. P. 5, 2nd. par. Should read—Haxley in the chair of the 'Ethnological Society and Bedloe of the Anthropological...' P. 6. The 'Local Correspondents' were abolished recently. P. 6. For Miss Katherine Martindale read Martindell. P. 7. The Wellcome Medal is offered annually for the best essay on the application of anthropological research to problems arising from 'culture contacts,' not 'to social services.'

P. 7. Under the will of the late E. J. Horniman the Institute will administer the legacy, as soon as probate has been granted.

P. 9, penultimate par. For ' Dr. Horniman' read 'Mr. 'Horniman.' P. 10, 2nd. par. For 1843 read 1843. P. 26, no. 12. Honorary Fellows: Dr. Callenfels died in 1938; see obituary, MAN, 1939, 10. Obermaier, Prof. H. Madrid: present address: Fribourg, Switzerland.

Dr. P. Orsi is dead.

Paso, Dr. A. should be Caso, Dr. A. Instituto Nacional de Antropologia e Historia, Zacatecas, Mexico.

Zarmatrune, Professor S. should be Zamiatun, Professor S.

Copper in Antiquity.

52 Sirs,—The good repute, according to Pliny, of the copper that came from Cyprus must have been due to its native condition. Such metal is of remarkable purity. That of the Lake Superior region is 99.9 pure. Thus we have a criterion for ancient copper artifacts. No metal of approximate purity was produced by smelting until the invention of electrolytic precipitation about sixty years ago. Here also we have a test for copper assigned inadvertently to the Early Bronze Age. If it be nearly pure, it has no relation to bronze; on the contrary, it may belong to an early part of the Stone Age, at which remote time native copper would be regarded as soft stone.

T. A. RICKARD.
Victoria, B.C.
‘TSANTSAS’ IN THE PITT RIVERS MUSEUM, UNIVERSITY OF OXFORD

1. COMMERCIAL COUNTERFEIT.  2. AUTHENTIC JIBARO ‘TSANTSAS,’ EASTERN ECUADOR
COUNTERFEIT 'TSANTSAS' IN THE PITT RIVERS MUSEUM. By G. E. S. Turner. With Plate C.

53 The macabre nature of the shrunken head trophies (tsantsas) of the Jibaro Indians has long assured them a ready sale to curio-hunters. As Stirling has pointed out in a valuable paper,¹ this demand has given rise to a considerable business in the manufacture of counterfeit tsantsas, with the result that a large proportion of the specimens in private (and some public) collections are in fact the heads of unclaimed dead from hospitals and pauper asylums prepared by taxidermists. The laws of Ecuador, Peru, and Brazil prohibit the export of tsantsas, but numbers are surreptitiously hawked to tourists along the Pacific coast from the Panama Canal southwards. The prices asked may range from £2 to £10 or more, according to the estimated means of the customer. While some of these may be authentic, the majority certainly are not.

The Pitt Rivers Museum, Oxford, possesses two such forgeries, purchased in Ecuador and presented in 1936. One of these has now been placed on exhibition alongside the genuine tsantsas, with a label drawing attention to the features which mark it as false. Most of these features are apparent in Pl. C. (fig. 1), which also shows an authentic Jibaro specimen (fig. 2) for purposes of comparison.

In the counterfeit tsantsa:

(a) the head is less thoroughly shrunk, the integument being consequently not so thick and continuing to exude a certain amount of oil;
(b) although slight prognathous distortion is present it is not sufficient to give the characteristic snout-like appearance seen in fig. 2; further, the dome of the head is high (reaching well above the upper edge of the head-band) instead of low and elongated, and the usual depressions in the region of the temples are lacking;
(c) the lips show no signs of perforation by the chonta-wood pins used by the Jibaro during the shrinking, and are sewn with light threads in place of the normal heavy fringe of cotton string;
(d) the top of the head is not pierced for the suspending cord;
(e) the posterior median incision is carried much farther forward over the crown of the head than is done in authentic specimens;
(f) the lobes of the ears are not pierced, as is done by Jibaros of both sexes early in life; instead, bone ornaments have been thrust through the rims of the ears, which does not accord with Jibaro practice;
(g) the facial down has not been singed off, nor the skin polished (the shiny surface being due to grease);
(h) the feathered head-band of beaten palm-bark is of a type not worn by living Jibaros, nor are genuine tsantsas ever provided with any kind of headgear;
(i) the hair is of finer texture than in most Indian specimens; it is less abundant and the short side-locks affected by most Jibaros are absent.

It is realized that the last detail is not definitive in that the Jibaros may still occasionally take heads from non-Indian victims (Stirling mentions a successful attack on a settlement in 1925), but considered in relation to the other foregoing points of variation it may be taken as strengthening the assumption that the head is that of a female European or mestiza hospital casualty. As final confirmation it may be added that part of a Quito newspaper of 1936 was found wadded into the crown in a manner suggesting that it was used to preserve the shape during reduction.

The second counterfeit in the Pitt Rivers collections is nearly identical in form and decoration with that illustrated, but is further adorned with two long pendants of the elytra of the beetle Mallaspis antennatus, tipped with feathers and human hair. Similar pendants are frequently hung from the ear-lobes of genuine tsantsas (see fig. 2) but in this specimen they are attached to the back of the head-band.

The above-mentioned particulars correspond closely with the criteria given by Stirling for distinguishing spurious from genuine tsantsas. The same author suggests examination of the stitching of the posterior incision which makes possible the removal of the skin from the skull. The professional taxidermist with his superior equipment tends to make a rather neater seam than is usually to be found in the Indian article,
Nos. 53, 54]

although this is not invariably the case. It should be added that the work of some counterfeiters is a good deal harder to detect than are the two examples described above.

Not all non-genuine tsantsas have been made for commercial purposes. Rivet 2 illustrates a passable counterfeit made by an Ecuadorian medical student, and in 1893 an Austrian doctor named Hein 3 described four which he had prepared from the heads of deceased patients. In both these cases the motive was to test the technique of reduction as reported by travellers. Hein's attempt to shrink a fifth head by drying in the sun failed completely.

Mummified animal heads, usually of monkeys or sloths, are sometimes seen in collections. Of these the sloth heads are likely to be genuine. The Jibaros are elaborately careful not to take the head of a victim who is related to the slayer, however long adopted into the enemy band. In such cases, as also when a vigorous resistance prevents the securing of an unrelated victim's head, the slayer may at some later date take the head of a sloth (Choleopus didactylus) and prepare a token trophy, called ūnūshi. Generally similar ritual procedure accompanies the preparation of the ūnūshi. Finished trophies display the lip-fringe and suspending cord seen in tsantsas, but the degree of reduction is proportionally less. Some other animals may be similarly treated when one of their number is supposed to have caused the death of a Jibaro.

Stirling persuaded a Yaupe Jibaro to reduce the head of a monkey, but this was done without ritual and simply as a demonstration of the shrinking technique. Preserved monkeys' heads seen by the writer have certain features in common with the counterfeit tsantsas and it is to be doubted whether they are of Jibaro origin. Even where this should be the case they probably represent nothing more than purely commercial examples of Indian taxidermy.

Note.—Since the foregoing was sent to press, Mr. Stirling has drawn my attention to a journalist's account of a domestic workshop on the outskirts of Quito where 'shrunken heads' are made in quantity from goat- and dog-skin shaped over clay moulds and shaved in the appropriate places. One diagnostic feature of these counterfeits is that the hairs of both eyebrows necessarily run in the same direction. (Ludwig Bemelmans, 'The Head-Hunters of the Quito Hills.' The New Yorker, April 12, 1941. New York.)

REFERENCES.


THE FENCING OF EARLY TOMBS. By Harold J. E. Peake, F.S.A.

54 In a previous paper 1 I pointed out that, from a study of the balustrades at Sanchi, I believed that the Aryans, in their original home in Afghanistan and Turkestan, had placed around the barrows, that covered the graves of their dead, one or more—probably two—circular timber fences. Such fences in the Balkh, whence tradition brought their Iranian cousins into Persia. From this region around Balkh a rolling grass-covered steppe stretches westward to the eastern shore of the Caspian Sea. It is not unreasonable to believe that the whole of this steppe was at one time occupied by those who first developed the Indo-European dialects. From this steppe, passing northwards along the coast of the Caspian, it is usually possible to pass by means of dry steppe or salt desert round the northern end of that sea to the Volga, whence another steppe stretches westward as far as the Dnieper, and for some way northwards until it passes by means of a belt of parkland into the dense deciduous forest that occupied most of Central Russia. I have stated that it was usually possible to pass from one steppe to the other, but there have been times, it is believed, when, owing to an increase in rainfall, the Caspian has enlarged its bounds, even joining the Sea of Aral, thus forming a barrier between these two steppes.

It seems almost certain that it was during one of these periods of an extended Caspian that the speakers of Indo-European dialects became divided into two linguistic groups, the eastern section called the Sate and the western the Centum group, after the word each used for 'hundred.' It seems equally certain
that it was during one of the times when this sea was
contracted that one of the Centum group passed to
Chinese Turkestan, where it was known as Tocharian,
and that a party of the Satem group passed westwards
and then northwards to form the Baltic linguistic
group, consisting of Lithuanian, Old Prussian, and
Lettic. If, then, a party speaking a language of the
eastern group reached the south-eastern shores of the
Baltic, it is not impossible that burial customs may
have spread equally far.

I have been assuming that the ‘cradle’ of Indo-
European speech was in South Russia and Turkestan,
where its speakers herded cattle on the grassy steppes.
There are other views. Some years ago Professor
Kossina of Berlin taught that the Herrensolk, Nordic
by race and Aryan in speech, armed with stone battle-
axes and riding in horse-drawn chariots, carrying
with them cups decorated with impressions of whip-
cord, set out from the neighbourhood of his university
city and made themselves lords over all the peoples of
Europe and some in the Middle East.

More recently Hawkes has suggested that the
Indo-European tongues developed among the Mesol-
ithic hunters who were occupying all the land
stretching from the Baltic and the North Sea to the
Caucasus and the Caspian, on what Clark has called
‘the belt of open country’ which extends from the
Baltic to the Black Sea.

It is not clear, however, that such a belt of open
country existed. Those who have studied the prima-
tive vegetation of Europe assure us that north of the
Carpathians there stretched a line of loess patches,
where timber grew sparsely if at all; also that along
the southern boundary of Prussia and Pomerania, on
the terminal moraine of one of the arctic ice-sheets,
there were sandy heaths, sparsely dotted in places
with clumps of pines and interspersed with marshes
and lakes. Between these two open lines nearly all
the land had been covered with dense deciduous wood-
land, reaching right down to the rivers, while north
of the moraine pine woods stretched to the shores of
the Baltic. There appears, however, to have been a
way through, a continuation of the loess patches
through Silesia, and areas more lightly timbered
stretching from Saxony to the east of the Elbe as far
as Schleswig and Jutland, with a branch leading to
the Thuringian Hills. Thus there was no great open
belt in which these languages could develop.

Let us approach the problem from another angle.
Soon after the arrival of the Aryans in India we find
them divided into four groups: the Brahmins, the
Kshatriya, the Vaïçya, and the Çudra. The last-
mentioned were clearly the dark-skinned people that
they found in the Punjab, the Vaïçya were cultiva-
tors and may have been some of those that had
embraced the Indus culture; only the two first were
considered true Aryans, and I have elsewhere given
my reasons that this was not strictly true of the
Brahmins.

The purest modern descendants of the Kshatriya
are the Rajputs, recently described by Hornell. He
mentions ‘their contempt for work in the fields and
‘especially for trade; the only callings agreeable to
‘their pride of caste are the bearing of arms or a
‘position of government service.’ He points out how,
when these occupations fail, the Rajput takes to
brigandage and piracy. He hints at a resemblance
to the mediaeval knight; he might have added,
among others, to the Homeric Achaean, the Viking,
the fox-hunting squire, or the cowboy of the western
world. Such a type is not the product of a forest
environment but of the open steppe.

We have seen reason for suspecting that the people
of the eastern steppe had been in the habit of sur-
rounding their tombs with one, or perhaps two
fence fences. We are not so confident about those
dwelling on the western half. Yet it is not unlikely.
At Nikolajev, at the extreme western end of this
steppe, a large kurgan was cleared away, and beneath
it were found four circles of large stones surrounding
the tomb. Another kurgan near Alexandropol was
found to have been surrounded by a sort of retaining
wall of small stones.

West of the Dnieper the black-earth lands were
occupied by a settled agricultural population who
made beautiful painted pottery. This is the Tripolye
culture. To the north of this area, however, the
inhabitants decorated their wares with incised
designs. It was probably in this northern area,
rather than at Oussatova, near Odessa, as Rosenberg has suggested, that the custom arose of making this decoration by impressing whip-cord into the damp clay. This, Rosenberg believes, is the origin of the cord-impressed pottery that has been found widely distributed over Europe.

It was in the park-land to the north-west of Kiev that, I believe, some of the people of the western steppe came across people making this cord-ornamented pottery, took a fancy to it and seized some of the women to act as their potters. I imagine, too, that a party of Satep people from the eastern steppe came here too and did the same.

The distribution of cord-ornamented pottery suggests that parties of men from the park-land of the northern Ukraine, including perhaps some who had come from the eastern steppe, passed along the loess belt of Galicia and by the corridor already indicated to the east of the Elbe, as far as Jutland, where they arrived with their corded-ware and stone battle-axes and buried their dead in single graves. Since corded ware is found also on the shores of the Baltic from Prussia to Finland, one might be tempted to think that they spread eastward from Denmark through the pine-woods to the eastern end of the Baltic. The absence, however, of corded-ware from Pomerania precludes us from adopting this view.

Nevertheless corded-ware and Satep dialects reached this corner of the Baltic, and we must discover how men of the eastern steppe passed thither from the Ukraine. The intervening land was thickly wooded right down to the rivers' margins, so that few villages were built along their banks, and such settlements as existed were on mud-banks in midstream, precursors of that excavated at Biskupin. The only way by which they could have covered this distance was by taking dug-out canoes on the San and floating down the Vistula to its mouth.

A large group of men from the grass-lands, including apparently some from the eastern steppe, after starting along the Galician corridor, settled in the Thuringian Hills. These, we may imagine, mounted on horses—which Clark will not admit, though doubtless using some of these beasts as pack-animals—drove bands of cattle along the loess belt, armed with stone battle-axes, and taking with them some women to make the pots to which they had become accustomed.

It was between 2000 and 1800 B.C. that, according to Hawkes, a number of men with beakers passed down the valley of the Upper Rhine, but, when they had reached its junction with the Main, some of them passed up that river and eventually reached the Thuringian Hills. While many of the Beaker-folk pursued their journey down the Rhine valley into Holland, introducing beakers of the B2 type, those that had turned eastward settled for a time near the cord-ware-folk, and learned much from them.

First they acquired the habit of decorating their beakers with cord impressions, making what are known as ‘A’ beakers, then they obtained horses and noticed that these animals, when tethered, cropped a neat disk in the grass with an outline of a perfect circle; this taught them how to describe a circle with a peg and a thong. Lastly they adopted the plan of fencing their graves, a plan already used by the cord-ware-folk at Koberstadt in Hesse and Baiersch in Darmstadt as well as at a number of other sites in Westphalia; the newcomers also erected one near Horbach.

Before long they followed their fellows to the Netherlands and settled near the mouth of the Rhine, coming into contact here with the people, lately arrived from Denmark, who buried their dead in megalithic tombs and used pottery decorated with grooves. In Holland one of these A-Beaker men was found buried with his horse, and all were interred in graves surrounded by timber fences and covered over with mounds, both fence and mound being perfectly circular. A single row of posts, set close together, surrounded two tombs at Uddel, a double-row at Wessinghuizen, and a log fence, such as are erected on western ranches, at Langedijk.

About 1800 B.C. some of these A-Beaker folk landed at various places on the east coast of Britain. After a time they erected a circular fence around the grave of one of their number on Calais Wold in Yorkshire, and later set up a similar timber circle as a cattle corral at Bleasdale in Lancashire.

Then a group, accompanied by women accustomed to making grooved-ware pots, came to the mouth of the Yar and, ascending that river, made another wooden structure at Arminghall near Norwich. They then passed over the moors to Thetford, near which fragments of grooved-ware have been found, and following the Icknield Way to the Thames, and the Ridge Way through Berks and Wilts, came to the banks of the Kennet, where they erected another timber circle known as the Sanctuary. Then, crossing Tan Hill, they came to the Vale of Pewsey, where they seem to have set up another near Marden. At last they reached Salisbury Plain, where they built Woodhenge and left much grooved-ware scattered about the site. Perhaps also at Stonehenge—but, as Kipling used to say, that is another story.
ANTHROPOLOGICAL FEATURES OF THE SHANS SOUTH-WEST YUNNAN. By Yin-Tang Chang, University of China. Illustrated.

The Shans are by far the leading people both in number and culture, among the many different ethnic groups on the borderland 'where China meets Burma.' Linguistically they differ from all the other aboriginal tribal peoples. Racially both the Chinese Shans and the Shans of North Burma together with the Siamese all belong to the so-called Tai or Thai race. They are essentially a tropical and sub-tropical people. Although the Shan settlements are in the mountainous districts of Southwest Yunnan, they are confined to the low plains along the river valleys, at an altitude ranging from 400 to 1,000 metres above the sea, in a region lying between the Mekong and Irrawaddy south of the 25th parallel of latitude. Some are also seen in the low valleys of the Red River drainage area, but they are insignificant in number. The Shans are concentrated in the plains around Lianshan (Chanta), Ying Kiang (Canal), Nantien in the Tayingkiang (River Tai-Ping) valley and around Chefang, Mangshih, Shweli (Mengmao) and Lungchuan in the Lungchuan-kiang (River Shweli) valley of the Irrawaddy, and around Lukiang in the valley of the Salween, and around Mengsa, Kengma, Mengting, and Hopong in the Nanling valley, and around Mengti, Menghe, and Chenkang in the valleys of Chenkang and Kuko tributaries of the Salween. These valley plains are basins in form, north-to-south in orientation and very much truncated in topography. They are virtually rift valleys deeply eroded, U-shaped, with mountains rising abruptly to from 1,000 to 1,500 metres above the floor of the valley on both sides, e.g. Mengting in the Nanling valley is only 450 metres above the sea, while Nanla on the mountain to the east of it, rises to 1,580 metres in height. Another great contrast in topography is seen at Lukiang Bridge across the Salween, which is only 670 metres above the sea, with the Kaolikung mountain rising to over 2,300 metres, like a sheer cliff, to its west. Owing to their relatively low latitude together with their southerly orientation and their enclosed topography, these low plains have a climate which is hot and moist, especially in the summer. Broad-leaved evergreens such as the big banyan trees, with numerous large air-roots hanging down to the ground and grown up again as secondary trunks, are the most representative trees of the region. Surface drainage is bad, so marshes and reeds are dotted here and there, forming breeding grounds for malaria mosquitoes. Summers are very trying; no other people venture to enter the region at that season. Even during the dry winter season, the January afternoon temperature often rises to over 19° C., which is almost as high as the mid-summer July records of Kunming (Yunnanfu) at 1,892 metres, 25°02 N. lat., 102°41 E. long., the provincial capital of Yunnan. In the winter, morning fogs appear regularly and are heavy and persistent, lasting till noon every day. So the morning temperatures are fairly low, and the wet fog renders the sensible temperature even lower. But with the disappearance of the fog, temperature rises fast up to 19° C. in the shade and over 22° C. in the sun even in the coldest month (January), e.g. at Mengting (at 450 metres, 23°28 N., 99°23 E.) on 5 January, 1940, the writer experienced a daily temperature change as follows—in the foggy morning it is 9° C. at 8 a.m., 10° C. at 9 a.m., and 15° C. at 10 a.m., then the fog disappeared at 12 noon and the temperature rose to 17° C. in the
shade and 19°C in the sun. At 4 p.m. of the same day, the thermometer rose to 19°C in the shade and 22°C in the sun. Mengting with an average temperature of 16.5°C for January and 26.9°C for July is considerably higher than that of Kunming with an average of 9.7°C and 19.8°C for the respective months. Mengting has twelve months with a temperature above 16.5°C and eight months above 20°C. So these valley plains on the Yunnan-Burma borderland like the Namting R. where Mengting is situated, are practically hot all the year round and there is no cold season. Mengting has an annual rainfall of 1,644 mm. which is much heavier than that of Kunming (1,245 mm.). Such intense heat combined with high moisture makes the climate most enervating. The Shans seem the only people who can stand this trying climate and have become immune to its bad effect.

Out of the 105 Shan people observed and measured, there are 41 brachycephals, 40 mesocephals, 21 hypobrachycephals, and only two dolichocephals. So the Shans are mainly a meso-to-brachycephalic people. Judging by their cephalic index they are undoubtedly Mongoloid. But they differ from the other Mongoloid peoples in their nasal form by having a platyopic type. Their nasal index points to that; the majority of them are platyrhine at a total of 67 out of the 105 cases, with 35 mesorhines and only three leptorhines. Their inter-orbital space is generally wide. This development is certainly due to a slow adaptation to local hot and moist climate. It is only through a long period of acclimatization to a hot and moist climate that platyrhines are formed. At present their nasal index on the average is at least 20 units larger than that of the true Mongols or the Northern Chinese. People migrate from relatively cold and dry climate to hot and moist regions, their nasal index is generally increased at the rate of one unit per 500 years. Therefore the Shans must have adapted themselves to their present geographical environment for a considerable period. Judging by their nasal index, they must have migrated to their present environment at least over 10,000 years. This suffices to disapprove the postulation that the Shans have been driven from the healthy highlands of Yunnan to these enervating valleys coveted by no other people. Ever since they adapted themselves to these low valley plains in south-west Yunnan, the
Shans have probably never been further north than the piedmont plains of Tali, where they reached their political prime by establishing the kingdom of Nan Chao during the Tang Dynasty. There is no indication whatever that the Shans have ever been a highland people in Yunnan.

The Shans are rather short in stature; medium heights are rare even among the males. Most of the females belong to the pygmy category. Small they are, but well built in physique, irrespective of the sapping climate. Like all the other Mongoloid peoples, their hair is straight and black; they belong to the leiotrich type. But unlike the southern Chinese, the irises of the Shans are chestnut-coloured. In this they are more like the northern Chinese and the Mongols. This may be due to the constant winter fog and heavy summer clouds which render insolation not as strong as its low latitude would suggest. But the hot and wet climate has made their lips become thick and everted for the convenience of discharging internal heat, like all the other tropical peoples. Quite prominent occiputs are common. Like the other Mongoloids, the Shans are xanthodermic, but much lighter in pigmentation than their cousins in Indo-China. This is again due to the moderation by fog and clouds. The above physical features of the Shans show that they are a branch of the Mongoloid race, but evidently they distinguish themselves in certain features by special adaptation to local environ-

ment. They may have mixed with the Nesiots, the early spread of the cymotrich dolichocephalic peoples coming from Indonesia, owing to their geographical, contact. But their effect among the Chinese Shans is insignificant; slight traces in stature, nasal index, and very rarely in cephalic forms.

As to their costume, the men of the Shans are very Sinicized, but do not wear long gowns. But the Shan women and girls still retain their peculiar ways. The unmarried maidens wear short coat and trousers, while the married women dress in skirts without trousers but with blue leggings. Most go barefoot, though shoes are occasionally seen. Both men and women wear turbans, and the married women always distinguish themselves by having their turbans wound up about one foot high above their heads. Practically all the Shan women have dark teeth and red lips stained by betel; white teeth, however, can be seen among the young generation. The Bu-Ma-San females are handsome and clean-looking, gay and alert. They usually wear fancy-coloured dresses and turbans, not content, like the Shan-Da-You, with simple black and white.

The Shans are a settled and agricultural people. They cultivate almost exclusively rice with only a small amount of sugar cane. Owing to the enervating climate and the lack of necessity, they use only a small portion of the cultivable land around their huts and reap only one crop in a year. They eat glutinous rice only, and sell the ordinary rice to their neighbours in exchange for their other needs. The women undertake hand-weaving mainly for home use. They live in simple huts made of bamboos thatched with straw; some are raised up on posts.
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<tr>
<td>Shan-Da-You</td>
<td>Land Shans</td>
<td>Bieh-go</td>
<td>Nine</td>
<td>Nam-ai</td>
<td>Sweet water</td>
</tr>
<tr>
<td>Bu-Ma-San</td>
<td>Water Shans</td>
<td>Gow-go</td>
<td>Ten</td>
<td>Pé</td>
<td>White</td>
</tr>
<tr>
<td>Tai-No</td>
<td>People of the Upper Shan States</td>
<td>Shib-go</td>
<td>Hundred</td>
<td>Lam</td>
<td>Black</td>
</tr>
<tr>
<td>Tai-Tao</td>
<td>People of the Lower Shan States</td>
<td>Ba-go-nun</td>
<td>Thousand</td>
<td>Lun</td>
<td>Red</td>
</tr>
<tr>
<td>Gao</td>
<td>You</td>
<td>Li-heun</td>
<td>Ten thousand</td>
<td>Leng</td>
<td>Yellow</td>
</tr>
<tr>
<td>Moo</td>
<td>He</td>
<td>Hsi-ping</td>
<td>Head</td>
<td>K'é</td>
<td>Blue</td>
</tr>
<tr>
<td>Gao-Nai</td>
<td>People</td>
<td>Goo-hoo</td>
<td>Mouth</td>
<td>Ga-la</td>
<td>Foreigners</td>
</tr>
<tr>
<td>Gwn</td>
<td>Family or Home</td>
<td>Wu-lun</td>
<td>Nose</td>
<td>Ga-la-pé</td>
<td>White foreigners</td>
</tr>
<tr>
<td>Pu-Mao</td>
<td>Man</td>
<td>Ma-ta</td>
<td>Ear</td>
<td>Bing</td>
<td>Soldiers</td>
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<tr>
<td>Pu-Mai</td>
<td>Women</td>
<td>Meng-hoo</td>
<td>Hair</td>
<td>Kwang</td>
<td>Gun</td>
</tr>
<tr>
<td>Hun</td>
<td>Old</td>
<td>Qin-ho</td>
<td>Tongue</td>
<td>Wan-tung</td>
<td>Brass kettle</td>
</tr>
<tr>
<td>Tác</td>
<td>Old man</td>
<td>Lin</td>
<td>Hand</td>
<td>Geng</td>
<td>Tripod (fire-pot support)</td>
</tr>
<tr>
<td>Gwn-T'ao</td>
<td>Little Kids</td>
<td>Teng</td>
<td>Foot</td>
<td>Fi</td>
<td>Fire</td>
</tr>
<tr>
<td>Ai-Wan</td>
<td>Father</td>
<td>Kà-lung</td>
<td>Thigh</td>
<td>Gō-k'ai</td>
<td>Match</td>
</tr>
<tr>
<td>Pó</td>
<td>Mother</td>
<td>Kà-giang</td>
<td>Leg</td>
<td>P'un</td>
<td>Fuel or wood</td>
</tr>
<tr>
<td>Mai</td>
<td>Son</td>
<td>Nuó</td>
<td>Moustache</td>
<td>Dai-fl</td>
<td>To light a fire</td>
</tr>
<tr>
<td>Lan-T'ai</td>
<td>Children</td>
<td>Gong-pa</td>
<td>Heaven</td>
<td>Bia</td>
<td>Fire lighter</td>
</tr>
<tr>
<td>Pu-Lun</td>
<td>Grandfather</td>
<td>Long-lín</td>
<td>Earth</td>
<td>On-p'ai</td>
<td>To get warm in front of a fire</td>
</tr>
<tr>
<td>Mía</td>
<td>To give birth to a child</td>
<td>Lao</td>
<td>Sun</td>
<td>Fa-do</td>
<td>Door</td>
</tr>
<tr>
<td>Mía-T'ai</td>
<td>To give birth to a baby boy</td>
<td>Lao</td>
<td>Moon</td>
<td>Só</td>
<td>Lock</td>
</tr>
<tr>
<td>Mía-Bú-Young</td>
<td>To give birth to a baby girl</td>
<td>Yúnläm</td>
<td>Stars</td>
<td>Gá-só</td>
<td>Key</td>
</tr>
<tr>
<td>Lu-Bá</td>
<td>To get married to—</td>
<td>Yún-né</td>
<td>Lower town (Meng-ting)</td>
<td>Gō-lü</td>
<td>Rope</td>
</tr>
<tr>
<td>Nai-T'ai</td>
<td>Wife</td>
<td>Yúnlüm</td>
<td>Upper town (Meng-ting)</td>
<td>Kiß-mu</td>
<td>Needle</td>
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<tr>
<td>P'ù-Man</td>
<td>Husband</td>
<td>Ho-lung</td>
<td>Yamén</td>
<td>Nun-teng</td>
<td>Stool</td>
</tr>
<tr>
<td>Die</td>
<td>Die (dead)</td>
<td>Chin-yùn-yún</td>
<td>To eat (rice)</td>
<td>Fun</td>
<td>Table</td>
</tr>
<tr>
<td>To-Go</td>
<td>Chopsticks</td>
<td>Mu-chin-na</td>
<td>To eat no more</td>
<td>Fun-chi-kao</td>
<td>Chair</td>
</tr>
<tr>
<td>Up or Gá-P'ù</td>
<td>Rice-bowl</td>
<td>Chin-k'ou</td>
<td>To eat</td>
<td>Wan</td>
<td>Day</td>
</tr>
<tr>
<td>En-Fén</td>
<td>Tea-cup</td>
<td>Chin-loa</td>
<td>Drink tea</td>
<td>Wan-nun</td>
<td>One day</td>
</tr>
<tr>
<td>Goo</td>
<td>Soup</td>
<td>Chin-ya</td>
<td>Drink wine</td>
<td>La-ping</td>
<td>Evening or night</td>
</tr>
<tr>
<td>Ba-Woo</td>
<td>Face tub</td>
<td>Chin-nâm</td>
<td>To smoke</td>
<td>P'a-leng</td>
<td>Morning</td>
</tr>
<tr>
<td>Vi-Hó</td>
<td>Bed</td>
<td>Chin-né</td>
<td>To drink water</td>
<td>Gong-na-la</td>
<td>Noon</td>
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<tr>
<td>Yáb-Chang (Up-chum)</td>
<td>Blanket</td>
<td>Gōé</td>
<td>To eat oil</td>
<td>Ma-hun-la</td>
<td>Go home</td>
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<tr>
<td>Man-da</td>
<td>Comb</td>
<td>Gō-mu-pek</td>
<td>Salt</td>
<td>Nuan</td>
<td>To sleep</td>
</tr>
<tr>
<td>Na-li</td>
<td>Mirror (glass)</td>
<td>Hái</td>
<td>Salt egg</td>
<td>Lu-lai</td>
<td>To wake up</td>
</tr>
<tr>
<td>Mao-ho</td>
<td>Spectacles</td>
<td>Né</td>
<td>Egg</td>
<td>Luai</td>
<td>Mountain</td>
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<td>Kin-ho</td>
<td>Thermos-flask</td>
<td>Né-wu</td>
<td>Chicken's egg</td>
<td>Ma-hsiung</td>
<td>Stone</td>
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<tr>
<td>Swái-da</td>
<td>Box</td>
<td>Né-mu</td>
<td>Meat</td>
<td>Köe</td>
<td>Bridge</td>
</tr>
<tr>
<td>Tsái-gia</td>
<td>Soap box</td>
<td>MÁ</td>
<td>Beef</td>
<td>Nam</td>
<td>River or water</td>
</tr>
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<td>Ma-tung-tzé</td>
<td>Trunk</td>
<td>Wu</td>
<td>Pork</td>
<td>Nam-ting</td>
<td>Namting river</td>
</tr>
<tr>
<td>Gap-tung</td>
<td>Face tub</td>
<td>Mái</td>
<td>Horse</td>
<td>Gá</td>
<td>Cold</td>
</tr>
<tr>
<td>Ga-kei</td>
<td>Blanket</td>
<td>Gái</td>
<td>Cow</td>
<td>Mei</td>
<td>Hot</td>
</tr>
<tr>
<td>Gio</td>
<td>Cloth shoe (slipper)</td>
<td>Gá'í</td>
<td>Goat</td>
<td>Fun'</td>
<td>Rain</td>
</tr>
<tr>
<td>Ssh</td>
<td>Wooden shoe</td>
<td>M'a</td>
<td>Chicken</td>
<td>Mei-hung</td>
<td>Banya tree</td>
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<tr>
<td>Hóo-go</td>
<td>Cloth</td>
<td>Mu</td>
<td>Dog</td>
<td>Mai-ee</td>
<td>Tree</td>
</tr>
<tr>
<td>Bai</td>
<td>Trousers</td>
<td>Miao</td>
<td>Pig</td>
<td>Mai-bí</td>
<td>Spruce</td>
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<tr>
<td>Gwěn</td>
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<td>Ló</td>
<td>Cat</td>
<td>Mai-pó</td>
<td>Bamboo</td>
</tr>
<tr>
<td>Wa</td>
<td>Watch</td>
<td>Mái-li</td>
<td>Mule</td>
<td>Jéh</td>
<td>Grass</td>
</tr>
<tr>
<td>Gun-nun</td>
<td>Hat</td>
<td>Yung (men-yung)</td>
<td>Donkey</td>
<td>Kome</td>
<td>Gold</td>
</tr>
<tr>
<td>Shuong</td>
<td>Turban</td>
<td>Fly</td>
<td>Mosquitoes</td>
<td>Èn</td>
<td>Silver</td>
</tr>
<tr>
<td>Sam</td>
<td>Pullover (sweater)</td>
<td>Húi</td>
<td>Rice in husks</td>
<td>Tung</td>
<td>Corner</td>
</tr>
<tr>
<td>Hai-go</td>
<td>Leather belt</td>
<td>K'ao-Pèh</td>
<td>Rice</td>
<td>Lieh</td>
<td>Iron</td>
</tr>
<tr>
<td>Ha-go</td>
<td>Button</td>
<td>K'ao-san</td>
<td>Beans</td>
<td>Cheng-lieh</td>
<td>Blacksmith</td>
</tr>
<tr>
<td>Hoo-go</td>
<td>Leather shoe</td>
<td>Tōo</td>
<td>Gluttonous rice</td>
<td>Chang-mai</td>
<td>Carpenter</td>
</tr>
<tr>
<td>Gwěn-i-s</td>
<td>Cloth shoe</td>
<td>K'ao-lo</td>
<td>Cooked rice</td>
<td>Deng-bí</td>
<td>Flute</td>
</tr>
<tr>
<td>Sh</td>
<td>One</td>
<td>K'ao-s</td>
<td>Corn</td>
<td>Kwong</td>
<td>Drum</td>
</tr>
<tr>
<td>Two</td>
<td>Two</td>
<td>Fa-bun</td>
<td>Turnips</td>
<td>Mong</td>
<td>Gong</td>
</tr>
<tr>
<td>Three</td>
<td>Two</td>
<td>Né</td>
<td>Oil</td>
<td>K'á-yá</td>
<td>Bugle</td>
</tr>
<tr>
<td>Four</td>
<td>Two</td>
<td>Né-mu</td>
<td>Rubber</td>
<td>Duú-lúó</td>
<td>Chinese fiddle</td>
</tr>
<tr>
<td>Five</td>
<td>Two</td>
<td>Num-ai</td>
<td>Lung</td>
<td>Kan-yá</td>
<td>Tobacco</td>
</tr>
<tr>
<td>Six</td>
<td>Five</td>
<td>Num-ai</td>
<td>Sugar</td>
<td>Mao-yá</td>
<td>Smoking pipe</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mak-one</td>
<td>Orange</td>
<td>Lov-ya-ping</td>
<td>Opium</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nam</td>
<td>Water</td>
<td>Soap-silik</td>
<td>Cigarette holder</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nam-ga</td>
<td>Cold water</td>
<td>Silik</td>
<td>Cigarette</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mi</td>
<td>Knife</td>
</tr>
</tbody>
</table>
with their underpart used as cow-folds, and some are built directly on the ground. Bamboo is the chief material for domestic uses—houses and fences, beds, tables and chairs, buckets as well as poles for carrying water, for fuel, and for bridging rivers. Some bamboo bridges are so strongly built that even motorcars and lorries can pass over them, like the one across the Shweli River. Thus the Shans can be called a bamboo-using people, different from all the other various wood-using peoples on the neighbouring mountains.

The Shans possess a written language of their own which is very much like Sanskrit. Undoubtedly this has a close connexion with the incoming of Buddhism, their only religion. On account of their relatively higher standard of living and more advanced social organization, the Shan written language is increasingly adopted by the other more primitive neighbouring peoples on the mountains, e.g. the Kwa people are taking up the written language of the Shans, though they have another spoken language of their own. The Shans talk very much like the Cantonese in tone except on a slightly lower pitch, that has made Gregory think that the Shans might have originally come from Canton and Fukien. But the light colour of their irises uproots this supposition without hesitation, for black irises will not change even if their environment has changed.

Table I. Distribution of Some of the Anthropometric Features of the 105 Shans Measured in South-west Yunnan.

A. Distribution of Cephalic Forms.

<table>
<thead>
<tr>
<th>Cephalic Form</th>
<th>Male</th>
<th>Female</th>
<th>Infants</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypobrachy</td>
<td>1</td>
<td>0</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>Brachy</td>
<td>10</td>
<td>8</td>
<td>23</td>
<td>41</td>
</tr>
<tr>
<td>Meso</td>
<td>10</td>
<td>6</td>
<td>24</td>
<td>40</td>
</tr>
<tr>
<td>Dolicho</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Subdolicho</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>15</td>
<td>69</td>
<td>105</td>
</tr>
</tbody>
</table>

B. Distribution of Nasal Index.

<table>
<thead>
<tr>
<th>Nasal Form</th>
<th>Male</th>
<th>Female</th>
<th>Infants</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Platyrhine</td>
<td>8</td>
<td>8</td>
<td>51</td>
<td>67</td>
</tr>
<tr>
<td>Mesorhine</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Leptorrhine</td>
<td>0</td>
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<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>15</td>
<td>67</td>
<td>105</td>
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</table>

C. Distribution of Sature.

<table>
<thead>
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<th>Stature</th>
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<th>Female</th>
<th>Infants</th>
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<td>Pygmy</td>
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<td>6</td>
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<tr>
<td>Short</td>
<td>15</td>
<td>9</td>
<td></td>
<td>24</td>
</tr>
<tr>
<td>Medium</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Tall</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Very Tall</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>15</td>
<td></td>
<td>38</td>
</tr>
</tbody>
</table>

At present the Shans still form small separate communities, ruled by their own chieftains called Saubreas by themselves or TU SZE in Chinese, under the supervision of the local Chinese magistrates. So the Shans virtually enjoy a large measure of autonomy.

Notes on the Anthropometric Table.

The notes which follow have been compiled by Miss Leland, Miss Oliver, and Mr. Edwards, of the University of Manchester, under the direction of Professor H. J. Fleure, F.R.S., from the tabulated observations of Yin-Tang Chang, which may be consulted at the Royal Anthropological Institute, 21 Bedford Square, London, W.C.1.

Twenty-four males over 17 and twenty-five males of 14–16 were measured, also fifteen females of 17 and above and a few younger people of both sexes. The numbers of women are insufficient for drawing conclusions but a few notes will be given.
### MAN

**Some Anthropometric Measurements of 105 Shans in South-west Yunnan**

**[May–June, 1944.](#)**

<table>
<thead>
<tr>
<th>Sex</th>
<th>Age</th>
<th>H.L</th>
<th>H.B</th>
<th>C.I</th>
<th>N.L</th>
<th>N.B</th>
<th>N.I</th>
<th>Statute in mm.</th>
<th>Hair-Texture and Colour</th>
<th>Colour of the Iris</th>
<th>Lip Form</th>
<th>Other Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chenkang : alt. 700 m.</strong></td>
<td><strong>Valley Basin</strong></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>M.</td>
<td>16</td>
<td>186</td>
<td>151</td>
<td>81-2</td>
<td>30</td>
<td>29</td>
<td>96-6</td>
<td>12,210</td>
<td>Straight and black</td>
<td>Dark-brown</td>
<td>Thick and everted</td>
<td>Platyopic.</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>178</td>
<td>146</td>
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<td>92-3</td>
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<tr>
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<td>16</td>
<td>179</td>
<td>142</td>
<td>79-3</td>
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<td>16</td>
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The males of 17 and over have head lengths mostly ranging from 181 to 199 mm., while among the youths of 14–16 the main range is 173–186. The head-breathings in the older group have a main range 147–156 mm., the youths showing a corresponding range 142–154. This indicates, so far as it goes, that, as usual, the later stages of head growth are more particular of growth in length. Of the fifteen women of 17 years and above twelve have head-lengths ranging from 176–188 while breaths range from 143–152, the resemblance of these main ranges to those of the youths being thus close, as usual.

As regards the cephalic index, there was no appreciable difference in the main range among males of over 17 and those of 14–16, though one can argue from the head-lengths that the indices of youths would tend to decrease when they grow beyond the age of 17. The main range here was from 78.2 to 85.2 with thirty-seven of the forty-nine within these limits and four youths and one adult man having relatively broader heads and seven having values ranging down to 74 while one is far off at 70.8. The nasal index in the men of 17 and above has its main range between 76.1 and 89.6, while that of the youths has the corresponding figures 92.3 and 102.8. The nose, like the skull, grows more in length than in breadth during the later stages. It may be noted in passing that among the men of 17 and over, the nasal index tends to higher values among those who live at 450 metres altitude than in those who live at 900 or higher, the averages being respectively 86.7 and 83.9, but numbers are insufficient for further comments.

The interorbital breadth is generally considerable. Stature in the males of 17 and above ranges mainly between 1,498 and 1,586 mm., while that of females of similar ages ranges mainly between 1,468 and 1,518 mm., the range as well as the stature being less, especially on the high side. While, therefore, these people are Mongolid by cephalic index, their platyopique condition differentiates them from their presumed congenerous and seems to represent an adaptation to the warm valleys. The shortness of stature is notable. Like all the other Mongolid peoples they have straight black hair. Their irises are chestnut-tinted more like those of northern Chinese and Mongols than like those of S. China. The lips are thick and everted as one would expect in such a hot wet climate. Occiputs are quite prominent and seen in many cases. Like the other Mongoloids, the Shans are xantherdemi, but much lighter in pigmentation than their cousins in Indo-China. This is again due to the moderation of fog and clouds.

Notes.

1 This article was written for the Science Reports of National Tsing Hua University, Series C. Geology, Geography, and Meteorology, in Commemoration of the Thirtieth Anniversary of the University, April, 1941. But on account of the war, publication of this kind has been made impossible in China.

2 The Shans are divided into Han or Land, and Shui or Water Shans, according to the location of their dwellings and some other custom, they are called Shan-Da-You and Bu-Ma-San respectively by themselves. This has probably something to do with the nomenclature of the 'Shans.'

The Shans are called Po Yi or Bai Yi in Chinese and written in various forms. Ref. Yunnan Tung Chih.

3 Major H. R. Davies has classified the peoples of South-West China into four main families, namely the Mon-Khmer, the Tibetan-Burman, the Shan, and the Chinese. Yunnan, The Link between India and the Yangtze, Cambridge, 1909.

4 Dr. V. K. Ting has considered the Shans as one of the three main aboriginal groups of Yunnan, i.e. the Shans, the Mon-Khmer and the Tibetan-Burman. China Year Book, 1925.

5 The Shans call themselves Dai meaning 'ourselves,' equivalent to the 'We' group in meaning of Dr. Li Chi's classification of peoples. Li Chi, The Formation of the Chinese Peoples.

6 A. Davies, 'Some advanced modifications on the relationship between Nasal Index and Climate,' Man, 1929, 4.

7 Beatrix Metford, Where China meets Burma, 1935, in the chapter 'Meng Mao and its Rulers.'

8 The irises of the Cantonese are pitch black.

9 W. J. Gregory, To the Alps of the Chinese Tibet. 'Where they came is uncertain, but there is close similarity to the Cantonese'. . . . they are supposed to have emigrated from Kwangtung and Fukien.'


The tribes of the Great Plains area were remarkably similar in their culture patterns, but there was one basic distinction. While age differences were important in all the tribes, it was only among the Arapaho, Gros Ventre, Blackfoot, Mandan and Hidatsa that the ceremonial societies were organized upon the age-grading principle. Any theory of age-grading that would be useful in explaining Plains Indian culture would therefore have to account for this distinction.

The first requirement in approaching such a problem is to set up a theory which appears to account for elaborate age grading systems. The attempt to apply such a theory to the Plains data may then reveal the factor or factors that have led to the difference in social organization.

Age-grading, as discussed here, is a system of differential distribution of rights and obligations, of prohibited, permissible, and required activities, according to different (socially recognized) periods of life and according to the social distinctions established between the sexes.
It is clear that age-grading, defined in this manner, is present in every society of the world. However, in some societies it is of relatively minor importance, whereas in others a formal system of age-graded associations has become accentuated at the expense of other social structures. What are the conditions that lead to this formalization of the age-grading system?

I should expect to find a highly organized and formalized system of age-grades in societies which

1. emphasize activities requiring strength and dexterity,
2. require large-scale co-operation,
3. have little division of labour,
4. have little economic inequality, and
5. pursue a nomadic or semi-nomadic existence.

If a society accentuates certain activities which require great physical vigour and dexterity, we should expect age distinctions to become very important. If such activities are not limited to men at the peak of their physical powers, from the late teens through the late twenties, such men are nevertheless best able to bear the brunt of the performance for their society.

A complex division of labour among the participating men militates against the predominance of the age-grading system. Where a number of occupations are practised, they tend to work out so that specialists in one line customarily originate action for those in another line, thus assuming higher status. This accentuates status distinctions at the expense of age distinctions. The division of labour gives rise to trading relations, which tend to promote the organization of society in terms of economic relations. The trade requires regulation, and this favours the development of political organization. The rise of economic inequalities, on the basis of a complex division of labour, militates against the importance of age-grades, for the acquisition of wealth enables certain individuals to control others without regard to age distinctions.

Where property is owned by the family group and is passed down from father to son, the individual's social and economic existence depends upon his place in the family system. Under these conditions, age-grading is naturally subordinated to family relationships. Where the family does not have a fixed relationship to the soil and where therefore the child is not so dependent upon his parents for inheritance, we should expect age-grading to assume more prominence. Hence a nomadic or semi-nomadic existence favours this development.

These conditions are clearly interrelated. Nomads cannot practice a highly developed division of labour, and in such a society economic inequalities cannot remain fixed through the inheritance of land and the construction of improvements upon it. Nomads of necessity pursue a way of life which puts continual demands upon their strength and dexterity.

The Masai 1 of East Africa, who are noted for the elaboration of their age-grading system, conform in every respect to the criteria given above. The Zulus 2 and the Dinka 3 also appear to fit the criteria. There were in Africa a number of tribes having age-grading systems that were fairly highly developed. Unfortunately it is difficult to apply the theory to most of these cases because we have insufficient data upon actual behaviour of the tribesmen. For example, field studies report that age classes are 'important' or 'unimportant,' that they are 'prominent' or else play a minor role. When we compare one society with another, such general statements are of dubious value. In order to estimate the importance of age-grading in a given society, we should have to work out for the entire society the pattern of interactions 4 of individuals in age classes, families, and other institutions. A study of the frequency of interaction of individuals in age sets, compared with the frequency in other sets, would provide an objective criterion for estimating the importance of the age-grading system.

Lacking data of this nature for most of Africa, we must turn elsewhere for a test of the theory. Data on behaviour among the Plains Indians are also inadequate for a conclusive test, but the distinction between tribes with or without age-graded ceremonial societies is sufficiently clear cut as to permit a useful investigation of the problem.

On the Plains the ceremonial societies functioned only at one period of the year. In winter, when buffalo herds were scattered, the tribesmen clustered in small bands. There was also a clan organization which varied somewhat in form from tribe to tribe. When the buffalo ran in great herds in the summer, the whole tribe came together. This was the period for the great tribal ceremonies, for large-scale war parties, and for the organization of the great annual buffalo hunt. In this period, the men organized themselves into societies for warfare, policing, and the hunt.

2 E. J. Krige, The Social System of the Zulus. London: Longmans, Green & Co., 1936. The Zulus had a fairly high development of agriculture, but this was primarily the sphere of the women. Economic activity of the men who formed the age-graded regiment was organized primarily around the herding of cattle.
Robert H. Lowie has summarized the characteristics of the highly graded systems of the Blackfoot, Gros Ventre, Arapaho, Mandan, and Hidatsa tribes in this way:

The features common to all five systems were these: In each tribe the societies were graded in a series, the difference in grade corresponding to a difference in age. Except for the very young and the very old, practically every male member of the tribe belonged to one of the societies. Age was nowhere the sole condition for joining; either membership itself or the requisite emblems and instructions had to be bought, and this purchase, even among the Blackfoot, was normally collective rather than individual. As part of the purchase price, the buyer ceremonially surrenders his wife to an older man in some, at least, of the societies of each tribe. In every case the function of a tribal police during the hunt is associated either with the entire system or with one of the societies in the series. Finally, in every one of the five tribes a women's organization connected with the buffalo is associated with the series, while no such society is reported from tribes having ungraded military organizations.4

Age distinctions were not rigidly adhered to in these societies. Cases have been reported in which old men had retained membership in younger societies, serving as mentors of the youth, and young men became members of societies of the very old to serve as messenger boys and perform other tasks requiring youthful vigour.5 Nevertheless, nearly all members of a given society were roughly of the same age.

There was no special warrior class, as among the Masai. We can assume that the younger societies must have played the major role in the buffalo hunt, though we have no field accounts that record actual participation. The elder societies took the lead in organizing the religious ceremonies. The position of the older men was supported not only by their control of the ceremonies but also by the nature of the rite of passage through which a group moved up in the age-grading scale. Throughout this ceremony the younger group remained passive and simply responded to the originations of action on the part of the elders.6

These five tribes fit my proposed specifications for age-grading systems quite closely. Warfare and the buffalo hunt were activities that required strength, dexterity, and large-scale organization. There was little division of labour and small development of economic inequality among them. They pursued a nomadic existence—with two exceptions. The Mandan and Hidatsa tribes were settled agriculturalists, living in well-constructed permanent dwellings, for a part of the year. However, as the buffalo hunting season approached, they left their villages and organized themselves for that period in terms of their age-societies. Since in no tribe did the age-societies function except in this ceremonial, hunting, and warfare season, it was apparently possible for a tribe to live a sedentary life for a part of the year and still develop age-societies that became activated in this season.

Lowie pointed out that in the tribes with 'ungraded' societies there was found a tendency for rank in the society to correspond with the age of the members. In the societies of the Oglala the correspondence was fairly close. By means of historical study Lowie showed that even in tribes with graded systems the rank of a particular society was subject to great change over a period of years. While the grades in existence at a given time corresponded with the people's conceptions of social prestige, there was no necessarily permanent connexion between a particular society and a particular age-grade.

Lowie undertook to discover the course of the evolution of the age-grading system and explain why it developed in the pattern found among the Plains Indians. By means of an elaborate analysis of the ethnographic evidence, he concluded that the ungraded systems had developed first and that the graded systems of the Hidatsa, Mandan, Arapaho, Gros Ventre, and Blackfoot had arisen out of the ungraded systems.

Lowie's theory may be accepted or rejected without affecting the problem set forth in this paper. It has been established without question that certain societies, with their ceremonies, were 'diffused' from one tribe to another. This, however, provides us with no basis for explaining the direction of diffusion and the differing lines of development of the social organizations of the tribes. Unless we can discover some objective criterion for distinguishing between tribes with and without graded systems, we must assume that the distinctions were simply the products of historical accidents, and abandon all efforts to discover laws of social organization.

It is suggested here that an examination of the distribution of wealth in the various tribes will enable us to establish such a distinction. In all the tribes that participated in the buffalo hunting and warfare culture complex, the horse was the primary form of wealth. Horses were valued not only for utilitarian purposes; they had great prestige value.

As Wissler has pointed out,7 horses reached the

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5 Plains Indian Age-Societies: Historical and Comparative Summary. Anthropological Papers of the American Museum of Natural History, XI, part XIII.
Plains area from the south, being introduced by the Spaniards into what is now Mexico. In general, the southern Plains tribes, being close to the original source of supply, acquired the horses early and held great numbers of them. The Blackfoot, Gros Ventre, Arapaho; Mandan, and Hidatsa tribes possessed relatively few horses.

To understand the meaning of this contrast, we may consider three cases. Henry Elkin makes this comment upon the role of the horse among the Arapaho:

The horse ... under proper circumstances, might have allowed for social stratification on a property basis. Unlike other forms of property, it was the essential means of procuring a livelihood; was differentiated into relative values, and deteriorated slowly. Nevertheless, any development along this line was precluded by constant warfare. The frequency with which whole herds were won or lost, served to prevent property ownership from becoming permanently concentrated. The spoils of a successful raid, moreover, were equally divided among all participants, although those who acted most effectively received first choice.8

The situation was quite different for the non-graded Crow and Kiowa. Wissler reports that the Crow had more horses than any other Missouri tribe.9 In 1833 Maximilian estimated that the tribe possessed nine to ten thousand horses for a population of 1,000 to 1,200 warriors.10 While horses were gained and lost in raids, the Crow more than held their own in competition with other tribes, so that there apparently was never a time when this wealth was wiped out, even for a short period. We have no exact accounts of the distribution of horses within the tribe, but the evidence indicates that great inequalities existed. Lowie reports that Gray Bull, a chief, had seventy to ninety horses.11 James P. Beckwourth’s autobiography gives abundant evidence of the unequal distribution of horses within the tribe. While Beckwourth was notoriously given to exaggeration, especially in matters involving his own behaviour, his accounts of the Crow culture have proved accurate in the main outlines. Lowie writes:

A large herd had sheer ostentation value; the owner could offer twenty horses for a wife instead of five; and he could give frequent presents to his father’s clansfolk if he liked to hear himself eulogized.12

Beckwourth reported several occasions upon which he was forced to give up all of his horses to compensate a man whose wife he had stolen. Within a short time he would be as wealthy as ever, since all his relatives would make up the loss with gifts from their own herds. Beckwourth smoothed the way for this system by giving away to relatives most of his horses before each wife-stealing episode.

It is clear that unequal distribution of wealth does not, in and of itself, create social stratification. The important question is, how was the wealth utilized? Among all the Plains tribes, prestige and position depended to a large extent upon liberality in the giving of gifts. The gift giver originated action in pair, and set events. He placed the recipients under obligations to him, with the result that, as Lowie has pointed out in the passage above quoted, he could originate action for them in other matters also. When the same individuals were continually able to originate action in this way, positions became fixed and a stratified society developed.

It is also important to observe the channels through which the gifts passed. The accounts of both Beckwourth and Lowie indicate that this activity tended to follow kinship lines to a large extent. This channelling of interactions emphasized kinship ties at the expense of age divisions. It is therefore natural to find that sons among the Crow frequently joined the societies of their fathers and that surrender of one’s wife was never a feature of society initiation, as it was in some of the graded systems.

The Kiowa13 present another clear case of stratification closely related to economic inequalities. This tribe had societies that were roughly related to age distinctions, but other social distinctions prevented the correlation from being very close. The system of societies was, furthermore, overshadowed by a clearly defined class system. Mishkin14 reports that there were four recognized social classes. Social position depended upon war honours, wealth, and special abilities.

Specialization was more highly developed among the Kiowa than among the age-graded tribes. Medicine men, hunters, artists, craftsmen, horse-breakers, herdsmen, and veterinarians were among the specialties recognized.

The Kiowa were extremely wealthy in horses. All members of the top social class were born to wealth. Therefore, in warfare and raids they could afford to concentrate upon the winning of war honours unconnected with economic acquisition. Members of the second class were in many cases as wealthy as the top people but were not born to wealth and consequently had had to win their position by excelling in horse

11 Ibid., p. 223.
13 Ibid., p. 228.
stealing. This concentration of activity prevented them from performing the honorific acts necessary for attaining the top social positions. The third class was made up of those who were poor in horses. At the bottom was a group possessing no horses at al.

There was considerable fluidity in this Kiowa social system. A young man in the bottom position might borrow horses from well-to-do relatives, engage in successful raids, pay his debts, and acquire the wealth to consolidate his position in the second social class. Beyond this, however, it was exceedingly difficult to rise in one lifetime, for the reason already given. Even though there was considerable shifting of social position below the top level, the aristocrats remained in power and those in the second class at any given time were able to build up their power by liberal giving and lending of horses. As among the Crow, the horses tended to pass back and forth along kinship lines, thus emphasizing family ties at the expense of age distinctions.

This theory of age-grading, especially as it applies to the Plains Indians, should be taken as suggestive rather than conclusive. Unfortunately, the existing data upon Plains Indian culture do not provide an adequate basis for giving a final answer to the question. We have a wealth of material upon arts and crafts, customs and folklore, and considerable work has been done upon the diffusion of traits. In order to explore this problem farther, we should know for each tribe roughly the number of horses possessed in relation to the population, how the horses were distributed as to ownership, and through what channels gifts of horses travelled. All ethnologists have recognized that in the Plains area the horse was the primary form of wealth, but, except for the Mishkin study, we have only fragmentary material on this subject. Most ethnologists were content to report in vague, general terms that the Indians rode, stole, and gave away horses. No attempt was made to determine systematically the role of the horse in the social organization of a given tribe.

This paper will, it is hoped, serve a dual purpose. In the first place, it presents a theory of age-grading, which, with modifications, may prove useful in analysing the social structures of a variety of societies. In the second place, the attempt to apply the theory reveals serious gaps in the existing data. If we are to develop a science of comparative social organization, such gaps must first be pointed out and then, wherever the data may still be available, be filled in by field research pointing toward the solution of particular problems.

THE FRENCH INSTITUTE FOR NEGRO AFRICA (L'INSTITUT FRANÇAIS D'AFRIQUE NOIRE). By Th.
Monod, Director; translated by H. V. Meyerowitz.

57 In a volume published in 1942 by the High Commissariat of French West Africa, entitled ‘French West Africa in 1942,’ I wrote at the head of the chapter devoted to the ‘Institut d’Afrique’:

The paraphernalia of what is now conveniently called a new country does not consist only of rails, lorries, and factories. It has become clear that the African edifice will have several façades, and the planners are already beginning to take this into account. Politics and economics will have their place, science will have its place, and intellectual and spiritual life will likewise take theirs.

All these things are interdependent, and it would be fallacious and inauspicious—indeed impossible—to desire discrimination between the true and the useful. To attempt this would be to condemn the one group to confinement within a strictly local utilitarian sphere, and to expose the scientific knowledge of the other to the indiscipline, suspicion, and indeed the hostility of that type of mind which, making a ready pretence at being “realistic,” too often blunders across all the pit-falls of a shortsighted empiricism.

Science has a general aim. Although it must collect the small stones separately, it is to use them in the erection of the great structure which is its supreme and permanent end.

Here in contact with the African realities, science seeks a thorough acquaintance with the present in all its aspects. But this picture would be but a snapshot, fleeting and unproductive, if it did not at the same time reveal itself as both a result and a cause, the consummation of a past which it explains, and the preview of a future to which it will owe its very contents.

The utility of this scientific research has been open to discussion. Only too often people have wanted to see in it nothing but a kind of academic pastime, a pretence at scholarship out of touch with current political, economic, and social affairs. But now this scientific research has gained the day.

Far from excluding science, and with it the scientist, from her colonial territories, France now wishes to make up for lost time and to do this speedily and well.

Scientific research in Africa, to be efficient, must be equipped with both research-workers and materials. Of the two problems the first is the more difficult because it cannot be wholly solved by making provision in the budget.
In those government departments where research and application already exist, it is only necessary to develop those two branches. Elsewhere they must be created.

This was the state of affairs prevailing among the scientific departments which are or will be represented within the Institut Français d’Afrique Noire.

Founded in 1936 by a decree of the Governor General, this Institute was established on a more than modest scale. In 1938 I was still all alone with one African secretary.

We started off with next to nothing, neither personnel, material for a museum, nor a laboratory. But we had at our disposal a building and a periodical—the old Bulletin du Comité d’Études Historiques et Scientifiques de l’Afrique Occidentale Française.

A war soon came to interrupt the development of the Institute. It was deprived of its director, who was mobilized. After 1940 an almost complete paralysis took place, affecting both the management of materials and those publications which were printed in occupied France. Only the end of the war and the return to normal conditions will enable us to carry out our programme of recruitment of staff and installation of equipment.

Once the Institute has attained its normal development it will have become, for a group of scientific departments, that main centre of research, documentation, learning, and integration which was foreseen in its statutes. The science of man with its numerous divisions, properly called ethnology, history, anthropology, linguistics, archaeology, pre-history, etc., will not exhaust the programme. Geography, human and physical, provides a link between the foregoing group of studies and that large group of natural sciences which include zoology and botany and implies not only simple classification but the study of form, function, and behaviour. It deals, in fact, with the human being as such, in its African environment, studied from numerous different viewpoints and providing material for the building up of a tropical biology, pure and applied.

The programme is colossal: means are still restricted, but are rapidly improving. Last year an important decision converted our scientific and technical staff into a special body, a condition obviously essential for the normal recruitment of a highly qualified staff. Research implies a research worker. It is about time this was recognized. To-day the case is clearly understood: all branches of scientific research must be staffed by specialists as some branches already are. Scientific research will have these specialists so long as the research worker is admitted into a special body wherein he can exercise his gifts usefully and permanently and is given the material security indispensable for the freedom of thought that produces fruitful work.

The staff of the Institute comprises three categories of officials, namely, ‘Les Assistants,’ ‘Les Aides techniques,’ and the ‘Préparateurs.’ Each of these categories is subdivided into several grades and classes.

The salaries suggested are adequate, as they must be if we wish to be able, as we do, to recruit and retain the best possible staff.

On the other hand, the qualifications for admission must be exacting, in order to ensure the best quality of recruit. In principle, candidates for assistantship are required to have degrees; equivalents are, however, provided for. Candidates possessing the ‘Doc- torat d’État’ enter with certain advantages. This degree is, in any case, demanded of nominees to the grade of Chief Assistant in any category.

Once all the posts are filled the Institute will have twenty assistants, not many considering the immensity of the territories and the complexity of the problems. But this is better than the ‘nothing’ of yesterday and sufficient to ensure, following sane methods, the systematic research which is, after all, the initial step conditioning all the rest. It is not only the matter of seeing the end of a task in a lifetime, but a ‘starting off’ or ‘launching’ of an ‘enterprise’ with far-reaching consequences. If the topmost turrets of the edifice are shrouded in the mists of the future, it is, at any rate, our task to ensure that its foundations are soundly laid.

If research implies a research worker the latter implies equipment. He can do nothing without his tools, that is, his records, apparatus, laboratories, and collections.

The federal centre must be equal to the task to which it is called, not only as a research centre, but as an instrument of documentation and teaching for the public, who will find in it the means of informing themselves rapidly and correctly on all subjects which may interest them.

The Institute, at the moment installed more or less adequately in a building not intended for it, is about to expand. The existing building, slightly modified, will be connected by a covered passage 20 m. long to a massive block of three floors, 100 m. long and 30 m. high. The floor-space of each storey of the new Institute will be 2,800 sq. m., and the total floor-space, including the basement and ground-floor, will be 14,000 sq. m.

It may be added, to emphasize the synthetic character of this whole effort at recording and research that the building will be happily situated only 10 m. from the Service Géographique de l’A.O.F.
The following is the general lay-out of the building:

_Basement._ Technical Services, Collections, Printing Press, Archive Stores, Lecture Theatre (200 seats).

_Ground Floor._ Public Museums for Ethnology, Natural History, Local Products; Temporary Exhibition Hall; Reading Room of the Library.

_First Floor._ Hydrobiology, Pedology, Administration, Anthropology, Linguistics, Ethnology, Archeology, Ethnographical Reserve No. 1, Geographical Service.

_Second Floor._ Ethnographical Reserves Nos. 2-3, Zoology, Botany, Geological Service (End).

_Third Floor._ Ethnographical Reserves Nos. 4-5, Photographic Laboratories, Chemical Laboratories.

In this combination, once it is set up, fitted out and equipped, the A.O.F. will possess an incomparable centre for studies hardly equalled anywhere else in Africa or outside the universities of the North and South.

We have tried in creating a centre at Dakar not so much to accumulate all at once the greatest possible mass of specimens and documents, as to 'launch' each department systematically by proved sound methods. The general library, with its card-indices, the record-office, the photographic index and service, the preparation of a general census of the populations of the A.O.F., the card-indexing and the general register of the ethnographical and archaeological collections, the maintenance and repair of specimens, the constitution of the herbarium, etc., in all these provinces the foundations are laid. The ethnological and archaeological collections, though still small, nevertheless already contain several sets of specimens of great interest. Among the most valuable may be noted the Great Golden Breast-Plate, 184 mm. in diameter, weighing 191 grammes, from the tumulus of Rao in Senegal, and a collection of 1149 Baoule gold weights.

The federal centre would remain incomplete without the branches which it will put forth into each colony. There are in view central local organizations standing for those territories, just as the parent organization stands for the whole A.O.F.

In this way each colony will have an accredited ethnologist at the head of the local centre. The latter will comprise, in addition to an office, library, and laboratory, an ethnographical museum in constant touch with the one in Dakar of which it will be a branch. It is proposed to preserve in situ traditional dwellings, buildings, and sites as museum specimens.

Frequently these local centres will be able to have their own character and their special purpose. For instance, the one for Dahomey will be partly based on the Royal Palace at Abomey, at last restored. The one at Abidjan (Ivory Coast) will be enhanced by an artistic centre where local sculptors, casters, potters, and weavers will execute faithful copies, veritable facsimiles of authentic pieces of good quality. This they would do instead of manufacturing for European taste in the name of 'African Art' those gaudy copies of European and even Hindu objects. In the domain of natural history the centre at Conakry (Guinea) lends itself more specially to marine biology, the one at Niamy (Niger) to the study of fresh water, and the one at Abidjan to the study of dense forest.

The Institute edits the following publications: 1. _Bulletin_ (quarterly, octavo); 2. _Mémoires_ (no special period, quarto); 3. _Notes Africaines_ (quarterly, quarto, intended for our correspondents and collaborators in A.O.F.).

The Institute sends to all who wish to participate in the progress of African Research a publication specially edited for them, _Conseils aux Chercheurs_, of which the second edition was published in 1943. Lastly, under the title _Manuels Ouest-Africains_, the Institute proposes to edit a series of elementary works intended to assist the layman to study African fauna, flora, and populations.

Apart from periodicals, the central library does not yet include more than 10,000 volumes. Attempts are being made systematically to acquire more literature on a variety of subjects and the Institute will always be glad to receive gifts or exchanges. In general, in the Colonies, one finds oneself held up in every branch of research by the lack of documentary matter and bibliography.

It must also be recognized that one can never in any sphere do everything on the spot. It would, therefore, hardly be paradoxical to claim that as oceanography is studied on dry land, so Africa is studied in the metropolis in contact with the libraries, the laboratories and museums. But the role of the Colonial Research Organization must be above all to accumulate the material at first hand, which it alone can do, to sift it, criticize it, summarize it, and finally preserve it for the benefit of the specialists of the future. When material is received by the museums and laboratories of France, the more concentrated and unencumbered by useless banalities it is, the better. The Institute should have an assured central position for the obvious benefit of the two parties. It is the liaison between the strongholds where metropolitan science is in the making and the outposts of the bush where the elements out of which it is made are collected. It desires equally to orien-
tate and guide those who wish to devote themselves to research and to guide those enquiring minds which will increase in number as the colony's administrators and merchants are able to spare the time from their main occupations. That is why, over several years, the Institute has organized every winter a series of elementary courses in ethnology, geography, and other subjects.

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.

Some Czechoslovak Folkways. Summary of a Communication by Dr. O. Friedmann: 21 December, 1943.

The lecturer compared the social life of the urban middle classes in Czechoslovakia and England. While in the period between the two world wars the basic ways of life were similar in both countries, there were some differences in manners, customs, and mentality, which the lecturer illustrated by many examples from various spheres of life, such as family and club life, social intercourse in houses and flats, in clubs and cafés, social manners, use of hereditary and personal titles, table manners, attitude to the State, cultural and religious life.

Some of these differences can be accounted for by the difference in the geographical position and historical situation of the two countries. The peculiar combination of democratic, egalitarian, national, and religious ideals in Czechoslovakia, for instance, is due to the nature of the Czechoslovak struggle against German oppression which has been going on for centuries. The small Czechoslovak nation, situated in the heart of Europe and surrounded by stronger neighbours, developed a keen interest for foreign affairs and literature; the Czechoslovak literature of translations is one of the greatest in the world. As the Czech nobility was exterminated in the seventeenth century, the thrifty and industrious middle and lower classes have been representative of the Czechoslovak nation, and they followed the lead of a series of distinguished University professors, Comenius, Masaryk, and Beneš.

The paper was discussed by Dr. Edith Stiaisny, Dr. Stein, and Mr. Braunholtz. Dr. Friedmann replied.


This is an account of a few of the remarkable folk-customs still prevalent in Yugoslavia, a country peculiarly rich in traditional lore. The mountainous nature of the land, and its long history of oppression, have encouraged the survival of ancient rites: Serbs especially, for centuries subject to Turkish rule, nourished their independence on their memories of the past, expressed by songs and ballads, and the motives hidden in their embroideries.

The rhythm of the seasons, sympathetic magic, the crises of human life, the propitiation and adoration of supernatural powers, here as elsewhere, give shape to the ancient ceremonies of Yugoslavia. Many gestures are concerned with the Earth and the Family; and older rites reappear in the saints' days and festivals of the Church.

More detailed attention was given to the celebrations of Spring and Midsummer, to the curious wedding ceremonies, to 'healing' friendships, and to the cult of the dead. The swinging rituals of Saint George's Day and the strange snake-dramas of March illustrate the

House Traditions in the Hebrides. Summary of a Communication by Dr. Werner Kiiolm: 8 February, 1944. (Illustrated by the sound film of Eriskay.)

The Black Houses and stone bee-hive huts of the Hebrides, both of which have been found inhabited in modern times, are well known from various descriptions by nineteenth-century observers. From these it appears probable that there is a close relationship between the rounded-rectangular (Black House) and the circular or oval (Beehive) type of dwelling in the islands. By means of photographic illustrations, it is shown that surviving dwellings of the Black-House type retain a more or less marked degree of its original ovate-oblong character. Some have rounded end walls; others are not quite so rounded, but are never strictly rectangular. All have walls of the same height throughout and thatched roofs with more or less rounded gable ends. All are of the 'central chimney type' (Ake Campbell: 'Notes on the Irish House,' Folkliv, 1937: 2/3; 1938: 2) even though a fireplace may have been inserted later in the gable end. Like the ancient oval Irish houses and some of the Welsh Long Houses (Lorwerth C. Peate: The Welsh House, London, 1940) they may be regarded as a link between the early circular structures and the more developed rectangular peasants' and crofters' houses of to-day. Suggestions are made for the building of a house to meet the vital modern needs without unnecessary departure from the traditional character.

The paper was discussed by Mr. Braunholtz, Mr. G. D. Walker, Mr. Fagg, the President, and Dr. Phyllis Kaberry. Dr. Kiiolm replied.


These survivals range from cave-dwellings, round stone huts, and agricultural implements to votive offerings, bull-fighting, and the cult of standing stones.

The paper will be printed in full in MAN.
Nigeria and its Reactions to the War. Summary of a
Communication by Mr. R. T. D. FitzGerald : 18
February, 1944.
At first the war made very little impression on
Nigeria. It was not until after Dunkirk that the country
woke up both in the military and economic spheres, and
then found itself doing double work on account of the
late start. Nigerian troops fought admirably in the
East African Campaign and, with the Gold Coast Regi-
ment and East African Armoured Cars, led the advance
from Kenya to Addis Ababa via Mogadishu and Harar.

The influx of European soldiers, R.A.F., and U.S. Air
Force, coupled with large-scale construction of aer-
dromes, barracks, and roads, the increased prices paid
for agricultural exports, and an extreme shortage of
imports caused inflation. Very little appears to have
been done to prevent inflation, and the introduction of
a Cost of Living Allowance did nothing to improve the
situation. An attempt at price control merely served
to cause a black market boom. However, the purchas-
ing power of local currencies such as manillas, which
cannot increase in quantity, has shown hardly any
change.

A large proportion of local Europeans was called up
for the forces. This resulted in an increased volume of
work being done by fewer men, who are to be congratu-
lated on their hard work in such an elevating climate.

Military life clearly shows up the differences between
the main tribal divisions. The Mohammedan Hausa
is courageous and well disciplined, but uneducated.
Yorubas and Ibos are very undisciplined but educated.
Fulanis take no interest in anything but cattle. Efikas
are traders and do not usually become soldiers. Thus
is the fighting troops are mainly composed of
Hausas and Hausa dominated pagans, while the South-
erners fill up the technical and pioneer units.

The conservative Mohammedan owes his character to
his religion and thousand-year written history. The
Southerner owes his character to his lack of satisfac-
tory religion and traditions of which he can be proud.

The practical effects of these differences are many.
The Hausa will not have anything to do with European
education; the Southerner eagerly seeks it, but unfortu-
nately his aim is either to become a clerk or else
a lawyer, which will bring him to the position of
being able to exploit his brothers. Lack of discipline in
the South means that it is very difficult to get things
done for the war effort. The prohibition on European-
owned plantations means that it is almost impossible
to improve the state of agriculture and the Dutch East
Indies is steadily win the markets. The Nigerian is not
amenable to propaganda unless indirect and subtly
camouflaged. The Nigerian, even when educated, has
an inferiority complex and is afraid of responsibility
when faced with a new situation; this makes him
unreliable and often inefficient. The undisciplined but
educated Southerner has a Press in which educated dis-
contended elements from a few coastal towns voice their
complaints. This Press is quite unrepresentative of the
99-9 per cent. of the population who live in bush, and
also of the Hausa, who has no Press. It will be noticed
that urban conditions in the North are deplorable when
compared with those in the South. This is due to the
difficulty of distances in the North, and, one suspects, to
Governor of the fear of the Southerner with his loud
complaints backed by the awe-inspiring memory of the Abo
riots. The Northerner despises the Southerner, and the
Southerner regards the Northerner as an uneducated
reactionary. It is unfortunate that the Northerner, who
would make a good citizen, is so uneducated, while the
Southerner, who is educated, has so little idea of civic
discipline and responsibility.

In considering the readiness of the country for self-
government we must realize that the only people who
want it are a few educated men in the Southern towns.
The average Nigerian is terribly afraid of being exploited
by his brother, both in the Northern and Southern
Provinces. Pre-requisites for self-government appear
to be: (1) Internal government, (2) Capital invest-
ment, which will supply, (3) Education, and (4) A disci-
lined economy.

Self-government must not be forced on a people who
are not ready for it, and politicians who criticize and
influence colonial policies should have more knowledge
of the character of the peoples they are dealing with.
Africans are not machines but peoples with an individu-
ality of their own.

The paper was discussed by Professor Forde, Dr.
A. N. Tucker, Dr. Eisen, and Mrs. Ruhemann. Mr.
Fitzgerald replied.

Eugène Dubois, 1858-1940. Portrait.

Eugène Dubois died at his home in Haarlem,
Holland, 16 December, 1940, in his eighty-third
year. He was born 28 December, 1858, at Eysden
in that recessed part of the province of Limburg which
abuts on the frontier of Belgium. His people were
staunch Catholics, his full baptismal name being Marie
Eugène François Thomas; but Dubois' religious convic-
tions were of a neutral order; I mention this fact
because of a prevalent rumour which ascribed to him a
stricken conscience on account of his having brought
to light the most famous of all 'missing links'—Pithecan-
thropus erectus. In 1894 he sprang suddenly into fame by
the publication of a monograph on his strange discovery,
describing it on the title page as 'eine Menschenehnlche
Uebergangsform.' The monograph was issued from
Java, for Dubois was then a military surgeon in the
Netherland-Indian army, but had been detailed for the
collection and study of fossil remains. He joined the
service early in 1889, when he was thirty-one years of
age, returning to Holland in the spring of 1895.

When Dr. Dubois arrived in the East Indies he was
already a highly trained anatomist and zoologist; he
was ever acknowledging the debt he owed to his great
teacher, Max Weber. After finishing his medical studies
in the University of Amsterdam he entered, in 1880, its
anatomical department as a demonstrator, becoming a
lecturer in 1886, and so continued until his departure for
Java.

In the autumn of 1895 he visited London, Edinburgh,
and Dublin, exhibiting the famous fossils to excited
audiences of anatomists and anthropologists; he had
already made the tour of most of the capitals of Europe,
leaving behind him a trail of debate. I met him first
during his visit to London; he was heavily built, tall,
and held himself stiffly erect; he held his mind, too,
somewhat as he held his body. He seemed to focus his
attention on the opinions he held and was more than a
little obdurate in giving consideration to those of anatomists who differed from him. His partiality for Pithecanthropus was that of an indulgent parent to an only child; any criticism which sought to take away the qualities he had ascribed to it, particularly those which sought to lessen its pithecid nature, were resented as if they were attacks on his own good faith. Thus his whole life, after 1895, was spent in a rearguard action, for the sequence of discoveries which marked the first four decades of the twentieth century made it more and more evident that Pithecanthropus was an early Pleistocene man—the first of his kind to be discovered. In 1924, when he published the first account of the cast taken from the interior of the fossil skull, and particularly in 1932, when he described three additional but fragmentary femora, he admitted the essential humanity of his "child," but in the end he insisted that it was marked off from all other forms of early man by its ribbon-like traits.

I met Dubois next at the meeting of the International Zoological Congress held in Cambridge in 1898; he, Elliot Smith and I were the guests of Dr. Duckworth in Jesus College. By this time he had succeeded in removing the matrix from the interior of the skull and in making excellent casts which revealed the chief features of the ancient brain. Elliot Smith at once insisted on their essential humanity. As already mentioned publication of Dubois' account was delayed until 1924. At the date of the Cambridge meeting (1898) his old university had appointed him its professor of Geology and honoured him with a doctorate in science. In 1919 he was elected a member of the Royal Academy of Science of Amsterdam, the Proceedings of which contain his chief publications, most of them written in his own clear English.

To the meeting in Cambridge, Dubois contributed a paper on the influence of size of body upon the volume of the brain of mammals, giving a formula for estimating the factor of body-size (Proc. Fourth Zool. Cong., 1899, p. 78). So far as I know this was the only scientific subject to occupy his attention outside his original discovery. I have reason to remember this paper because three years previously I had published a research on the same theme (Journ. Anat., 1895, Vol. 29, p. 282), and still think that I had got nearer to the heart of the problem than Dubois had done, but this was not Dubois' belief nor that of my fellow anatomists.

When Dubois returned from Java, he had much more in his kit-bag than the fossil bones of the individual who became so famous; indeed so much that he feared flooding the market were he to expose all at once. We had to wait until 1920 to know that he had had the Wadjak fossil skulls in his possession for nearly thirty years; he had found them in a deposit of upper Pleistocene soon after his arrival in Java. In 1918, Dr. S. A. Smith published a paper on the Taiga skull—the earliest form of Australian aborigine known to us (Phil. Trans., 1918, 208, p. 38); the Wadjak skulls were then revealed, labelled as 'proto-Australische'—a very just description, in my opinion. Then in 1924 he produced the fossil fragment of a lower jaw which he had excavated prior to his major discovery and assigned it to P., coming, I suspect, to entertain a more humanoid conception of that fossil being. Then, in 1932, he produced fragments of three more thigh-bones; he had just discovered them in a mass of fossil material, collected at the original site and level in 1900.

Then began the wonderful series of discoveries by Oppenworth and by von Koenigswald, revealing Java as a paradise of Pleistocene man; Dubois was the pioneer in this revelation. Oppenworth (1931–1932), while excavating a site intermediate in age to the Trinil and the Wadjak sites discovered a series of fossil men (Homo soloensis) which serve very well as a stepping stone from Pithecanthropus to Wadjak man, thus making it probable that in P. we have the ancestral type of the Australasians of to-day. In 1936 von Koenigswald brought to light at Modjoeroto, Java, the skull of a P. child, the skull of another adult, the fragmentary skull of a third, an upper jaw, and a large part of a lower jaw. But Dubois to the last refused all of them admission to his P. group; in his opinion the discoveries of his two successors must be assigned to the Wadjak type of man.

Just before leaving Java in 1895, Dubois was given permission by his Government to visit India, so that he might see the Siwalik formations with his own eyes and
compare the famous Indian fossil fauna with the contemporary fossil fauna of Java. He encountered certain difficulties in India, owing to local Siwallik authorities suspecting that his scientific quests masked political objectives. This was brought to my notice in the following way. I had contributed to *Nature* (19 April, 1941, p. 475) an article to the *Rationalist Annual* (1942) certain data relating to Dr. Dubois' life. The articles brought me a bundle of letters written by him during his visit to India; these were addressed to J. S. Gamble, Superintendent of Forests, then living at Dehra Dun at the foot of the Siwalliks. Lately Dr. Gamble died in England; his executors handed the Dubois correspondence to Mr. Cecil E. C. Fisher; with his permission I am depositing the letters in the library of the Royal College of Surgeons of England; they deserve preservation as much for the credit they reflect on Dr. Gamble as for the light they throw on the enthusiasm, good humour, and gentle nature of Dr. Dubois, who was ever a gentleman. I cannot restrain myself from giving a brief extract from one of these Dubois letters, dated 3 March, 1895.

"In the paper you had the good fortune to send me was a review about a session of the Gesellschaft for Anthropologie of Berlin, wherein my Pithecanthropus was one of the topics. It struck me that such savants as W. Krause and R. Virchow did in such bad way read my description (written in German, A. K.). These inaccuracies of the great savants, which, in every case, is of great signification, gives me no great opinion of Homo sapiens, and such an experience weights the heavier just now and is in itself sad enough."

Dubois was already jealous for the credit of his beloved child.

A. KEITH.

**REVIEWS.**

**GENERAL.**


The writer of this useful and sensible book is Emeritus Professor of History at Stanford University. Much of it, he says, is based on his own research; much of it on the teaching of his own teacher, George Lincoln Barr, but it clearly owes much to his own thought and experience. The first part asks the question: 'What is History?' The second, much shorter, deals with History's neighbours. All the principal aspects of the matter are passed in careful review, with frequent reference to the opinions and practice of reputable historians: one regrets that references to these quotations are not given. Principal topics are the materials for history, the procedure of research and criticism, the comparison of sources and the arrangement of historical writings; and so we return to the initial question: 'What is History?' in its conception, and in the literary form which is the expression of this. Here are many wise and helpful sayings for a would-be historian, and an answer to much ill-informed criticism of historical studies.

The 'Neighbours of History' include most of the sciences, from Astronomy as the science which has done most to dispel mistakes beliefs about Man's place in Nature, to Genealogy and Technology. Most of the sections contain rather obvious reflections and jottings; and some of the 'neighbours' such as 'diplomats' would seem to be little more than the equipment of the historian himself. All nevertheless have their special and appropriate technique and subject-matter.

Anthropology is described as the 'most basic of the social studies'; for the historian it lies at 'the threshold of his own domain,' the life of man before history takes up the subject. History is then the study 'of man the animal,' 'but of conscious and purposeful man,' an interesting differentiation, amplified by distinguishing between the 'general' people, state or person, and the 'individual'; for the latter there are no longer general laws, or classes, or types, as there are in the other social sciences, where the individual is merged in the group. In anthropological perspective, 'the story of progress has been one of continual secularization.' The same contrast is enforced in regard to the social sciences generally. The discussion of jurisprudence is interesting: for 'the history of jurisprudence is the history of civilization,' giving 'the surest outlines for a trustworthy picture of the past,' and modern law is presented as fundamentally archaic, applying to modern civilization concepts and methods that have changed but little since the year 1700. The rules of evidence, for instance, are 'hopelessly out of date and confused,' and trial by jury indefensible. Perhaps things are worse in the United States than in Britain. Jurists however begin to 'discuss the purposes of law rather than the nature of law,' and this may lead to better things.

The presentation of religion and of ethics is no less critical: ethics is described simply as 'the exponent of one or other of the many moral systems,' which is not quite what the philosophers say. Ethnology and ethnography are curiously separated from anthropology, and restricted to the study of races in the biological sense; which though etymologically correct is not in accordance with popular usage. On the subject of philosophy, and especially on the philosophy of history, there is also some unfamiliarity with the subject.

But these are minor matters. The heart of the book is in the first part, and is sound.

JOHN L. MYRES.

**ASIA.**


This is a difficult book to assess. Much of it is just a travel book, and as such it is good of its kind. The descriptions are excellent, and one gets the impression of being given a very good idea of the country and people of Annam. Combined with this is a serious attempt to deal with anthropological and archaeological matter to an extent which is hardly compatible with the setting of the author's journeys. Much space is given, for instance, to 'Early Man in Eastern Asia' and to early Chinese history and civilization. The method is uneven like the matter. A bibliography is given, but detailed references are omitted; there is a first-class index, but the map is very poor. The archaeology, at any rate as regards China, seems to be an accurate enough resume of existing knowledge; the anthropology is notable for an admirable account of the 'Sacrifice to Heaven,' which is analogous, no doubt, to the ancient Chinese ceremony, and it is illustrated with a number of very good photographs, though it is to be regretted that these and the illustrations generally, which are good, are spread through the book at intervals of about sixteen pages instead of adjoining the relative passages in the text. The anthropological must be taken a little more cautiously than the strictly archaeological statements, and without forgetting the author's own recommendation that 'the strength of wisdom is not easily to believe,' particularly when he tells us that the woodcarvings of Indonesia are of the same origin as the ornaments of early Irish art, as the Book of Lindisfarne, and as the Jellinge cup from Denmark." The statement again that man is the only animal sexually excited by vision seems (to say nothing of certain apes) to overlook the many birds a display of whose plumage constitutes an important part of pre-mithral beha-
Mr. Brodick's book, it is irritating to find so much that is just chat. An entirely personal encounter, for instance, with a pretty Armenian girl in a corridor train, and aphorisms that can hardly be intended to be taken seriously, such as the statement that the professions of politician, policeman, and pimp are closely allied. It is true, of course, that each begins with a P, and if the casual reader should thus be surprised that the third of these is the more germane to the author's interest, he has only this to say to the author's matter to blame for it.

J. H. H.

CORRESPONDENCE.

Integration of Anthropological Studies. *Cf. MAN, 1944, 8. 66*

Sir,—The necessarily brief report of the discussion on the integration of anthropological studies at the Centenary Meeting does not, I feel, adequately convey the point I was endeavouring to make at the conclusion of the forensic approach to the various branches of anthropology. Dr. Firth's paper was read last, but my remarks were not directed solely or specifically to it. There can be no dispute as to the relations of social anthropology with sociology, since the former is, as an inductive and comparative study of the forms and conditions of the social activities of man, an integral part of the latter.

The essential point is that any given sociological system is inter-dependent with a technological system—a system of inter-related elements of equipment and associated skills. It is also the expression of given quantities of physical energy relating ultimately to the psycho-physiological characteristics of the human beings concerned, hence 'racial' differences with regard to these characters are among the determinants of sociological differentiation. Finally, the expression of this energy is at any point in time already canalized by conditioning in certain forms of behaviour, and is also in large measure a response to the measures of the physical environment, and variable in relation to these. We are, in fact dealing with a series of inter-connected systems in which the resultants of one are partial determinants in others. As in the physical sciences therefore, knowledge of relations and intensities in one system affords data for interpretation in the others.

Moreover the comparative methods of anthropology imply the inclusion of the widest available range of data concerning the forms and factors involved, archaeology, as the study of fossil technology and fossil sociology, can make a contribution of great importance, particularly where the relations between habitat, technology, economy, and social structure are being increasingly explored in that field.

It seemed, therefore, that the need and the scientific basis for keeping the integrative functions of the Institute constantly in mind should be recalled and emphasized at the Centenary Meeting. Specialist organizations and students in particular fields may—indeed must—limit their own spheres of investigation. But this is the greater reason for providing means for scientific intercourse between them. All are contributing their quota of evidence for the progressive formulation of a science of human societies, and it is the opportunity of the Institute, as well as its long-established traditions, to encourage studies in all the fields, but also to foster integration and quicken the pace by providing the forum for the interchange of evidence, the explanation of new developments in theory and technique among the specialists. This, I suggest, is what the Institute should and should above all seek to provide for the pre-historians, the physical anthropologists, the students of technology and the sociologists, and what they should expect from it.

DARYLL FORDE.

Cain and Abel. *Cf. MAN, 1944, 31. 67*

In his interesting contribution on the myth of Cain and Abel (MAN, 1944, 31), Mr. Hornblower describes, as many commentators have done, the Hebrew story of Cain and Abel as an astrophysical myth intended to explain the transition from the pastoral to the agricultural mode of life, and the consequent change in the nature of offerings to the gods.

This view is not without difficulties. In the first place, such a distinction between the relative suitability of flesh and vegetable offerings is not manifest in the history of Hebrew sacrificial ritual. Both types of offering continued in regular use until a late period in the history of Hebrew ritual; hence there does not appear to be any occasion for a myth explaining a non-existent conflict. In the second place, the myth does not conform to the required conditions of life arising as the consequence of the perpetual threat of Beduin inroads upon the agriculturalist. On the contrary, in the Hebrew myth the agriculturalist is the aggressor and the semi-nomad sheep reaper is the victim, and the situation in which a shepherd should be slain calls for an explanation which is not provided by the current view of an astrophysical myth. In the third place, the story of Cain and Abel is not a unity, but has arisen as the product of the fusion by the Yahvist of two distinct and incompatible traditions. In one of these, Cain is the eponymous ancestor of the Kenite clan, a branch of the larger Beduin group of the Amalekites. He is a Beduin steppe-dweller, and the blood-feud is the characteristic mark of the clan. In his genealogy Jabal, the semi-nomad, 'the father of such as dwell in tents and have 'cattle,' is the counterpart of Abel in the other form of the tradition. It has long been recognized that the two names are identical. In the other tradition Cain is an agriculturalist whose crops have failed, his being the implication of the non-acceptance of his ritual offering, and the original purpose of the myth was probably to offer an explanation of the existence of the grim ritual of human sacrifice. The grounds upon which this suggestion is based have been given in the paper referred to by Mr. Hornblower.

The etymological suggestions put forward by Mr. Hornblower are very interesting, and in the main sound. The Hebrew term lechem has a fairly wide connotation, and may be used for food of any kind. But I am not sure upon what grounds Mr. Hornblower gives the meaning 'flesh from the bone' for the Arabic root hwh. He may be right, but the usual meaning assigned to the particular lama in classical Hebrew is 'to fit close together,' and the root has the same meaning in Syriac and New Hebrew, a meaning which might well underlie both usages, flesh closely packed together, and the closely kneaded dough. Also it must be added that the word lechem in Judges V, 8 is suspect; the passage is very corrupt, and few modern commentators accept the rendering 'then there was war in the gates.'

S. H. HOOKE.

Colour Blindness and Pigmentation. *68*

Sir,—May I inquire through your columns whether any of your readers are in possession of recent unpublished data which might be used for a study of the distribution of (i) hair and eye colour and of (ii) defects in colour vision in various parts of the British Isles? Data which I collected some years ago during surveys of school children suggested that colour blindness and allied defects were somewhat more frequent in certain regions than in others, and might conceivably be associated with darker pigmentation of hair and eyes. In more extensive figures submitted to me for adult recruits I find an unexpectedly high correlation when the results are classified by counties—0.88 for hair colour and 0.73 for eye colour. This is in keeping with the fact noticed by the late Dr. Rivers in his studies.

[ 79 ]
of colour vision among primitive races: in the pigmented races, the incidence of defective colour vision (chiefly insensitivity to blue) appeared much greater than in the fairer races — a difference which he tentatively attributed to the greater pigmentation of the 'yellow spot.' (J. Anthropol. Inst., XXI, p. 321, Report of Cambridge Expedition to Torres Straits, II.)

Unfortunately, for the distribution of hair and eye colour in this country we have had to rely mainly on surveys carried out many years ago; and it is difficult to make accurate allowance for subsequent migration. We have endeavoured to make some estimate of the probable incidence of these characteristics at the present day; but, before publishing the table so obtained, it would be helpful to know whether investigators, particularly those attached to Anthropological Departments of the Universities, may have more recent data bearing on this problem. Medical officers and ophthalmologists who have examined school children, railwaymen, and applicants for the merchant service, may also have obtained comparable figures for defects of colour vision.

Replies may be addressed to me at the Psychological Department, University College, London, 20, New Street, Aberystwyth.

CYRIL BURT.

The Custom of Covade. Cf. MAN, 1944, 49.

Sir,—Professor Ruggles Gates tells us (MAN, 1944, 49) that where people live in conditions of dirt and stufliness, and where a husband shares his wife's bed throughout her pregnancy, an emanation from the wife causes the husband to feel unwell, and to this fact he attributes the origin of the custom of covade. If he were right, we should expect the custom to be universal where people live in what may be called sump conditions, and unknown elsewhere: in fact we find nothing of the kind. Belief that the husband of a pregnant woman suffers from various ailments, not always those specified by Professor Gates, have been reported from various parts of Europe, but it does not appear that the belief is general, even amongst sump-dwellers. I have heard of cases in which soldiers, etc., living at a distance from their wives, complained of ill-health when the latter were pregnant.

It is by no means certain that these beliefs have any connexion with the custom of covade, which is not, as Professor Gates seems to suppose, a method of treating sick men, but a custom by which healthy men, who may have been living apart from their wives for months, have to take to their beds when the latter are confined. It is often associated with a variety of taboos which have to be observed by men whose wives are pregnant. Torday tells us, for example, that the Bushongo observe the custom of covade, and he also gives a long list of the taboos which must be observed by a man whose wife is pregnant. These include paring his nails, curling his hair, wearing red cloth, and eating with other men. (Trail of the Bushongo, p. 174, 195.) Can it be suggested that these taboos have a rational origin?

From the facts cited by Dawson, Hocart, and others, it seems clear that the custom is the result of a religious belief, possibly a belief that, unless due precautions are taken, the life or soul of a man will pass into his newborn child. But whatever the origin of the custom, it seems to me that Professor Gates's facts are no more adequate to explain it than is the fact that pork may cause indigestion adequate to explain the taboo on pork.

RAGLAN.

A Contraceptive Girdle from Calabar Province, Nigeria.

Illustrated.

Sir,—Dr. Nadel in his book A Black Byzantium, p. 8, writes: 'The Bida women know how to bring about abortion, and even know the use of contraceptives or rather of certain practices and drugs which are believed to work as contraceptives. Many of them are clearly mere superstitions and the expression of magical beliefs: whether certain drugs which one can buy (in the greatest secrecy) from medicine-men and bairn-doctors are really effective I am unable to say...' The Nupe 'doctors know two kinds of contraceptives: temporary contraceptives of a magical nature (e.g. a magical belt) etc.' The knowledge of abortifacients is widespread. It is well known among the Ibibo. I have had experience of the magical contraceptive belt. Among the Ibibo, the standard of morality and chastity is not the same as ours. They have a standard. Ante-nuptial intercourse is not frowned on. The unforgivable sin, the disgrace that carries a life-long stigma, is to have a child before marriage.

The great day in a girl's life is the day, when, fattened and almost naked, she makes her debut in public in the market place and is then publicly acclaimed as the wife of so and so, her future husband. Prior to this debut she has undergone clitoridectomy and body cicatrization; the later process being known as Mbohi. These initiation rites are performed only on girls who have not given birth to a child. Consequently this cicatrization is a life-long advertisement of a chaste girlhood—claste according to Ibibo ideas. Women without it are subject to abuse and revilement as being no better than they should be.

Many years ago when I was serving at Ikot Ekpene, Calabar Province, Nigeria, among the Ibibo, a well-built young 'flapper' of about seventeen dragged a reluctant youth of about the same age into the office. There she burst into bitter tears.

CONTRACEPTIVE GIRDLIE FROM CALABAR PROVINCE, NIGERIA.

Now in the Wellcome Museum, Oxford.

Between her sobs I learnt that this was the year for her to undergo her body cicatrization and now she was pregnant and what was she to do. On asking her how it came about, she pointed to her boy friend and said he was responsible. He had gone to an itinerant Hausa who had, for two shillings, sold him a magical girdle which, if worn by the woman, would ensure plenty of fun and no fears. It had not worked, though she had worn it and was still wearing it. She pointed to a bit of string round her waist to which were tied two little chips of wood. I asked to see it. Slipping the girdle over her hips to the ground, she stepped out of it and handed it to me.

The crying started again: what was she to do: what was she to do: her life was spoilt. Although we, as District Officers are, metaphorically, regarded as the 'fathers and mothers' of the people, to appeal to me in a case of unwanted pregnancy was carrying this 'father-idea' beyond its workable function. I asked her if she had told her mother. No, she had not told her mother. Well, you have asked me 'what are you to do: you take my advice and tell your 'mother.' As she was leaving I asked her if she wanted her girdle back. No. She did not want it: it was useless. I never saw her again.

I sent for this itinerant Hausa but he had gone. Doubtless the bottom had fallen out of the market for contraceptive girdles.

This girdle, illustrated herewith, is now in the Wellcome Museum, Oxford. M. D. W. JEFFREYS.

Bamenda, British Cameroons.
A PATCHWORK QUILT OF MID-NINETEENTH CENTURY DATE FROM WREXHAM, DENBIGHSHIRE
NOW IN THE NATIONAL MUSEUM OF WALES
(By permission of the National Museum of Wales)
A PATCHWORK QUILT FROM WREXHAM, DENBIGHSHIRE. By Iorwerth C. Peate, M.A., D.Sc., F.S.A. With Plate D.

This patchwork quilt (Plate D) now in the National Museum of Wales was made from 4,525 separate pieces of cloth by a James Williams of Wrexham, Denbighshire. It was completed in 1852, and the maker is said to have spent ten years in working on it. It measures two and a half by two and a quarter yards.

As an example of 'unlearned artistry' this quilt is of particular interest to students of folk culture. The background is made of variegated pieces of many brilliant shades, placed together in geometric patterns. The border-surround is composed of squares, rhombs, triangles, quadrants and chevrons in brilliant colours, and these patterns appear throughout the body of the quilt as a background to the pictorial subjects represented on it.

At the top centre is a crown, intended no doubt to represent the union of the four British nations which are represented by their emblems, the rose, thistle, shamrock and leek, within the border, each set in a different colour.

The other pictorial patterns fall, in the main, into two classes: (a) the contemporary engineering 'wonders' of north Wales, (b) Biblical scenes. At the time when this quilt was being made, the Cefn viaduct (near Ruabon) which was completed in 1848 was undoubtedly considered locally to be the greatest engineering feat of the age. It is depicted here with its nineteen slim arches and with a locomotive engine and carriages crossing it. The engine displays a flag and from its tall chimney issues a volume of smoke, skilfully depicted by an irregularly-cut piece of dark grey cloth. This viaduct with its long horizontal line and its series of slender upright columns has been chosen as a foundation for the principal scenes depicted in the quilt. The other engineering subject is Telford's Menai Suspension Bridge (completed in 1826). This appears in the top left-hand corner of the quilt. Here again the maker's skill is apparent. To convey the impression of the current in the Menai Straits he has cut long strips in wavy outline and alternating light and dark colours. The same technique can be observed in other representations in the quilt of both water and cloud.

Of the Biblical subjects portrayed, the principal—Adam naming the beasts—is placed immediately above the viaduct motif. The figure of a nude black-bearded Adam, with right arm outstretched, is shown between a well-spotted giraffe (each spot a separate piece) and a black lion which seems to be accepting its name with a most enquiring expression. The cutting-out of the Adam figure shows a real feeling for form. Other animals depicted are the elephant, fox, and a number of birds.

Above this scene are three others: Jonah and the whale, the killing of Abel by Cain, in which lightning is portrayed by a series of straight yellow lines coming from a black cloud, and the Ark with a dove bearing an olive branch.

In the top right-hand corner is a pattern taken from a 'willow-pattern' plate—a pagoda with a pathway leading from a gate. At the bottom of the quilt are shown a reared snake, a deer and vulture, and an archer aiming at a running horse.

The total effect of the quilt is pleasing; and the diversity of the designs gives ample scope for the great variety of colours used.
THE FACTORIAL STUDY OF PHYSICAL TYPES.
London.

72 Since the publication of Kretschmer's work on 'Physique and Character, the problem of classifying persons according to 'bodily type' has become a subject of much speculation among psychologists. Kretschmer's terminology and scheme of measurements have little relation to those used in physical anthropology. In his earlier writings he explains that 'racial types' and his own 'constitutional types' belong to entirely different categories. In later pronouncements he and his followers point out that the thin, tall, 'asthenic' or 'schizothyme' type is more prevalent in the North, and the short, broad, 'pyknic' or 'cyclothyme' type more prevalent in the South—a view of 'racial temperament' akin to that previously put forward by McDougall. Judged, however, by the descriptions and photographs of his own cases (drawn mainly from Württemberg and Baden), his 'asthenic' group, with their 'long egg-shaped face,' seem mainly to belong to the Mediterranean group (though several tall Dinaric specimens, described as showing a 'broad egg-shaped face,' are included). His 'pyknic type' is mainly Alpine, with a few Armenoids; but he adds a sub-group with a 'five-pointed face,' apparently fair, and suggestive of the Borreby type. His account of the third, 'athletic' type combines many characteristics usually attributed to the so-called Beaker-folk, but his more recent followers claim that it coincides with the 'ideal Nordic type.'

The very existence, however, of the so-called 'constitutional types' has recently been called into question. Several writers have made statistical analyses of the tables of measurements published by Kretschmer himself and of similar data collected by his followers or by themselves. But so far few have been able to find convincing evidence for a theory of types as he advanced it.

Both the supporters and the critics of the theory have taken the term 'type' in a somewhat narrow sense, namely, as denoting a well-marked, sharply demarcated class. If, however, we interpret it as implying, not so much a rigorously circumscribed group, but merely a complex tendency—a generalized pattern to which different individuals may approximate in varying degrees—then a special mode of analysis becomes essential. Simply to calculate an average measurement for each isolated trait, as observed in two more contrasted groups, and then to compare the differences with their respective probable errors—the sole procedure hitherto adopted—can neither prove, or disprove, the existence of a complex pattern. The appropriate method, as I have elsewhere argued, is rather that which has proved so successful in verifying the existence of 'mental types,' and is known to psychological investigators as 'multiple factor-analysis.'

The method is merely an elaboration of the well-known 'principle of least squares' as applied to the 'combination of indirect observations.' If the observed measurements have been converted to 'standard measure' (i.e., have first been divided by their respective standard deviations), then the product-sums which appear as the coefficients in the 'normal equations' become ordinary coefficients of correlation, measuring the degree to which the different traits vary together. The presence of complex types or factors is thus to be determined rather by examining the correlations or covariances than by comparing the separate measurements themselves (cf. Tables I and II below).

If every human body preserved precisely the same proportions, and if the differences between one body and another consisted solely of differences in size—the effect (we might imagine) of differences in the strength of some inherent growth impetus affecting all dimensions equally—then the correlations in each row of the table would be proportionate to the corresponding figures in every other row. In such a case the differences in growth and the correlations to which they gave rise could be expressed in terms of a single 'general factor.' If, however, some persons tend to grow more in one particular dimension (say the vertical) than in others, while other persons exhibit the opposite tendency, then a second 'bipolar' factor (i.e., a factor with both positive and negative weightings among the traits) will be discernible. In the table of observed correlations it will betray itself by clusters of coefficients larger than would be expected from the principle of simple proportion (note in Table I the augmented correlations between the longitudinal measurements, on the one hand, and between the circumferential measurements, on the other). To assess the effects of this second factor in precise numerical terms, we must first rule out the influence of the first or 'general' factor. This can be done by a formula analogous to that of 'partial

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1 The three-fold classification, popularized by Kretschmer, is based on that of Halle, Macauliffe and J. Bauer. Cf. also Kretschmer, E., 'Konstitution und Rasse,' Z. f. d. ges. Neurol. u. Psychol., LXXXII (1923), pp. 139 f.; idem, Medizinische Psychologie (1926). Among his immediate followers, Stern-Piper most strongly favours the view that Kretschmer's types are merely racial types (Z. f. d. ges. Neurol. u. Psychol., LXXXVI, pp. 265 f.); Weidenreich, on the other hand, argues that Kretschmer's two main constitutional types represent antithetical tendencies running through all races (Rasse und Körperbau, 1926).

2 The most recent summary of the literature, with a bibliography, will be found in The Varieties of Human Physique, by W. H. Sheldon, S. S. Stevens, and W. V. Tucker (Harper Bros., 1940).
TABLE I. Correlations and Factor saturations.
(203 British Males, aged 20-22)

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<tbody>
<tr>
<td>1. Leg length</td>
<td>0.768</td>
<td>0.690</td>
<td>0.555</td>
<td>0.475</td>
<td>0.213</td>
<td>0.372</td>
</tr>
<tr>
<td>2. Arm length</td>
<td>0.690</td>
<td>0.622</td>
<td>0.480</td>
<td>0.456</td>
<td>0.204</td>
<td>0.350</td>
</tr>
<tr>
<td>3. Sitting height</td>
<td>0.555</td>
<td>0.480</td>
<td>(0.041)</td>
<td>0.219</td>
<td>0.280</td>
<td>0.361</td>
</tr>
<tr>
<td>4. Chest circumference</td>
<td>0.475</td>
<td>0.456</td>
<td>0.219</td>
<td>0.280</td>
<td>0.527</td>
<td>0.667</td>
</tr>
<tr>
<td>5. Waist circumference</td>
<td>0.213</td>
<td>0.204</td>
<td>0.257</td>
<td>(0.049)</td>
<td>0.704</td>
<td>0.704</td>
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<tr>
<td>6. Hips circumference</td>
<td>0.372</td>
<td>0.350</td>
<td>0.667</td>
<td>0.704</td>
<td>0.797</td>
<td>0.797</td>
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</table>

Bipolar Factors

Factor i                                    | 0.738        | 0.673         | 0.600             | 0.746          | 0.619          | 0.781        |
Factor ii                                   | 0.442        | 0.366         | 0.377             | -0.301         | -0.467         | -0.417       |
Factor iii                                  | 0.169        | 0.189         | -0.358            | 0.341          | -0.221         | -0.120       |

TABLE II. Correlations and Factor saturations.
(533 American Males, aged 16)

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</thead>
<tbody>
<tr>
<td>1. Standing height</td>
<td>1.000</td>
<td>0.861</td>
<td>0.891</td>
<td>0.727</td>
<td>0.591</td>
<td>0.484</td>
<td>0.416</td>
<td>0.676</td>
</tr>
<tr>
<td>2. Leg length</td>
<td>0.861</td>
<td>(1.000)</td>
<td>0.459</td>
<td>0.556</td>
<td>0.424</td>
<td>0.307</td>
<td>0.300</td>
<td>0.465</td>
</tr>
<tr>
<td>3. Sitting height</td>
<td>0.891</td>
<td>0.459</td>
<td>(1.000)</td>
<td>0.928</td>
<td>0.612</td>
<td>0.527</td>
<td>0.415</td>
<td>0.710</td>
</tr>
<tr>
<td>4. Trunk length</td>
<td>0.727</td>
<td>0.928</td>
<td>0.612</td>
<td>(0.949)</td>
<td>0.592</td>
<td>0.520</td>
<td>0.415</td>
<td>0.665</td>
</tr>
<tr>
<td>5. Iliac width</td>
<td>0.591</td>
<td>0.949</td>
<td>0.592</td>
<td>0.582</td>
<td>(0.566)</td>
<td>0.560</td>
<td>0.441</td>
<td>0.652</td>
</tr>
<tr>
<td>6. Chest width</td>
<td>0.484</td>
<td>0.949</td>
<td>0.582</td>
<td>0.582</td>
<td>0.560</td>
<td>(0.566)</td>
<td>0.441</td>
<td>0.652</td>
</tr>
<tr>
<td>7. Chest depth</td>
<td>0.416</td>
<td>0.484</td>
<td>0.560</td>
<td>0.560</td>
<td>0.560</td>
<td>0.560</td>
<td>(0.441)</td>
<td>0.652</td>
</tr>
<tr>
<td>8. Weight</td>
<td>0.676</td>
<td>0.484</td>
<td>0.560</td>
<td>0.560</td>
<td>0.560</td>
<td>0.560</td>
<td>0.441</td>
<td>(0.652)</td>
</tr>
</tbody>
</table>

Bipolar Factors

Factor i                                     | 0.909             | 0.674        | 0.894            | 0.833           | 0.731          | 0.669          | 0.575          | 0.899    |
Factor ii                                    | 0.381             | 0.373        | 0.262            | 0.168           | 0.186          | 0.314          | -0.301         | 0.397    |
Factor iii                                   | 0.157             | 0.602        | -0.322           | -0.437          | -0.057         | -0.074         | 0.075          | 0.056    |
Factor iv                                    | 0.032             | 0.203        | -0.110           | -0.125          | 0.119          | 0.116          | 0.113          | 0.122    |
Factor v                                     | 0.055             | -0.054       | 0.128            | -0.130          | -0.048         | 0.051          | -0.061         | 0.059    |

Group Factors

Size Factor                                  | 0.741             | 0.536        | 0.760            | 0.768           | 0.748          | 0.704          | 0.540          | 0.839    |
Longitudinal Factor                          | 0.412             | 0.595        | 0.112            | 0.148           | 0.021          | -0.127         | 0.077          | 0.019    |
Transverse Factor                            | 0.033             | 0.000        | 0.060            | -0.006          | 0.145          | 0.235          | 0.378          | 0.538    |
Leg Factor                                   | 0.422             | 0.589        | 0.132            | -0.155          | 0.022          | 0.015          | -0.060         | 0.024    |
Trunk Factor                                 | 0.319             | -0.118       | 0.626            | 0.558           | 0.043          | -0.001         | -0.023         | 0.058    |

'correlation.' Afterwards, if the standard errors are sufficiently low, we may go on to eliminate this second factor in its turn, and examine the residuals for a third factor or a fourth. Thus, by means of a 'multiple factor' technique, the contributions of the several factors to the various trait-measurements can be isolated in succession, and their statistical validity can be estimated by the familiar chi-squared test.

In an earlier paper I briefly reported the results of applying this technique to a set of physical measurements obtained from British children and adults (pupils in London elementary schools and students attending the educational or psychological departments of the University of London). The analysis indicated at least three distinguishable factors: (1) A well-marked general factor, presumably governing growth in all directions; (2) a fairly well-marked factor making for disproportionate length of the long bones; (3) a third factor (in some ways the antithesis of the foregoing), most clearly marked among adults, making for a disproportionate increase in breadth, thickness, girth, and weight. Provided we interpret their term 'type' to mean

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2 This principle was first used to determine the presence of 'group-factors' (special abilities) underlying the performance of children and others in mental and scholastic tests (cf. Burt, The Distribution and Relations of Educational Abilities, 1917, pp. 53, 58 f.) and has since been widely employed by American psychologists with large batteries of psychological tests.

simply 'tendency,' these results confirm the distinction suggested by earlier French and Italian writers between the longiligne (or 'leptosomatic') type and the bréviligne (or 'eurysonatic') type, from which, no doubt, Kretschmer's distinction between his 'asthenic' and 'pyknic' types was derived.

In view of the controversy over the relation between constitutional types and racial or national origin, it seemed desirable to inquire whether similar results would be reached by factorizing correlations obtained from other racial or national groups. At my suggestion, therefore, Dr. Cohen has applied the same procedure to a similar set of physical measurements secured for a hundred Jewish patients at Colney Hatch Mental Hospital; and more recently another of my research-students, Mr. W. H. Hammond, has analysed measurements obtained from 100 adult males in Ireland by Mr. J. M. Moge, and from 40 adult males in Wales (part of a survey carried out by Professor Fleure).

Mr. Hammond's conclusions have been described in the pages of this journal. Both he and Dr. Cohen found factors very similar to those observed in the London data. A third investigator, Mr. Gamble, has just completed a further study of Irish patients in mental hospitals, and finds that dolichocephalic types (particularly those belonging to the Mediterraneen or kindred groups) appear somewhat commoner among the schizophrenic patients, while other Irish types (brachycephalic, Nordic, beaker-type, etc.) are more frequent among manic-depressive patients—a result which at first might seem to support those who hold that the 'constitutional' types are related to racial types. On the other hand, Dr. Cohen's study of Jewish patients seems to imply that the distinctive physical and temperamental characteristics described by Kretschmer are largely the outcome of differences in endocrine balance, such as may be found in all or any racial groups.

With samples covering only a hundred persons or less, the probable errors of the correlations were too large to permit the statistical results to be fully significant: and it is the purpose of the present note to offer more decisive evidence, both for the value of the method and for the reliability of the inferences drawn, by analysing data from somewhat larger

groups. I give first a table of correlations obtained from 203 young British males (London students aged 21 or thereabouts: see Table I), and secondly a similar set of correlations independently procured during the recent 'Harvard growth study' from 533 young American males (youths aged about 16; see Table II). For my own investigations the choice of anthropometric measurements was based upon the scheme proposed by Giovanni and his fellow-workers for their studies of physical types; and the methods of measurement followed the instructions laid down by the Anthropometric Committee of the British Association. With both the London and the American data, the factorial analysis has been made by what is called the method of 'simple summation.' The factor-saturations so obtained are shown at the foot of each table.

With both sets of data the first factor proves to be by far the largest, accounting for between 50 and 60 per cent. of the total variance. In each case it is a 'general factor,' i.e., it has positive saturation coefficients for every one of the characteristics measured. This conclusively contradicts the view of Spearman and others, who have held that there is no general factor underlying physical measurements, analogous to the factor of 'general intelligence' underlying mental measurements. 'In all cases,' says Spearman, (referring to tables of correlations between 'bodily measurements' that he reprints from American writers), 'the divisibility into two factors—a general and a specific—does not occur'; and on this particular point—'the contrast between physical and mental measurements'—Professor Godfrey Thomson, Spearman's most vigorous critic on other matters, is in apparent agreement. With the Harvard data, it will be remarked, of all the various single traits, the two furnishing the highest correlations with the general factor of growth or size are standing height and weight: the same result was observed with the London school children, and thus

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6 An Application of Burt's Multiple Factor Analysis to the Delineation of Physical Types, MAN, XLII, 1942. It was intended that, if successful with this trial sample, Mr. Hammond's analysis should be extended to a much larger sample drawn from the Welsh survey: but his work was interrupted by the war. I may add that further investigations are in progress at one or two military hospitals, which will no doubt throw further light on the alleged correlation between psycho- and physical types: so far the results appear to confirm the view that the correlations with temperamental characteristics are certainly positive, but too small to be of diagnostic value.

7 W. F. Dearborn, J. W. M. Rothney and others, Predicting the Child's Development, 1941, pp. 299 et seq., and Table 63.
8 Brit. Ass. Ann. Rep., 1908, pp. 355-62. In the later batches an endeavour was made to include a larger variety of traits (head-measurements, measurements of upper and lower arm and leg); but so far the figures are too few for detailed comparison. Standing height and weight were always measured, but not included in the present analysis: standing height can be almost completely deduced from an appropriate selection of the other measurements; height is a characteristic of a different order from the others, which are linear measurements depending mainly upon bony growth.
9 C. Burt, Factors of the Mind, 1940, pp. 459-50, and footnote 1, p. 486. The data have also been examined by the method known as 'analysis of variance' with much the same results.
10 Spearman, Abilities of Man (1926), p. 144 (his italics: actually, as I have shown elsewhere, in the tables on which Spearman relies, there is a general factor accounting for nearly 50 per cent. of the variance). Thomson, Factorial Analysis of Human Ability (1939), pp. 279-81.
lends some support to the common practice of using height and weight as convenient indices of general physical development, at any rate until maturity is reached.

The second factor is bipolar; and with both tables divides the measurements into two contrasted groups, namely (i) the vertical or longitudinal measurements (such as height, and length of arms or legs), and (ii) the transverse or circumferential measurements (such as width, depth, or circumference of chest, hips, etc.). Consequently, a person who has a positive measurement for this factor will be relatively tall and thin ('leptosomatic,' 'microsplanchnic,' 'ectomorphic,' or 'asthenic'); and a person who has a negative measurement will be relatively short, broad, and stout ('eurysonmatic,' 'macrosplanchnic,' 'endomorph,' or 'pyknic'). In the first table the probable error of a just significant correlation is \( \pm 0.047 \) and in the second \( \pm 0.037 \). There can therefore no longer be any question about the statistical validity of these two factors.

There are indications of several minor factors; but their influence is much smaller, and their nature varies with the nature of the measurements selected for analysis. Both tables suggest (and more detailed measurements support the suggestion) that the so-called 'pyknic' type probably includes two distinct sub-types—those whose excessive breadth depends mainly on the breadth of the bones of the shoulder, chest, and possibly pelvis, and those whose excessive weight and girth depend mainly on obesity, especially in the abdominal region. Both tables suggest, too, that there is a specific factor governing the length of the bones of arms and legs; and the larger set of measurements indicates still more specific correlations between homologous parts of the limbs (long forearm, for example, tending to go with a long shin). When head-measurements are included, there are indications of a factor governing the growth of 'membrane-bones' (e.g. clavicle and skull) distinct from that which governs the growth of other large bones. But until more extensive measurements have been obtained from larger samples of the population, any detailed discussion of these subsidiary factors must remain inconclusive.

It must, however, be remembered that the 'factors' discovered by statistical analysis are in the first instance merely mathematical abstractions: the factor-saturations may suggest, but they cannot suffice to prove, the concrete nature of the causal factors that may be responsible for the correlations observed. Thus, because the second factor has both positive and negative saturations, it would be unsafe to infer, without other evidence,\(^{11}\) that there must be some physiological agency which has both positive and negative action—a 'rate-gene' or a 'growth-regulating hormone,' for example, which accelerates the growth of the long bones when overactive and retards it when underactive. Had we adopted what is termed the 'group-factor' method of analysis, we could have explained the measurements equally well in terms of factors whose saturations are all positive (except for trivial deviations attributable to errors of sampling and the like). Since many writers prefer this type of hypothesis, I have appended at the foot of Table II the factor-saturations reached by this alternative procedure.\(^{12}\) It will be observed that they do not alter the essential deductions, but only the terms in which those deductions are expressed.

However, this is not the place to speculate on the precise nature of the underlying agencies. I may content myself with noting that the establishment of factors of two main kinds—general or 'isauxetic' factors making for increase in physical size in all dimensions, and 'heteraxetic' or group-factors making for more specialized differences in physical proportions or shape—is in keeping, not only with the analogous results obtained by psychologists in the mental field, but also with the conclusions independently reached in the study of animal growth. In work on animals, Huxley and others\(^{13}\) have distinguished between 'isonomic' growth, in which the local growth gradients are but particular manifestations of a general growth gradient pervading the body as a whole, and 'heteronomic' or 'dysharmonic' growth, in which different parts or organs grow at different rates. Similarly, at the Institute of Experimental Biology at Kiev, Schmalhausen and his collaborators, working on the development of organs during embryonic life, have been led to an analogous theory implying two fundamental forms of growth during this earlier phase—one proceeding by a 'general increase proportional to the total bulk of the developing material,' and another making for 'progressive differentiation in different parts of the organism.'\(^{14}\)

writes, 'one and the same influence can act with a stimulating effect on the growth of some parts or organs, and with a depressing effect on the growth of others, we can understand how unequal growth would ensue, and how an alteration of form would consequently be produced.' (Arch. f. Entwicklungsmech. (1926), CVIII, p. 721).

This alternative procedure, and its relation to the former, are fully described in the appendix to Factors of the Mind (pp. 477–84). For assistance with these further calculations, I am indebted to Miss C. Banks.

\(^{11}\) This hypothesis has in fact been put forward by Schmalhausen on the evidence of his embryological work. 'If,' he writes, 'one and the same influence can act with a stimulating effect on the growth of some parts or organs, and with a depressing effect on the growth of others, we can understand how unequal growth would ensue, and how an alteration of form would consequently be produced.' (Arch. f. Entwicklungsmech. (1926), CVIII, p. 721).

\(^{12}\) This alternative procedure, and its relation to the former, are fully described in the appendix to Factors of the Mind (pp. 477–84). For assistance with these further calculations, I am indebted to Miss C. Banks.

\(^{13}\) J. S. Huxley, Problems of Relative Growth (1932). Incidentally I would suggest that the method of factor-analysis should be of assistance to the zoologist, not only for independent development patterns, but also for distinguishing species, where no obvious qualitative or geographical criteria are available, and generally for discovering polymorphic tendencies in groups that appear relatively homogeneous.

To the anthropologist the analysis of the Harvard data is, I venture to think, of special interest for two main reasons. First, it demonstrates that the conclusions reached by analysing measurements from Englishmen, Irishmen, Welshmen, and Jews also hold good for an American population. Secondly, it provides an answer to a question which the American investigators themselves were apparently unable to solve. After discussing the problem of 'body types,' they declare that, so far as they can see, their data merely 'illustrate the futility of trying to describe' any but the cases at the extremes of the distributions as types. 'The difficulty,' they rightly add, 'lies in determining just when one type ends and another type begins.' But, in seeking evidence for such types, they merely used the commoner indices proposed (e.g. chest depth × iliac width ÷ height); and they infer that, with such methods, any attempt to classify individuals into 'body types' such as those described by Kretschmer would seem to rest upon 'a mistaken idea.'

What is 'mistaken,' however, is not so much the idea of distinguishable types, but rather the way in which these types have been conceived and measured. In the anthropological field, 'types' seldom constitute sharply discriminated and mutually exclusive classes; they merge gradually the one into the other, and, as I have already stated, depend primarily on a tendency towards a complex pattern. Furthermore, these secondary tendencies are themselves nearly always obscured by the preponderant influence of the general factor. Hence, unless we use the method of multiple factor-analysis to eliminate that influence and to discover the complex pattern, the search for types is bound to be inconclusive.

How, then, are we to define the pattern and measure the degree to which any given individual conforms to it? The procedure commonly adopted is to devise some simple index, deduced, not from any statistical analysis, but merely from rough a priori considerations. In place of this crude procedure I venture to urge that the only adequate method for exact research is the construction of a partial regression equation, weighting each trait in proportion with their importance in characterizing the type. This is the natural corollary to a multiple factor-analysis (though in anthropological work the linear form, which alone is used by psychologists, will probably need to be replaced by a parabolic equation).

For practical purposes, the weighting equations and regression coefficients can often be reduced to simple integers; and a convenient measure of conformity to type can be obtained by the newer technique of 'correlating persons' (instead of correlating traits, as the older procedure usually entailed). With this device the ideal for the type in question is specified by a set of representative measurements (expressed in 'standard measure,' not, of course, in inches or metres); and the correlation of the given individual with this standard pattern then indicates how nearly he approximates to a perfect representative of the type. This procedure has proved satisfactory in many researches on psychological types; and I venture to suggest that similar methods might be adopted for formulating and verifying various physical types, particularly those alleged to be characteristic of particular peoples or races.

With his paper on 'The Use of Indices as an Auxiliary Method in the Establishment of Physical Types' (Human Biology, III (1931), pp. 420 et seq.), the factor-saturations given in the tables above suggest that, if we attempt to construct such an index based on the contrast between two measurements only, then the best result would be obtained by taking the ratio of body-weight to height (or some power of the height). This happens to be the ratio which Jackson and others have claimed, on different grounds, to be the 'most convenient index of body build' ('Normal and Abnormal Human Types,' Measurement of Man, V (1930), p. 88). However, body-weight depends largely upon metabolic factors regulating the deposition of fat, and so varies greatly with age, diet, etc. To estimate skeletal build, the best single ratio would be that of chest-width (or chest circumference) to standing height; if the above correlations can be trusted, this would seem decidedly better than the Lucas-Pryor ratio of iliac width to height, which has recently found much favour. It should be added that these and other anthropological indices would be much improved if the ratios were taken between measurements expressed in 'standard measure' rather than in absolute units. However, as I have argued in the text, physical type is far too complex a thing to be satisfactorily determined by the simple proportion between two measurements only. It will be observed that such anthropometric classifications may prove of special importance at the present time; as I have pointed out elsewhere, new weapons, conveyances, and controls, if designed merely to fit a 'standard man,' instead of taking account of the wide differences in body-type, may prove ill-adapted to at least 20 per cent of the population.
THE YALE OX. By Dr. Margaret A. Murray, D. Litt.

When Seligman first described the Dinka cattle with artificially deformed horns, he called them *majok* oxen, and this name was used by Sir Arthur Shipley in his *Hunting of the Yale, Cambridge Cameos*, 1924, p. 64 seq. With further knowledge Seligman withdrew the name: 'The late Sir Arthur Shipley on information supplied by us wrote that a beast with horns trained fore and aft was called *majok*. This was a mistake; an ox we saw happened to be a *majok*, but this term really applies only to particularly coloured (red with white belly) *muor cien*.' He says further that the *muor cien* have their horns trained so that one grows forward and the other backward; they act as leaders of the herd (Pagan Tribes of the Nilotic Sudan, p. 169 and note). Shipley has, however, brought together a mass of evidence proving that the 'fabulous' animal, the Yale, was merely a misunderstood version of an ordinary ox whose horns have been artificially distorted. I propose therefore in this paper to use the term 'Yale Ox' for any such animal, as the African term *muor cien* refers apparently to only one form of deformation, i.e. the fore and aft horns.

Several African tribes of the present day are adepts at altering the natural growth of the horns of cattle. The operation has to be performed when the animal is very young, when the horns are beginning to sprout. Seligman says that if the horns are to point fore and aft, the anterior base of the young and growing horn is sliced away to make it project forwards, while the horn that is to point backwards has the posterior base sliced off (Cambridge Cameos, p. 69). Le Vaillant, describing the methods used by the Kaffirs to alter the horns of their cattle, says, 'They take the animal at as tender an age as possible, and when the horns begin to appear they make a small vertical incision in them with a saw and divide them into two parts. If they are desirous of forcing one of these divisions in the whole horn to form, for example, a complete circle, they cut away from the point, which must not be hurt, a small part of its thickness, and this amputation, often renewed and with much patience, makes the horn bend in a contrary direction.'

That the practice of artificially deforming the horns of cattle dates to a high antiquity and was at one time very widespread, is proved by the examples still surviving. I give here instances of its occurrence which range in time and space from the modern Dinka ox of the Sudan to the animals represented in the paleolithic caves of France.

Fig. 1. Drawn from the example given by Seligman (Pagan Tribes, 1932, p. 35, fig. 38); who compares it with an Egyptian bull of the Vth dynasty (see fig. 5).

Fig. 2. This is the most elaborate of all the 'Yale oxen' represented in Egypt. It dates to the New Kingdom (i.e. Late Bronze Age, about 1400 B.C.). It figures in the tribute brought by the Negroe. The animal is obviously a royal gift, for it is not only a very fine bull, but the decoration indicates that great care and pains have been bestowed. The human head is probably worked up with clay from the thick hair which grows between a bull's horns, and the deformed horn is tipped with an object, possibly made of wood, in the shape of a human hand. Unfortunately the tip of the other horn seems to have been defaced anciently. The drawing is copied from the drawing in Hunting of the Yale where no reference is given. Cattle, with ordinary horns tipped with hands and with heads modelled between the horns, figure in the tribute to Tutankhamen in the tomb of his Vizier.

Figs. 3, 4. Both these examples show that the animal was the leader of the herd. They date to the Middle Kingdom, at least half a millennium earlier than No. 2. (Fig. 3 from Prise d'Avennes. Fig. 4, A. M. Blackman, Rock Tombs of Meir, I, Pl. IX. A similar Yale ox on Pl. X.)

Fig. 5. This dates to the Old Kingdom, and is the earliest example that I know of in ancient Egypt. The ox is being led to the sacrifice by a herdsman, and is represented in a separate little compartment by itself to show that it was a very special offering. (M. A. Murray, Saqqara Mastabas, I, Pl. XXII.)

It is perhaps worth noting that in the Egyptian examples it is always the long-horned cattle who have the deformed horns; the short-horns, who were also known from an early period, had horns that were allowed to grow naturally.

Fig. 6. This is an aurochs and comes from Mas d'Azil. The horns show the same kind of deformation as in fig. 4, one growing naturally, the other being trained downwards (E. Pilloy, L'Art pendant l'Age du Renne, Pl. XLVI, 4).

Fig. 7. This is a very confused drawing as another animal has been drawn over it, but the deformation of the horns is quite clear. It is presumably an ordinary bull and not an aurochs. It seems to represent a grazing ox, with the muzzle downwards, not upwards as in the publication (S. Piette, L'Anthropologie, V, p. 143).

Fig. 8. The example from Font de Gaume shows a less marked, though quite distinct, form of deformation. The near horn is clearly bent forward in an unnatural growth (L. Capitan, H. Breuil, D. Peyrony, La Caverne de Font de Gaume, p. 204, fig. 188).

Fig. 9. From the Grotte de Lascaux. The shape of this animal's horns suggests that both have been deformed, the one farthest from the spectator having been the more drastically treated (H. Breuil, Una Altamira Francesca, No. 11).

Fig. 10. Also from the Grotte de Lascaux. Though only one horn is shown, its downward curve shows
that it has not grown naturally, but has been deformed by artificial means (H. Breuil, *Una Altamira Francesca*, No. 11).


Dr. Peate deserves the sincerest gratitude of all folk-lore students for having so valiantly penetrated the mysteries surrounding the Mari Lwyd. His masterly exposure of the main characteristics of that Welsh custom suggested to the present writer a further way of approaching this long-obscure problem; namely, by attempting to determine the pagan festival on which that 'pre-Christian horse-ceremony' was performed. 

Mr. Peate's various examples indicate that the ML was carried about during the early hours of the night. These first hours of darkness agree well with the Celtic belief that 'night preceded day' (which had) the result that every festival began on the previous night.1

Among the Celtic festivals it is Samhain, the celebration of the New Year, which attracts our attention particularly for the following reasons:

1. Dr. Peate established the fact that the ML custom belongs to the mid-winter period. The pagan year 'began with winter, probably about mid-November, though later the winter festival began on 'November eve ...'2

2. Dr. Peate's instances are associated with Christmas, New Year, or Twelfth Night — with the coming of Christianity and the adoption of the Roman calendar, (the Samhain-ritual) was once more scattered over the other sacred days in winter. 'We must remember that in pre-Reformation times the festivities of the Christmas season were kept up until Candlemas. After the Reformation the natural tendency of the times was to shorten them.'3

3. Similar horse-ceremonies were and are still performed on 31 October, on Hallowe'en, which replaces Samhain's Eve, as well as on the other sacred days of winter, as we shall see later on. A 'speaking steed,' referred to in numerous Irish place-names, is associated with Samhain in Irish legend.4

4. The similarities existing between the ideas underlying the Samhain-rites and the various ML traditions seem too profound and too numerous to be accidental.
Samhain combines—like the Greek Anthesteria—two widely divergent aspects: a cheerful festival of beginnings and a gloomy commemoration of the dead. The importance of the latter part in Ireland emerges from the names given to November: 'The Month of the Dead' or 'The Month of Mourning'; 'ghosts' and evil spirits are believed to be powerful throughout the month. November 30 is the last night of the dance of the dead; on that night as well as on Samhain's Eve it is specially dangerous to be abroad, because the dead have been given leave from the other-world to return to earth.

Two customs entitle us to assume that the dead were supposed to visit their graves in preference to other places; they are:

(a) The kindling and keeping alight of bright fires at formerly prominent places of interment: on grave-mounds and in the hearth. (It makes us wonder whether the 'hills,' 'mountains,' 'eminences,' 'knolls' or 'rising grounds' where the bonfires were kindled have not actually been grave-mounds. The fact that the sites of former bonfires are of importance is disclosed by the Lancashire custom of marking them by means of cairns.)

(b) On the morning following Samhain's Eve the ashes of these bonfires or of the hearth are searched for traces of the dead.

Our statement that fires were kindled for the benefit of the returning dead agrees with the notion universally harboured that the dead seek the warming fire. A passage quoted by Dr. Peete from a Wassail-song of a ML party reads: 'We crave to have the heat of your fire... and suggests that the ML party represented beings from the other-world. Let us examine the main figure, the ML, from this point of view.

The following three items speak in favour of the ML being a 'death-horse':

1. The white sheet used for its cover. In other Hallowe'en performances the same requisite symbolizes beings from other-world.

(In Leitrim a person runs in a white sheet through the house on Samhain's Eve.)

The festivities of the 'Hallowe'en Queen' concluded with a 'Ghost-scene.' 'One of the number was selected and covered with a white sheet, and held a long rod, also covered with the sheet, which gave the ghost a weird appearance...'"

2. The observations recorded by Marie Trevelyan:

'Some people think that the bony horse's head used in what is called the "ML" celebration was an emblem of death, or a symbol of the dead, and not a remnant of pre-Reformation days and the Virgin Mary.

'I have been told that in the seventeenth and early eighteenth centuries this celebration was called in many parts of Wales the "Marw Llwyd," meaning the "Grey Death," a symbol of the dying or dead year.

'The skeleton, head and shoulders and skull of the horse, accompanied by a procession of sightseers and dancers, point to the ML celebrations as a lingering vestige of ancient horse worship common to Celts, Teutons, and Slavs."

3. The association between a horse and the dead or the dying year has been elucidated by Professor Macalister's definition of the divine king of Temair: totemistically connected with a horse, the king was an incarnation of the god of vegetation and of richness of cattle as well as a chthonic deity, Dis Pater, god of the dead. The chthonic character of the horse, well-known from Greek traditions, can be met with in Celtic literature, where horses express presentiment of approaching death.

Having established some foundations for the relationship between the ML itself and the other-world, we shall have to investigate whether the other details of the ML-rite fit in with our theory. With the dead wandering about, the darkness of Samhain's night and its horrors are so great that most people are afraid to go forth after dark. They remain behind closed doors and windows and we can readily understand:

(a) Why 'the visiting players' had 'to knock for admittance' and to prove their harmless nature by reciting traditional passwords and by answering in set rhymes. ('Well, here we come, innocent friends... For we are all poor people, well known to you before...')

(b) Why the ML—a being from the other-world—when

'peeping around into the room, or sometimes shewing his head by pushing it through an upstairs window always created a collapse of some, and the scamper of others.'

It should be noticed here that 'of all the festival days offering alleged favourable opportunities of looking into the future... none is more famous than Hallow-E'en, the 31 October... Therefore it might not be unreasonable to conjecture that the unexpected appearance of the ML was thought to prophesy the death of the onlooker during the coming year.

'The visiting players' are sometimes 'the soulers' or, in Denbighshire, 'messengers from the dead.'

The gifts offered to them are by no means without a deep significance. In Irish legend hazel-nuts have been called 'the moderate share of food which the dead sought when visiting their old homes.' The
nuts given to the players, or burnt in the hearth 22 (which ranks amongst the foremost places visited by the dead on Samhain’s Eve), were certainly meant for the benefit of the dead. The extremely close connection between apples and the other-world has found expression in several Irish legends.13 Pagan apple rites survive in the manifold apple-games of Hallowe’en, the snipping of apples, apple-auguries, etc.24 (The wasilling of apple-trees in mid-winter should be re-examined!) Bearing in mind the symbolic meaning of hazel-nuts as well as of apples, we may see in these gifts to ‘the visiting players’—just as in the kindling of fires—a means of providing protection during that dangerous night by propitiating the dead.

A similar intention may have caused the drinking customs and the disguising of both sexes which Dr. Peate quoted and which also form part of the Samhain-traditions.25 However, with the same right both customs can be claimed for the festival of beginnings, which was celebrated in order to secure the fertility of crops and cattle. This latter hypothesis is stressed by Martin’s record:

the inhabitants of the Lewis Isles used to offer at Hallow-tide a cup of newly-brewed ale to a sea-god called Shony when asking him to send plenty of seaware for enriching the ground the ensuing year.26

The Hallowe’en drinking customs 27 remind us again of the Greek Anthestoria, the most prominent part of which was the blessing and ceremonial drinking of the new wine. The first day, called Pithoigia, had its name from the opening of the wine jars.28

Leaving the similarities between the ML customs and the Samhain rites, we proceed with the quotation of the story of ‘the speaking steed’ and with the enumeration of related horse-ceremonies spread over the British Isles and scattered over the sacred days in winter. There is a manuscript piece, entitled ‘Mac ‘na Michomhairle’ (Son of the evil advice), which states that ‘the reason the hill was called Binn-each-labhra (hill of the speaking steed) was this: namely, in the days of Samhain, a plump, sleek, terrible steed was wont to emerge as far as his middle from the hill, and speak in human voice to each person; he was accustomed to give intelligent and proper responses, to such as consulted him, concerning all that would befall them until Samhain of the ensuing year. The people used to offer valuable gifts and presents to him at the hill and they adored him until the time of Patrick and the holy clergy.29

Unfortunately the passage leaves us guessing. Did the steed emerge from a sacred cave? Since it appeared on Samhain the fact should not be overlooked that in Ireland caves served as burial chambers 30; universally caves aroused the belief that supernatural agencies were at work in them. Or should we interpret the passage as referring to an artificial horse related to the following examples? Since the Hobby-Horse and the Hooded Horse have been discussed in detail by Miss Alford and Dr. Maylam, it will only be necessary to stress points of special interest and to group the records according to the sacred days on which they are performed.

1. Hallowe’en traditions.

(a) Dr. Evans mentions an Irish game ‘Riding and Shoeing the Wooden Mare.’31
(b) ‘Hobby-Horse in white sheet led about in S. Wales.’32
(c) The Bwea Lwyd in Wales. ‘A horse’s head made of canvas is prepared. This is painted and stuffed with hay. A hay fork, the blades covered over with leather, does duty for ears, the handle being manipulated by the person inside, who guides the movements of the head as he wishes.’33
(d) W. G. Wood-Martin writes in 1902 that not very long ago a remarkable rustic procession ‘used to perambulate yearly the district between Ballycotton and Trablogan (Ireland), on the eve of Samhain. . . . The principal characters posed as messengers of a being styled the “Muck Olla,” in whose name they levied contributions on farmers. The procession was led by a man enveloped in a white robe or sheet, bearing a rude representation of a horse’s head, accompanied by a number of youths blowing cows’ horns. This personage, called the Lair Bhan, i.e. “the white mare,” acted as master of the ceremonies . . .’34

2. All Souls’ traditions. 2 November. From All Souls’ Day to Christmas Day, Old Hob is carried about in Cheshire. As far as Mr. Wright could ascertain, the custom was discontinued in the late years of the nineteenth century.35

(a) An outline of the Soulers’ Play, as performed at Halton, near Frodsham, 1886. After the appearance of the Old Woman, Knight George, the Turkish champion, the doctor, Beelzebub and Jerry Dout ‘the Hobby Horse is led in by the Driver . . . (it) prances and snaps his jaws. This imitation horse is usually made up with a horse’s skull fastened to the top of a staff. A man, in a stooping posture; holds the staff so that his legs serve as the horse’s hind legs, his back the horse’s back, and the staff serves for the fore legs . . .’36

The staff representing the fore-legs reminds us of the rod, mentioned before in the ‘Ghost-scene’; was it used for the same purpose and did ‘the weird appearance’ originally represent a horse?

(b) At Northwich, Tarporely, and other places the souls are accompanied by one bearing an imitation head of a horse, which snaps its jaws.
'in an alarming manner.' Mr. Wright adds that the covering of the horse was a white sheet.37
(c) 'Once at least Dicky Tatton is shown with a real horse skull ... blackened with varnish to a more natural likeness of a live horse, and furnished up with plumes, ribbons, and horse-bells. Shaking his head and "gnashing at his bit" he is led round by the Driver. This all Souls' horse is attached to the remnants of a Mummers' Play of St. George, Lord Nelson, and a Lady dancing and incongruously singing the Souling Song.'38

3. Christmas traditions.

(a) 'In the Midland counties, people asking for Xmas-boxes on Christmas Eve drag about with them a horse's head and skin.' William Henderson has seen this himself in the Forest of Dean.39
(b) 'In some parts of Derbyshire, "th' poor owld hoss" is taken round at Christmas time ... 40
(c) An example from Land's End district with head, neck, and snapping jits, its carrier covered by the hide. The accompanying guisers must have been some of the most primitive in England for they too, in imitation of their Midwinter beast, were wearing bullock skins with the horns left on the head. Sometimes these, or more probably additional characters, presented the Mummers' Play, and not to be misled by the newfangled Calendar they were out from new to old Christmas Day to make quite sure of covering the essential period.'41
(d) The Abbots Bromley Horn Dance was formerly done in the churchyard after service on Christmas day, which corroborated Dr. Plot: The Hobby-horse dance at Christmas (on New-Year and Twelfth-day); a person 'carried the image of a horse between his legs, made of thin boards, and in his hand a bow and arrow, which passing through a hole in the bow, and stopping upon a shoulder it had in it, he made a snapping noise as he drew it to and fro, keeping time with the Musick: with this man danced six others, carrying on their shoulders as many Rain deers heads ...'42

'In bye-gone days ... it is probable that the hooden horse was to be found at Christmas in every village and hamlet, in fact in every large farm throughout the whole of that part of Kent lying east of Godmersham.'43
(e) In Thanet the "make-up of the horse ... consists of a horse's head crudely carved from a block of wood and painted ... The lower jaw of the head works on a hinge and attached to it is a leather lace ... which the hoodener pulls repeatedly, bringing the lower jaw sharply into contact with the upper jaw, and as both upper and lower jaws are thickly studded with hobnails for teeth, the result is a loud snapping noise supposed to represent the champing of a horse ...'. In Thanet the practice of the custom is almost entirely, if not quite, restricted to the men on the farm who have charge of the farm horses, and formerly (Dr. Maylam was told) a farm with more than one team would have a hooden horse to each team; when not in use it is kept in the stable.'44

Miss Alford states that the Hooden Horse could be seen some years ago in the Isle of Thanet, and indeed he may still come out round Deal ... We hear of him first in print in 1731. In 1807 his head is described as that of a dead horse, but from 1859 onwards as being of wood. In 1891 it was "hollowed out and a lighted candle held inside"—an impressive apparition on a dark Christmas Eve ... 45

(f) During the years 1849-1903 'the men on Walmer Court Farm always went round at Christmas with the hooden horse ... The wooden head is made on the same lines as the Thanet horse ... The Walmer horse has no pretence to tail or mane.' The rounds took place from 6.30 till about 11 o'clock.46

(g) The Lower Hardres horse (now lost) is described as "being more like a horse," having a distinct neck.47

(h) Formerly at St. Nicholas-at-Wade 'the farmer used to send annually round the neighbourhood the best horse under the charge of the wagoner, ... afterwards instead, a man used to represent the horse, being supplied with a tail, and with a wooden figure of a horse's head, and plenty of horse hair for a mane ...' There was a hooden-horse at St. Nicholas-at-Wade at least until Christmas 1908.48

(i) At Deal 'the head displays a marked variance from the other ... showing an attempt to be more realistic.'49

(k) 'The hobby horse finds a place among the performers of the Morris Dance at Revesby, in Lincolnshire, or did, so recently as the Jubilee Celebration in 1887 ... The date of the performance is 20 October, but there is a reference to Christmas in the words ...'50


(a) 'In Lancashire they amused themselves on Twelfth Night by carrying round the semblance of a horse's head.'51

(b) 'The morris dancers who go about from village to village about the twelfth day, have their fool, their maid Marian (here generally a man dressed in women's clothes) and sometimes the hobbyhorse ...'52
It has been our endeavour: 1. to demonstrate by means of numerous and remarkable coincidences that the ML originally constituted part of the Celtic Samhain-ritual.

2. Bearing Mr. Peate's statement in mind that 'the ML may be associated with similar customs' we have shown how the hobby-horse and the hooden-horse are connected with the various sacred days of mid-winter. The phenomenon of their being spread over Hallowe'en, All Souls', Christmas, New Year, and Twelfth Night can only be found in the scattering of the Samhain-rites, with which we dealt at the beginning.

If our theory has been found sufficiently substantiated, the connexion between the Mari Lwyd, the Hobby-Horse, and the Hooden-Horse, employed in mid-winter rites—and the commemoration of the dead should be looked upon less sceptically.

32. Folk-Lore, XXVIII, p. 65.
35. Wright, British Calendar Customs, III, op. cit., p. 145.
41. V. Alford, op. cit., p. 228, quoted from R. Edwards, The Land's End District (ca. 1862).
42. V. Alford, 'The Abbots Bromley Horn Dance,' Antiquity, VII (1933), pp. 203, 209, n. 2; Dr. Robert Plot, Natural History of Staffordshire (1686), p. 434.
44. Ibid., pp. 4-5, 7.
45. The Hobby Horse, op. cit., pp. 227-228.
47. Ibid., p. 9.
48. Ibid., pp. 22-23, quoted from a letter from the late Rev. H Bennett Smith, Vicar of St. Nicholas-at-Wade in 1876.
49. Ibid., pp. 45-46.
Fig. 1.—Scenes from the Tomb of Rekhmiré, about 1450 B.C.


75 Fig. 1 shows the metal-workers in the tomb of Rekhmiré at Thebes in Egypt of a date about 1450 B.C., and as this picture has given rise to so much misunderstanding it is as well to set out the facts about it. Seeing that in Central Africa many of the Negroes both smelt and smith iron with the same system of bellows, this picture has been made the basis of a belief that iron-smelting is represented here, and hence that a knowledge of iron-working spread from Africa to Egypt and thence over the whole world. This is a complete misconception.

It will be seen that whatever it is that is being treated in the fire it is something in a crucible, which two men are twice shown to be lifting by means of (green withies?). The contents are then poured out into a mould. Hence, the scene is one of melting, not of smelting, metal. It can, therefore, have nothing to do with iron-working, for such small furnaces are not capable of melting a mass of iron, as that requires a temperature of 1,530° centigrade, which they are not able to attain. Moreover, the scene is one of casting, for the centre piece shows the liquid metal being poured from the crucible into the mould. Hence, once more, the pictures can have nothing to do with the iron-industry, as castings of melted iron were not made until the Middle Ages. On the other hand, bronze is an excellent medium for casting, and has been regularly used for this purpose. Moreover, Rekhmiré's pictures were painted in the middle of the Eighteenth Dynasty, about 1450 B.C., when Egypt was in her full Bronze Age, when such few scraps of iron as there were were nothing but curiosities, and some thousand years and more before her Iron Age can be said to begin.

In actuality the scene is one of a bronze-worker's shop. On the extreme right two men are polishing one metal vase, while another stands behind them, and a couple of dishes and a ladle lie on the table above them. In the middle of the scene between the two inscriptions lie two leaves of a door. All these objects are well known at the period and are made of bronze, never of iron. Below the right-hand inscription three men bring ingots of two shapes. That brought by the foremost man has the hollow sides of the standard shape of copper ingots all over the eastern Mediterranean. The two men behind are bringing basketfuls of bars or cakes. As these accompany the copper ingot in a bronze-worker's shop, they must be tin, for that is what is mixed with copper to make bronze. The picture in the left centre is consequent upon this, for it shows a man stirring something [in a crucible] in the fire. He will be stirring the mixture of the two metals which are being melted together.

The two leaves of the door which are shown above the casters have been marked by the copyist, Mr. N. de G. Davies, as being red in colour. This shows them to have been of copper, or rather of bronze, as indeed we know such things to have been. The inscription over the bearers of the ingots says that they are bringing them 'in order to cast a pair of doors for the shrine of Amun in Karnak.' So the

J. Déchelette, Manuel d'archéologie, ii, pp. 397-400, fig. 160. Much of the information, but in less detail, will be found in Sir A. J. Evans, The Palace of Minos, ii, p. 624, fig. 391; iv, p. 652, fig. 636, where two of the nineteen found at Hagia Triada in Crete are shown. Evans quotes others that have been found at other places in Crete and a piece of one that was found at Knossos itself. Yet others come from Sardinia, Cyprus, Mycenae, Chalkis, and other places on the mainland of Greece. His fig. 637 shows how often these ingots are recorded on the tablets from Knossos. They are also brought to Egypt as tribute by the Syrians and Keltans: N. de G. Davies, Bull. Metrop. Mus. of Art, New York, 1926, The Egyptian Expedition, 1924-5, p. 48, fig. 5; Wreszinski, Atlas zur altägyptischen Kulturgeschichte, Pls. 334-5; Nina de G. Davies, The Tomb of Huy, Pl. xix, top register. For the red colouring of Wreszinski's and Mrs. Davies's examples see J. G. Wilkinson, The Manners and Customs of the Ancient Egyptians (ed. Birch), i, Pls. ii, A, B, following p. 38; C. R. Lepsius, Denkmäler, iii, Pl. 116A. Pl. xxi of Davies's (unpublished) drawings shows that those ingots set down on the ground in Wreszinski's Pl. 335 are labelled hmt 'copper'.

[94]
picture of the casting itself is interesting in showing how these huge castings were made. The mould is set up on edge, and the liquid bronze is poured in through a series of funnels along the length of the door. This enables the metal to be distributed evenly to all parts of the casting. The rest of the scenes adds little of value. On the extreme left two more men are blowing up their fire with similar bellows. It is contained in something which Mr. Davies has marked as being ‘light brown’ in colour, and is no doubt an earthenware fireplace of some sort. The other furnaces are also contained in just such a way and that at the top left corner is also marked ‘light brown.’ By the side of the casters a man empties a sack of charcoal, and piles of black material, also of course charcoal, lie beside most of the other fires. At the extreme right a workman with his tongs sits at his small hooded furnace, which he stimulates with the old-fashioned blowpipe. In the centre, above the casters, three more men are coming with their tongs and blowpipes.

The inscription over the casters unfortunately gives no information, as it is merely laudatory of Teshmosy III under his throne-name of Men-kheper-re. It reads: ‘They say: The kingly, whose monuments are beautiful, Men-kheper-re given life for ever, may he exist while they (the monuments) exist for ever, he who has been given the reward of these good works in the form of good luck, while he continues to make monuments in the house of his father (i.e. Amun).’

The inscription over the bearers of the ingots, though involved in laudations, this time of the temple of Amun, yet gives valuable information. It says: ‘Bringing Asiatic copper, which his Majesty carried off in victory from the hill-country of Syria, in order to cast a pair of doors for the shrine of Amun in Karnak, the pavement of which is overlaid with gold in the likeness of the horizon of heaven, by the Governor of Thebes and Vizier [Rekhmire].’ Thus, if further evidence were needed, it states definitely that the scenes deal with copper and that it is Asiatic in origin, having been captured in Syria. I was able to show in Antiquity, XVII, p. 96, that ‘Asiatic copper’ was probably the original name given to bronze by the Egyptians, as it seems almost certain that they got it originally from Byblos (Gebeil) on the Syrian coast. When they first used the name they only knew that the ‘copper’ that they got from there was of good quality, but did not know what caused it to be different from other copper.

There is another fallacy based on this picture which should be disposed of here. It is that these bowl-bellows are original to Egypt. This is quite false, for although we have a number of scenes of metal-workers from a period running from the latter part of the Fourth Dynasty, say about 2800 B.C., to the beginning of the Twelfth Dynasty, say about 1975 B.C., none of these scenes ever shows bellows of any sort. During that time it is always the blowpipe that is used, such as is shown here, fig. 2. Large furnaces were forced in this way by gangs of two, four, or six men blowing with their own lungs, and once a single blower is shown. It is not until the middle of the Eighteenth Dynasty that bellows are first shown, but at that time and in the latter part of the dynasty they are represented a number of times. Thus, there is one at the end of Hatshepsut’s reign or the opening years of Teshmosy III, i.e. not later than 1500 B.C. At the end of Teshmosy III’s reign or at the begin-

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4 C. R. Lepsius, Denkmäler aus Aegypten und Äthiopien, ii, Pl. 13, shows six blowers. This is the earliest, being in the tomb of a son of Mycerinus and therefore of the latter part of the Fourth Dynasty, say about 2800 B.C.; Early Fifth Dynasty, about 2700 B.C.; Id., op. cit., Pl. 49b, four blowers; G. Steindorff, Das Grab des Ti, Pl. 134, four blowers; Middle Sixth Dynasty, about 2575 B.C.; N. de G. Davies, Deir el-Gebrawi, ii, Pl. xix, four blowers; Id., op. cit., i, Pl. xiv, six blowers.

5 P. E. Newberry, Beni Hasan, ii, Pl. vii, bottom left-hand corner shows two blowers, latter part of the Eleventh Dynasty, say about 2050 B.C.; Id., op. cit., Pl. xiv, third row from the top shows two blowers in one case and one in the other, end of the Eleventh Dynasty, say about 2000 B.C.; Id., op. cit., i, Pl. xi, third row from the top (reproduced in colour, Id., op. cit., iv, Pl. xx) shows two blowers, Earliest Twelfth Dynasty, say about 1950 B.C.

6 Fig. 2 is taken from P. Duell, The Mastaba of Mereruka (Chicago), i, Pl. 30, and dates to the beginning of the Sixth Dynasty, say about 2600 B.C., p. 6. The accompanying inscription records remarks made by the workmen and is practically unintelligible, as are most of those accompanying the metal-casters. Of them all only two are satisfactory. One reads: ‘It looks very good,’ evidently referring to the molten metal or the casting, and the other says: ‘Blow strongly [that it may become] hot.’ On another scene one blower says something about ‘wind’ and the other replies something about ‘beer,’ though apparently not for himself. Erman has made a study of numbers of these remarks made by workpeople in Beel, Rufe und Lieder aus Griebildern des alten Reiches in Abhundl. preuss. Ak. Wiss., 1918, Phil.-hist. Klasse, Nr. 15, pp. 3-62. Those of the copper-casters will be found on pp. 40-2. P. Montet has also discussed the scenes and their inscriptions, but without adding anything new in his Les scènes de la vie privée dans les tombeaux égyptiens de l'ancien empire, pp. 278-84.

7 N. de G. Davies, The Tomb of Puymir at Thebes, i, Pls. xxiii, xxiv, middle row, and p. 73. For the date see p. 21.
ning of that of Amenhotep II, i.e. about 1450 B.C., we have the paintings of Rekhmiré, which have been so often published and which form the subject of this article. From the reign of Amenhotep III, c. 1411-1375 B.C., there is another picture, and probably from the end of the same reign there is yet another. After this we see no more of the bellows, not because they were no longer used, but because this type of picture ceases to have been painted.

The first appearance of the bellows shows them to have been used in pairs, so as to keep up a continuous blast. It also shows them at a time when Asiatic influences were strong in Egypt, and as being used to fuse 'Asiatic copper' which had been brought to Egypt 'from the hill-country of Syria.' Hence, it is probable that the bellows themselves were an introduction from Asia. Fig. 3 makes it clear that pairs of bellows had been used in Mesopotamia a thousand years before the system was introduced into Egypt.

The object comes from Tello in Mesopotamia, and is clearly a firepan, just as the finder described it to be. It is a pottery pan about 50 cms. (20 inches) in diameter and 12 cms. (4½ inches) deep. It was filled with ash, and so had been used for a fire. From the side there is a projection pierced with two holes, which, as the excavator says, are clearly designed for use with a pair of bellows. This fireplace arranged for a pair of bellows evidently dates to the third millennium B.C., for everything that came from the excavation and could be dated belonged to the kings of that period; Gudea, about 2600 B.C. and his son Ur-Ningirsu, and Dungi who reigned about 2450 B.C.

But unfortunately we do not know what the type of bellows was that was used with this furnace. No doubt they were of the same type as those shown in the Egyptian pictures a thousand years later and which clearly came from Asia, that is to say, a pair of bowls covered with a pliable skin.

The other type is the bag-bellows which is merely a pair of skins with an opening at the back of each which can be opened and shut by the fingers of the bellows boy, as he raises or depresses them, fig. 4. They do not appear in ancient Egypt, and seem to be a later invention than the bowl-bellows. I have found nothing earlier than what appears to be a reference to them at about 800 B.C. It is in the well-known passage in the Odyssey, X, ll. 19-20, where Odysseus says that 'He (Aeolus) gave me a skin-bag (δασχός) flayed from an ox of nine years, and therein he bound the paths of the blistering winds.' Later again they are often figured on Greek vase paintings and sculpture from the early sixth century onwards.

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9 The tomb is lettered qq in Porter and Moss's bibliography, *The Theban Necropolis*, p. 193. A very rough coloured sketch, of which no detail can be trusted is given by Loret in *Méms. publiés par les membres de la mission arch. franç. au Caire*, i, Pl. 1, fig. 1 and cf. p. 29.


12 Passim. From the same level in the trench, 1.45 metres below the surface, came part of a terra-cotta of the workmanship of that date or earlier, *Id.*., *op. cit.*, Pl. vii, fig. 4. Not Pl. viii as stated in the text. There was nothing from the excavation that could with any reason be dated to a later period.

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13 Fig. 4 is drawn from P. de la Coste-Messelière, *Au Musée de Delphes* (1936), Pl. xxiii, facing p. 318, The Siphnian Frieze, c. 525 B.C.

14 *The Iliad*, xviii, ll. 372, 409, gives no indication as to which of the two types Hephastus' *fōasa* were.

15 *Darembourg and Saglio, Dictionnaire des antiquités grecques et romaines*, n.s. *Follis*, p. 1,227, give *fōasa* as one of the words used by the Greeks for bellows. Inflated skins were being used by swimmers in Assyria in the early ninth century, a habit that would easily lead to the invention of the bag-bellows: E. A. Wallis Budge, *Assyrian Sculptures in the British Museum: Reign of Ashur-nasir-pal*, 885-60 B.C., Pls. xxii, 1, 2, xxii, 1. On the other hand, none of Rameses II's sculptures of the battle of Qadesh in Syria in 1287 B.C. show the Hittites using them in swimming back to the city, Plates in J. H. Breasted, *The Battle of Kadesh* (Chicago, 1903).

16 Professor Beazley has kindly given me the following references and dates: not later than 560 B.C., B. Graef and E. Langlotz, *Die antiken Vasen von der Akropolis zu Athen*, Pl. 94, fig. 2,134, b. c, and Text, p. 215; about 525 B.C., the Siphnian Frieze, P. de la Coste-Messelière, *Au Musée de Delphes* (1936), p. 313 and Pl. xxiii; 490-80 B.C., A. Furtwängler and K. Reichhold, *Griechischen Vasenmalerei*, Pl. 135,
To return to where we began; the idea that the iron-industry originated in Africa and spread to Egypt and thence over the world is in complete opposition to the known facts, quite apart from any beliefs based on the bellows. The present writer has shown that men were already smelting their own iron in Mesopotamia and its neighbourhood before 2700 B.C. Iron was quite common in Asia Minor from the twentieth century B.C. onwards, and in northern and central Syria and north-western Mesopotamia we know of iron in the sixteenth and fourteenth centuries B.C. By 1100 B.C. the Iron Age was setting in in these lands, and by the eighth century B.C. had reached vast proportions in Assyria. The Iron Age was introduced to Egypt by Psametik I's mercenaries from Caria, Ionia, and Lydia in the seventh century B.C., and even then was slow in appealing to the native population. Nearly a hundred years later it was carried up into Nubia by another generation of these mercenaries under Psametik II, 593-588 B.C., and it was at some time after this that the vast iron-industry was started at Meroë.

The iron-industry is later again in appearing in Africa, and on the whole may be said to be later as we proceed southwards. The Bushongo learned of it in their far-northern home on the Shari River in the sixth century A.D. It came to Uganda about A.D. 1000, but had evidently been established in Unyoro before that. Near the Zambezi the Basuto nation was founded in the thirteenth century by the famous ancestor Morolong (Smith) and his son Noto (Hammer). The industry was introduced to Angola about A.D. 1475. In south-west Africa the craft reached the Berg-Dama, or Damara, about 1400 or 1500 A.D., and the Winamwanga between Lakes Tanganyika and Nyasa were taught it in the seventeenth century.

Thus, it is certain that the iron industry did not originate in Africa and spread from there over the whole world. On the contrary it originated in western Asia, spread to Egypt, and thence to Meroë. It was only very much later again that it began to work its way up into central Africa, and the process was not complete when the Europeans came on the scenes in the nineteenth century. In moving up into Africa the iron-industry brought with it its bellows, which had been used long before then in the bronze-industry, and, in Mesopotamia, no doubt long before that in the copper-industry.

On the way into Africa the manipulation of the bellows has changed. Rekhmirè's men tread their bellows, whereas the negroes regularly work theirs by hand, whether with sticks which is usual, or by merely grasping the soft covering of the bowls. However, the Labwor of north-eastern Uganda tread their bellows as a rule, though even they also use the sticks in the usual African way. For treading the feet are inserted into straps attached to the pliable top and so are able both to raise and depress it. On the other side of the continent a curious memory of the use of the feet for working the bellows has survived among the Ewe-people of West Africa. They speak of a newborn child who has died as kuyowu, which is translated as 'Death treads the bellows [against me].' In Egypt the picture of the copper-caster of the Old Kingdom shows him holding the hot crucible by means of thick pads (fig. 2) which no doubt were wetted to prevent their burning. This is exactly what Livingstone saw the Nyamwezi copper-casters doing in 1868. In the New Kingdom, however, the crucible is held with withies (fig. 1), which no doubt would be green and perhaps wetted as well. Much can be done with comparatively thin green things. For instance, round about the headwaters of the Kadel River the Baya-Kala merely use a liana to drag the red-hot pig of iron away from the smelting furnace. Similarly in West Africa near Oyo in the Yoruba country a loop of green creeper is actually got round the red-hot pig as it lies in the furnace. This serves to drag it out and eventually right out of the shed, although the pig is heavy, weighing some seventy or eighty pounds. Evidently these green...
things do not burn through immediately as the uninitiated might suppose they would. Not only the method of holding the crucible but also its form had changed by the New Kingdom. Originally it was a deep pot with a spout at the bottom which was stopped up, and the picture shows a workman breaking it open and the molten metal pouring out. By the time fig. 1 was drawn this type of crucible had been given up in favour of a shallow bowl with a lip from which the metal was poured.30 One would have thought that this would not have been as practical a shape as the older one.

Before closing it will be well to state that though we have many scenes of metal-working in ancient Egypt, there is no single instance of smelting the metal from its ore. The scenes are always of melting the ready-made metal. Attention has been drawn to this in the case of Rekhmire's pictures, and it is seen again in fig. 2, which is eleven or twelve hundred years older. In each case the workmen are pouring out the molten metal.


Those who remember the Australian Aboriginal Art Exhibition of 1929, and the account of Australian Aboriginal Art published in connexion with it by Mrs. Charles Barrett and A. S. Kenyon, will appreciate the knowledge and energy which have gone to the preparation of this one, which is of considerably wider scope. Most of the objects are from the Melbourne collections, but a few from private sources. The object of the exhibition is to show that primitive man has always had his artists, many of them with artistic aims and ideals not far removed from those of to-day. The principal provinces here represented are Australia, New Guinea, Melanesia, Polynesia, America—represented by British Columbia, Alaska, Eastern Canada, the Pueblo Indians, and Peru—and Africa, both Bushman, Negro, and predynastic Egyptian. Asia has only a small series from Tibet and Ceylon, and Indonesia, and some Luristan bronzes which can hardly be described as 'primitive.'

There is a short introduction by Dr. Leonhard Adam, and ten plates, among which the Bixula 'Thunderbird 'Mask' and the Kwakiutl 'Portrait of a Chief' are masterpieces in their respective styles.

J. L. M:

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS.


One of the most interesting problems of European archaeology is the proper linking of the several established groups of culture with the individual groups of Indo-European, Aryan, and other ancient European peoples, mentioned in historical sources. In this field noticeable achievements have been attained. Nevertheless, there are still many questions which remain to be answered, among them that of the oldest settlements of the Slavs.

In discussing the problem of the earliest settlements of any Indo-European people one should begin by realizing where is the proper place of that people in the scheme of the relationships and language similarities between the Indo-European peoples, as established by H. Hirt. According to this the Slavs must have been situated among Teutons, Balts, Indo-Iranians, Thracians and Illyrians, which should correspond geographically to an area situated roughly between the Elbe and Dnieper, the Baltic Sea and the Sudetens and Carpathian Mountains. There are, however, some objections against such an assumption, and owing to them the oldest Slavonic settlements are mostly located somewhere in Polesia and Northern Volhynia.

If any theory is to be maintained it must be in keeping with the data gained from all branches of science, and the theory which locates the homeland of the Slavs in this region is far from that. There are many objections against it, geographical, linguistic, and archeological. It would be, however, quite a different matter if we were to put the oldest Slavonic settlements in the territory between the rivers Oder and Bug. This localization corresponds completely with all the conditions provided by other sciences and has full support from the side of archeology too. It is the Lusatian culture which can be regarded as the culture of the ancient Slavs.

There are, of course, many scientists who disapprove of such an assumption. One of the strongest arguments against Lusatian culture being Slavonic is the quite commonly accepted fact that this culture vanished suddenly in the fifth century B.C. But in the light of many researches by Polish scientists during the ten years before the present war there can be no doubt of the continuity of settlement on the territory occupied by the Lusatian culture to the tenth century A.D., that is to the beginnings of Polish history. Although changes in culture occurred several times during this period, a careful study of archaeological material leads to the conclusion that the bearers of those cultures, though subjected to different influences and invasions, still belonged to the same race.

There remain still many questions to be explained. Nevertheless, in spite of the difficulties, there are more arguments for the assumption that the bearers of the Lusatian culture were the Slavs, and for the location of the oldest Slavonic settlements in the territory which is to-day Poland and Eastern Germany, than there are against it.

The paper was discussed by Mr. Hawkes and Dr. Baumgartel. Professor Sulimirski replied.


There was for long a general similarity in the pattern of country life in the different countries of Europe. The cultivated land was held partly in large
estates by great landowners, and partly in small parcels by the peasants. The two were closely related: the peasants had duties towards the landowners and the landowners had responsibilities towards the peasants. The peasants' duties were in the nature of services, and so long as they so remained the peasants had but little need for money and their farming was chiefly for subsistence, mostly grain production with such animal produce as could be got off the wild land. Clearly they found the services rather irksome, for they steadily got out of them or commuted them by payment; this transfer from a service to a cash basis for the discharge of the peasants' liabilities was one of the permanent features of peasant history. It involved a change in the agriculture as it meant farming not only for subsistence but also for cash. A second feature in peasant history was the division of the land between the peasants and the landowners. As the peasants were more numerous than the landowners, they multiplied more rapidly and soon found their old share of the land inadequate. So began a struggle for land which has lasted for generations. The peasants not only had the urge of hunger but felt that justice was on their side: they believed that the land belonged to the man that tills it; and this belief either goes back to the earliest days of cultivation or it arose spontaneously among the various peasant groups, for we find it in England in the peasants' lines:

'We have dwelt on the earth,
And in Russia in the peasants' saying: 'My back belongs to my master but the land belongs to me.'

It was not merely that the land represented their means of livelihood. They had for it a passionate love that we can but dimly appreciate: usually for each peasant it was love for a particular piece of land. I have repeatedly met peasants in Poland, Italy, and elsewhere who have worked in the United States and saved enough money to buy a particular little farm at home; then have returned to much harder and less lucrative work, but feeling that they had achieved their purpose.

In the interval between the two wars I spent a good deal of time in Europe and was able to collect information about surviving characteristics that throw light on peasant history.

The system of agriculture adopted was the early one of grain and fallow, this being the natural extension of the old shifting cultivation. The livestock were kept on the surrounding wild land and also on the stubbles, while pigs could utilize the forest. The individual peasant holding was not usually in one compact piece but in strips scattered over the whole arable area, with the purpose that each man should have his share of good and bad land. It still survived in Eastern Poland before the present war and in the U.S.S.R. till about 1930. Peasants everywhere held tenaciously to this system, and usually had to be forced out of it; often there were great disturbances.

The system was inefficient and required much more labour than could be supplied by the adult males. The women had to work in the fields as well as their household duties and child bearing and rearing: they suffered heavily and wore out early. Families had to be large to supply the labour. Independently of this necessity, however, the modern peasant is fond of children, and presumably the older ones were too. Marketing of such produce as had to be sold was always a difficulty and led to much anti-Semitism.

Life was very hard for the peasants but it clearly had its compensations. Peasants in all the northern European countries developed folk-songs, dances, folk-tales, peasant arts and crafts, and found much joy in these things. In general one finds, finer work in the more fertile regions where the struggle for life was less severe, but there are many exceptions: in the Priepet Marshes, some of the most attractive weaving is done in the remote villages, where material is scarcer than time. A very important factor, however, was the linking of craftsmanship with religion.

A third important group of factors is associated with the supernatural, of which the peasants have always had a very strong sense. It covers a wide range, from witchcraft to mysticism and religion, and its distinguishing feature is that it is closely linked up with everyday activities both on the land and in the home. Blessing the crops, harvest-home, and other festivals were kept up with great picturesqueness and sincerity: while threatened disasters such as fires (which are very dangerous in view of the straw thatch, and quantity of hay and straw stacked) were the subject of witchcraft. Both the Roman Catholic and the Greek Orthodox Church very successfully linked their religious observances with the important periods in the peasants' year and with the artistic side of the peasants' nature.

Of the three great groups of factors making up the pattern of the peasants' life: his struggle for land and independence; his artistic expression; and his feeling for the supernatural, the one making for change was the struggle for land. In the main this went slowly, though there were jerks forward as the result of the French Revolution, of the events of 1848, and the 1914-1918 war when Peasant Parties were formed to further the peasants' aims. The peasant pattern might have survived the political successes of the peasants in acquiring more land, but it was broken down by two rather unexpected factors.

So long as wars, famines, and pestilences kept down the peasant population, and sufficient new land was available to provide for the small net increase, the system could continue indefinitely. The expectation that a successful peasant might buy out his neighbour and become a large proprietor was in general countered by the practice of dividing the holding among all the sons after the death of the father. Had there been no other outlet for the sons, and had the natural increase been at all high, the holdings would in a few generations have become extremely small. Poland and Czechoslovakia got over the difficulty by developing industries which took the excess population off the land. In Eastern Galicia, however, this outlet was not available, and farms became very small.

The final blow to the old peasant system resulted from the subtle and far-reaching changes effected by the introduction of education and later of science into national life. The peasants saw in education a means of helping their children onwards, and in science the means of lightening the burden of the day's work. The tractor was one of the most potent propaganda agents in effecting the change from small-scale peasant-farming to large-scale collective farming in the U.S.S.R.: the peasants recognized its great advantages, but saw that it could not operate on their little strips. The offer of universal free education for the children was one of the most popular actions of the Bolsheviks.

Two new patterns of country life gradually emerged. In much of western Europe the peasants changed into independent small farmers, farming for cash and not for subsistence; moving away from grain production to
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ing livestock, feeding-stuffs, seeds, fertilizers, etc.; also the plan of farming and expert technical supervision. The settler provides his labour and that of his family. The produce is shared on an agreed basis till such time (normally five years) as the settler has repaid the working capital items; he then passes out of the stage of tutelage and becomes a 'proprietor,' receiving the title deeds but continuing annual amortization payments till he is absolute owner. The first stage is not unlike the metayage to which the Latin races have long been accustomed; the second is virtually a tenancy, but the final aim is occupier-ownership.

The pre-war Italian scheme is the same in principle but with differences in detail.

On the material side these changes have been all to the good. But in other directions there have been losses. As science and education came in at the door, the old peasant arts and crafts tended to fly out of the window. Once gone they can never be restored; they become museum pieces for exhibition at theatres and concerts, but are no longer the spontaneous outburst of the people themselves. As yet modern civilization has little to offer in their place. Before the war both films and wireless were very much in the hands of propagandists; and now that we have seen what mass-psychology can do, we may well feel some uneasiness as the possibilities thus presented. In any case they are purely passive occupations and have no element of self-expression.

The most drastic change came in those regions where the change in the peasant's situation affected not only the material and artistic side but also his religious life. That left him entirely adrift. Politicians and a semi-defied leader are not likely to prove satisfying for long, and the mystical religious side of the peasant's nature can be trusted to reveal itself.

A satisfactory solution of this cultural problem is found in Denmark where the essentially religious basis of the countryman's life has been preserved, and where a good education has given a wide range of interests to take the place of the lost arts and crafts.

The paper was discussed by Dr. Gavrilović, Dr. Mineer, Professor Mahr, Colonel Green, Mr. Brahmoltz, Mrs. Ruhemann and Dr. Lindgren. Sir John Russell replied.

Tribes, and the Caste System of India. Summary of a Communication by Mr. P. D. Mehta, 21 March, 1944.

Four main groups successively peopled India before the entry of the Indo-Europeans. Negritos were probably the earliest, followed by proto-Australoids, then by peoples of Mediterranean origin, and lastly by traders and settlers from the west, bringing religious elements from Asia Minor via Mesopotamia. The Indo-Europeans, interacting with the Indian peoples as they found them, gave rise to the caste system, so uniquely characteristic of Hindu society of the last thirty centuries. One of the explanations of the caste system, Ibbetson's, has been sought in a tribal origin. Be this as it may, there is evidence that the sentiments and beliefs on which caste is based seem to go back to the totemistic proto-Australoid and to the Austro-Asiatic inhabitants of pre-Dravidian India.

Vedic literature gives support to the view that a tribal state of society flourished among the Rigvedic Indians. Elective chieftainship, characterizing that period, developed into hereditary monarchy in the course of a few centuries. Through political development, with accom-
panying changes in the social structure, tribes were incorporated into or became distinct castes; and also, sub-castes became separate tribes. But there are ancient tribes which have remained untouched to this day by any external influence, and so stand unassimilated by the caste system.

Aryan caste society, and some of the tribes, have affected each other beneficially in some ways, adversely in others, and have made specific cultural contributions. Perhaps the greatest contribution of the Indo-Europeans is practical intelligence—typified in their vastly superior language with its corresponding opportunities for mental and cultural growth. Also they, probably more than other races, emphasized individuality. The Aryan caste system regarded from one point of view is an attempt to create a social organism in which the interests and needs of both the individual and of society are dynamically balanced, and in which the individual, by the very process of developing and fulfilling individuality, increasingly liberates his society from its present limitations and enhances its well-being. In some respects the attempt has failed signally—untouchability! In others there is evidence of success. Indeed, some of the elements of its success are the very ideals inspiring modern social reconstruction—freedom, material and spiritual, and co-operative action for the good of the whole, yet allowing the fullest available scope for the flowering of individuality.

The paper was discussed by Dr. Hunt, Mr. Desland, Mrs. Chadwick, and the President. Mr. Mehta replied.

**REVIEWS**

**GENERAL.**


Race relations in Africa are examined from the point of view of the impressed ideals of the British Commonwealth of equal opportunity for all. The opposition which has been expressed in some colo-nies to the principle of 'paramountcy of native interests' is noted at the outset. It is argued that the secondary interests of natives should not be allowed to take precedence of the primary interests of Europeans in Africa, but that, since Africa is for the African his only home, his primary interests must come first. The existing position, with regard to land, taxation, pass-laws, and labour conditions and legislation, is set out, and certain specific changes are mentioned as necessary, if the facts are to be brought into line with the declared aims of policy. These include the introduction of a graduated system of taxation, the reconsideration of pass-laws in all territories, and improvements in the conditions of labour such as will convince the African that it is to his real advantage to work. The industrial colour bar and the segregation policy are examined, and the motives underlying them explained. A concluding chapter discusses, and dismisses, the idea that equality of opportunity must lead to miscegenation.

L. P. MAIR


The substance of this book is a course of lectures given to Army and A.T.S. officers on topics in which they were interested. It is a pity that the title suggests a systematic examination of morale, a subject that even if treated in an elementary way, related to present-day social groups, would be of great interest to the social anthropologist. Although anthropologists may be disappointed both with the subject matter and the treatment, they will be grateful for the statement that differences in national morale are cultural not racial differences. All civilizations are compounded from the same fundamental units; it is their grouping together in peculiar combinations and the arrangements of these in a characteristic scale of values, that differentiates one people from another.

B. Z. S.

**RELIGION.**


In this course of eight lectures delivered in the Divinity Faculty at Cambridge by the Master of Christ's, the rise of the modern scientific movement and its relations with contemporary theological thought and controversy is discussed from a variety of standpoints. Both science and religion, Dr. Raven contends, represent the most important formative influences in the educational and intellectual life of the world, and the result of their efforts in the recent past has been a holocaust unequalled in history. For the failure to adjust human thought and life to the new knowledge which the past century has disclosed, he blames the men and the movements which direct mankind. The history of this disaster is surveyed in the first four lectures, and in the second four how it may be retrieved.

Professor Raven has very little to say about anthropology except in so far as his interesting account of the enunciation and reception of the Darwinian hypothesis bears on our science. But it is with evolution as a biological principle, and the transition from the old Weltanschauung that he is mainly concerned, and while he recognizes the debt owed by the scientific movement as a whole to the Platonic and Thomistic tradition, he does not appear to be aware that the 'realm of the irrational, of magic and make-believe,' may have a place of considerable importance in the realm which 'it is our business and joy to explore and understand and interpret.'

Perhaps the most significant feature of the book from our point of view is the useful reminder of the pitfalls of the scientific method and the ease with which the process of sifting, classifying, examining and interpreting data may lead to fallacious conclusions. The plain fact is, says Dr. Raven, that scientists are very much like the rest of us. They observe—as we all do in our special fields; they test their observations by experiments—as in one way or another the historian or the theologian also tests his data; they formulate hypotheses—sometimes inventing myths like that of the all-pervading material ether which dominated physics a generation ago, or the planetary electrons whose models were so familiar till Heisenberg, or the quantum theory . . . and to these hypotheses they attach a more than credal inerrancy, until further research knocks the bottom out of them. It is a normal human procedure which only invites criticism when its devotees 'imitate the behaviour of other priesthoods and claim a pontifical authority for their theories.'

Professor Raven, however, is at his best when he is outlining the history of research and discovery, and he has much to say that is most illuminating concerning John Ray, Richard Owen, and the Darwinian conflict. That was the reaction of the Divinity Faculty to the theological issues in this course of lectures it is not our business to surmise or evaluate.

E. O. JAMES.
MAN

[July-August, 1944.]


'The world in which human beings think, feel, and act,' Dr. Hallowell reminds us, 'is always ... seen not only from a human but from a culturally circumscribed point of view.' This limitation holds good as much for the anthropologist as for the object of his studies. Particularly is it difficult to comprehend, other than on the intellectual level, the magic-religious beliefs of a primitive people, springing from metaphysical notions not clearly defined. Consequently we never fully penetrate their behavioral world. We never see their culturally-tinted spectacles; the best we can do is to try to find them. Trying to reach those of a small group of hunting Indians in sub-arctic Manitoba, Hallowell proceeds to study the function of conjuring in the past and present life of the community. The result, in ten brief and lucid chapters, will be of interest beyond the immediate confines of American regional ethnology.

Conjuring, in this context, is defined as 'an institutionalized means for obtaining the help of different classes of spiritual entities by invoking their presence and communicating human desires to them.' The procedure is formalized. Concealed within a small specially built lodge, which shakes with evidence or without the same, the conjurer is heard in converse with his spiritual helpers. Characteristic voices are recognized by the audience although often speaking in languages unintelligible to the laity. Almost any spirit, as well as the souls of living and even dead persons, may be invoked, with the important exception of 'The Owner,' the aloof high god of Saulteaux belief. An indispensable participant is mikiok, the whimsical Great Turtle, whose combined role of messenger, introducer of other spirits, and jester, recalls in some respects the dual function of the Pueblo sacred crowns. With the aid of these helpers the conjurer can report on people and affairs at a distance and locate the missing, to discover the cause of illnesses, and escape from sorcery, broken taboos, or infractions of the moral code, to combat malevolent influences such as vindigo (cannibal spirits) threatening the group, to direct hunters to game, and anciently to advise on warfare. In contrast with Siberian shamanism, Saulteaux conjuring does not involve possession or the trance state, nor any drumming now employed. A notable feature is the degree of intimacy established between the audience and the spirits, which finds expression in humorous repartee.

Their power from a dream revelation, which must be experienced four times to be valid. Small fees are paid for their services, but although prestige attaches to them, they do not in any way form a class apart. Of the group studied by Hallowell, almost ten per cent. had at some time consulted, and it is probable that in aboriginal conditions this proportion would have been at least doubled. The trait appears to be typically Algonkian, surviving chiefly among the Montagnais-Naskapi, Cree, and Ojibwa. Its reported incidence among the Cheyenne is interesting in view of the known migration of this tribe from the Woodlands to the Plains in early historic time.

The spirit voices and the shaking of the lodge have been made much of in spiritist literature. Hallowell believes on apparently good grounds that these phenomena are in fact produced by normal means. Is it then necessary, he asks, to dismiss the conjurers as deliberate charlatans? His answer is No; and here the importance of seeing through the native spectacles is illustrated. Conjuring is firmly integrated in Saulteaux culture; the approved means are part of the total situation and are inseparable from it. The dream revelations are from the native standpoint perfectly genuine, and to try to change or modify them by psychological projection may operate to confirm the conjurer's belief in his own special power. Summing up in his final chapter the social implications of conjuring, Hallowell finds that it has important effects in the fields of religion, morals, aesthetics, and morale. In the first, it offers precise evidence of the reality of spiritual entities (by recalling the dead) of the after-life; in the second, it acts as a deterrent to transgression through the threat of exposure and its emphasis on disease sanctions; in the third, although such is not its ostensible purpose, it provides a form of entertainment with a dramatic and a humorous value; and finally, by its capacity to circumvent natural and supernatural disasters, it promotes a sense of public security.

GEORGE TURNER.


The sub-title of The Road to Hel is 'A study of the conception of the dead in Old Norse literature.' In the course of her book the author has amassed a great deal of evidence, chiefly drawn from Old Norse sagas, which prove the richness and complexity of this subject. She traces in detail two main and apparently incompatible conceptions; that of Valhall, which envisages an after-life in some abode of the gods; and that of life lived on within the grave-mound. The first conception appears to be linked with the rite of cremation, the second with that of inhumation; but Miss Ellis also gives a brief summary of the archaeological evidence for burial in the mound, pointing out that it is not always easy to make any precise connection between rites and beliefs. Ship-enclosures, for example, appear to be connected with burial rites and belief. From the literary evidence the author concludes that it is possible that Valhall was connected with one conception, a part which has survived for us only because of its persistent and poetic theme. It seems to her probable that this conception was 'never very widespread in Scandinavia, but that it was a "vigorously, perhaps fanatical belief within a restricted circle." Yet she points out that there may prove to be closer links than have been suspected between the conception of Valhall and the more popular grave-mound belief. Valhall itself, 'Hall of the Slain,' thatched with spears, has features in common with certain burial mounds described in sagas; and the author indicates the possibilities of extremities of the Valkyries of Valhall and the Dûr, mysterious supernatural beings usually associated with burial-mounds.

Miss Ellis goes on to show that the conception of an after-life within the 'Howe' or burial-mound is in itself by no means simple. At its most straightforward, the conception appears to be that of the 'Howe' as the house of the dead man, a close counterpart to his former home. The corpse was usually furnished with treasure and goods, over which it was envisaged as keeping guard. Human sacrifice seems occasionally to have been entailed, and the author cites a curious case from Iceland, towards the close of the 12th century, in which a dead man was heard demanding in song that the servant killed and buried with him should be removed, because there was too little room for both in the mound. Yet in spite of such crude materialism, there appear to have been some more subtle and elusive beliefs linked with burial-mounds. In some cases there developed apparently a cult of the dead, a deification of the deceased merging into a cult of the barrow itself. There also appears to have been some as yet ill-defined belief in rebirth, which was linked with the burial-mound; and Miss Ellis suggests that possibly a third further, a more 'Druidic annihilation,' awaited barrow-dwellers who failed after a period of time to be reborn—a death out of the grave (hel) into a deeper annihilation (niflhel).

*Hel* itself is a conception which it is difficult to define. As the author points out, the word may stand for death, the grave, a personified goddess or a shadowy underworld. In this last sense it is used vaguely, and Miss Ellis thinks it may have a subtle and moving meaning rather than represent a piece of straightforward cosmogony. If this were so, the journey along 'Helveg' (the road to Hel) which is described with such consistency in the Old Norse literature, might be a symbolic spiritual journey, such as forms part of shamanistic ritual. Miss Ellis finds much that is of interest in this connexion in the Norse conception of the soul (which is in itself very complex, with its various aspects of shape-changing, guardian spirits, animal counterparts or 'fylga,' and apparently some belief in rebirth); and also in necro-
AMERICA.


Although the Cañado Indians became known to Europeans in the seventeenth century and a remnant of them still exists in Oklahoma, yet there is not very much information available regarding their former culture. Dr. Swanton in 1912 obtained some in the field, and another valuable contribution was made by Dr. Elsie Clews Parsons. Now Dr. Swanton has supplemented this field material by the present book in which he gives the results of an extensive examination of the literary sources which are mostly in Spanish and French. The material in English is principally concerned with the usual unhappy story of ill treatment by the whites. But against this one must note that the Cañado have of late years increased in number.

The author has made the most of his sources and gives a valuable picture of the ancient culture. The old writers, many of whom were missionaries, were interested in religion and government and their accounts, though superficial, can be supplemented by modern comparative methods. On the other hand they gave no information as to technology, such as pottery.

The valuable report of Dr. Leslie Spier on the Cañado kinship system is also included.

Finally a comparison is made with the culture of other Indians and it is concluded that that of the Cañado was basically of the Eastern Woodland type and was only slightly influenced by that of the Plains. The comparison with the Natchez is interesting, but though the Cañado had hereditary chiefs and priests, their authority was very slight and in this respect they are distinctly from despotic 'Suns' of the Natchez. Altogether this is a valuable work.

RICHARD C. E. LONG.


Dr. Lothrop continues his valuable publications. This volume is devoted to ceramics only, as the other artifacts have been dealt with in Part I.

A detailed analysis and classification of the pottery is given together with beautiful illustrations. The author uses an interesting method of relative dating of the pottery by the styles of the individual potters. This is new to the reviewer, but it results in a chronology which is on the whole corroborated by that of contemporary cultures. One cannot help wondering, however, if the Coclé culture was really so short-lived as Dr. Lothrop suggests.

Coclé by its situation in the Isthmus was naturally influenced by both North and South America, but the present study shows that the southern influence was much greater than that of the north, and that the people were apparently of South American origin. A point of much interest is the wide extension of trading connections both north and south. This is in line with Dr. Lothrop's discovery at Zacualpa in the Maya region placing such wares as the axe and ring which must have come from southern Mexico.
CORRESPONDENCE


SIR,—Mr. G. A. Wainwright, in his very interesting paper, mentioned that the dates given by Cosmas were in the ancient Egyptian shifting calendar. But the fixed Alexandrian calendar which has a year equal in length to that of the Julian calendar and commences on 29 August (Julian), was introduced into Egypt by the Romans in B.C. 26. It is true that both calendars continued to function side by side till A.D. 238 at least, and probably longer, because Theon, writing in the fourth century A.D., mentions the old calendar but uses the new one (J. K. Fotheringham, 'The Calendar,' Nautical Almanac, 1935), but the old calendar gradually dropped out of use. The Alexandrian calendar was necessary for Christian usage in order to fix the church festivals and was the official reckoning, while the old calendar remained for some time in popular use and was also used by astronomers and astrologers. Sir J. G. Frazer (Adonis Attis Osiris, 1907, p. 282), citing Ideler, says that by the beginning of the fifth century A.D. it appears to have been dead and forgotten. So there seems no evidence that it survived as late as A.D. 522, and in any case Cosmas, a Christian monk, would have used the Alexandrian official reckoning, even if the old one survived.

That being so, in A.D. 522, by Alexandrian reckoning, the First Egyptian calends on 29 August, and the last day of Thoth on 27 September (Julian). This agrees with the rains falling in Abyssinia from June to September, so there is no need to assume that Cosmas made any mistake about the season.

RICHARD C. E. LONG.

An Explanation for the Cowade. Cf. MAN, 1944, 49.

SIR,—Professor R. Ruggles Gates has suggested in a letter to MAN 1 that there is a physiological basis for the cowade, which is due to the action on the husband of oestrogen absorbed, partly by inhalation, from the sweat of the pregnant wife. As supporting evidence he quotes some observations made by Frame 2 of eight families of negroes or poor whites, in the Southern States, in which the husband showed, during the wife's pregnancy, various symptoms resembling those experienced by pregnant women. One case is described in more detail to show that the symptoms are produced in the husband only when the he has been in close contact with his wife. The suggestion is made that the necessary conditions for the cowade to occur are that the husband and wife should sleep in close contact, preferably with lack of ventilation, and that they should not bathe frequently. Presumably these conditions would increase the amount of oestrogen absorbed by the husband.

An examination of this hypothesis, however, shows it to be untenable for anthropological and physiological reasons, and indeed, to be based upon incorrect foundations. I shall deal in turn with each of these aspects.

Frazer 3 has shown that there are two distinct customs included (and confused) in the term cowade, a pre-natal and a post-natal custom. In the pre-natal type, which occurs late in pregnancy, the father adopts a strict diet and regimen, 4 but does not imitate any of the signs or symptoms of pregnancy. The basic idea is that the father is united to the child by a strong bond of sympathy, and the child will therefore be affected by anything the father eats or does. In the post-natal type, which occurs at or shortly after parturition, the husband shows symptoms, not of pregnancy, but of childbirth, usually taking to his bed and acting the pains of labour. It is doubtful if the husband actually feels any pain or is unaware of the fact that he is imitating the pains.

Frazer explains this variety of cowade as an example of sympathetic magic intended to diminish the wife's labour pains and also, perhaps, as an attempt to deceive the demons which interfere with childbirth.

In the cases quoted by Professor Gates, the symptoms occurred in the husband during the wife's pregnancy (the stage of which is not stated). The symptoms described (malaise, morning nausea, slight epigastric pain, loss of appetite) may occur in early pregnancy, but not in late pregnancy, and therefore, even if they were produced in the husband by the inhalation of oestrogen from the wife, this mechanism would not explain either type of cowade as it commonly occurs; it would explain only his eight cases.

A consideration of the physiological evidence shows how completely untenable the hypothesis is, even for explaining these special cases. Professor Gates states that oestrogen is found in the body secretions, e.g., urine, bile, gastric juice, sweat, of the female during pregnancy. This statement is incomplete and consequently misleading. Oestrogens, of which oestrogen is an example, are found in the body secretions during pregnancy, but in low concentration and in a relatively inactive form. Thus, the amount found in the urine in early pregnancy is very little different from the amount found in the non-pregnant female, or, for that matter, in the male. It is only just immediately antepartum that there is a rise in active oestrogen. This makes it seem highly improbable that the inhalation of female body odours and sweat, during pregnancy, would result in effects in the male due to oestrogen.

Further, Professor Gates implies that the action of oestrogen in the male is to produce malaise, morning sickness etc., i.e., the symptoms of early pregnancy. The actions of oestrogens in the male have been extensively studied and, as far as I am aware, there is no experimental evidence to show that oestrogen produces any of these symptoms. In fact, the normal male eats daily in his food, and absorbs, more oestrogens than could possibly be absorbed from sweat by inhalation, and shows none of these symptoms. So far only massive doses of oestrogens have been shown to have an effect in the male and these effects are quite different from the symptoms of pregnancy. In view of these facts, I think it would be emphasizing the obvious to discuss how much oestrogen could collect on the skin, or how much would be absorbed by inhalation, or by other ways.

Finally, there are many examples of the cowade known, occurring in people to whom the necessary conditions laid down by Professor Gates do not apply.

The real explanation of the cowade is, I think, still to be found in the anthropological hypothesis put forward by Frazer, viz. that it is an example of one or more forms of sympathetic magic.

M. LUBRAN.

1 MAN, 1944, 49.
3 Frazer, Totemism and Exogamy, 1910, iv, 244-255.
4 E.g. Codrington, The Melanesians, 1891, p. 228.

Corrections. MAN, 1944, 70.

In the title of the illustration, and in the last line of the article, for 'the Wellcome Museum, Oxford' read 'Wellcome Historical Medical Museum, London.' MAN, 1944, 12. List of Honorary Fellows: for Paso, Dr. Alfonso' read 'Caso, Dr. Alfonso, Chihuahua, 55 Mexico City.'
IBEJI STATUETTES FROM YORUBA, NIGERIA: FULL FACE
BRITISH MUSEUM (1943, 3, 10)

For oblique view see back: scale in inches.
IBEJI STATUETTES FROM YORUBA, NIGERIA: OBLIQUE VIEW

BRITISH MUSEUM (1943, 3, 10)

For full face see back; scale in inches.
IBEJI STATUETTES FROM YORUBA, NIGERIA. By Eva L. R. Meyerowitz. Illustrated, with Plates E, F.

94 Ibeji are wooden statuettes carved invariably in pairs, for they represent twin children, and as such play a part in the rites connected with the cult of the twins.

Although twins in Yoruba are, to a certain extent, held sacred during their lifetime, Ibeji are only ordered to be carved by mothers, who have lost either one or both of their twins, in order to give the spirit of the deceased children a home. Should only one have died, the mother keeps the Ibeji of the surviving twin in a calabash, but the Ibeji of the dead child is given to the living one, who has to look after it; that is, the child has to offer it food whenever it is given food, has to wash and dress it, whenever it does so, and has to carry it about wherever it goes. Should the child be too young or should the second twin also die, then it is the mother's duty to perform these acts. After the mother's death, it appears that the Ibeji of her twins are kept by the family; the regular daily routine of washing, dressing, etc. now ceases and only on special occasions are sacrifices made to them. However the case may be, these statuettes remain well looked after by the family and are even given to a carver for repair should this be necessary.

The pair of Ibeji (see Plate E), presented to the British Museum a short time ago, are typical examples of such statuettes and incidentally very fine specimens. They are undoubtedly carved by a very good wood-carver who, within the framework of the traditional figure, was still able to express his sense for proportion and composition. Note, for instance, how the space between the arms and legs is used in the composition of the figure, the patternlike treatment of the whole body, and the well-executed faces.

1 At Iseyn, in Northern Yoruba, I came across a row of eleven Ibeji which had been taken out into the courtyard to be ready for a rite which was to be held later on in the day.
2 At Abeokuta I was able to buy one old Ibeji from a carver to whom a pair was given for repair. One was finished and already sacrificed upon and therefore, according to the carver, had a soul again and was not for sale. On the other one he had not yet started to work and sold it to me reluctantly. I do not know how he hoped to make it all right with the family to which the Ibejii belonged, but probably he hoped to copy the second one so successfully that the exchange would not be detected.

FIG. 1.—IBEJI STATUETTES AT ISEYN IN NORTHERN YORUBA, LAID OUT IN THE COURTYARD OF THE FAMILY FOR A RITE TO BE HELD LATER.
Ibeji are always carved as standing figures in the nude with their arms hanging down by their sides. They usually stand on a round base, or on a square base of which the corners are rounded off; these bases are either plain or decorated with simple patterns. On the other hand, I have also seen Ibeji without a base but in that case the nude figures wore sandals carved thick so as to form a kind of split base.

The head-dresses vary greatly; those on the figures shown here are very elaborate and of an unusual type; they somehow give the impression that the twins came from a family high up in the social order. The old and fairly valuable beads of their necklaces confirm this impression. They are the same in both figures: eight cylindrical beads, yellow with green stripes, called Aggry beads, which were highly prized in olden days (and still are to this day), a blue Popo bead, and a red Ilorin stone bead. A further necklace of three (in the female figure of four) rows of small white imported beads is finished off with two red glass beads on either side of another blue Popo bead. The figures have in addition two rows of the same small white beads round their ankles and the female figure has also a row of alternating white and red stone beads, indicating that she came from a family of Shango worshippers, red and white being symbolical for the god of thunder and lightning.

These Ibeji, as well as most others, show traces of colour, a reddish ochre for the bodies and blue for the head-dresses. The faces show no colour but the pupils in the eyes are filled with some dark material. Through constant handling of the figures, washing them, rubbing them with palm oil, etc. the colour disappears, and once in European hands a vigorous cleaning process usually does the rest. Apart from this, some European collectors unfortunately polish up their African carvings to such an extent as to alter their appearance completely.

All Ibeji have facial tribal marks; the Ibeji shown here have three long rather broadly drawn upright marks on each cheek; these are Egba tribal marks as worn during the last century. The height of such statuettes varies between seven and ten inches; those reproduced here are nine inches high.

Ibeji are typical for the Yoruba only and either come from this part of Nigeria or from Dahomey which incorporates some tribes of Yoruba descent. Ibeji which in European collections have been labelled as coming from the Gold Coast or other parts of West Africa, are either wrongly labelled or imported there by Yoruba immigrants. Besides, their origin can easily be identified by their tribal marks which are invariably shown.

In olden days twins were abhorred in Yoruba and killed at birth, a custom which was still practised until recently by tribes to the south-east of this kingdom. Nobody seems to know nowadays how a stop was put to this custom, but Johnson is of the opinion that the cause was either a decree by the Alafin Ajaka or the custom was frowned upon at his court, which, in time, had its effect all over the country. The legend goes that:

Once upon a time when the practice still prevailed, one of the wives of the Alafin Ajaka gave birth to twins and the king was loath to destroy them. He thereupon gave orders that they should be removed—with the mother—to a remote part of the kingdom and there to remain and be regarded as dead.

So she left with a large number of friends and retinue to the site of the present Ode Ondo, then sparsely peopled by a tribe named Idoko and there settled, hence the term "Ondo" signifying the "settlers." The people of the district, knowing who the strangers were, yielded them ready obedience and the strangers became rulers of the district.

Nothing is said in this legend about the origin of the cult but we may presume that the cult of the twins was a sequel to the abolition of the killing of twins. The Alafin Ajaka ruled towards the end of the twelfth century—he was an older half-brother of the first Oba of Benin—and it is therefore not surprising that of an event, which must be centuries old, so little is remembered.

Ondo is a district bordering on Benin and to this day rather inaccessible. I do not know whether a temple was ever erected at Ode Ondo to Orisha Ibeji, the tutelary deity of twins, but A. B. Ellis mentions one at Erupu, situated on a lagoon between Lagos and Badagry, to which pilgrimages were made by parents with their twins from all over the country. I think Dahomey in 1861, labelled 'Nude Haussa Woman'; see the Burlington Magazine, Oct. 1940, 'The Dating and Provenance of Negro Art,' by Richard Carlile. The facial tribal marks of this figure belong to a noble family from Oyo (see Johnson, p. 106) and are definitely not Haussa marks. Carlile, or whoever labelled this Ibeji, mistook the three vertical marks for Pele marks which were used, especially in olden days, by Yorubas turned Moslems who lost to remain plain-faced. He forgot to take into account the three horizontal lines underneath the vertical ones and the three marks on the forehead of this figure (probably added when the family, after the destruction of Oyo, found a new home in southern Nigeria or Dahomey). However the case may be, the figure has absolutely nothing to do with Haussa—the Haussa being Moslems for centuries, and the law of the Koran does not permit the making of 'graven images.'

Johnson, The History of the Yorubas, p. 25.

that it would be worth while if some research could be made there, for the temple—if still in existence—is bound to possess old Ibeji statuettes, twin vessels, and other ancient cult objects. Possibly also the priests or priestesses still know some old folklore which may throw light on the origin of this interesting cult.

NOTES ON THE BASSA-KOMO TRIBE IN THE IGALA DIVISION. By Miles Clifford, C.M.G., O.B.E.,
E.D., Colonial Secretary, Gibraltar.

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CHAPTER I

1. Location, physiography, etc. The independent District of Bassa-Komo, covering an area of some 333 square miles, is situated in the north-western corner of the administrative Division of Igala in the Kaba Province. In appearance this area is one of the most pleasant in the Division—open and gently undulating parkland, for the most part, with occasional patches of dense forest, while its most distinctive feature is a chain of flat-topped hills which rise from the plain and mark an earlier ground-level; many of these hills are tree-clad and the most notable group is the Imberichi range running due east and west through the District.

2. The soil is remarkably fertile and a rudimentary system of crop rotation is practised. There is some erosion. The area is well watered and many of the streams which run through laterite deposits are crystal clear in the dry season; after heavy rain they become rapidly swollen with water carried down from the hills and are impassable for some hours afterwards; few are normally of any size and none is navigable; fish are found in all but the smallest.

3. Communications. The District headquarters at Oghuma are connected by an all-season motor road at Adenyew with the Dekina-Echau system; an important trade route runs due east from Oghuma through Arasamashe to Ogain Enugu in the Dekina District and another, almost parallel to this but north of the Imberichi range, through the Kakuri and Kpanke village groups to Akande and so into the Ife District. There is no access to the river Benue save by grace of the Ashegha of Mozum whose territory runs parallel with this river and between it and Bassa-Komo throughout its length; thus, both geographically and economically speaking, the unit forms an island enclave within the Ata Gala’s administration.

4. Markets, crops, etc. There are important markets at Odugbogho, Shiriya, Enugu, Akande, and Okette and they are attended not only by the Bassas but by Igala and Igbirra over a wide area. The Bassas are able and industrious farmers and their principal crops are guinea corn (sorghum), millet, maize, yams, benni-seed, ground-nuts, beans, pumpkins, and tobacco. The bulk of the farming operations are carried out by the men though the women assist and will generally cultivate small gardens of their own in addition. Gayya (mutual co-operation in the heavier tasks) is extensively practised. The actual marketing of produce is to a very great extent in the hands of the women but a proportion of the trade is done in bulk through Nupe and Igbirra middlemen who buy the crop in situ and arrange transportation to markets or to other middlemen who convey it by river to Onitsha in Southern Nigeria. Apart from an inconsiderable number of palm trees in the vicinity of Oghuma, Enugu, and Ebenehe which are exploited, there is little sylvan produce of economic value; Ceiba balsam flourishes in the forest area but commercial demand is so unstable that its collection offers little attraction to the harvester.

5. Industries. Industries are confined to fishing (mainly by spearing and the use of poisons), hunting, brewing, pottery, mat and basket weaving, and the breeding of small livestock. In earlier days there was a good deal of iron working but this is now almost entirely in the hands of itinerant blacksmiths from Awka in Southern Nigeria.

6. Population. The District is populated mainly by the Bassa-Komo tribe and the last decennial census (1931) revealed the following:

<table>
<thead>
<tr>
<th>Tribe</th>
<th>Adult Males</th>
<th>Adult Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bassa-Komo</td>
<td>4,540</td>
<td>5,017</td>
<td>9,557</td>
</tr>
<tr>
<td>Hausa</td>
<td>160</td>
<td>177</td>
<td>337</td>
</tr>
<tr>
<td>Nupe</td>
<td>53</td>
<td>59</td>
<td>112</td>
</tr>
<tr>
<td>Igbirra</td>
<td>212</td>
<td>236</td>
<td>448</td>
</tr>
<tr>
<td>Igala</td>
<td>370</td>
<td>413</td>
<td>783</td>
</tr>
<tr>
<td></td>
<td>5,335</td>
<td>5,902</td>
<td>11,237</td>
</tr>
</tbody>
</table>

These figures are approximate only and were compiled for purposes of tax assessment; they exclude, therefore, the aged and infirm.

CHAPTER II: HISTORY OF THE TRIBE

7. The Bassa-Komos of this Division emanate directly from north of the river Benue in the neigh-
bourhood of Umaisha and are of the same stock as the Bassas in the Zango-ru Division of Niger Province; they have also characteristic affinities with the Gwari. For many years they were vassals of Igibirra Pandha (a chief of the Ata Gala) with whom they dwelt in amity, and state that the latter protected them, whilst they were strong enough to do so from the slave-raiding forays of the Fulani.

8. In the middle of the nineteenth century, however, the Igibirra power was on the wane and the repeated ravages of Masaba, Emir of Ida, forced the Bassa Komos to cross the river and to take refuge in Igala; this they were enabled to do through the active help of the Ashegba Atoye (a chief of the Ata Galu) between whom and the Bassa there existed a long-standing friendship—this Chief had himself migrated at an earlier date, and for the same reasons, from Igibirra to the island of Okpangana, opposite Ogba on the south bank of the river. Not only did the Ashegba set apart lands in his fief on which the Bassa might settle, but he also arranged for the transport of the earlier immigrants across the Benue and cleared the bush for their first encampment at Agbarara which was given the name of Oguma (the village of mats) because the refugees at first dwelt in mat huts (Oguma—= the village of mats).

9. The leader of this migration was one Omagere of the Akuba clan, and he and his people were swiftly followed by contingents of their sorely tried brethren from amongst the Asahama clan who settled at Igesi, between Odogbo and Mozum; by the Arasama who joined the Akuba at Oguma and thence moved to Abutu and spread eastwards, south of the Imberi Range, by the Diga and who crossed over to Kakuri, and by a steady stream of smaller groups and individual families during the time of both Atuene and his successor, the Ashegba Ataheje, who had settled at Mozum.

10. So far as can be ascertained these migrations began in the reign of the Ata Gala Amoje (13th of the Idah Dynasty) and by the time of his successor, the Ata Akodida (circa 1854-70), the Bassas were settled in considerable numbers, each clan division under the patriarchal administration of its own senior elder and—with certain exceptions—regarding Omagere as primus inter pares whilst acknowledging the Ashegba as their liege-lord; secure, seemingly, under the protection of the latter they looked forward to an era of tranquility— they had reckoned without their hosts.

11. Ozu Okuriko, a princeling of the Igala ruling house, was at that time living near Oguma and regarded the arrival of the Bassa refugees as a heaven-sent opportunity to do a bit of slave-raiding on his own account; he little knew what he was tackling and the incessant Bassas, biding their time (as is their wont), attacked his village early one morning, set fire to it, looted his property (including his household deity) and generally persuaded him that they were in a position to molest; Masaba’s bands, well-organized, well-equipped and well-mounted, had been more than the Bassas could cope with; with Okuriko they were on their own ground. Following this reverse he withdrew some four miles to the south and established a new settlement which, though now occupied by Bassas, bears his name to this day—he eventually succeeded to the title of Ata, circa 1870 to 1876.

12. Final breach with Igala. Thereafter the Bassas and Igala dwelt in amity side by side until the reign of the Ata Amaghe, who, resenting their presence in his country and still mindful of the affront to his predecessor, essayed to drive the Bassas out of the town to the advice of the Ashegba who counselled mediation; he despatched a force to Oketese-Kpalpara (near Odogbo) where, however, they encountered such determined opposition from the Bassas under the leadership of Omagere, Pama, and Inidam (a Gwaria who had been driven across the Benue with the Bassas and had settled with the Akuba Clan at Oguma) that they withdrew to Arara where the Ata was encamped awaiting the result of this foray. He was subsequently visited by a Bassa deputation headed by Omagere, with Inidam acting as intermediary, and a peace was patched up which has endured to this day. According to the Igala version the Bassas were confirmed in the occupancy of the lands allocated to them by the Ashegba, conditioned on their acceptance of the Ata Galu as suzerain.

13. Administration under alien Chiefs. On the establishment, some years later, of the Northern Nigeria Administration, attempts to appoint a Bassa Chief proved abortive owing to the intense jealousy existing between the elders of the various clan divisions and Inidam was installed in this office with the name title of Elder and was followed by a number of alien District Heads until 1929 (when Kwanaki, a grandson of Omagere who had led the Benue migration was appointed; he was murdered two years later and his son has, however, served under him and died.)

14. The murder of Kwanaki was inflicted during a surprise attack at dawn on 22 June, 1931, on the village of Odene where he was collecting taxes; it was accompanied by other acts of violence in which upwards of 400 armed men from the Arasamkhe and their kinsmen from over an area of some 150 square miles, were concerned. Prompt action alone prevented a complete collapse of the administration and a sanguiinary internal war.
CHAPTER III: ETHNOLOGICAL.

15. In addition to the six major clan-divisions of the Akuba, Arasamse, Asahama, Digachi, Ovon-golo, and Arini, scattered settlements of the following lesser branches are to be found: Otindo, Monu, Akwinya-kwinya, Echucu, Akomatun, Okubere, Ekeggie, Imberichi, Eyusu, and Ogache. Elements of these same groups are to be found in the Bassa country north of the Benue and they are survivals of a very clearly defined clan-organization, each such group tracing its descent back to some common ancestor and, in former times, practising clans-exogamy.

16. Social organization. The basis of the social organization is the patrilineal extended family which not infrequently embraces sons-in-law who have elected to reside with their wives’ people. Marriage, which is conducted by exchange, is invariably exogamous with respect to the kindred of which the particular extended family is a component. The village generally consists of two, three, or more hamlets situated at some small distance from each other, recognizing the patriarchal authority of an elder, or headman. The hamlet will house several families with their huts ranged round a compound in the centre of which are located the communal grinding-sheds and brewing-pots. Each such compound will have one large hut set apart by the compound-head as a meeting place for the men where they can gather of an evening to discuss matters unbecoming a woman’s ears—this hut is also used as a guest-house for strangers.

17. The husband has no sleeping-hut of his own, but lives in the hut of the wife with whom he is cohabiting at any particular period and it is shared also by the children she has borne to him until such time as the arrangement is no longer practicable. Adolescent youths will share a common hut, but the writer was informed that it is by no means unusual for a young man in his wild oats stage to bring his sweetheart to the house of his mother, and for these two with the boy’s parents to sleep in the same hut together.

18. Racial characteristics. The Bassa are of definitely crude type and, generally speaking, of unprepossessing appearance. Both men and women are as a rule short of stature, and the former more often than not of mediocre physique. The women are well-built but age rapidly and their habit of carrying heavy loads on the shoulder (as do the Gwari women of southern Zaria) has a ruinous effect on both figure and deportment. There are many affinities between the Bassa and the Gwari.

19. Both sexes shave their heads (the males leaving a top-knot) and file the front teeth; it is interesting to note a tendency with some of the women to allow the hair to grow and to dress it in imitation of the Igibiras who have settled amongst them and that the filing, or rather chipping, of the teeth is also beginning to lose favour. This latter operation is effected with a miniature iron chisel beaten with a stone, whilst the patient’s head is firmly held by a helper—the four middle teeth of the upper jaw being so treated; the operation is extremely painful and the mouth swells up as a result of it. It is usually done about the age of eight after the second teeth are well formed; so far as could be ascertained there is no conscious connexion with any fertility cult and no especial link is forged between those who undergo treatment during the same year.

20. Both sexes have tribal markings (which may be done either before or after the chipping of the teeth but usually in the same year), the males on the face only and the females all over the body and arms in addition; the marks consist of an unspecified number of longitudinal scratches in no particular pattern or order. It is again of interest to record that there is a marked tendency on the part of both sexes to adopt the Igibira markings which consist of keloidal squares, lozenges, and dotted lines—in the case of the women the pattern is elaborate and extensive and by no means unattractive; a compound of powdered antimony and palm-nut oil is rubbed into the incisions which heal in two to three weeks. The work is done by itinerant Hausa barbers who have made their home amongst this community. The reasons for this curious adoption are not only aesthetic but social, and it is the women who are largely responsible for it—they admit their Igibira neighbours to be of higher culture and would have their children grow up to look like them; the adoption of the Igibira marking confers, as it were, an improved social status. As one woman put it to the writer, ‘When we go to the markets, the Igibiras do not mix with us, they keep to themselves; we might be animals for the way they look at us—’ ‘Stand aside, Bassa,’ they will say, or, “Away Bassa, you stink!”’ (They do.)

21. There is said to be no intermarriage between the Bassas and their neighbours; the Bassa marriage system would certainly render such an arrangement difficult, aesthetic objections apart.

22. Dress. The men normally wear a cloth or sometimes a skin bunte (loincloth) when at work, and during leisure hours, or, when attending markets or social gatherings, don a fringed cloth as well, draped over the left shoulder. For special occasions a knee-length gown is worn. Nowadays they are becoming more and more sophisticated and there is a keen demand for Hausa gowns and trousers—clothes are hoarded and represent the real wealth of the community; they are wrapped carefully in bundles and
stored away in baskets. The chief affects a turban (as do many of the elders) and on state occasions wears an alkeba (a hooded gown as worn by Emirs and other persons of rank); he has even acquired the solemn gait that goes with such regal apparel.

23. The women are more conservative in this respect and stick to a cloth wrapper, but even amongst them fashion has its appeal and the adjunct of a Hausa pataki (abbreviated petticoat) is becoming more and more popular; there is also a vogue for finger-rings, ear-rings and ear-studs and necklaces. Children of both sexes run naked till the age of about eleven, though in Oguma (the Headquarter town) they react to the customs of their more sophisticated neighbours.

24. Formerly a Bassa would never stir outside his own village—even to attend market—unless armed with his bow and a stick and knife in addition, but there has been a marked falling-off in this habit, with the opening-up of the District.

25. Character. The Bassas are dirty in habit and in person; the compounds are swept daily but the condition of the immediate precincts and of their huts must be seen to be believed; they wash infrequently and in consequence are highly malodorous. Of excitable temperament, they are quick to wrath and given just as easily to depression, the latter leading not infrequently to suicide by hanging; they are intensely jealous in disposition, revengeful, and treacherous, and will endure hardship and suffering themselves so long as they can achieve their end. They are gregarious, boastful when in drink and of miserly habit—so much so that this and their untruthfulness recur frequently in Hausa folk-tales. In war they are cunning and skilful, relying principally on surprise attacks and ambushes. Withal, they are industrious farmers, a good deal more honest than their Igala neighbours, indulgent and devoted to their children and to the aged, and very loyal to their own kith and kin.

CHAPTER IV: LAND TENURE, ETC.

26. When the Bassas first crossed over into Igala the distribution of lands, within the area allocated to them by the Ashegba, was vested in their leaders and, from them, delegated to the elders of each Group; to-day this authority is vested in the Village Headmen. There was never any question of land-hunger, for the area into which they migrated was sparsely populated and far in excess of their prospective requirements—the situation remains unchanged. There are thus no 'reserved lands' (as the term is generally understood—e.g. on which no farming may be permitted), communal lands, or grazing lands.

27. Land, once allocated, descends from the original grantee to his brother and sons and so on. Land of an intestate person reverts to the community in the person of the Headman for reallocation at need. Land may not be sold for any purpose, used in payment of a debt, or pawned; ownership may be revoked where the plot is systematically neglected, for although there is no actual land-hunger, those farms within easy access are proportionately the more valuable. Land for strangers is allocated by the Headman and no tithe on its fruits is now levied; should the stranger die the land reverts to the community but his relatives are entitled to the crops that he planted—should the stranger, however, marry into the community, the son of such marriage will inherit the land; the stranger's brothers, failing male issue to him, would not inherit.

28. Boundaries. Boundaries between community lands are clearly defined and generally follow natural features, a path or stream-bed or something easily recognizable; between individually-owned lands within the community the boundaries are generally artificial. Trespass is regarded as a most heinous offence (it is fortunately very rare) and where it occurs invariably results in bloodshed.

29. Sylvan produce, etc. Individuals have absolute right to all sylvan produce on their own lands, the same rule applying to thatching material and firewood; in unallocated lands such rights are shared by the community.

30. Hunting rights over individual lands are inviolable and the owner is entitled to a tithe consisting of one foreleg, one hind-quarter, the skin and head of any animal killed thereon. This would also be the case if the animal had been shot in the bush and taken refuge on private land where it subsequently died. Over unallocated lands, the hunting rights are communal but the Headman (as custodian) is entitled to the same tithe as though the land were his own.

31. Water-rights fall into three categories:
(a) Streams or pools which provide drinking water for the community.
(b) Water which runs through individually-owned lands over which the owner of such land exercises sole prescriptive right.
(c) Water in unallocated lands over which the Headman exercises rights, which, however, are restricted to a tithe of any fish caught therein.

32. Markets. There is no individual ownership of markets.

CHAPTER V: CUSTOMS

33. Birth. The husband ceases to cohabit with the wife about six months after pregnancy is established but no other specific behaviour is enjoined on him;
he will refrain during this period from quarrelling with her or striking her (he is normally a notable wife-beater) for fear of adverse consequences to the child, and, if she proves cantankerous or provocative, will leave the house, lest his anger overcome him.

34. So far as the woman herself is concerned, certain sorts of food are considered undesirable but there are no statutory 'taboos'; laxatives are prohibited as they might bring about miscarriage, but diuretics are encouraged. The expectant mother pursues her normal duties right up to the last moment and not infrequently delivers on her way to or from market or the communal water-supply.

35. There are no professional midwives, but the mother and mother-in-law and other of the wives will be present to give assistance and to look after the infant; herbal infusions are given during labour which are believed to facilitate delivery. In cases of difficulty—the local 'medicine man' (Aguma inebe) will be called in and will, if necessary, resort to manipulation, payment being made either in cash or in kind for such service.

36. If the mother dies in the effort to give birth the aguma inebe will be hastily summoned to remove the child, which he effects by opening her stomach 'so that the child shall not continue to torment her in the under-world'; no attempt is made to bring such a child to life.

37. If the woman dies shortly after delivery, the child is handed over to a foster-mother which act brings the two into close pseudo-relationship, the child regarding the foster-mother as its real mother throughout its life; no marriage is possible between foster-children. The father will provide food for the foster-mother until the child is weaned, when, if it is a son, it will return to his home; if a daughter, it will remain with the foster-mother till marriage, and although she cannot herself give the girl in marriage she is entitled to half of any marriage-gift that may be made.

38. The umbilical cord and after-birth are burned and buried in the ground at the back of the mother's hut; three mud bricks are placed on top and on these the mother sits and is washed twice daily, morning and evening, until she is 'cleansed.' The site of such burial is not shown to the child when it grows up, as is done amongst some tribes, and no reason for the foregoing ritual could be ascertained.

39. Children born with a caul are believed to have evil propensities; they are held to be ill-tempered and sinister of character. Natal abnormalities—albinos and the like—are similarly regarded. Twins are welcomed, but contrary to our own beliefs are said to hate each other. Triplets are practically unknown.

40. Bassas are not ignorant of physiological paternity; contraception is neither known nor practised—abortion is, however, freely; it is effected by the use of herbs—not by manipulation.

41. Fathers prefer sons, and mothers daughters, as the latter are more often with them. The first-born son is not cherished if the father has no brother, as it is supposed that he will be impatient for his father's death in order that he may succeed to his property. The first-born son is invariably handed over to the paternal grandparents to bring up, incidentally.

42. Naming. The child is named about seven days after birth, in the presence of all available relatives (Bassas will travel incredible distances to participate in such social obligations); the actual naming is done by the father after propitiatory sacrifice at the ancestral shrine. There is a belief in reincarnation and a boy will frequently be named after his grandfather or great-grandfather if consultation of the oracle indicates that the latter is about to enter on a new phase of existence; other names will be chosen after some well-known local character or to commemorate some notable contemporary event.

43. Some typical names are: (a) Men
Kpanaki, name given to a child after a succession of children have died at birth; Adaruwona, sunlight; Eto, similar to Kpanaki—literally 'will he die?'; Ajiya, God's will; Soko, God's gift; Asene, the reward of virtue or effort; Asekpa, the helper; Ekpeiso, steamboat; Aduniya, the world (borrowed from Hausa).

(b) Women
Ezengafu, 'no brother'; Anduma, 'the tale-bearer'; Tafanama, 'Don't give it to him'; Ilayeke, 'It has not befallen' (the parent hoped for a son); Egiteshuye, 'The only woman in the house' (a girl born after a succession of boys); Adau, a reincarnation of the grandmother; literally 'the old lady.'

44. Childhood. The mother will suckle her children until nearly three years of age in the case of girls and nearly four in the case of boys, who are considered to be more difficult to rear—it is a common sight to see a sturdy, well-built child with a full set of milk-teeth suddenly break off from play, run to his mother, reach up for her breast and stand there drinking lustily; the belief that continued lactation confers immunity from pregnancy may explain why children are encouraged in this practice. Breast-feeding in the later stages is augmented by a thin gruel.

45. After weaning, both sexes are introduced to work—the boys accompanying their fathers to the farm where they are instructed in the simpler gardening operations, the girls helping in their small way with household tasks, drawing water, collecting kindling, cleaning dishes, and the like; from an early
age they are accustomed to the carrying of loads in the characteristic Bassa manner—this is exclusively a woman’s job—a conical wooden bowl is placed on the shoulder, in it are placed three sticks to form a tripod on which the load is balanced: the women will carry heavy and cumbersome burdens for long distances in this manner. The boys are also instructed in the art of mat and basket weaving. There are no age-grades.

46. At about eight years of age, or even later, according to individual development, the teeth are filed and the tribal marks (inyete, see, however, para. 20) applied, a number of children up to ten or more being done at one sitting; body markings are not obligatory and may be done in later years. Neither circumcision nor clitoridectomy are practised.

47. There is a form of ordeal, egummu—boys who have reached the required age assemble at harvest time, gird themselves with a short kilt of raffia and beads and, naked from the waist upwards, strike each other in turn with rawhide whips, the ritual being somewhat similar to the Fulani sharaf, and almost certainly borrowed from the Fulani. The blows are heavy and draw blood. The elders stand by to observe the conduction of the youths and the proceedings are presided over by an old woman, long past child-bearing, who exhorts the contestants to show fortitude. An exhibition of cowardice is regarded as shameful and involves the individual in a second ordeal the following year. The proceedings close with a liberal supply of beer.

48. On attaining adolescence a boy is introduced (several of them at a time) into the secrets of the religious rites (even whilst a small boy he will have learned something about them) and is placed under a binding oath not to impart these even to his mother; daughters are in no circumstances instructed in the mysteries, the purpose of which is in some respects no doubt designed to keep the women in proper subjection. There is no form of ordeal or initiation for girls nor is there any ceremony on the appearance of the first menses.

49. Marriage. Marriage amongst the Bassas is exogamous as regards the ‘kindred’ and there is not the least doubt that, formerly, clan exogamy was practised; it is patriloclal and the basis is exchange. A youth meeting a girl who takes his fancy will tell his parents and they will arrange matters with the parents of the girl (the business is transacted by the fathers on both sides or by the eldest surviving uncle if the father is dead), the consent of the girl herself being obligatory. These purpurlers having been satisfactorily concluded, the father will return and notify his son and the latter will summon a number of young friends and instruct them to waylay the girl at some market which she is known to attend. The party set off on the chosen market-day and, on arrival, one of their number is set to watch her movements—when he sees that she is packing up her loads preparatory to going home he will slip back and tell his companions who will go off ahead and lay up in the bush alongside the path to her village. The ‘scout’ is meanwhile walking ahead of her and, on passing the ambush, will give some sign that the girl is approaching behind him—as she passes they spring out and seize hold of her; she will cry out and struggle until she is finally overpowered and carried back bodily to the bridegroom’s compound where she is set down and given into the custody of his mother or, if the latter be dead, of his eldest brother’s wife. No one pays the least attention to her cries when she is seized, for those who hear them are perfectly well aware as to what is toward.

50. That night there is a feast and dancing in the compound and much beer-drinking—the girl takes no part in these festivities, being in fact kept in strict custody lest she may seize the chance of escaping to her home. The next morning she is washed and her body is rubbed with a preparation of cam-wood which is supposed to soften and beautify the skin; the operation is repeated again that evening and yet once more the following morning, the bathing being carried out by the bridegroom’s mother or his eldest brother’s wife—after the third washing her head and body are shaved and she is once more anointed with camwood. A new cloth is wrapped around her and the bridegroom is then admitted; there is no further ceremonial. Precisely the same ritual applies to secondary marriages.

51. If it be found that the girl is not a virgin there is a great to-do and she is forced, in family conclave, to divulge the name of her seducer; if the bridegroom is really fond of her or she is particularly attractive he will do nothing further than mark down the name of the offender for future attention—should she be disappointing in other respects, however, she will be ignominiously returned to her parents. As elsewhere, morals tend to become looser and it is now not uncommon for girls to be betrothed before adolescence and to be brought up by the mother of the prospective groom who keeps a lynx-like eye on her movements and conduct.

52. If a would-be benedict has no sisters of his own as a basis for exchange he will beg from the families of his cousins for discharge of his part of the bargain when called upon; the name of the exchange-wife must be given (even though the girl be of tender years) before the bride’s family will part possession—she becomes heritable by the brother of the man to whom she is in pledge.

53. A man may have anything up to six wives and, on occasions more, but the average number is from
two to three; the second wife will often actually be chosen by the first—it means less work for the latter and there is wisdom in allowing her to have some say as regards the woman who is to share her life and husband. The senior wife is in charge of the compound and appoints the daily tasks—she has definite authority over the others and the husband is bound to support her. The husband has no sleeping-hut of his own and (in theory) visits his wives in strict rotation, spending two or three nights with each.

54. The levirate marriage is obligatory and an interesting feature in connexion with it is that the first child born of such union is believed to be the actual child of the woman's dead husband; the eldest son of a first marriage will always claim to inherit the first child of his mother's second marriage, a claim which cannot be disputed. In the social life of the compound where such a marriage has taken place, the brother's widow takes precedence of his own 'senior wife.' It seems clear that the purpose of this form of marriage is not only to 'raise up seed to the dead' but to preserve the unity of the social organization. The sororate marriage is also practised but is seldom regarded as a 'good' marriage.

55. The laws of prohibition are rigid and include cross-cousin marriages. There is avoidance of the mother-in-law.

56. Adultery is fairly common and usually takes place in the bush—the woman meeting her paramour at some prearranged rendezvous on the way to market; where it results in pregnancy and the circumstances are such that the husband can by no means be persuaded that he is the author, the woman is forced to divulge the father's name and the child is claimed by the husband. It would seem that the old adage 'it's a wise child, etc.' has particular application amongst the Bassas and, although this may appear to be an overstatement, the writer is assured that it is not; one might almost say that adultery is condoned—the social organization offers little remedy. It is exceedingly rare for a complaint of this nature to be taken either to the Native Court or to an Administrative Officer; in a Division where a very large proportion of the latter's time is taken up in hearing such complaints this is in itself significant.

57. Divorce. Divorce is rarely practicable—it leads to too much trouble and complication, for if the woman leaves her husband and returns to her father, the husband's family will at once reclaim the exchange-wife, which act will make the divorcée extremely unpopular with her brother or such member of her family as may be immediately affected. Sterility and frigidity, however, invariably lead to divorce, but the wife's family will in that case usually provide a substitute.

58. Death. Death is accepted as a rule as a natural phenomenon, but where there is no obvious cause such as accident, familiar disease, or old age, the agency of some evil spirit or of some person possessed with powers of witchcraft is suspected; in former days (occasionally nowadays for that matter) such death would have at once culminated in a trial by ordeal, the suspected person being required to demonstrate his (more frequently 'her') innocence by drinking an infusion of sasswood at the deceased's death-bed or grave. It may be mentioned here, since it has been the cause of so many illegal trials of this nature, that the most violent superstitious dread attaches to certain dreams and to see a person one knows in a dream is a certain portent that the person seen is seeking to encompass your death or to involve you or yours in misfortune.

59. The spirit of man is believed to survive after death when it is known as uguyu (probably borrowed from the Igala iygu) and may manifest itself as a ghost (baratu)—should it do so it is believed to be evilly disposed. There is widespread belief in reincarnation, generally in the body of the grandchild or great-grandchild, the spirit remaining in the underworld whilst awaiting re-birth. This underworld is believed to have a definite social order and organization though it was not found possible to obtain any details regarding it.

60. Death will always take place, if this can possibly be arranged, in the house of the dying man's father; it is not believed to be propitious to die elsewhere. However far from home a man may be taken sick, the moment it appears probable that he may succumb to his illness every effort will be made to bring him home; should this prove impossible, his bow and arrows, knife and hoe (as being most intimately identified with deceased) are brought back and placed in his father's hut. A dying woman, similarly, will always be laid to rest in the hut which she has shared with her husband.

61. Those who attend the death-bed are the father, brothers and sons of the deceased—no women are permitted to be present, it is strictly taboo for them to look upon the corpse of a man; men, however, are allowed to be present at the death of a woman, those usually attending being the husband, sons, and the woman's own brother—should she be buried without the latter having been summoned this would be a grave breach of customary law and would at once raise the suspicion in the minds of her family that the death was brought about by foul means. There is no actual ritual (so far as could be ascertained after exhaustive inquiry) at the actual moment of passing.

62. As soon as possible after death, the corpse is washed and shaved, a duty which is enjoined on the eldest surviving brother or failing such, the eldest son; the eyes are closed and the jaw bound with a
white cloth, and (if the wealth and circumstances of the family permit) the body is clad in gown, trousers, and hat. Meanwhile a summons has been sent to the male relatives from far and near (even into the Nassarawa Division, north of the River Benue) and not until these have all assembled or have been satisfactorily accounted for, may the interment take place. Failure to attend unless for some good reason would incur grave social stigma. This will sometimes involve a delay of anything up to three days or longer.

63. The grave is dug by youths from neighbouring houses, and having completed this they are summoned to bear the corpse to its resting-place. The actual interment is attended by all available male relatives except the father of the deceased, who is consumed with shame that he, who by tale of years should have prepared his son, is yet alive. The corpse is actually laid in the grave by the next youngest brother; the nearer relatives each provide a cloth which is wrapped around the body.

64. With the corpse is buried his pipe and a supply of tobacco and a calabash containing money subscribed by the relatives and deceased’s wives so that he shall lack for nothing on his long journey to the underworld, or, that should he meet there one to whom he owed money in their earthly existence he shall be able to discharge his debt. If a man, the corpse is laid on its right side facing the East, for the sun rising there will remind him that it is time to be up and go to his farm; if a woman, she is laid on her left side facing the West, for there she will see the setting sun which will warn her that her man will soon be returning and that it is time to prepare the evening meal.

65. The actual grave consists of a well-shaft some 4 to 5 feet in depth, with a gallery tunnelled out across the bottom; in this gallery a mat is spread and the corpse is laid upon it at full length. At the bottom of the well-shaft a rough wooden frame is fixed, it is then sealed and the shaft itself is filled in, whilst over the surface an earthen mound is raised about 3 feet high (more in the case of notables) to mark the site. At the apex of this mound an oblong piece of stone (about 12 inches by 6 inches) is set and is surmounted with a red fez and turban; these latter are left in position until they rot—if, however, it is the grave of an important individual such as an elder, a grass-roofed shelter will be erected over it to protect it from the weather. Graves of children are not marked nor is there any ceremony such as has been described—their attitude to child mortality is entirely fatalistic.

66. The body having been interred, the mourners return to the compound and sit drinking beer, discussing the attributes of the deceased and the disposal of his property—this being arranged in the presence of all the male relatives who must be satisfied that his children are properly provided for. At intervals throughout the night guns are discharged, not as might be supposed to scare away animals or evil spirits, but to demonstrate to those within earshot that here was a man of substance with numerous connexions who were delighted to honour him by a prodigal waste of valuable and expensive gunpowder. A person whose obsequies are not distinguished in this manner is held to be of no account.

67. The next morning, at sunrise, the mourners repair once more to the grave-side where an animal (preferably a ram) is sacrificed; its throat is pressed against the stone surmounting the grave-mound and there cut so that the blood flows over it. The animal is then cut up, roasted in situ and the funeral feast is served there; much beer is drunk with this and libations poured to the accompaniment of some valedictory apostrophe by the mourners in turn. This completes the ceremonies and all now disperse to their homes.

68. Notables will be buried in some public place such as a market, or at the side of a much-used road, so that all may think on the deceased as they pass; humbler folk are interred at the back of the compound—there are no recognized funerary groves. Suicides are buried at the foot of the tree from which they have hanged themselves, the ceremony being precisely the same in this case; nor did it vary when deceased was a suspected witch who had died as the result of trial by ordeal—restitution had been made and the usual honours must be accorded!

69. The male relatives remain in a state of mourning for about seven days (about forty days in earlier times) and his wives for five months; during this period the hair is allowed to grow and clothing is not changed—the woman must bathe herself twice daily but may not cup her hands to perform her ablutions, she must use a special calabash to pour the water over her body—no explanation could be obtained for this custom. No forms of food are taboo during the period of mourning.

70. Inheritance passes to the eldest son if of age, and, failing this, to the deceased’s next younger brother (in contradistinction to the neighbouring Igala rule of the eldest brother) who stands in loco parentis to the orphan; in either case the younger brother inherits the wives, but in the second alternative the actual property is held (theoretically) in trust by him on the orphan’s behalf, a trust which in practice is honoured more in the breach than the observance. If there be no younger brother there is remainder to the elder brother who may, at his discretion, divide the estate between deceased’s son and his own son—for these two are regarded as brothers.
71. Should deceased have neither brother nor son, the property may pass to his eldest surviving daughter though male cousins would claim precedence. In no event does inheritance pass to a wife, the argument being that she herself is a heritable chattel.

72. Inheritance disputes in the old days were settled by the Clan Headman with the aid of a committee of elders. The heir, incidentally, becomes responsible for the debts incurred by the deceased and their discharge is his first duty.

73. On the death of a woman, her property passes to her eldest surviving son, or, failing male issue, to her own eldest brother—the husband gets nothing. In this connexion it is of interest to note that the women are generally wealthier than the men; the woodpile (that most characteristic feature of Bassa compounds) is hers, so are the livestock; moreover she accumulates money from marketing, the sale of pots and profits from brewing—and the beer she brews for her own menfolk has to be paid for by them, though she will buy the grain for its manufacture from her husband. The proceeds of marketing of his own farm produce are of course handed over intact to the husband. The goats and sheep she breeds for sale 'on the hoof,' the pigs she butchers herself, smoke-cures the flesh, and sells it in the market. She is a thrifty soul, spending little on herself save for an occasional cloth or some cheap article of adornment which takes her fancy (unlike the Igala woman she does not smoke), so that it will be seen that she may amass quite a store of money during her lifetime. She will lend money to her husband at tax-time, or perhaps to pay some courtfine, but it has very definitely to be repaid either in money or in grain for brewing. The grey mare is the better horse.

CHAPTER VI: BELIEFS

74. The religious beliefs of the Bassa-Komos merit much closer and more detailed examination than the writer was able to give to them. Broadly, Bassas believe in (i) a universal Creator, Agwatana, (ii) a miscellany of lesser deities (of whom Ebefu is the most important) enshrined in an axe or some other cultus emblem, varying in each clan, and finally (iii) communion with the ancestors.

75. Agwatana is recognized as the source of light and of all life and dwells in the skies—he is too remote for individual worship or, in the ordinary way, for supplication in respect to individual needs. He will be approached on the occasion of some major distress—drought, war, large-scale epidemics and the like; he has no shrine nor is he represented by an image but there are certain places which are considered as favourable for establishing contact with him; more often than not, the top of some lonely hill or a grove in some patch of dense forest—these are regarded as sacred and it is possibly their quality of solitude which renders them auspicious.

76. Ebefu (who is principally identified with the large Akuba Clan) and other lesser deities are more intimately accessible; as stated previously, his spirit is enshrined in an axe-head, this having potent value as an oath-binder. Prayer and sacrifice are made to him at the shrine in which the emblem is kept and he is believed to exercise a controlling influence over all the petty accidents of the community life; his wishes and pronouncements are interpreted by diviners (cf. Igala and Igbirra from whom the Bassa has in all probability borrowed this technique) who of course exact a tribute for such service.

77. As amongst their neighbours, however, it is the ancestral spirits which are the most essential factor in the social organization, for they remain after death an integral part of the community. The shrine by which they are personified is known as Ada (father) and this is to be found in every hamlet. Annual sacrifice is made there at the Guinea Corn harvest, for here, it is believed, that the spirits of the ancestors congregate to commune with their descendants. All the members of the hamlet, men and women, will gather there and, after the sacrificial animal has been slaughtered, libations of beer and blood are poured over the shrine; this act is followed by a feast lasting for some three days or longer. The annual ceremony apart, the ancestral spirit is the subject of great veneration, frequent sacrifice, and communion on the part of the individual; identification of the ancestral spirit does not go back farther than the two or three immediately preceding generations for, as has been observed elsewhere, there is a firm belief that after sojourn in the underworld the spirit is reincarnated in the person of a great-grandchild.

78. There is no superstitious dread attaching to purely natural phenomena such as thunder and lightning but a very wholesome physical fear of the latter; the earth is believed to be flat, and the larger planets to be inhabited.

Some Kinship Classificatory Terms

<table>
<thead>
<tr>
<th>Relation</th>
<th>Father</th>
<th>Mother</th>
<th>Paternal Grandfather</th>
<th>Paternal Grandmother</th>
<th>Elder Brother</th>
<th>Younger Brother</th>
<th>Father's elder brother's son</th>
<th>do.</th>
<th>younger do.</th>
<th>Father's elder sister</th>
<th>do.</th>
<th>younger do.</th>
<th>Father's elder brother's son</th>
<th>do.</th>
<th>younger brother's son</th>
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<tbody>
<tr>
<td>Term</td>
<td>Ada</td>
<td>Omu</td>
<td>Ugbunokoshi</td>
<td>Bungusani</td>
<td>Batagum</td>
<td>Bohungum</td>
<td>Ada'ato</td>
<td>Adatowi</td>
<td>Ashimo</td>
<td>Ayawomi</td>
<td>Ashimo-ti dikie</td>
<td>Ayawomi</td>
<td>Bohungum</td>
<td>Batagum</td>
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<td>Reciprocal</td>
<td>Iyawomi</td>
<td>Iyawomi</td>
<td>Igalumi</td>
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Among the national minorities of Poland there existed a Tatar tribe small in number, in all some thousands of souls, inhabiting the region of Vilna. Unlike the other regions inhabited by the peoples of this race, it had never been touched by the Tatar invasions. I shall examine the following questions:

(1) Why and how did the Tatars come to settle in Poland?

(2) How was it that this small Islamic island, the most westerly, isolated among Christian communities, and never very numerous, yet preserved its religion intact during centuries, in an epoch which had never known religious tolerance?

(3) Lastly, what are the distinctive traits of this tribe, both from the physical and from the psychological point of view?

Everyone agrees that these Tatars came from the Golden Horde, whose Empire was created about 1240 by Batu, the grandson of Jenghiz Khan, and had dominated Russia during two and a half centuries, with its capital at Sarai, not far from the mouth of the Volga. But it is now necessary to define the term 'Tatar.'

The Chinese call a Mongolian tribe by this name, and later the term came to apply to the whole army of Jenghiz Khan, although the majority were Turkish in race and the Mongols appeared mainly among the officers. When Batu's army established itself in south-eastern Europe, it became mixed with an amalgam of peoples, most of whom were also Turkish, and dominated by the Polovtsy, another Turkish people. Thus we see that the population of the Golden Horde, to whom the term 'Tatar,' originally applied to a Mongol tribe, was finally attached, was chiefly of Turkish origin and contained only a small proportion of Mongols. This is often not understood, but we may remember that the name of Russia is of Scandinavian origin and originally applied to a Scandinavian tribe, part of which settled in the North of Russia, and whose Prince, Riurik, founded the first Russian dynasty.

We can now discuss the circumstances which led to the settlement of certain Tatars in Poland. It is above all well to remember that Poland then consisted of two parts: Poland proper, and Lithuania, which united in 1386. At that time the Grand Duchy of Lithuania was a great country stretching from the Baltic to the Black Sea, and towards the East up to the source of the Oka, a tributary of the Volga. Being obliged to defend itself against its neighbours, Lithuania began in 1319 its policy of alliance with the Golden Horde and as a result the Tatars soon participated in war at the side of the Lithuanians. As the Lithuanians were pagan before the union with Poland, the question of religious differences did not arise. The Lithuanians themselves were, moreover, not very numerous (according to historians, they then numbered about 250,000), since the population of the Grand Duchy was composed mostly of Slavonic elements, i.e. White Russians and Ukrainians; and the Grand Dukes therefore conceived the idea of establishing Tatars in the country to 'strengthen the Lithuanian elements.'

The first authentic Act concerning the establishment of the Tatars in Lithuania is dated 1391, but it can be assumed that the first colonies had settled somewhat earlier. With the decline of the Golden Horde at the end of the fourteenth century, civil wars were another cause of considerable Tatar immigration into Lithuania. The partisans of a defeated Khan often sought refuge in Lithuania, their traditional ally. A third but minor source of immigration, dating from the beginning of the sixteenth century, consisted in the prisoners taken in wars against the Khanate of the Crimea.

The Grand Dukes of Lithuania received the Tatars on the following basis: they were given land in return for the military service they would render in case of war. These simple warriors were established in villages which had, at the beginning, a purely Tatar character. Nobles were granted estates of a size corresponding to their degree of nobility in the Golden Horde, or to the distinction of the service which they had rendered their adopted country. These estates could not have been very large if one considers that, according to the census of 1630, the Lithuanian Prince of Sloutek had to provide more than 700 armed horsemen, while the richest Tatar only had to furnish 8.

The rights of the Tatars to the land had a clearly feudal character. It could be defined as a sort of
usufruct in perpetuity, since the Tatars could not acquire or cede their land in any way without authorization from the Royal power. For this reason they were sometimes called 'Royal Tatars,' or, in Western terminology, direct vassals of the King. This right of usufruct to the land was transformed in time into a right of property pure and simple.

In the Middle Ages the Polish Tatars enjoyed almost all civic rights. Thus, for example, the noble Tatars, owners of estates, had the right to possess serfs. I have said 'almost' all rights, since they did not enjoy political rights up to the time of the Polish partitions, i.e. up to the end of the eighteenth century. They did not participate in elections to the Central Diet, or to the provincial diets. The Jagellonic Kings had shown a tendency to make the rights of the Tatar nobility conform to those of the Polish nobility, but after that dynasty died out there was a reactionary movement in relation to the Tatars. This was due to Jesuit influence, and had begun at the beginning of the seventeenth century, in the reign of Sigismund III Vasa (a Prince of Swedish origin), who was an intransigent Catholic. But the Tatars had shown themselves to be so loyal during this epoch, which had been troubled by perpetual wars between Poland and Turkey, Sweden, Russia and the Cossacks of the Ukraine, that finally, towards the third quarter of the seventeenth century, in the reign of John Sobiecki, Tatar rights were completely restored.

It is worth noting, in passing, that the percentage of nobles was rather high among the Polish Tatars, probably as a result of the civil wars in the Golden Horde. The Book of Armorial Bearings of their noble families, published at Vilna in 1929, contains several hundred pages and it is certainly not complete. Certain families had been able to prove their genealogy back to the beginning of the fifteenth century. Among them there were even descendants of Jenghiz Khan; the best known of these was Hadji Girei, founder of the Khanate of the Crimea, the grandson of Tokhtamish, Khan of the Golden Horde and celebrated rival of Tamerlane, as well as two tzareviches, Punski and Ostrynski. A scientific study of the noble Tatar families of Poland would certainly be an interesting contribution to the history of the Golden Horde, a history which is yet to be fully written.

In receiving the Tatars, the Grand Dukes of Lithuania had guaranteed them complete religious toleration. In each Tatar village there was a mosque, and also in certain towns. There had even been more: there exists a legend, supported by some historians, according to which, up to the beginning of the sixteenth century, Tatars had the right to marry Christians without changing their religion and on condition that the children of these marriages kept the faith of their fathers. One explanation of this privilege is that the Tatars usually arrived in the country without women. The custom would account for the fact that later certain Tatar families had Slavonic names, as a result of their ancestors having adopted the family names of their Christian wives; and also for the fact that fairly soon, in any case towards the middle of the sixteenth century, the Tatars had forgotten their mother tongue. Thus the Polish Tatars possess a whole literature in the White Russian and Polish languages, but written in Arabic letters.

As for military service, in case of general mobilization the Tatars formed their own regiments, commanded by their own chiefs. This tradition was maintained right up to recent times. The Tatars had participated in all the wars of Poland, serving her, according to the words of one writer, 'with a devotion extending to sacrifice.' The Tatars had especially distinguished themselves during Poland's struggle for independence. During the insurrection called the Confederation of Bar, the Tatar general Jusuf Bielak had defeated the Russians in the only battle won by the insurgents in Lithuania. During the insurrection of Kosciuszkoe, in 1795, they had put into the field six regiments of cavalry, and had distinguished themselves during the defence of Vilna.

We may note as a curiosity that it is to the Polish Tatars that we owe the name of a type of cavalry called the Uhlans. Ulan was the name of an old noble Tatar family famous in the military annals of Poland. In the first half of the eighteenth century, a Colonel Ulan commanded a regiment of Tatar cavalry which so pleased the then King of Poland, August of Saxony, by its exercises and its equipment, that he established in Saxony a similar regiment called Uhlans. From Germany this type of cavalry was later introduced to Poland and to Russia. The British counterpart is the Lancers. A Captain Ulan commanded the squadron of Polish Tatars attached to Napoleon's Guard. The last descendant of this family, a cavalry general, died at the beginning of this war, at Vilna.

Before the war of 1914–18 one used to call these Tatars Lithuanian for, as we have seen, they had settled in territory formerly Lithuanian. But since Lithuania separated from Poland after the last war, they are now appropriately called 'Polish Tatars.'

It is thus the fraternity of arms which explains why, during the epoch of violent struggles of Christianity with Islam, there flourished a Muslim minority in Poland which enjoyed almost all rights of citizenship.

From what has been said one can see that the Polish Tatars engaged, above all, in two professions: agriculture and war. This tradition was maintained
up to our time, with but the difference that from the end of the eighteenth century they also began to enter civil careers, especially the administration and law, as judges and barristers, as well as other liberal professions such as medicine and industry. Curiously enough there have never been traders among them.

The tradition of army service largely explains the drop in numbers of the Polish Tatars. They suffered very heavy losses during the last great war and the civil war which followed in Russia. We do not know the exact number of Tatars in the ranks of the Imperial Russian army in the last war, but it must have been high as they provided 20 generals, which is a very considerable proportion for a people of 25,000 souls. In the Russian revolution of 1917–20, the Polish Tatars were bound to take an active part, as the intellectual classes were prominent in the independence movement of the Tatars of the Crimea and Azerbaijan. General Sulikiewicz, for example, was head of the Crimean regional government in 1917, and then chief of staff of the Azerbaijan army. He paid with his life for his devotion to the cause of his co-religionists, as he saw it.

After the last war the Tatars found themselves divided between three states: Poland, Lithuania, and Russia. Most had returned to Poland where, at the beginning of this war, they numbered about 7,000. Their division among three states had obviously weakened their national strength, but the re-establishment of Poland gave them advantages which largely compensated for this weakening. In fact a free Poland opened up before them an opportunity to fulfil their cultural and religious aspirations.

One of the first acts of the Polish government in relation to the Tatars was the establishment of an autocephalous Muslim church, in the form of an autonomous Muftiäte. This act had important consequences. Before the re-establishment of Poland, the Polish Tatars depended in religious matters on the Muftiäte of the Crimea, which took little interest in their fate, so that the Polish Tatars were completely deprived of religious direction. The creation of the new Muftiäte changed all this. Above all the Muftiäte began to raise the cultural level of the imams, creating courses of advanced re-education for this purpose. In addition young men began to be sent to Cairo to attend the courses in Muslim theology at the University of El Azhar. Furthermore the Muftiäte published prayer books in two languages: Arabic and Polish. At the beginning of the present war there were 17 mosques and 3 houses of prayer in Poland. Attached to each mosque was a school where the imam taught the children the Arabic alphabet, the rites, and prayers.

The establishment of the Muftiäte had also helped the Polish Tatars to maintain relations with their co-religionists abroad. They were now represented at all Islamic congresses, and the Polish Mufti made frequent journeys abroad, in order to enter into personal contact with his colleagues.

The Polish Tatars are very deeply attached to their religion. For this reason mixed marriages are not encouraged. A Tatar who changes his religion immediately ceases to be a member of the Muslim community. Divorces, though they take place in accordance with the rules of the Chariat (i.e. the formalities are reduced to the minimum), are very rare, and one can say without exaggeration that the Tatars are devoted to family life. The proportion of large families was very considerable before the last war, but the rise in the cost of living after the last war led, as everywhere else, to a reduction in the number of large families.

Tatar women differ little from Polish women, in that for instance a number have studied at universities, and one has taken up an academic career. In accordance with Muslim tradition, however, Tatar
women pray separately from the men at the mosques. As far back as one can go into the past of the Polish Tatars, one finds no polygamy among them.

Having become completely polonized, the daily life of the Polish Tatars, especially in the towns, is determined by the trend of the Polish surroundings. The strict observance of the Muslim rites is therefore relaxed in the towns. It is not the same in the country, where the rites are more strictly observed; thus, for example, Tatars living in the country do not work on Fridays. But if, on summing up, one observes a certain relaxation in the observance of the rites among the Polish Tatars, one can, on the other hand, say without exaggeration that they adhere firmly to the moral principles of their religion. Despite their reduced numbers the Polish Tatars have, thanks to the considerable proportion of intellectuals among them, played quite a noticeable role in the cultural and political life of Poland. Among them there have been judges, university professors, officers of high rank, senators, etc.

I must specially mention the 'cultural movement' among the Polish Tatars. In principle the cultural movement of a national minority aims at the recreation, or the development, of its own culture. This cannot be the case among the Polish Tatars; who have forgotten their mother tongue, and being, not a national, but simply a religious minority, cannot pretend to create a culture of their own: for it seems that a specific culture presupposes, as a fundamental condition, the possession of one's original language. The aim of the cultural movement of the Polish Tatars is more modest: it is to enrich Polish culture by the addition of values which are the result of the Muslim religion and of a study of their history. It goes without saying that the cultural activity of Polish Tatars in other spheres is a part of Polish culture proper, of which I will not speak here, nor mention their cultural activity before the re-establishment of Poland in 1918. In general, before this epoch, their cultural movement never had a systematic and organized character, but was rather sporadic and individual. This is explained by two main causes. In the first place, before the re-birth of Poland, the intellectual class of the Polish Tatars had been scattered throughout Russia, and, in the second place, the Russian government of that epoch did not regard manifestations of this kind, among national minorities, with a favourable eye. The renaissance of Poland had, as I have said, opened a new era to the Polish Tatars from this point of view, since the Polish government not only tolerated their cultural movement, but supported it by various measures.

It was organized in the following way: in each centre containing a sufficient number of Tatars, a cultural association was organized. The work of all the associations was co-ordinated by a central committee, and consisted above all in the organization of conferences on political, religious, and historical questions, in the dissemination of literature, in the publication and collection of books, in the maintenance of contact with Muslims abroad, and in contacts with Muslims coming to Poland. During holidays a troupe of young people made theatrical tours.

The most interesting form of cultural activity was the publication of books and periodicals. This began with the publication of the Armorial which we have mentioned. As for periodicals, there were altogether three: The Islamic Review, a quarterly founded in 1930 in Warsaw by Vassan Girei Djabagu, a journalist of Caucasian origin, related by marriage to the Polish Tatars. It was mostly devoted to religious questions. In order to encourage its circulation abroad, the principal articles were summarized in French. The Tatar Life, founded in 1934, was the organ of the Muftiate and appeared at Vilna. It was chiefly concerned with the daily life of the Polish Tatars. The Tatar Annual, founded in 1932 and edited by Arslan Kryczynski, also summarized its principal articles in French. The difference between these three publications lay in that the Annual had a scientific character, while the other two were more popular. To Tatar Life only Polish Tatars contributed, while the others were open to other Muslims; Polish scientists also wrote in the Annual. Lastly, there was a difference from the point of view of size. The Annual ran to some 300 to 400 pages, while the other Journals had only some 24 to 32 pages each.

Most of the articles in the Annual dealt with the past of the Polish Tatars. The last volume consisted of a monograph on the Polish Tatars by Stanislas Kryczynski, a man of Tatar origin. This preoccupation with the past is not surprising. Circumstances long prevented the Polish Tatars from realizing their cultural aspirations, and as a result their beliefs became too superficial, and the consciousness of their origin and particular history was weakened. It was thus natural that, as soon as circumstances changed, they turned to the study of their religion and their past in order to find there factors which would strengthen their religious sentiments, and better enable them to resist the influence of other religions. They also turned to the study of their special origins and their history. In this work the place of honour should be accorded to the article entitled 'The Post-War Nationalist Movement and the Polish Tatars,' published as a leading article in the first issue of the Tatar Annual, and written by the President of the Central Committee of the Cultural Associations, Olguierd Kryczynski. It summarizes the ideology of the Polish Tatars and is, in addition, an interesting
contribution to the philosophy of Islam and of the post-war period. Apart from this, the Central Committee of the Cultural Associations published several books about Islam, translated from foreign languages, among them that of Lord Headley, entitled *The Power of Islam*. On the initiative of the leaders of the cultural movement, young Tatars devoted themselves more and more to the study of oriental languages and general questions. Before the war, this cultural movement had already developed in an interesting manner, which enabled one to contemplate the future with confidence.

We do not possess much information about the position of the Polish Tatars under German occupation. But Ali Wronowicz, formerly a student at the University of El Azhar, who had been appointed

and those Tatars who had attempted to defend their mosque were shot without trial.

As for the physical traits of the Polish Tatars, we are in a position to summarize them, thanks to the work of an eminent Polish anthropologist, Julian Talko Hryncewicz, professor at the University of Cracow. His work was published in 1907 under the title, *The Polish Muslims or Tatars*, and contained the results of examining 91 Polish Tatars, all males belonging to the lower or middle classes. Here I may only give the conclusions:

1. Polish Tatars are generally of medium height.
2. They have long legs and a short body.
3. They are generally of a dark type.
4. Their skull is brachycephalic.
5. Their foreheads are narrow.

![Figure 3: Group of Polish Tatars](image)

*Imam* of Warsaw just before the war, was dismissed by the Germans and replaced by another Muslim, who was not even of Polish Tatar origin. In December, 1939 the French and Polish papers in Paris published the news that Arslan Naim Mirza Kryczynski, Vice-President of the Tribunal of Gdynia and editor of the *Tatar Annual*, was shot by the Germans together with other hostages in that town. His brother Olgierd, Vice-President of the Court of Appeal of Vilna and Director of the cultural movement, was deported by the Russians to the interior of Russia. The Arab daily *El Habr* published the news, a year ago, that as soon as well-known Tatars refused to collaborate with the Germans, the latter replied with brutal repression. Leading Tatars were sent to concentration camps, where many died after torture. The Mosque of Slonim was converted into a garage.

(6) They are broad-faced; the orbits are wide; the nose is small, more often fine than flat, straight and moderately long; the mouth is medium, the lips sharply defined, the chin prominent or rounded, the eyes stand out, and the lobes of the ears are well developed.

(7) They do not age prematurely. Their hair begins to turn grey fairly soon, but it rarely becomes quite white, even at an advanced age. They retain their hair, even up to a great age. They begin to lose their teeth fairly soon, but not in considerable numbers until they are past 60. It has been concluded that they belong to a mixed race, from the following facts: (1) They are generally of medium height; (2) the colour of their skin, hair, and eyes generally shows a mixed type; and (3) the group of skull types among which, at the side of brachy-
cephalic there often appears a meso-cephalic type and more rarely the dolicho-cephalic. This variety of types is also observed in the dimensions of the forehead. Thus, for example, among those of medium occipit one meets both straight and large noses, while among low faces one meets long ones. This mixture of traits is indeed confirmed, as we have seen, by the origin of the Polish Tatars. Before their arrival in this country the Tatars had already been a mixture of races. Having settled in Poland, it became more difficult for them to isolate themselves from the surrounding elements: thus there were mixed marriages with the native population during the first period of their existence in the country. And as, among the Tatars established in Poland, there had already been representatives of all the peoples which had composed the Golden Horde, there came about that mixture of various groups which prevails to the present day.

From the types examined it is clear that the Polish Tatars once possessed a great proportion of Mongol blood, which then spread among the local natives. Thus, for example, of the 91 individuals examined, 16 were of much less than average height, had shorter heads, larger prominence of face, aquiline or flat noses and slanting eyes, which are characteristic traits of the Mongolians.

The result of my own observations is that the members of the upper classes were more often of Turkish type, while the peasants were generally more Mongolian.

To what conclusion do we come as the result of all the data? We have seen that the Polish Tatars are a remnant of the Golden Horde, detached from the original body and lost in the midst of a Christian population. It is in this fact, it seems to me, that the importance of a study of their characteristics lies. An investigation into the origin of this tribe, and above all, into the alliance between the Polish-Lithuanian Kingdom and the Golden Horde throws a light on the history of the Horde, a question of great importance if one remembers that the Golden Horde dominated Russia during two and a half centuries, and left numerous traces of its institutions, customs, and languages, and in the blood of her peoples. In other words, without studying the history of the Golden Horde in detail we cannot understand Russia.

Secondly, the Polish Tatars, having become completely polonized, represent a synthesis of some Asiatic and some European elements. In other words, they represent an example of the possibility of the complete adaptation by a people of purely Asiatic origin to conditions of European life. And if those are right who, as the result of the two wars which Europe has suffered during thirty years, deplore the fallibility of European civilization, in so far as it is based on materialistic foundations, and preach the need for Europe to turn towards Asia, the cradle of all religions, then the example of the Polish Tatars may be of interest again.

ROYAL ANTHROPOLOGICAL INSTITUTE: PROCEEDINGS

Song and Dance in Malekula. Summary of a Communication by John Layard, M.A., D.Sc.; 4 April, 1944.

As in other parts of Melanesia the artistic genius of the natives may express itself in a variety of ways, for example in carving and inlay, or in the esoteric ritual of secret societies, so in the Small Islands and coastal districts of Malekula it expresses itself primarily in drama, music, and formal dancing.

Whatever the origins of these Malekulan art-forms, the institutions that they now chiefly serve are, on the one hand, the great megalithic religious cycle called the Maki together with the Mortuary Rites for those who have attained high Maki rank, and on the other hand Initiation. While music in the form of singing permeates all aspects of life (so that there are special branches of unaccompanied vocal music all having their own proper forms such as love-songs, children's songs, songs having to do with fishing, sailing, bird-life, and gardening, and above all the secret incantations of magic) what might be called the classical music of these islands is bound up with dancing and the highly specialized technique of orchestral performance on the slit-gongs. There are a number of these ritual Song-and-Dance cycles, each with its own complicated gong-rhythms, which accompany all major ritual activities. Sometimes they are performed during daylight, but more often at night during the full moon, when singing and dancing continue uninterruptedly from dusk till dawn, each night or consecutive group of nights being devoted to a single cycle.

One cycle has to do with the erection and consecration of a new set of these gongs, the orchestra of which is led by an old man playing on a mother-gong, which may beanything up to twelve feet high, accompanied by a number of smaller gongs each beaten in a different rhythm, so that at times there may be as many as four interlocking rhythms sounded at once, while the feet of the dancers beat out a fifth rhythm and their vocal music is sung to a sixth. Other such cycles have to do with commemorating the ancestors, others with mythical subjects, yet others extolling the founders of the various forms of initiation rite, and so on. These songs are sung partly in unison and partly in harmony. Each song starts off with a refrain, so that one song may last from ten minutes to a quarter of an hour. No one song may be repeated during the same night, so that on any one night from 60 to 70 are sung, all belonging to the same cycle. Taking all these ritual Song-and-Dance cycles together with the innumerable secular songs, every native knows all or parts (and at any rate the tunes) of at least 500 songs, and experts know many more. New songs are constantly being invented, and the best of these become incorporated into the general repertory while others die out. Any one may invent a new song (often coming to
him in a dream), and all ritual songs are copyright in the sense that they may not be sung by others without due payment.

The dances for these Song-and-Dance cycles are, some of them, processional, the dancers progressing from one end to the other of the long dancing-grounds (along the sides of which are ranged the sacrificial megalithic monuments including dolmens, monoliths, and stone-platforms) or else taking place along the paths leading from the shore to the dancing-ground, and also connecting the dancing-grounds of the different villages; in this latter case the singing is unaccompanied, as the orchestras are all erected in the dancing-grounds. Others are circular, the dancers moving around the wooden sacrificial posts in the centre of the dancing-grounds. Spectacular effects are obtained by some dancers moving clockwise while others circulate counter-clockwise. All villages in stated rotation congregate to take part in these dances, a dramatic feature of which, when they take place at night, is the carrying by the men of the home-village of blazing torches some six feet long as they dance among, (or in the circular dances around), the guests. Yet other processional dances are performed secretly and unaccompanied during initiation inside the large and specially constructed initiation lodge.

The most formal dances of all are those called Na-leng, performed on certain occasions at dawn after an all-night dance. These are set pieces, rehearsed for weeks beforehand and preceded by mumming-plays setting forth mythological or other subjects. They are danced by bands of men forming themselves into squares and going through a number of intricate and entrancing movements. One of the most famous of these dances represents the sacred marriage (the women's parts being taken by boys wearing women's aprons and false breasts), while another represents a hawk pouncing on its prey, symbolizing the conqueror of the skies that is believed to preside unseen over all their rites.

The lecture was illustrated by slides and gramophone records, and the lecturer himself sang a number of native songs.

The paper was discussed by Mr. Braunholtz, Mr. Frank Howes, Dr. Audrey Richards, and Mr. Medlicott. Dr. Layard replied.

Nutrition in East Africa. Summary of a Communication by Mrs. G. M. Culwick: 14 April, 1944, at a Special Joint Meeting with the International African Institute.

A brief summary was given of the history of nutrition work in E. Africa generally, with special reference to surveys and in particular to the work of the intensive survey carried out in Nyasaland in 1938-9, by a team under the scientific direction of Dr. B. S. Pratt of the Medical Research Council. The party included Dr. Margaret Read, appointed by the International African Institute, a medical officer and an agricultural officer seconded by the Nyasaland Government, a nutrition investigator, and, for part of the time, an economic botanist.

Along with their investigational work went experiment and development, in directions indicated by what they found, and arrangements were made in 1940 for a Nutrition Unit to carry on the work. Although reduced to a maintenance basis before it started and hampered by difficulties arising out of the war, this Unit survived and did valuable work until 1945.

The general dietary picture throughout E. Africa is the familiar colonial one of over-dependence on one starchy staple food, accompanied by deficiency which varies in both degree and kind and is often seasonal in its severity. The causes are the no less familiar trio—poverty, ignorance, and inefficient husbandry. The wartime recruiting campaigns showed the extent of malnutrition in the population. It contributed largely to the high rejection rates, while improvements in health and physique from the proper feeding of recruits have often been noteworthy.

Points stressed included the need for more practical and realistic nutrition propaganda, the nutritional importance of certain traditional methods of food preparation, and the dangers of encouraging earlier weaning except where care is taken to see that foods suitable for very young children are made readily accessible.

On the quantitative side, caution was urged in the interpretation of data from brief isolated dietary surveys, especially in primitive rural communities.

The effects of wartime changes on the nutritional status of the general population and on its feeding habits are not yet known. In the army, dietary prejudices have been broken down to such an extent that all the different tribes except the Somali have accepted a common ration.

The war has brought about an important change in the whole approach to nutrition work. Emphasis is no longer on the survey approach, but on overall food planning. In the nutrition planning on which all well-conceived food policies must be built. The Hot Springs Conference was an expression of the new outlook on a world scale. Nutritional surveys have, of course, a part to play in such planning, but they no longer hold the centre of the stage.

The paper was discussed by Professor Forde, Miss Wrong, Dr. Lucy Mair, Mr. Braunholtz, Major P. Granville Edge, Mr. Deans, Mr. Cooper, and Mda. Roosel. Mrs. Culwick replied.


The Kizil-kum steppe, of the 'red sands,' results from the failure of former irrigation systems, and preserves many monuments among its dunes—burial places of saints and chiefs, or vaults and niches of mosques. In oasis-towns, such as Tashkent, smaller mosques are still in use, and the houses conserve traditional plan and architectural forms.

A fuller abstract of this communication will be published later in MAN.

Bereavement as a Field for Research: An Introduction with Special Reference to Recent Research on Bereaved Spouses. Summary of a Communication by Professor David M. Fulcomer, Ph.D.: 25 April, 1944.

Dr. Fulcomer is Assistant Professor of Sociology at Brothers College of Drew University, Madison, New Jersey, U.S.A.; now on leave of absence while serving as field director for the American Red Cross with the United States Army Air Force in England. Until the present war is ended, he can always be reached if mail is addressed to him at his university.

There exists in every culture a death-complex which is an important part of the culture pattern. Its existence is reflected in many ways. It so permeates numerous areas of a society that its importance and ramifications are always one of the characteristics noted by any scientific student of the culture.

Also, almost every human being goes through the
bereavement crisis at some time in his life. For many
the experience comes more than once. Is it not peculiar,
then, that more scientific investigation of this experience
and all its ramifications upon a culture have not been
instituted?

The scientific investigation of the death-complex is
still a comparatively young endeavour as revealed by
the dearth of scientific literature on the subject. Professor
Thomas D. Elliot of Northwestern University, Evanston,
Illinois, U.S.A., has unquestionably been the pioneer in
the scientific analysis of the death-complex. He will be
happy to correspond on this subject with anyone interested
in his work.

Many others are interested in the development of research in this field
and have made important contributions, especially
Howard Becker of the University of Wisconsin, Willard
Waller of Columbia University, and the writer.

A few years ago Dr. Fulcomer decided to investigate
how persons in American culture adjust themselves to
the bereavement experience. After a careful examina-
tion and consideration of the many and varied aspects of
this problem which have been left untouched by scientific
research, he decided to study the depressive behaviour of
bereaved spouses during the first six weeks following
bereavement.

The cases were carefully selected and limited in order
to make the findings meaningful; and a technique of
case study and analysis especially adapted to the problem
at hand was developed and used. The aim of the study
was to discover answers to the following questions:
1. What types of responses do bereaved persons make to
bereavement, both immediately and also during the first
six weeks following bereavement?
2. What, if any, common sequences of behaviour are observable in these
responses?

Seventy-two cases were used for this investigation.
The data collected were carefully studied for uniformities
and patterns. They reveal, it was discovered, certain
uniformities in the sequences of behaviour which are
common to all cases studied. The 'stages' through
which they passed during the first six weeks following
bereavement were: 1. immediate; 2. post-immedi-
ate; 3. transitional; and 4. repatterning.

The data also revealed, it was discovered, that during
each of these stages, the behaviour of each bereaved
spouse fits into one of several distinct configurations of
response. For a detailed report of this research see
Fulcomer, David M., 'The Adversive Behaviour of Some
Recently Bereaved Spouses,' Doctoral Dissertation MS.,
Northwestern University, 1942. The findings of this
study are well summarized by Elliot in the following:
Elliot, Thomas D., 'Of the Shadow of Death,' in The
Annals of the American Academy of Political and Social

The stages and types of response within each are:

I. Immediate.—1. Stoic; 2. Dazed; 3. Collapse;
4. Lachrymose.
II. Post-immediate.—1. Acquiescent; 2. Excited;
III. Transitional.—1. Alternating; 2. Enforced-
Collaborative; 3. Attention-Seeking.
IV. Repatterning.—1. Projective; 2. Participative;
3. Identification; 4. Memory-Phantasy; 5. Repressive-
Seclusive.

This study of bereaved persons demonstrates only one
type of research possible in the investigation of the death-
complex. A great many others ought to be made. For
instance, additional descriptive studies should be instituted,
methods of reducing tensions and modes of
adjustment ought to be placed under scientific scrutiny,
responses of persons to bereavement should be psycho-
logically examined, pre-bereavement and post-bereave-
ment factors of importance should be discovered and
evaluated. These are only a few of the problems
requiring further research. Each research will become
a stepping-stone to the next.

The death-complex can be profitably approached from
many other directions. The emphasis could be placed
upon group readjustment, particularly that of the
family. The professionalization of the funeral profession
is another fruitful and necessary approach. The socio-
-economic aspects need much more elaboration. And
one could name numerous other desirable approaches.

Regardless of the specific approach, it is hoped that
many social-scientists will now see the value and need of
bereavement research. The field is both challenging
and promising. The necessity of scientifically examining
this area of human social behaviour is certainly as great
as for other phases of life already much more thoroughly
investigated.

The paper was discussed by the President, Mr. Little,
Dr. Lindgren, Miss E. Anderson, Dr. Marie Jahoda, and
Mr. Braunholtz. Professor Fulcomer replied.

Reactions to Modern Changes shown by Islam around
the Eastern Mediterranean. Summary of a Com-
munication by Professor H. J. Fleure, F.R.S.:
9 May, 1944.

In the Dinaric Alps the Muslim include descendants
of men who accepted Islam from conquerors and were
allowed to retain their lands. Sir John Myres tells me
that Bektaşi refugees from the Turkish revolution are
also present. Islam here is neither progressive nor
aggressive, but able men like Mehmet Ali have gone
forth to lead other peoples.

In Istanbul the discreeting of the old régime produced
revolutionary fervour, and neglect of the mosques. This
effervescence is passing and older ideas seem to be re-emerging
to some extent.

In Syria and Palestine the Ottoman collapse prompted
orientation towards Arabia, especially as there was fear
of European influence (French, British, Jewish). There
has thus been a tendency to orthodoxy.

Sa’udi Arabia is unique in trying to maintain the
sacred law (Shari’a), with compromise interpretations
for all purposes. The isolation of Riad’h is a factor
here.

In Egypt the almost millennial tradition of El Azhar
university is being modified by introduction of modern
studies, and the Shari’a is little used, except in personal
matters.

In N. Africa outside Egypt emotionalist movements
have been a feature for centuries and they have con-
tinued into modern times.

The general tendency is thus towards a reduction of
such homogeneity as formerly existed in western Islam
when it was focussed on the Shari’a.

A fuller abstract will be published later in MAN.
PROCEEDINGS OF INSTITUTIONS


The conference was well attended, chiefly by delegates from local government authorities, who took a keen interest in the proceedings.

It was announced that a Royal Commission on Population has been appointed.

The present position and population trends were stated by Mr. Caradog Jones. Population tables for England and Wales, from 1811 till 1931, show that in the first generation (30 years), the population increased more than half as much again, while in the last generation increase was less than 25 per cent.

Population is affected by births, deaths, and migration. The last is so small that it need not be considered now. Both the birth-rate and the death-rate have decreased considerably. While the population as a whole is still increasing, the number of women under 30 has already begun to decline. A stable population depends upon the replacement of girls in each generation. In England and Wales, in 1937, the birth and death rates were such that, assuming the conditions to remain the same, every 10 girls would be replaced in the next generation by 8. If the same rate should continue for three generations, the population of England and Wales would be halved. But the alarming feature would be the relative age of the population with only 16.5 per cent. under 15 and 17.1 per cent. over 65, as against 22.1 per cent. under 15 and 8.4 per cent. over 65 in 1937.

The family is the biological and sociological unit necessary for the continuation of the human species. Dr. Audrey Richards spoke of the fundamental features of the family, of the various types of marriage and family, of the economic and religious functions of the latter in simpler societies, chiefly in Africa. She stressed the inducement to parenthood by the raised social status that it conveys, and the provision for orphans, given by the extended family and kinship organization.

Causes for the present decline may be biological, social, or psychological. Dr. Kenneth Walker discussed the problems of fertility, sterility, and subfertility. His investigations were carried out on males and show a considerable degree of sterility and low fertility in healthy males, not due to venereal disease. Diet and certain drugs (i.e. M and B) may be causes, probably temporarily. More team-work research is necessary. In U.S.A., fertility clinics have been started.

Other speakers demonstrated that though the infant mortality rate was decreasing, it is still high for infants under one week old, and the difference in rate between the highest and lowest area is still considerable.

On the psychological side, an increasing distaste for maternity was dismissed by an experienced worker in a birth-control clinic. The use of contraceptives among married women is apt to increase the family by proper spacing of births.

Voluntary childlessness, or limitation of family to one or two children, is sociological and mainly economic. Contributory causes are lack of housing, refusal of landlords to accept tenants with children, and lack of domestic help. Children, formerly regarded as an economic asset, both for child labour and for help in old age, have become now a financial liability for maintenance and education.

Methods to raise the birth-rate were discussed: family endowment, social security, compulsory insurance for family allowances, housing, education and methods for reducing domestic drudgery, organized systems of home-help during the latter part of pregnancy and after childbirth, nursery schools, and spiritual re-awakening.

In order to retain the family as a biological and social unit, it is necessary to educate public opinion so that the best use may be made later of the findings of the Royal Commission.

B. Z. SELIGMAN

OBITUARIES

Aleš Hrdlička : 29.3.69-5.9.43

By the death of Dr. Aleš Hrdlička in Washington on September 5 at the age of 74, American, and indeed world, anthropology has lost yet another revered leader. Hrdlička was born at Humpholec in Bohemia, on March 29, 1869. He received his early education in his native town and then emigrated with his parents to New York in 1882. He studied medicine in New York and Paris, graduating in 1892 and 1894. Thereafter, he joined the N. Y. State service as a research alienist, and two years later became an associate in anthropology at the pathological institute of the State of New York where he remained till 1899. In 1897 he was already working on the human remains collected by the Carl Lumholtz Expedition to Central America, and deposited in the National Museum at Washington.

From 1899 to 1903, he was in charge of the section of physical anthropology in the Hyde expedition, undertaken on behalf of the American Museum of Natural History of New York, to Mexico and the southwestern United States. About the same time (1901-8), he was associated with the American Naturalist as part editor. In 1903 he was invited as assistant curator to organize the division of physical anthropology at the U.S. National Museum in Washington and he became head of the department in 1916. This post he was destined to occupy for the next thirty-two years. When he retired in 1942, the Museum had become the richest repository of its kind in the world. From 1915 to 1918, he was successively secretary of the XIX International Congress of Americanists, of the section of Anthropology of the Pan-American Scientific Congress, and of the Anthropological Committee of the National Research Council. In 1918 he founded the American Journal of Physical Anthropology, and in 1930 the Association of Physical Anthropologists.

Hrdlička was, with the possible exception of Bastian, the most travelled anthropologist in the world, and he certainly was a devoted and prolific writer on physical anthropology. Many of his works appeared as reports in the Smithsonian Miscellaneous Collections.

He made researches into fossil man all over the world and his name was familiar to both experts and laymen alike. He imbued human palaeontology with a liveliness it had not known since the days of Huxley.

His style was clear and incisive and he showed in everything he wrote his command of the literature of his subject. Although he had many admirers he made
In recognition of his work on Pre-Paleolithic Man, Moir was elected a Fellow of the Royal Society in 1937.

Upon the death of Sir E. Ray Lankester, Moir succeeded to the Presidency of the Ipswich Museum. It is safe to say that no better man could have been selected for the honor, who had himself whole-heartedly into the task of making both the Museum and Christchurch Mansion worthy of the great city to which they belonged. In the course of this duty a sound knowledge of old furniture, pictures, etc., was soon added to that of prehistoric implements.

In 1936 Moir received a Civil List Pension.

Though archeology monopolized Moir's time his interests were eclectic, and no matter whether in correspondence, during a country ramble, or seated in an armchair of an evening, a wide range of subjects was sure to be covered. Sometimes, on a walk or a visit to a friend's home, he could not help referring to the subject of the Rev. R.G. Penn—whom he married in 1904 and who survives him.

J. P. T. BURCHELL

Godfrey Wilson, 1908-1944

The death of Godfrey Wilson, active service will be felt as a heavy loss, both by his friends in the anthropological world, and by the science of anthropology itself, which can ill do without the energy, enthusiasm, and experience that he had to give.

Wilson died at the age of 35 after a brilliant opening to his scientific career. He went with an open scholarship to Hartford College in 1927, and then a first in Life History in 1931. From there he went to the London School of Economics, under the late Professor Malinowski, as one of the first Fellows appointed by the International African Institute under a five-year plan of co-ordinated research in the different African territories. Wilson threw himself with characteristic eagerness into this new work and took an active part in Malinowski's famous seminars. After this training, he went to Tanganyika to work on the Nyankuru people. In 1935 he married Monica Hunter, who had completed a field study of the Ponde, of which the results were published in 1936 as Reaction to Conquest. The two spent from 1936-8 in the field and set to work the joint work which seemed to promise such fruitful results, and which later gave their home at Livingstone such a stimulating atmosphere for a visiting anthropologist.

In 1938 Wilson was appointed as the first Director of the Rhodes-Livingstone Institute at Livingstone in Northern Rhodesia. This was pioneer work. It was the first local anthropological research institute to be set up in an African colony, and Wilson gave much thought and energy to its development. He was determined that it should retain academic freedom and an academic standard of work, even though engaged, by its terms of reference, mainly on the study of problems of practical...
important to the Northern Rhodesian and other African Governments. He was intent that the papers the Institute published should be of universal interest to anthropologists and not merely of local administrative importance, and that they should make a contribution to anthropological theory as well as forming a possible basis for Government policy. Some of his views on the proper relation of the anthropologist and the administrator are described in his article 'Anthropology as a Public Service' (Africa, January 1940) and he maintained them without compromise. The success he achieved can be seen in the high reputation the Institute has already won during its short history. The extensive programme of work now planned by the new Director, Dr. Max Gluckman, with a grant from Colonial Research funds, is largely based on Wilson's first three years' work in Northern Rhodesia. The experiment is one which is likely to prove fruitful for the development of anthropological field work, for it has shown the important function that a local research institute can play.

In May 1942 Wilson joined the South African Medical Corps and served in North Africa. In November 1943 he was commissioned as an Information officer. He died in May 1944.

Godfrey Wilson was first and foremost a sociologist, and his belief in the importance of a rapid development of sociological theory and technique was so strong as to give him almost a sense of mission, and even a touch of arrogance in defending the anthropologist’s role. If this impression was given, it was misleading, for those who worked closely with him found him as ready to accept as to give criticism, essentially humble and with a generous mind. He was stimulated by controversy and enjoyed it, and made a good companion in anthropological ventures. He would have been at his best in academic life, to which he was anxious to return.

The work he has so far published can be only a fraction of the material he collected in field-work done in Tanganyika, Nyasaland, and the copper-belt of Northern Rhodesia. His published papers deal chiefly with the study of Bantu law, and the various normative forces at work in societies of this type—An African Morality (Africa, January 1936); An Introduction to Nyakusa Law (Africa, January 1937); ‘The land rights of individuals among the Nyakusa’ (Rhodes-Livingstone Papers, 1938). In his work in the urban area he became interested in the study of culture-change as a social process, and particularly in the changes brought about by the impact of industrialization on primitive peasant communities. An Essay on the Deterioration of Distribution in Northern Rhodesia, Part I, 1941, Part II, 1942. It is understood that he and his wife have practically completed a book describing the principles governing such changes, and that a second book giving the results of his field study is well under way. The material already available makes us regret all the more keenly the loss of such a keen and scholarly mind at a time when the ranks of anthropology are already all too thin.

A. I. R.

**CORRESPONDENCE**

The Rhodes-Livingstone Institute, Northern Rhodesia

Sir,—I have just received the centenary number of the MAN and have read with profit Lord Hailey’s illuminating address on The Role of Anthropology in Colonial Development (MAN, 1944, 5). Where Lord Hailey has given so much of value to both administrators and anthropologists, you may allow for it a somewhat egotistical point. In his survey of the extent to which Colonial Governments have used anthropological work (at p. 14), he did not mention the Rhodes-Livingstone Institute, Northern Rhodesia. Whatever the value of our work, Major Sir Hubert Young, then Governor of Northern Rhodesia, took a fresh step in 1937 in establishing, with Government support, an independent research institute at Livingstone. Sir Hubert envisaged a permanent body of scientists who would concentrate on sociological and other problems and also, by the systematic analysis of social conditions in the region, provide the Government and people of British Central Africa with information which would enable them intelligently to anticipate developments. These scientists were to be independent of Government, but working in close co-operation with it.

Sir Hubert was successful in obtaining the support of all the British Governments from Southern Rhodesia to Uganda as well as that of the British Colonial Office and the Rhodesia Railways Limited, four Northern Rhodesian Mines, the Beit and Rhodes Trusts, and of other bodies and individuals. Thus the Governments of British Central Africa and other institutions working or interested in the region, showed their practical interest in the need for social science to assist in the development of the country.

In addition to the scientific study of social problems, the Institute undertook the development of the Rhodes-Livingstone Museum which is closely associated with the increasing knowledge about peoples of the area. We plan that the exhibits in this Museum will be so arranged as to present vividly the results of the researches of the staff and others.

Finally, it is a definite part of the Institute’s programme to make available the results of its researches to the public in a popular, but scientifically accurate, form. The importance of this was stressed by Lord Hailey.

The actual work of the Institute has been restricted by the war which led to reduction in staff and which interrupted the campaign for funds which had been planned for the centenary of Livingstone’s departure for Africa.

The Institute’s staff has carried out two research projects. The first in Broken Hill was, I believe, largely instrumental in inducing the competent authorities to appreciate the extent to which Afrikaners were becoming urbanized, and the change which this has brought about in the movements of population between the rural areas and towns. These points had been previously made by Sir Alan Pim in his study of Northern Rhodesia. The second research project was in Barotseland and its results have already been used by Administration officials recently asked for detailed analysis of the political organization of Barotseland in order to reform it. In addition to its own researches, the Institute has provided a means for publication of others’ work in the region.

In 1942 the Institute began to enrol outside members and it now carries on an active correspondence with many of them, supplying them with information and assisting them in their own studies of social problems. Details of this part of the work will be found in the Director’s Report to the Trustees of the Rhodes-Livingstone Institute on the work of the years 1940–43.

The hope that the establishment of the Institute of West African Arts, Industries and Social Science (MAN, 1943, 86) indicates that the Colonial Office is going to adopt the principle of encouraging local research institutes in the various territories, for which we consider the successful working of the Rhodes-Livingstone Institute through the difficult years of the war has raised strong support.

MAX GLUCKMAN

Director, Rhodes-Livingstone Institute

**Conjectural History**

Sir,—Professor Radcliffe-Brown devotes much of his address on ‘The Study of Kinship Systems’ (J.R.A.I., LXXI, pp. 1 ff.) to attacking those who base theories on ‘conjectural history’; yet his own theories have no other basis.

He says on p. 2 that the kinship is built up from elementary families. It might be held that the elementary family results
The principle of sacrifice underlying the thoughts and beliefs of the present-day Sinhalese. Such a psychological predisposition can alone explain the mental attitude of the Sinhalese in respect of various untoward occurrences which the more educated of the Sinhalese population may explain as accidental. Every instance of a magician working himself into the madness of chanting incantations is due up by Indian tradition, a dead person is a mock human sacrifice of himself staged for the specific purpose of saving a diseased person whose life may be demanded by particular demons. Every case of drowning near a ferry, a bridge, the mouth of a river, or the bay of a sea; every case of a road fatality at a junction, crossroad, giant tree, or a sylvan grove is the punishment of human life exacted by the spirit presiding over the particular scene, who has been denied the legitimate annual sacrifice of human flesh and blood. The spirits expect such annual tribute in default of which they exercise their supernatural power for the purpose of obtaining it. The fact that such scenes are the most likely spots for human congregation and activity is lost sight of as contributing to these mishaps. On the contrary these places are firmly believed to be the sure haunts of the spirits.

Centuries of Buddhist influence and the spread of modern education have so far not succeeded in eradicating from the minds of the majority of the Sinhalese such prescientific conceptions. The townsmen are comparatively free of such superstitions beliefs but the majority believe in them. Although human sacrifice is never attempted even in the far impenetrable jungle village and even the torchlight procession of it in symbolic form can be witnessed any day in any of the denominational rituals practised at the present time. This conception is ever present in the mind of the Sinhalese. These are social and not religious events. Buddhism has nothing to do with them. Yet the present study fully confirms the existence in the ancient pre-buddhist society of Ceylon an institution of human sacrifice which continued through the ages until it was abandoned mainly owing to the influence of Buddhism.

Pottery made by Red Indians

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From a Correspondent in Nova Scotia comes the following account of a plant working in Eastern Canada for the benefit of the Micmac tribe:

The manufacture of pottery ware is a part of the "civilization" which is being taught to the Micmac Red Indians whose forbearts at one time carved out a life for themselves there. Instructors in some parts of the Dominion have had this business in hand for two or three years, with the result that Indian-made pottery can be bought not only in Western Canada—where the "Reds" are the most numerous—but in the Eastern Provinces as well.

One of the successful branches of the new industry is at the Indian Residential School at Shubenacadie (Shu-be-na-ca-die), Nova Scotia, where a variety of these "objects of art," as the Indians with no little pride describe them, are now being made. A supply is kept on hand for sale to visitors to the plant and to the immediate neighbourhood. The goods are also dispatched to various centres in Nova Scotia and other Provinces in the Dominion.

The best work of these natives of the Micmac Tribe consists of vases, ashtrays, book-ends, model animals, and ornaments. The Shubenacadie industry is a war-baby, started in 1941 and expanded until the output may in time run into commercial figures of some importance to those engaged in work which they find agreeable as well as profitable, the Indians being naturally skilful in the manipulation of the raw materials and easily taught by experts.

A second class of clay is found in Shubenacadie, one of the inducements to the promoters. It is dug up by Indian boys and girls and taken to the pottery, where the adults turn it into marketable wares. An electric kiln was installed in 1942, where 56 designs in "biscuit" ware are produced and about 80 of glazed ware. As in more pretentious potteries, some of the modern processes have been introduced, specimens being coloured by the addition of various oxides to the glaze and finished in accord with form and design required for a satisfactory disposal of the products.

Hove, Sussex

C. RIVERS-ANDERSON
Avoidance of the Mother-in-law.

Sir,—I write with reference to Messrs. Rose and Jolly's suggestion, made on the basis of Australian and his mother-in-law is necessitated by the possibility that a right to marry a wife's younger sister, as implied by junior sororate customs, might lead to incest between a man and his own daughter if a strict taboo were not placed on his relations with his first wife's mother, a danger particularly obvious in a matrilinage society.

The suggestion is ingenious and attractive, and no doubt holds good in some cases, but not apparently in all. The Junior Sororate obtains among the Crow Indians of North America, but the rule of avoidance ceases when the wife dies, a practice hardly consistent with the origin postulated by Messrs. Rose and Jolly.

J. H. HUTTON

A Peculiar Raft in Bihar, India. Illustrated.

Sir,—In the course of his recent visit to the holy city of Gaya in Bihar I noticed a peculiar kind of raft, in large number, on both the banks of the river Phalgu.

The raft (fig. 1) is known as the ghadanai in the local Bihar dialect. It is generally of two different varieties, viz. one containing 42 earthenware pots and the other 39 similar pots. The pots used in both these types are of the same dimension. If it is made of 42 pots, then 39 pots, arranged in three rows of equal number, are fastened together by their necks with rope to small lengths of split bamboos, laid crosswise. When these pots are fastened in this manner, a platform of split bamboos is automatically formed. When

![Fig. 1: A Peculiar Raft in Bihar, India](image)

these split bamboos are fastened to these pots, there is no chance of the pots being separated from each other. Out of the remaining three pots two are placed in the same way as the other three rows and the remaining one at the extreme end of that side thus giving an angular shape. All these pots have their mouths open.

If the raft is made of 39 pots, then 36 pots are fastened in the same manner as in the case of the preceding raft and the remaining three also in the same manner as in the case of the preceding one. The larger type is approximately 18 feet in length and 5 feet in breadth and the smaller type is approximately 16 feet 6 inches in length and 5 feet in breadth. It is propelled by a broad bamboo called the loggi in the Bihar dialect, used as an oar as well as a rudder. It is simple, cheap, and useful.

The raft is generally used from June to October; but if the river is in high flood, then it is not used, because at that time it is not possible to touch the river-bed with the loggi bamboo. Further it is risky to set the raft afloat at this time as it may topple over.

It is generally used as the ferry. In the larger type 9 adults with approximately 10 to 15 seers of luggage each are allowed at one time, though according to the government rules only 6 men should be allowed.

There is a great similarity between this kind of raft and another type prevalent in the Central Provinces (MAN, 1942, 41). Though the method of construction is fundamentally the same in both these cases, yet there is some difference in details between the rafts found in Bihar as well as in Central Provinces. Firstly, whereas the Central Provinces raft is made of two rows of earthenware pots, the Bihar raft is made of three rows of similar pots. Secondly, the three pots which are arranged in a peculiar way in the Bihar raft are not found in the Central Provinces. Thirdly, the work for which it is used in these two provinces of India differs. Anyhow it also shows the presence of a similar kind of raft in two distant provinces of India.

C. C. DAS GUPTA

Earthen Basins with Central Peg from West Africa. Illustrated.

Sir,—A conical cup with a central peg has been described as an obturator for big pots, both at Jemdet Naar (Sumer), at Mohenjo-Daro, and at Susa (V. Gordon Childe, L'Orient préhistorique, 1935, pp. 152, 196, 220).

It may be interesting to note that a very similar, if not identical object, has a quite different use in the Western Sudan of to-day.

I collected recently in Djenné (Soudan Français) two such earthen cups: 32 cm. x 10 and 28 cm. x 9.5, the central peg respectively 4 cm. and 2.5 high. This peculiar dish is used for the ritual moslem ablution before the canonical prayers, the heel being placed on the central peg.

Identical cups are found in Timbuktu (Dupuis-Yacoubia, Industries et principales professions des habitants de la région de Tombouctou, 1921, pp. lv) and certainly elsewhere between Djenné and Niamey, that is to say along the chief artery of the Songhô empire. Like many other special pottery forms of that region, they are most probably of Moroccan origin.

THEODORE MONOD

Inst. Français d'Afrique Noir

EARTHEN BASIN WITH CENTRAL PEG FROM DJENNE, Soudan Français
MOSQUE IN SOVIET-TURKESTAN

DRAWING BY H. E. ADLER
ORIGINAL ARTICLES


113 Where the Kizil Kum—the 'steppe of the red sands'—stretches now, the soil was once well watered and intensively cultivated, while the snow and ice-covered mountain-ranges of Central Asia still poured water enough from their slopes into these vast inland regions. Then for various causes, the dense net of irrigation channels dried out, and the fertile stretches of land along the rivers Amu-daria and Syr-daria became narrower and narrower, and the nations and tribes exhausted and partly exterminated themselves in struggles for the ever-shrinking oases.

On some of the sand-dunes stand simple cubes, crowned by cupola-roofs, the burial-places of saints or chieftains, which are landmarks visible from afar to the always roving Khirigiz. Crumbling vaults and arches, the ruins of splendid mosques, are lying about in the boundless sea of sand and dust, like nutshells crunched under one's heel.

The first large specimen of Central-Asian architecture stands some distance from the railway station of Turkestan, the former capital of the province of that name. Over the flat roofs and trees rises a large mosque, built only of bricks, and not glittering with the dazzling colours one expects from this kind of building. The reason for this lack of splendour is simply that Tamerlane, who built this mosque to honour Hazret, Hodja Ahmed Hasair, one of the most celebrated Moslem saints of Central Asia, left this building, one of his largest, unfinished when he died. With a field glass one can see the holes in the brickwork left from the scaffolding, and even some of the beams remained untouched through the centuries, just as the workmen left them. Only patches of fluted jade green tiles appear as colouring on the high dome, rising above the central portal and the flanking turrets.

Tashkent is one of the largest oasis-towns of Turkestan. In fact, it consists of two sister-towns. The new Russian part, and the old 'Sart'-town, very spacious and for the most part of one-storey houses, surrounded by gardens and orchards, are intersected by a few main roads leading to a central bazaar, and these sectors consist of a maze of meandering lanes and blind alleys, determined by the course of open channels, the Arikis. The layout of the 'Sart'-town is like a huge leaf with many veins. No splendid mosques, madrassas and mausoleums are to be found here. The smaller type of mosque resembles brick-kilns. But even the larger ones and the madrassas are not covered with the glazed tiles, as are the famous buildings of Samarkand and other ancient towns of Turkestan and Persia. The bare mighty walls, vaults, and domes are built from very flat fired bricks, not more than an inch thick and bound together by a thick layer of lime, as thick nearly as the bricks themselves. The very elaborate patterns showing contrasting burnt sienna and brilliant white, set off against the translucent sky, are indeed so enchanting that one does not miss the luxurious faience decoration.

Together with the New town, built by the Russians after they conquered Turkestan in the second half of the nineteenth century, Tashkent has an area greater than Paris, although the population was only 558,000 at the time of the census 1938. By the side of the original, ancient settlement, which is more or less a giant village, a completely new town came into existence, just across the river Chirchik. The semi-military governors, with their preference for the broad and elegant boulevards and prospects to which they were accustomed in St. Petersburg, ordered the city architects to plan a purely geometrical lay-out. Whilst the centre represents a modest imitation of its prototype, a Russian district-centre or provincial town, the outskirts, where the mud-built houses of the Uzbeks are intermingled with the small peasant cottages of the Russian colonists, present a very picturesque setting for rural architecture. The broad village streets meander for many miles in all directions and have narrow irrigation channels on either side. They are lined with double rows of shady poplars, and the white-washed Russian houses, with their gables facing the road, alternate with the square cut, cubical
shapes of the Uzbek houses. Each house is set amid orchards and small fields enclosed by high mud walls, and these extend to the boundaries of the vast oasis, there to merge into the arid steppe.

Whilst Tashkent—the capital town of Uzbekistan—thus represents a couple of an ancient and a more modern town, Stalinabad—two days journey to the south-east, in the approaches to the High-Pamirs—is an almost new creation. Before it was decided to build the capital of the autonomous Soviet Republic of Tajikistan there, it was a small and primitive wretched village like hundreds of others, perhaps even more malaria-stricken than most. It was called 'Dushambe,' which means Monday, because the market was held there on that day. In 1925 the whirlwind of Soviet energy was let loose upon it and transformed this little hamlet into a modern city. In the earlier stages of building, when rebel irregulars were active, the workers were often under fire. At that time, too, nearly all building material except clay had to be transported first by camel and then by lorries from the nearest railway station. On 1 May, 1929, the first train steamed into Stalinabad, and since then the stream of new arrivals has never ceased.

Every day people arrived from all parts of the Soviet Union. They were not only men drawn here by enthusiasm for fighting at an exposed point for the socialist ideal. Many were enticed by the surplus food which was still being enjoyed here at a time when there was scarcity in many districts of the Union, or by the high salaries which specialists were paid here, 'at the front.' Curiosity and lust for adventure must have attracted not a few, and during the NEP-time (the time of the New Economic Policy) when the door was opened to free trading again, innumerable speculators streamed out here, all hoping to make money by buying up karakul skins, silk, and carpets.

Of course many, who did not find what they had expected, left again. Before starting back, they auctioned their belongings in the bazaar: rickety bedsteads, damaged oil-stoves, and worn-out clothes, which perhaps came from relatives who had been snatched away by typhus or malaria. Out of these relics the new arrivals picked the necessities of life. This constant change in men and goods gave the whole town an air of impermanence. When we arrived in 1932 tall concrete edifices were growing out of a mass which included every imaginable type of human habitation down to the Khirigiz yurts which had been transported there when their owners had found work as brickmakers. Other workers lived in holes in the earth, covered by roofs consisting of boards, through which the stove-pipes projected. In order to keep pace with the severe housing shortage, standardized wooden houses were brought here from the distant factories of European Russia, but they proved to be completely unsuitable to the climate, and their occupants suffocated in them during the seven extremely hot and entirely rainless summer months. Because no timber was available and no stone quarries had been started, loess clay remained the only building material. Although many Europeans may well object to houses built from this material, it cannot be dismissed as being entirely impossible and unsuitable.

At that time everyone built according to his personal ideas, as they do in England. Examples of classical architecture and modern cubes and prisms of glass and concrete were built, while the local patriots favoured a semi-oriental style. It was not until the city numbered about 40,000 inhabitants that a modern town-planning scheme was prepared. The city thus had to be rearranged before it was a few years old, and in spite of its youths, beautifying operations were carried out, such as normally only very wealthy and aged female comrades can afford.

And so too was the daily life of this young capital town thoroughly mixed as was its population as heterogeneously composed, not only in its appearance, since the inhabitants had been scrambled together from even the remotest parts of the U.S.S.R. These components together gave the town a personal character which was unique in the world.

We sometimes visited the villages (kischlaks) sprinkled in the river-valleys round Stalinabad. They are almost hidden under very old maple-trees which distinguish them, because the village streets differ very little from the country roads, which for long stretches are bordered on both sides by high mudwalls, screening off orchards, vineyards, and even fields. No windows break the continuity of the smooth curved surfaces which strictly follow the watercourse winding through each village. Doors appear only at infrequent intervals. These doors, made from planks and sometimes carved, are almost the only sign of the presence of houses. They are carefully locked from inside by a massive wooden beam and bolts. Town and country houses alike are laid out to secure complete privacy. Even behind the entrance door an inner curtain wall prevents the passers-by from peeping into the courtyard, if the door should be open to let a cart or cattle pass inside.

The plan of the houses, even the humblest, divides it into compartments, the smaller one usually being allotted to the women of the family. Both compartments face the courtyard with its sunken pool. On the brink of this pond (chaus), which is connected by channels with the elaborate arik-system, is a terrace, where the inmates sit on hot summer days and close nights, drinking tea and taking their meals, sleeping on the rug-covered clay platform, or on wooden trestles covered with mats. The gardens are intersected by many watercourses, which ensure an abun-
Fig. 1.—Perspective view of a house in Tashkent

Drawing by H. E. Adler
dant verdure. Pomegranates, pistachios, almonds, apricots, vines, and the indispensable karagatch tree, a black elm with very thick green foliage, full of birds, are to be found in every garden. Open verandahs are supported by posts or, when the founder can afford it, by tall columns made of maple-tree trunks, richly and ingeniously carved.

Only clay is used for the floors and the inner and outer walls, even the roofs being covered with a thick layer of it. It is an ideal building material which can be found everywhere and, when dry, is a good insulator. For one-storey houses clay can be used unfired. The absence of forests has limited the use of timber. The whole process of building in clay can be described as resembling full-size modelling.

All that is necessary is to dig a trench and run water into it. The softened clay soon forms a kind of paste, which is kneaded with the feet, and after chopped straw has been mixed in, the work of making walls is begun. The original trench, which is supplying the building material, is not wasted. Filled with water it provides the indispensable tank or pond for the future house. The clay is shaped, beaten hard, and smoothed with the ketmen, a flat chopper-like tool fastened to a long handle, which is the universal tool of the Central Asian peasant. No foundations are needed, and an earthen floor is common to all houses. The seeds which get into the clay with the straw begin to sprout rapidly in the warm, damp air, and shoots soon force their way through the slowly hardening walls, making them more porous as well as firmer. Such houses are often several centuries old and the owners claim that none of the frequent earthquakes that occur in these regions have been known to destroy houses built of mud.

When layer after layer of softened clay has been laid, leaving openings for the few doors and niches which serve as shelves, and the sloping walls are about nine feet high, the roof is formed by laying thin, trimmed poles of poplar across a few rafters. Plaited mats of reed or straw are then placed over the slightly sloping raftered ceiling, and the roof is completed by a 12-inch layer of mud. A canopy of printed cotton hangs under the ceiling, which serves both purposes—to catch raindrops seeping through the roof and also to catch the scorpions and lizards that like to nest in the thatch of brushwood and reeds.

The rooms have generally only one opening, which is window and door at the same time. Door-frames are not in use. The doors are fixed with heavy hinges straight into the walls. The windows consist of a space over the door, filled with lattice-work which ensures light and ventilation when the doors are closed. The hearth is sunk into the floor and the mant你好, a copper brazier for charcoal, is placed inside it. The poisonous fumes escape through the lattice-

work over the door or through an earthenware pipe inserted in the centre of the ceiling. This is however a very insufficient means of heating during the winter, which can be very cold and damp. So both men and women wear padded coats and cloaks on top of their summer dresses. These winter garments are kept, during the summer months, in wooden chests covered with strips of coloured tin, or red embossed leather, and richly ornamented with metalwork. The niches in the sloping walls are gaily painted or, if a household is wealthy, framed with carved alabaster. This is the place for cups, cans, fluted copper and brass jugs and ewers, known as kungans.

Tables and chairs are not needed, and bedsteads consist of a rectangular frame made of soft wood, fixed in short legs. The frame is lashed criss-cross with a net of camel- or horse-hair. Such beds are an ideal resting-place for sultry nights. They are mostly placed on the verandah or the raised terrace of clay in the garden, or in the bala-chana, a light shelter erected on the flat roof with thin poles and covered with wide meshy reed mats. The bala-chana can be reached by a very simple ladder and serves as a guest room. Inside the houses, nearly everybody prefers to sleep on the stuffed quilts, which are piled in the corner of the room during the day. Besides the cradle, no other furniture is in use. These cradles are carved out of soft wood and gaudily painted. A strong handle is fitted to the top of the bended ends, over which a rug can be laid to keep the infant warm in winter, or to keep the flies away in summer. A circular hole in the bottom is intended to fit over an earthenware pot, which is filled with ashes. For a whole year the

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FIG. 2.—BEDDING FROM A HOUSE IN TASHKENT
Drawing by H. E. Adler

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infants lie on their backs in these cradles, tied hand and foot. They are only taken out when their clothes have to be changed or the pot emptied. Even when the mother gives her child the breast, she bends over it. If the family goes on a journey, the cradle with the child is bound to whatever animal is ridden. At home it often hangs from a beam.

No proper kitchen is provided in the houses. Meals can be prepared anywhere, either over an open fire in the garden, or on the verandahs, or on a portable oil-stove, the Russian version of the ‘primus,’ which prevails more and more. A coal-shed is not needed; camel- or cow-dung is placed, when fresh, on the outer walls and taken off when dry.

Cattle are either tethered to the poles, which support a light roof over the entrance door, or kept in a stable at the back of the house. In the case of farmhouses, barns and storehouses are grouped around the courtyard.

The mosques too, the only communal centres in the villages, are built of the same native materials, *loess* and timber (Plate G). They consist mainly of one room, occupied by the *ikwan*. The wooden pillars supporting the raftered ceiling are often painted in very bright colours, and the openings for light over the low and narrow doors are filled with sheets of perforated alabaster. The tall columns bearing the richly carved consoles and rafterwork of the front-hall are the most prominent part of the building. Here the mullah stands when he calls to prayer, or he climbs up the ladder leading to a turret on the roof. The mosque and the surrounding garden, with its indispensable pond and *chahai-chaanu* (tea-house), is the only place where a social life exists. Here in the peaceful, shady grounds the untouched tradition of Central Asia can still be found.

In some places there is a *mazar* in the vicinity of the mosque. These shrines are the burial places of local saints, simple cubical buildings holding a plain coffin without any inscription, and only supplied with the customary ram’s horns.

During one of my journeys I was fortunate enough
to find an exceptional kind of mausoleum. It stood in the lower reaches of the Kafirnighan River, near a simple village south of Sha-ar-tuz. Two large cupola-like structures built of bricks are connected by an archway. Each of the circular rooms is illuminated by round openings at the top and only one narrow door leads into the interior. Each room contains about a dozen coffins, some of them flat, more like plinths, others more elevated, probably belonging to the more distinguished deceased. But none of these coffins had an epitaph. Some were covered by strips of white linen, placed upon black polished stones, similar in shape to irons for pressing clothes. Huge ram’s horns were fastened to the vaulted walls.

In the courtyard behind the twin-cupolas, some trees were covered by narrow linen strips to such an extent that their branches could hardly be seen. These linen strips are also offerings for the deceased.

The surface of this mausoleum has been partly damaged by earthquakes or weather beaten during the five or six or more centuries since the completion, but these injuries serve to reveal the ingenious technique of the building construction in greater detail.

HOUSE TRADITIONS IN THE OUTER HEBRIDES.

By Werner Kissling, Dr. Jur. (Königsberg).

In attempting to trace the relationships of the Black House of the Hebrides it is natural to begin by comparing it with earlier forms of dwelling in the islands.

The Black House is best known from the descriptions of Thomas (9) who was the first to undertake scientific investigations. A typical example of a Black House in its simplest form, such as was widely inhabited up to the middle of the last century, is shown in fig. 1, A and B. It was built on a rounded-rectangular plan, with thick walls of stone and earth, often nearly as thick as they were high, composed of two shells, the space between which was filled with rubble. They were of the same height (up to six feet) throughout, and usually formed one main roughly rectangular long and narrow room. On the outside the walls were rounded at the corners and were distinctly battered.

The low roof resting on couples had no perceptible ridge and did not reach the outer edges of the walls. With its sloping thatched ends, the roof continued the rounded contour of the end walls, so that the house sometimes took on an elongated ovate form.

The floor was of earth, often of two levels, the lower end being used as a cow-byre, the upper as the dwelling for the family. The upper end was barely separated from the part reserved for the animals, there being simply a row of stones to mark it off. Sometimes the space for the family with the beds at the further end was raised above the level of the byre floor by a stone step (see Roussel, 1, p. 16).

The very low entrance, barely five feet high, with a flat stone serving as a lintel, opened into the byre.

Not far from the door, somewhere near the centre of the house, in its upper end, was the fire. This was made directly on the earth floor, its place being sometimes marked off by a few stones. There was no chimney nor window, but usually at least one small hole at the bottom of the roof to admit light. The door could be used in conjunction with this skylight (Gaelic faireus, from far=over, and leis=light) to regulate the circulation of air and the draught to the fire. The skylight also served to some extent as a smoke-hole.

In the early undivided houses the people also slept sometimes in recesses in the thickness of the wall beside the fireplace. These built in wall-beds, two and a half feet wide at the head, were roofed in by overlapping stones and at the narrow end towards the foot by lintel stones.

It is apparent that this type of dwelling, of which more complex forms existed in Lewis, was built in accordance with the nature of the country and the

9 The references are to the ‘Literature’ at the end of the article.
crofter’s simple needs. The lay-out and arrangements seem to have been determined partly by environmental conditions and partly by his reluctance to be separated from the cow which played such an important part in his life. Although the custom of the undivided house persisted throughout the Celtic Highland zone it cannot be assumed that it originated there (Peate, 6, p. 94). It is also apparent that the Black House embodied features known in prehistoric times, such as the type of wall construction, the placing of the roof upon the inner faces of the walls, and the construction of the bed alcoves.

Concerning the thickness of the walls, it might be thought that at least in certain instances it far exceeded that necessary for shelter from the wind, protection from cold probably not having been a factor of importance affecting building in the Black House days. Further it may be questioned whether, even with dry-stone walls, the extra thickness and the battering were necessitated by the un-tied roof construction. The roof was small and lightly built, reflecting the scarcity of timber in these treeless islands, and was generally covered with light material. Although there was no outside chimney, its place would have been near the centre, above the fire, which was never put against an end wall.

Campbell (1, p. 208) in his studies of the Irish House called this type a ‘central-chimney house’ in contradistinction to the ‘gable-chimney house’. It is the central-chimney house which permits of rounded corners, whereas the gable-chimney house is always rectangular, and it is the house with rounded corners or rounded end-walls which most readily permits of rounded thatched roof-ends. Rounded ends of roof and walls evidently go together. A rounded roof is doubtless well suited to withstand the wind but not the rain, so is no more adequately explained by the climatic conditions than would be a high-pitched angular one.

The rounded end-walls are likewise inadvertently explained on practical grounds, since their weight alone was ample to secure stability against wind. In short, the rounded form of roof and walls, so universally concomitant in houses of the Black House type may well have been inherited together from an earlier circular form of building in the islands.

There existed in the Outer Hebrides down to the end of the Black House days a number of small circular stone buildings of extremely archaic construction. These were made of more or less circular courses of flat stones so arranged that each successive course slightly overlapped the last on the inside. The hole remaining in the middle at the top of the completed dome-shaped structure was eventually closed by a flat stone. More often than not, there was a low battered vertical wall (cf. below) before the corbeling began, but the wall and roof formed one continuous structure. The whole building was aptly termed a beehive hut on account of its shape. If considered in relation to the independent timbered roof construction of the Black House, the corbelled roof of the beehive hut clearly stamps it as an earlier and fundamentally different type.

The remarkable fact about these stone huts is that as late as the middle of the nineteenth century, at the time of Captain Thomas’ investigations in the islands, a number of them were found by him to be in use as temporary habitations or shielings, mainly in the grassy summer herding-places in the parish of Uig in Lewis (8, p. 135). Here these beehive huts were called bothan (pron. bô’-un, sing. bo’h, pron. bô), meaning temporary dwellings. They were not much higher than a man, and stood either singly or joined together in clusters of two or more as shown in fig. 2, A and B. Though in places the huts were of bare stone and scarcely distinguishable from their rocky background, those inhabited seem usually to have been thickly encased with turf, giving them a rounded contour. Their walls were of a thickness out of all proportion to the size of the room inside and their entrances so low that even a child would have had to stoop and a man to crawl to pass through them. These features would appear to have been necessitated by the type and technique of the building. The thickness of the wall was necessary to give sufficiently stable support to the roof which, being built on the corbel system, was also necessarily very thick and heavy. Only a comparatively small space could be spanned by a roof of this type, hence the small room. The size of the entrance was more or less limited by the height of the wall, since it could not appreciably exceed this without causing considerable difficulties in the construction of the roof. The height of the whole structure would appear to be that best adapted to the circumstances in which the huts were used. Greater height would have rendered the shelter less storm-proof and colder, besides adding to the labour and technical difficulties. There would appear to be no mechanical reason for the inward slope (batter) of the wall, since the corbelled roof caused no appreciable outward thrust. It is far more likely that the battered wall is a remnant from the roof-house in which the corbeling started at ground level (cf. Erixon, 4, p. 134).

The bo’h shown in fig. 2, A and B consisted of two rooms with a passage of communication between them, the larger one irregularly round, used as a dwelling-room, and attached to it another, more or less square room used as a dairy. On the outside each hut had a rounded, dome-like appearance and was ‘green with growing turf.’ The larger room, being approximately nine feet long and seven feet wide, was slightly larger than the average beehive size. The
height in the centre was scarcely six feet and that of the doorway about two and a half feet. On the right-hand side, close to the door, was the fire, the smoke escaping through the hole in the apex of the dome, which was apparently primarily intended as a skylight. In front of the fire was a row of stones, and behind this a litter of rushes for a bed (p. 162).

Varieties of this type of dwelling ranged from a simple double bo’h to the most complex group of huts with internal communications. They showed among other features a raised stone bed-place (Plate XV) and walls built of two facings of stone with a core of rubble (Plates XIV and XV). Those surviving as shielings were not unnaturally all of the simpler types, but not necessarily of any great age.

The circular type of hut might be more or less rectangular inside. This is more clearly shown in fig. 2 c, which is a plan of a double bo’h consisting of a somewhat more elongated rectangular room of average beehive size and a smaller rounded one adjoining it. The two rooms had dome-shaped corbelled stone roofs and were each more or less round on the outside as would be expected in view of this type of roof construction.

A particularly interesting combination of the same kind occurred in another derelict hut found by Thomas in Harris (p. 129) in which, however, the rectangular compartment was roofed with timber. This part was scarcely above the average size for a bo’h, but was more oblong in shape. The walls were from five to eight feet in thickness and very rudely built. The whole presents a case in which two huts were joined together, one of them being of the bo’h type, circular and stone-roofed, the other oblong and timber-roofed and belonging therefore, from the point of view of classification, to a fundamentally different type of building. In Thomas’ view the hut must have been inhabited to a late period, since there were remains of thatch and rafters. The example, of which unfortunately there is no plan, suggests that although the natural conditions of the country favoured the archaic stone construction for temporary dwellings of this kind in modern times as much as in the past, timber nevertheless tended to take the place of stone if it happened to be available. It is not strange therefore to find that the summer shielings of the people in Lewis in Thomas’ time might be either stone or timber roofed (p. 130). The timber-roofed shielings called in Gaelic airidhean (pron. ah’-rin; sing. airidh, pron. ah’-ry) were of oblong form, though not necessarily larger than the bothan. Curwen (p. 278) has however given a description of an oval airidh in Lewis which was as much as twelve feet long.

It might appear that the change in character of the shieling huts from a more or less round to an ovate-oblong form was directly traceable to the use of timber in the place of stone. When large slabs were scarce and timber was at hand. That the oval shape had however made its appearance independently of the use of timber in buildings of the beehive style is shown in many prehistoric sites, for instance in the corbelled cells and compartments of wheel-dwellings and earth-houses, some of which have been found in such a state of preservation that the construction of the oval domical roof could be easily distinguished. The roof had an elongated hole in the top which was closed over by a row of lintels instead of by a single stone. It is this variant of the domical roof which indicates more distinctly than the somewhat irregular outline of the walls the essentially oval character of the building. These ruined relics at least exhibit oval as well as circular beehive roofs, making quite obvious the direct relation between their circular and oval beehive structures. If in the islands no example of an oval beehive shieling is known, it is not surprising, in view of the very meagre evidence of dwellings of this type in modern times and of the fact that only a few of them have been found in a sufficiently good state of preservation to show the roof formation. It is moreover significant that the oval form occurred in the Irish
counterpart of the Scottish bo’th known as the clochán. Particular attention is drawn to the oval form of the clochán by Campbell (2, p. 180). The photographs which he gives (2, Plates 31 and 32) show extremely clearly the appearance of the oval domical roof as seen from the interior. The construction is evidently the same as that of the oval domical roof of ancient beehive structures in the islands. From these indications it appears likely that in the islands oval as well as circular bothan existed side by side with the timber-roofed airidhean, and that the oval airidh had its origin in the oval bo’th.

Campbell’s illustrations and descriptions (l.c.) further appear to show that in the stone-roofed oval clochán little more was gained by increasing the length than was necessarily lost in the width, and that this mode of roof construction allowed of little more enlargement of the space enclosed in oval than in circular dwellings of this type. Evidently the size of the oval clochán was still limited by the material of the roof, since this could only be increased in size consistently with retaining convenient proportions by the use of stones which, even if they had been forthcoming, would have been impracticable to manipulate. Only timber could allow any appreciable increase in size of a reasonably proportioned hut, and it might therefore be expected that, especially in dwellings of a permanent nature, the circular or oval form of building would give way to a more elongated one. The early rounded-rectangular Black House of the Hebrides, built to shelter man and animal, with its solid battered walls of stone and earth, its simple wooden roof and central fire, differed in no important feature from the sub-rectangular airidh, in which couples of trees and branches had replaced the stone slabs formerly used to make the roof. There is therefore nothing to preclude the possibility that in the islands the elongated house form may have developed from the circular form. Seen in this light, the rounded corners of the Black House, its rounded thatched roof and sloping ends, keeping the fire more or less central, may all be interpreted as adaptations from the stone technique.

Similarly the excessive thickness of the walls, also characteristic of the beehive huts, would point to the persistence of a firmly established tradition, which together with the prehistoric type of wall construction was almost certainly inherited directly from the earlier form of dwelling in the islands. The raised pavement or upper end with the beds may be a vestige of the raised sleeping platform found in some of the circular huts (cf. Peate’s discussion of the Welsh ‘tyle’ or raised bed-platform (6, p. 95) and his observations on the inadequacy of a functional explanation of the two levels in Black Houses (6, p. 94)). It is evident from all this that in any comparison on a broader basis of the various features mentioned with their European associations the possibility of close relationship between the traditional Black House and the earlier circular structures in the Hebrides cannot be ignored (as by Roussell, 7, p. 33) (cf. Campbell, 2, p. 183).

The few surviving examples of the Black House type, still show, despite various modifications, its original plan—that of a long single-roomed building housing the family and domestic animals under the same roof. In the present century this traditional custom has almost disappeared from the islands. I can recall only one isolated case in South Uist where a cow still shared the people’s dwelling. It was separated from them only by a half-broken-down partition of rough pieces of wood. The house was much dilapidated, and the survival of the custom in this particular case was probably due to poverty. But this may not be generally so (cf. Peate 6, p. 64).
As a rule byre and horse-stable now stand entirely detached from the house. The example shown in fig. 3 shows a form of grouping which is unusual in houses with thatched ends. This house now consists of two rounded-rectangular buildings with independent roofs joined together end to end, one forming the living-room and the other, on slightly lower ground, the byre. The separate byre is a recent addition built against the end wall of a typical old Black House. The two parts have their separate entrances and are connected by a doorway through the wall of the original building. In this way the crofter has retained internal access to his cows. The entrance, formerly through the animals' portion of the building now (1934, date of photograph) leads directly into the dwelling-room which is undivided through its whole length, but has the bed-places screened off by pieces of furniture at the far end. A board partition of the same height as the wall, which probably used to separate the lower from the upper end, has been put against the near end-wall, with its doorway opening from the present dwelling into the byre. The open fireplace, formerly somewhere near the centre of the house, has been moved towards the near end-wall, where it still retains its normal position close to the byre door. It is of the simplest form marked only by an iron chain and a hook hanging from the rafters to suspend the pot. As usual there is no chimney, the smoke escaping through one hole at the bottom of the roof, another hole simply cut into the thickness of the wall, and an unglazed window which is a later addition. On the windward side there is only one small hole in the wall which is always shut at night. The wall and roof construction are as usual in Black Houses. The walls although still up to three and a half feet thick at the base can scarcely be called excessive in view of the exposed position of the croft. On the other hand they are quite sufficient to support the roof. A point of interest in the wall construction is that some at least of the stones in the outer facings are definitely set slanting downwards towards the outside. It was impossible to discover whether this had been done on purpose so as to shed off rain water from the roof which, placed as it was on the inner faces of the walls only, conducted all the water into the cores of the walls. According to Macalister (5, p. 242) the slanting stones constitute a feature characteristic of the Irish clochán. The roof,
like that of many other houses nowadays, is thatched with straw instead of heather, fern, or bent-grass. The thatch is covered with wire-netting and held in place by ordinary ropes instead of heather ropes, weighted at the ends with stones. With its rounded thatched ends, this house, although comparatively recent, being only about seventy years old, has retained most of the traditional features of the ancient Black House.

All the surviving dwellings of this type retain to a more or less marked degree the earlier rounded-rectangular character of the Black House in a similar way. Some have rounded end-walls; others are not quite so rounded but are never strictly rectangular. All have walls of the same height throughout and thatched roofs with more or less rounded ends. All are of the central chimney type, even though, as shown in fig. 4, a fireplace may have been inserted later in the end-wall. Like the ancient ‘oval’ Irish houses (Campbell, 2, p. 189) and some of the Welsh Long Houses (Peate, 3, p. 60), they may be regarded as a link between the early circular structures and the more developed rectangular peasants’ and crofters’ houses of to-day. All these points and the general conclusion are well supported by other examples which can neither be illustrated nor described here on account of lack of space.

The design shown in fig. 5, c, d, e, fig. 6, a, b, and fig. 7, a, b, is an attempt to develop the local traditions to meet modern needs. It has been generously prepared by an architect with expert knowledge of rural building and a full appreciation of local tradition. It is intended to overcome the disadvantages of the Black House without losing the desirable elements of its character.

The first great evil of damp is to be overcome by the special construction of the floor and walls. The foundations are of concrete and a concrete raft (fig. 7, a) is also laid under the floor. On this and over the wall foundations is laid a horizontal damp-course of heather on which are built the walls and floor. The
floor consists of a second raft of concrete, eight inches thick, which can be finished to a smooth surface for mats and rugs, or wax-polished. The walls are built of an outer battered facing of the local stone, laid in dry courses and an inner facing of peat blocks, with heather layers at intervals, which may be white-washed inside to keep out any damp due to the natural porosity of the local stone. The walls and the chimney, which is also of local stone, are built in the most economical way possible and with all precautions to keep out damp. The whole house is surrounded by a paving of flagstones to drain away rain-water.

The next great drawbacks of the existing dwellings—want of room and absence of privacy—are to be overcome in the proposed house by its larger size and two storeys, and by the division of each storey into separate rooms. General comfort is increased by the better floor and proper chimney and windows, both the ground floor rooms being heated.

A shed containing a copper and a bath present in the cheapest and most efficient way possible a necessary minimum of bathing facilities suitable for general adoption. The need for these cannot be overstressed.

As seen in fig. 5 the house remains of the central chimney type and has thatched ends. The thatch is carried over the outer walls which also carry the weight of the roof, there being no apparent advantage in adhering to tradition in this respect. In small outbuildings and so on there may be no objection to following the old custom, providing that the walls are also built in the old way with the stones slanting downwards towards the outside.

The whole can be constructed with local labour and local materials, except possibly that the crofter wishing to build his own house may be at present unaccustomed to the use of concrete, and that cement, doors, and window-frames would have to be obtained from the mainland. Such importations are however cut down to a minimum, since the Hebridean cannot afford to be dependent on outside labour or materials where it can possibly be avoided.

THE FRUSTRATION COMPLEX IN KWOMA SOCIETY.

The purpose of this paper¹ is to present the results of the application of the frustration-aggression hypothesis² to data gathered at Kwoma. Before these results are stated, however, a brief summary of the way in which Kwoma individuals react to frustration from infancy through adulthood will be made.³

The data for this paper were gathered by S. W. Reed and myself during a field trip to New Guinea in 1936–37. The Kwoma are a small tribe situated in the mountains just north of the Sepik River and about 250 miles from its delta. They are an agricultural, patrilineal, polygynous group, in which political authority resides primarily in the kin group, and in which sorcery is both an explanation for sickness and an important means of social control. Their contact with the whites has been minimal, having been restricted to a few government officials and traders.

Kwoma infants are cared for almost exclusively by their mothers. For approximately the first three years of his life a Kwoma infant sits in the lap of his mother during the day and lies by her side at night. It is the Kwoma mother’s duty to care for all the needs of her child during this period. When, despite this constant care, Kwoma infants suffer frustration, crying is the response which becomes most firmly fixed. A Kwoma mother, whenever her infant cries, does her best to comfort him. If he is hungry she feeds him; if he is cold she warms him; if he is sick or in pain she tries to soothe him. Thus by removing the source of frustration or pain the Kwoma mother rewards crying as a response to these conditions. Toward the end of infancy, when the child begins to talk, he responds to frustration or pain by asking for help, and his mother complies with his request whenever it is possible for her to do so. Thus during

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¹ Read at the annual meeting of the American Anthropological Association, December, 1941.
² For recent statements of this hypothesis, see bibliography, p. 144.
³ A more complete description of Kwoma reactions to frustration can be found in a recent publication by the present writer (11).
infancy a frustration-dependence sequence is established.

The weaning period is a transition from the lap of the mother to the play group, which takes from one to two years to accomplish. During this time the child stays around the house for the most part, trying to maintain or to regain the close relationship to his mother, which she is forcing him to relinquish. His initial response to the frustration which he receives at this time is, as might be expected, one of dependence. First he asks his mother to permit him to do what he wants. When she refuses, he cries. When this fails, he aggressively tries to get his way by attacking her. The mother extinguishes all these responses by non-reward or mild punishment when she or the father is the frustrator, but continues to reward him by helping him when the frustration or pain comes from another source. When the child finds that his attempts at dependence and aggression fail, he finally submits. He gives up his old habits and learns new ones to take their place. For this he is rewarded both because these new habits are in themselves successful and because his parents praise him for them. Thus a frustration-submission sequence is established under the condition that the parent is the frustrator; the frustration-dependence sequence is still maintained with respect to other frustrators.

At the age of five or six the Kwoma child enters the play group, which consists of other boys of the hamlet, his classificatory brothers. His reaction to his bigger brothers is similar to his reaction to his parents. Since aggression leads to retaliation by a person bigger and stronger than he, since avoidance makes him miss the fun, and since dependence reactions are ignored unless he is in real danger, submission is his most adaptive and usual response.

The first instances of aggression to be rewarded are those directed toward younger siblings. Since they are smaller than he is, he can bully them and beat them without fear of effective retaliation, and thus he achieves direct reward for this response. Unless he is so violent in his aggression toward them that he seriously injures them, his parents praise him for this behaviour rather than punish him for it. Thus, both by direct reward and by social approval, the frustration-aggression sequence is established with respect to children younger and smaller than he.

Late in childhood, after the frustration-aggression sequence has been well practised, he uses it even toward his older siblings and parents. Usually when it occurs in this context, either it is combined with avoidance—a hit-and-run response—or it takes the verbal form of insult from a safe distance, or grumbling and criticism behind their backs.

Although submission, dependence, avoidance, and aggression all occur during childhood, the response which is idealized is that of aggression. Two contrasting epithets express this ideal. Karaganda gikafa, which means 'little child,' is used to criticize a child when he is too submissive or dependent, whereas harafa ma malaka, 'big older brother man,' is used to praise him for being appropriately aggressive. The latter term is applied to the men in the society who have the highest prestige, achieved largely by being bold and standing up for their rights. It is interesting, in the light of the above analysis, that the same words are used to describe a big older brother and the aggressive ideal of the culture.

When a Kwoma reaches adolescence, he must learn to behave in a special way toward his sisters, when they frustrate or threaten him. During childhood he has either avoided them, or behaved toward them as he would toward his brothers. At adolescence he must take the responsibility of protecting them from assaults on their virtue, and he must inhibit his own sexual feelings toward them. This creates a new series of frustrations, and the culture provides a special type of response—a joking relationship. He is permitted to accuse a sister of breaking incest rules, or to make disparaging remarks about her personal habits and appearance, insults which, if directed toward other persons, would lead to serious physical combat, but which evoke laughter and retaliation in a similar vein when applied to a sister.

Toward frustrations imposed by the men who philander with his sisters, an adolescent is rewarded for reacting with aggression. Toward the frustrations of the male relatives of the girls he courts, he reacts with avoidance in the form of hiding his love-making from them. His behaviour toward other persons remains similar to his behaviour during childhood.

Upon his marriage and initiation into adulthood, a Kwoma man must share the responsibility for social control with other men of the hamlet. He must help maintain the rights of the hamlet against encroachments by non-relatives and foreigners, and he must educate his children. Both of these demand aggressive behaviour.

The frustrations which he or his relatives may endure from non-relatives may be divided into three classes: capital crimes, property and sex offences, and sorcery. Murder, rape, arson, and theft of sorcery material are capital crimes, the appropriate response to which is, if possible, to kill the criminal. Anyone who commits such a crime, however, normally flees from the tribe before the death penalty can be imposed.

A man responds to theft, trespass, or adulterous behaviour with a female relative by threats, insults, and other forms of vituperation. Challenges to duels are frequently issued, but actual duels never seem to occur. The most effective expression of his aggres-
Frustration may be imposed by foreigners as well as by other Kwoma. The Kwoma dwell in a head-hunting area, and they live in constant fear of being murdered in raids carried out against them by neighboring tribes. The men of other tribes, who have married Kwoma women, not being subject to the sanctions which apply to Kwoma men, may cause frustration by refusing to pay the required bride-price. Finally, a member of some other tribe may cause sickness by practising sorcery.

The Kwoma react to such frustrations, either by carrying out a retaliatory raid, or by participating in an intertribal court meeting to demand payment of the bride-price, or wergild for a murdered relative. They wait for a year after a murder before calling a court meeting, to give time for their ‘bellies to cool,’ as they put it in pidgin English.

The Kwoma also carry out head-hunting raids against tribes who have not directly frustrated them. They frequently displace, to the out-group, aggression which was generated within the tribe. This is evidenced by the fact that the only two raids, about which I was able to question participants, began with in-group quarrels. One informant said that he had organized a raid because his wife had teased him for not showing himself a man by taking a head. When he started to beat her for taunting him, she accused him of being a woman-beater but afraid of men. With his ‘belly still hot with anger’ he had then organized a raid, in which he had taken a head.

Another raid, organized during the period of fieldwork, also grew out of a quarrel between a husband and wife. Finally, in the memory of living informants, the Kwoma had once waged a war of extermination against another tribe over territorial rights.

These data, taken in conjunction with certain principles established in the fields of anthropology and psychology, suggest a series of propositions which I should like to advance in the hope that they may be tested by future fieldworkers.

The first proposition is derived from an hypothesis advanced by Miller and Dollard. Although the innate dominant emotional reaction to frustration is an indeterminate visceral response involving the sympathetic division of the autonomic nervous system, these emotional responses, it is suggested,

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1 This is not an important factor, since a foreigner is rarely blamed for sorcery.
2 Reported in detail in Becoming a Kwoma (11), pp. 165–168.
3 (6), p. 64.
4 W. B. Cannon (2) indicates that there is no physiological difference between anger and fear except perhaps in the thalamic responses involved. It is possible that these two emotions can be distinguished by the overt reactions which are associated with them, the emotion associated with aggression being defined as anger, and the emotion associated with avoidance being defined as fear.
may be modified by learning, so that frustration may result either in anger, in fear, in a combination of the two, or in neither of them. Since the emotional reactions to frustration are covert, it is difficult to study them by the usual field techniques, and thereby to test this hypothesis conclusively from Kwoma data. Informants reported that they were angry, for example, when they were frustrated by anyone who was breaking a rule of the culture, and that to be angry was part of the idealized pattern of the 'big older brother man'; they also reported that they were, for example, afraid of sorcerers, enemy head-hunters, and of the relatives of the girls with whom they philandered; they claimed, finally, that they were neither angry nor afraid when a relative frustrated them by asking for help, when it was in accordance with custom that he should do so.

The second proposition is derived from the general theory of culture, and from the observation of infants in our own society. Although the innately dominant overt response to frustration is violent thrashing muscular movement of the arms, legs, and torso, loud crying, and holding the breath, these responses, it is suggested, are modified by learning, so that culturally defined responses take their place. From casual and unsystematic observation, it seemed that Kwoma infants reacted to frustration with violent random thrashing behaviour and crying, and the evidence summarized above indicates that these reactions are modified into culturally determined responses.

The third proposition is that the culturally relevant overt reactions to frustration may be divided into four classes of social behaviour: aggression, submission, dependence, and avoidance. These four classes were found to be adequate to describe overt frustration-reactions in Kwoma culture, and it is proposed that they may be useful in the analysis of other cultures.

Propositions one and three may be combined in the following diagram:

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<tr>
<th>Context</th>
<th>Emotional Response</th>
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<tr>
<td>Frustration</td>
<td>Anger</td>
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<td>Other</td>
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Thus, frustration may result in any combination of emotional and overt responses, the combination being determined by the frustrating context.

The fourth proposition is a corollary of the general theory of culture. It is that the reaction to frustration depends upon the culturally defined context, and particularly upon the social relationship between the frustrated person and the frustrator. The overt reaction of a Kwoma to frustration can be predicted only if both his social position and that of his frustrator are known, as well as the cultural context in which both the frustration and the response to it occur.

The fourth proposition, suggested by the work of Benedict and Mead, is that any culture may idealize, i.e., consistently reward, one or another of the types of reaction to frustration. Aggression is the type chosen by Kwoma. The aggressive implication of the ideal of haraja na malaka, 'big older brother man,' is stressed in their culture from childhood on. Submission, dependence, or avoidance may be found to be idealized in other cultures.

The fifth proposition is derived from Malinowski's theory of the functional integration of culture, and Sumner's assumption of the strain toward consistency. It is that the idealized reaction to frustration is correlated and integrated with other aspects of the culture. Since the burden of social control in Kwoma society is placed on all adult males, rather than upon a chief, a council of elders, or some other specialized governing body, bold aggressive men are demanded to effect social control. Thus the idealization of this aggressive reaction is integrated with the governmental organization of the tribe.

The sixth proposition is derived from the Freudian theory of displacement. It is that when the anger-aggression sequence has been established, and then inhibited, either by social sanctions or by fear of retaliation, the aggression tends to occur toward some person other than the frustrator. The fact that direct-indirect, defensive-perseverative, and specific-non-specific—is made on the personality level, and thus is not directly pertinent to the problem undertaken in this paper.

The basic definition of frustration employed here is, 'any event which interferes with a habit.' This definition is in accord with that employed in Frustration and Aggression (3), p. 11. The analysis of Kwoma data shows that social frustrations are usually symbolic events such as commands, threats, warnings, and insults, which imply physical punishment or attack, the withdrawal of help or support, or the withholding of gifts. The implication of this proposition is, therefore, that the reaction to frustration depends both upon who issues the command or threat, and upon when and where he does it.

This accords essentially with the theory of displacement proposed in Frustration and Aggression (3), pp. 41-44, and applied to social data by Dollard (4). The differentiation of emotional and overt responses made in this paper, however, makes it possible to give a somewhat more adequate account of this phenomenon. As Miller has pointed out (6), pp. 61-64, emotional responses act as acquired drives. Thus anger may motivate a person, until a displaced aggression response reduces his tension.
that a Kwoma child is more aggressive toward his younger siblings than the frustrations imposed by them seem to warrant—he sometimes even attacks them when they have not frustrated him at all—suggests that some of this aggression is displaced. It is probably motivated by anger generated by parents and older siblings, but not expressed toward them for fear of punishment. Similarly, head-hunting raids against tribes with whom the Kwoma have had but little contact, suggest that the mechanism of displacement operates here too. Both of the head-hunting expeditions discussed above began with an in-group quarrel.

The seventh proposition is more novel than the previous ones, and is put forward tentatively. Owing to certain universal conditions of social life (it is suggested), aggression, submission, dependence, and avoidance will be likely to be specified as proper responses to frustration in given contexts in all societies. The analysis of Kwoma culture shows that the frustration-dependence sequence occurs both during infancy, when the infant is too immature to care for himself, and later in life as a part of co-operative reactions to common frustrations; that the frustration-submission reaction occurs in childhood during the process of socialization; that the frustration-avoidance reactions occur in children when they are frustrated by persons bigger and stronger than they, and in adults when they are frustrated by persons whose supporting group is more powerful than their own; and, finally, that the frustration-aggression reaction occurs in education and social control. Since education, social control, co-operation, and variation in the power of the supporting group may be assumed to be universal cultural aspects, and helplessness of infants and disparities in the size and strength of individuals are universal biological facts, it may be assumed that these four reactions will be likely to occur in all cultures.

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It has been said that prehistoric times go on, in Europe, at least until well into the seventeenth century, in the sense that the traditional attitudes towards life and society were carried on, in spite of occasional challenges, with little fundamental questioning. That century, however, saw the expansion of European overseas intercourse, Dutch replacement of earlier efforts in the East Indies, the British Trading Companies, the occupation of several distant posts by the French. It also saw the spread of canals and some development of roads for wheeled traffic. Root crops began to exert their disintegrating influence on the old manorial villages. Scientific inquiry progressed enormously with the work of Leeuwenhoek, Boyle, Harvey, Newton, Leibnitz, and many others, as well as the philosophical work of Bacon and Descartes.

The stirring of thought promoted anti-clerical movements, arising from other causes, in eighteenth century France; but less of this occurred in England in which the tradition of compromise suggested there were many approaches to truth. The challenge to traditional thought has, however, become more widespread and more direct in the nineteenth century. Lyell made men realize the immense age of the earth, and Boucher de Perthes, the great antiquity of the human race. Darwin, followed in one field by Robertson Smith and Frazer, carried the concept of natural evolution far into realms of mind and thought. The challenge, in Europe, thus came from the within; but, in Islam, largely owing to the set-back of thought under Ottoman rule, it came in the main from without. In Europe the challenge was to a traditional creed and its implications, but had little immediate effect on ideas of law which had become a separate, or laicized, field of thought. In Islam the basic creed is so simple that the challenge to it is not so important, and it is not under the protection of a priesthood which depends upon its maintenance. The more particularly religious challenge is thus less serious in Islam; but, among many Muhammadan communities, the sacred law or Shari'a has long retained a very great hold and its interpretation by Mufti increases the difficulty of adjustment. In the Shari'a, formulated many centuries ago, is obviously incapable of dealing with many modern commercial matters, and this part of it has been largely adjusted or discarded. But the personal law concerning the family, as well as the law on religious
endowments, has tended to remain sacred, breaking down to some extent when and where polygyny becomes impracticable for the majority of the leaders.

The reactions of Islamic life to modern thought have therefore been very different from those developing in western Europe, and it is characteristic of them that there are diverse accounts. The diverse experience of the various Islamic peoples concerned. A crisis in traditional thought and life typically leads, in this way, to increased differentiation, even if enhancement of communications may make possible more mutual comprehension. The various reactions noticeable around the Eastern Mediterranean are here used to illustrate these tendencies. The West of the Balkan Peninsula—The Muslim in this region, numbering over two million, include the descendants and dependents of those who accepted a compromise with Islam at the time of the medieval conquests and, subject to payment of tribute, were left is possession of some of their lands and customs. They often became Muhammadans. This was a convenient scheme for the Islamic conquerors in a different outpost of their domain. Here, therefore, Islam is associated with the maintenance of an old privileged position for many, also sometimes with the right to keep more than one wife. But Sir John Myres draws attention to another element; the Bektashi, originally a Dervish order expressing ideas and practices of Sufi mysticism, came west away from the strict and uncultured fundamentalist orthodoxy of the Ottoman Sultans at Constantinople.

In 1923 Albanians gave up allegiance to the Caliph, or traditional head, of Islam, made polygyny illegal (it had nearly died out and unveiled their women. The adoption was based on the influence of Italy and France in 1928-9. This illustrates the fact that the western parts of the Balkan peninsula Islam is largely a historic survival, though it contributed such a vigorous leader as Mehmet Ali to the life of Modern Egypt.

Turkey—The Ottoman Sultans, with little culture of their own, sought support by enforcing strict Sunni orthodoxy and were inclined to persecute all dissidents. Turkish came into use for religious purposes in place of the traditional Arabic, and Turkish Islam gradually took upon itself a sort of religious leadership, reviving the Caliphate in the eighteenth century. The impracticable character of a fundamentalist regime, especially in legal matters, then undermined the Caliphate position as well as the whole Turkish power. The breakdown of this old regime offers several analogies with the French and the Russian revolutions—a period of vigorous revolution against the old ideas, with rapid changes, followed by the rise of a strong dictator, in this case Kemal Ataturk. The abolition of the man’s fez and the woman’s veil, as well as of polygyny, the development of education and gainful activities for women, the adoption of Swiss civil law, Italian penal law, and German commercial law all illustrate the type of revolution. The decision of Ataturk to restore Santa Sofia and to keep it as a monument was highly characteristic. A few years ago the mosques were largely neglected; and a faculty of theology had been instaurated, the Caliphate of Islam restored. The ideal for Turkey was that it should become a homogeneous modern state, laying aside old imperial ambitions and traditional Islamic prestige. Since his death there has naturally supervened a period of indecision; and attempts are being made by secret and, up to the present, (1944), illegal organizations to reassert old ideas with a view to ousting European influence from neighbouring Islamic lands into the south.

Syria and Palestine—These lands, long held back under Ottoman rule, faced a crisis following its collapse in 1918, and the subsequent exercise of influence by the French in Syria and the British in Palestine. The physical features of this area fractionally, and there has been little prospect of unified effort. The British in Palestine were inclined to maintain Islamic law, but also to permit considerable immigration of Europeanized Jews, so that both Palestinians and Syrians were concerned about European influence and tended to look to Arabia for support against the infidel, but the Lebanon Christians are intensely suspicious of any such move. The Gulf therefore between the Muslim of Syria and Palestine and the followers of Ataturk is a deep one, and it will be important to watch the future development of religious relations between them. There is also the special problem, in the Lebanon, of the existence side by side of almost equal numbers of Muslim and Christians, the latter subdivided into very numerous sects, while the former have the Druses on their side.

Arabia—The well-known story of the fall of Hussein King of the Hejaz and of the rise of Ibn Sa’ud of Riadh shows the power of fundamental Sunni orthodoxy and of the enthusiasm it creates. The Shari’a is maintained, not without a good deal of adjustment. The effort is made to purify Islam from post-Quranic growths. Reverence paid to saints is condemned. In the desert the old scheme can attempt to maintain itself for a while, but the custody of the chief holy cities of Islam, Mecca, and Medina, involves the strict Wahabi of the desert in many complexities.

Egypt presents a marked contrast to all the lands already mentioned. The tradition of civilization is more than five thousand years old, and the people have been in touch with many ancient cultures and powers of the Eastern Mediterranean and South-west Asia. Heritages from Greek culture have been handed on, and learning has had much influence. El Azhar at Cairo may be the oldest, it is certainly one of the most famous, of the world’s universities, though, after the rise of the Mamelukes, cultural development was severely set back from the forward-looking thought of such writers as Ibn Khaldun. The Shari’a had a great prestige and much superadded complexity as a result of the discussions at El Azhar; but Egypt from the days of Mahomet Ali and Ferdinand de Lesseps left her mark not only on the material form of world affairs, making maintenance of the public law of the Shari’a impossible. The contrasts in reaction to modern thought between Turkey and Egypt are very striking. Egypt developed modern commercial activity in association with France and Britain, and the ultra-conservatism of Arabia was not possible for Cairo, Alexandria, and the Suez Canal. The new Egyptian University at Gizeh, organized on modern lines, has been followed by the creation of a second modern university at Alexandria. But El Azhar, also, has felt the impact of modern thought from the work of Abdur, which appears to have had behind it Sufi mysticism. And, following this, modern studies have penetrated into this historic institution, alongside of the traditional Islamic learning. This penetration was in response to a request from both teachers and students. El Azhar has further contributed some teachers to the new universities, and there are efforts towards a friendly and orderly evolution of studies. As against this, one must mention the poverty of political experience that is such a handicap for Egypt in matters of government, and the inevitability both of outside influences and of xenophobic reactions to them. The impossibility of adopting
such uncodified traditional growths as the British constitution and English Common Law is a matter to be borne in mind in this connexion.

North Africa outside Egypt. — The position is again very different. Populations include Berber elements in ' Mauretanis,' negroids towards the Sudan, and many varieties of what are comprehensively called Hamites. The fighting capacity of the men is very great, whereas that of the Egyptians is almost as low as can be. Excitability and emotionalism are social features and accompany fanatic zeal, with which has long been associated the formation of sects. Some sectaries have escaped persecution by establishing oases using underground water in the Sahara or near its borders. In North Africa, also, there was a good deal of Christian influence before Islam spread; and the Messianic tradition, in this case the expectation of the advent of a Mahdi, crops up from time to time.

In the Middle Ages the Almoravides, a Berber and Negroid group with some Arab infusion, broke into Arab Spain, and, after their decline, another North African group, the Almohades, conquered southern Spain and then, in their turn, declined. Both groups illustrate fanaticism that has no regard for a cultural tradition. The modern Senussi, whose founder was Algerian, have the Messianic or Mahdist idea strongly developed, but were not prepared to accept the Sudanese Mahdi of the late nineteenth century. The Senussi may be considered to be on a much higher level of understanding, and of political and military skill, than the medieval Almohades. With all their religious zeal, they do not carry the puritan idea as far as do the Wahabi of the deserts of Arabia.

To sum up, the Caliphate no longer exists, and it is of special interest as an illustration of modern Islamic divergence that a movement for the restoration of the prestige of that ancient office was developing in India just at the time when Ataturk abolished the title which had been associated with the Turks for nearly 200 years. Mutual recognition by different groups and schools of thought probably goes a good deal farther in Islam than in Christianity; the fundamental credal simplicity in the one case standing in contrast to the complexity and controversial exposition of the creed in the other. Increased differentiation among Islamic peoples in modern times may affect this attitude, but it is hardly likely to do so effectively, as the tendency everywhere is towards credal simplification. But that differentiation may nevertheless make the re-establishment of a Caliphate for all Islam much more difficult.

The Installation of the Shilluk King. Summary of a Communication to a Special Joint Meeting of the Institute and the International African Institute by Mr. P. P. Howell : 7 July, 1944.

The most important aspect of Shilluk religion is the cult of Nyikang who is the culture-hero of the tribe and the great leader who brought them from the South to their present country. Nyikang is the medium between the Shilluk and their conception of God, and his spirit is reincarnate in every Shilluk king. The King is thus imbued with divine powers and is the central figure of religious activity. His fortunes and his physical condition react upon the welfare of the tribe and his life is hedged round with ritual observances. The period between the death of a King and the installation of his successor is one of intense political and spiritual danger to the tribe as a whole. Civil war may break out between the supporters of rival candidates to the throne. Moreover, the tribe is temporarily deprived of the symbol of religious cohesion. Therefore the occasion demands strict observance of all the rites and ceremonies which are necessary to establish the King-elect in his new status.

Further investigation is necessary before a full account of the events can be published. A detailed report will eventually be published in collaboration with Mr. W. P. G. Thomson and with the assistance of other observers who attended the ceremonies. When these events, which are briefly summarized below, are compared with the record of the installation of Fafiti wad Yor in 1918, the continuity of tradition and the observance of past precedents are remarkable.

The late Reth or King of the Shilluk, Fafiti wad Yor, died in September 1943 and was buried immediately at his private village in Golbany. Shortly afterwards his funeral wake was held, a public ceremony which lasted three days. Meanwhile Anei, son of Reth Kur, was elected by those chiefs who are traditionally responsible for the choice. Preparations for the final installation then began.

According to Shilluk tradition, Nyikang and his son Dak, who are represented by and manifest in special effigies, must be brought out from the shrine at Akurwa and march from there to Fashoda to instal the new king on his throne. This march began at the end of February this year, and Nyikang and Dak, carried with great pomp and provided with feasting and dancing on the way, reached Nyigir, which is just north of Fashoda, after a journey of six days. At dawn the next day the king-elect moved to Debalo, which is just south of Fashoda. At this point the conventional opposition between the northern and southern division of the country current during the installation ceremonies became clear. The inhabitants of the northern division flocked in to join the army of Nyikang at Nyigir, while those from the south mustered round the King at Debalo.

After he had spent three days at Debalo, the king and his army set out for Fashoda, and arrived at the watercourse called Arepeajur which means 'the gathering of the people.' Here they halted and drew up parallel to the watercourse, with the king and his immediate escort in the centre. Meanwhile, the host of Nyikang, who had marched that morning from Nyigir, could be seen gathering in battle array on the high ground near Fashoda. At an exchange of messages, the King-elect stepped over a black sheep and a black bull, which had been cast at the edge of the watercourse, and crossed over, and followed by his army marched forward to join battle with Nyikang. Millet stalks—which were used to represent spears—began to fly through the air and with wild war cries the two armies met. In this fight, the king was captured by Nyikang and carried off to his shrine in Fashoda. The sacred stool of the Shilluk was then brought forth from the shrine and shielded from the public by a canopy of white cloth. The king knelt down and grasped the legs of the stool while the effigy of Nyikang was set upon it. Then the effigy was removed and the king took his place on the stool. This act of substitution is the crisis of the ceremonies, for it is said the king is thus possessed by the spirit of Nyikang. Outside the shrine was a temporary camp consisting of two grass huts and into these the king retired to undergo ritual purification, which takes place in seclusion. That evening the fires of Fashoda were extinguished and rekindled from a fire ritually kindled with fire-sticks. The next evening the king moved up into the sacred mound which is in Fashoda, but he made no public appearance and no
Further public ceremony took place until the morning of the fourth day. On this day another mock battle between the armies of Nyikang and the king took place over the possession of Nyakwer—"the girl of the ceremonies"—who is handed over to the king at Debalo by a Shilluk clan who are bound by tradition to do so. She accompanied the king from Debalo to Fashoda and entered the temporary camp with him.

It is said, however, that the king is enticed from his secluded residence in the temporary huts by a girl of the Orolo clan who leads him to the mound and that he forgets to take Nyakwer with him. Nyikang seizes her and carries her off into his shrine. Messengers are sent out by the king to search for her and they return to inform him that Nyikang has claimed her on the grounds that the cattle paid for her bride-wealth are his. The king again sends out to fetch her and thereby angers Nyikang who calls out his warriors to battle. This traditional quarrel between the king and Nyikang—the climax of opposition between them—was faithfully enacted, and the two armies met in battle in the open space in the centre of Fashoda. The king himself rushed forward and wrested Nyakwer from Nyikang and carried her off up to the mound. After a furious counter-attack by the followers of Nyikang peace was made between the opposing parties and Nyikang went up to the mound to meet the king. Nyikang's public part in the ceremonies was then at an end and after a tour of the capital in which he imposed fines on those clans who had ignored their traditional obligations to repair the houses, he disappeared into his shrine and was seen no more until his return to Akurwa some weeks later.

The final ceremony which took place the next morning is more secular in character. The chiefs of the country gathered round the king who was seated on the sacred stool below the mound. Each chief in turn made a speech of exhortation and allegiance. Every speech which was approved by the king and his company was applauded by a sharp tattoo on a special drum, but unsuccessful orators were met with stony silence. After the speech-making was over, the king was led round all the houses of Fashoda, and thus formally handed full control of his capital.

The paper was discussed by Mrs. Seligman, Dr. Fortes, Dr. Hildburgh, and Mr. Brahmoltz. Mr. Howell replied.

Collection of Negatives and Lantern Slides

Miss Edith Durham, who has already made important gifts of ethnological sketches and photographs resulting from her travels in Albania, has now presented the whole of her collection of negatives and lantern-slides to the Royal Anthropological Institute. Those who know Miss Durham's published work will best appreciate the value of this fresh token of her interest in the Institute's work.

Colonial Research Fellowships

The Secretary of State for the Colonies has been considering ways and means of encouraging scientists to give special attention to problems of Colonial interest. On the advice of the Colonial Research Committee he has now decided to institute a number of 'Colonial Research Fellowships,' which will be open to qualified scientists, whether in the natural or in the social sciences, to enable them to pursue research work in the Colonial Empire. The Fellowships will normally be for two years, and the Secretary of State hopes that Universities and other research institutions will be willing to grant applicants, if already members of their staffs, leave of absence for this period in order to enable them to take up the Fellowships. Provision has been made for 25 such Fellowships within the next five years. It is recognized that war-time shortages of personnel will restrict the immediate applicability of the scheme; it is, however, being brought into force immediately, in case there are suitable candidates in any part of the Empire who are not at present required for urgent war-time work.

2. The award of these Fellowships will be made by the Secretary of State, on the advice of the Colonial Research Committee.

Qualifications of Applicants

3. The Fellowships will normally be reserved for University graduates under 35 years of age from any part of the British Commonwealth and Empire. Candidates must already have had some experience of research, and must have given evidence that they have the ability to plan and prosecute investigations of a high quality without close and constant supervision.

Terms of Award

4. The Fellowships will be tenable normally for a period of two years provided that the Fellow's report from his supervisor at the end of the first year is satisfactory, and may be extended for a third year at the discretion of the Secretary of State.

5. The Fellowships carry a basic allowance of £400 per annum, which may be increased to a sum not exceeding £600 per annum if the Fellow is married, or in other appropriate circumstances. Travelling expenses and the cost of any special apparatus or material required for the Fellow's research will also be provided. Where a Fellow is a member of a superannuation scheme in which his employer pays part of the contributions, the Secretary of State will, if necessary, also take over the employer's contributions for the duration of the Fellowship.

6. Fellowships will be tenable in any part of the British Colonial Empire. Where practicable, Fellows will be attached to centres of higher education in the Colonies and may be required to give occasional lectures of general interest on their subject for the benefit of the students attending courses at such centres.

7. During his tenure a Fellow shall be responsible to a supervisor selected by the Secretary of State. If the supervisor is not resident in the territory visited, the Secretary of State may appoint, in consultation with him, a deputy supervisor in that territory or in a neighbouring territory.

8. The Fellow shall submit through his supervisor a concise progress report at the end of each year of his tenure, and a full report of his researches within a reasonable time on the completion of his tenure.

9. The award will be conditional upon the candidate being certified as medically fit for the type of work to be undertaken.

Applications

10. Applications should be addressed in the first instance to The Secretary, The Colonial Research Committee, Colonial Office, Downing Street, London,
S.W.I, and they should state the applicant's age, nationality, educational history, occupational history, and experience of research, and should indicate the precise nature of the problem on which the candidate wishes to do research. They should bear the endorse-

ment of the Head of the Collège or research institute to which the candidate is attached, or of some other responsible person.

[Colonial Office : O.O. Miscellaneous, No. 509. May 1944.]

REVIEW


This is an important new monograph. It describes one of the most interesting tribes in the Northern Transvaal, and describes it for the first time. The Loveva claim descent from the Vakaranga of S. Rhodesia. They still differ markedly from most of the neighbouring peoples such as the Shangana-Thonga, while they have certain features in common with the Venda, who are also reputedly of S. Rhodesian origin. They are in many ways a red (or thrice) people. About 1800 a chiefness seems to have assumed power in place of a line of chiefs, and from that date the Mujaji, or Queen of the Loveva, has been a legendary figure throughout black and white South Africa. She is one of the most renowned rainmakers of the country, hailed as the 'mother of the storm' or the 'huckster in her hut,' and lives on top of a mountain ridge above Duivel's Kloof, where she extends her influence from a small and inaccessible village which ritual prevents her from ever leaving. The Mujaji has always been surrounded by an atmosphere of mystery. Magic attributes of all sorts are attributed to her and it is rumoured that strangers cannot see the real queen but a substitute. It is known that the Queen must commit suicide by poisoning when certain initiation ceremonies have been performed a certain number of times. The reputation of this line of queens has given political importance to a tribe that has always apparently been insignificant from a military point of view and small in size. It is now estimated at about 33,000. The Mujaji has been asked to exercise her magic powers by such dominant South African chiefs as Chaka, Mosesho, and some of the Tsawana rulers, and sought in marriage by the King of the Pedi.

Loveva culture is distinguished by many interesting features, particularly in agriculture, which is associated with spring sowing and the rains was last performed in 1892. Initiation ceremonies (the eyaali and vuhra) with most complex and mystifying symbolism are vividly described in this book also. The passage of cattle at marriage, which is common to most Bantu people, has here a unique anthropological significance. The cattle received at marriage are passed on according to strict rule that the Kigges speak of a 'cattle ring' and liken it to the kula ring described among the Trobriand islanders. They estimate in fact that all the cattle possessed by this tribe are actually circulated in fulfilment of marriage obligations of this kind. The legality of marriage is so completely determined by this passage of cattle that a wealthy woman may marry another woman by this means as easily as can a man, and becomes the 'father' of the latter's children by a lover given her. The Queen's political power in fact depends in part on arrangements and agreements which are possible in this way. The political system is not of a highly organized centralized type but is characterized by the virtual autonomy of local groups, which however recognize the influence and magic power of the Queen. The persistence and vitality of this tribal culture are remarkable at a time of considerable contact with Europeanism, the presence of villages predominantly inhabited by Christians who live outside the tribal system, and the absence of men at work elsewhere in the Union.

The Realm of a Rain Queen is intended as a general monograph of Loveva culture. The Kigges deal with the history of the tribe by means of a series of 'pages' or imaginary accounts relating turning-points in tribal history. They noted the time of their arrival in their present habitation in the Transvaal, the father and daughter incest which led to the birth of the first Mujaji, and the initiation of the new line of queens instead of kings. This device is an interesting one. The pages certainly clarify a confused mass of tribal legends and set the stage for the description of the mysterious Rain Queen. It must be admitted however that clarity is obtained at the cost of introducing European conceptions and interpretations, by omitting the definite linking of legend with present-day social structure and rank that the sociologist would have liked to see discussed.

The historical introduction is followed by a vivid and charming account of daily life, of the isolation of the Loveva hills and a description of the people's basis of subsistence. The book gives no full analysis of the economic life of the people as a whole, but provides a detailed description of their knowledge of the environment, its soil, flora and fauna, and general agricultural possibilities. Malinowski suggested in his monograph on the Trobriand islanders that the Christian was filled in their empirical knowledge by reliance on magic which gave them confidence and acted as incentives to work. The Kigges deal with agricultural technique and ritual in the same way. They add an account of some of the effects of European contact on the people's nutrition and will to work. Among the most valuable chapters of the book are those on 'co-operation and exchange.' Malinowski pointed out that in Melanesian society reciprocity was one of the most important sanctions enforcing economic obligations in primitive society. This conception the Kigges work out in the case of the Bantu society where there is little public display of goods. The book deals with the introduction of goods into the Pacific, and notes that the part played by different systems of work and reciprocal services in agricultural and in social life. They go further and attempt an estimate of the economic efficiency of forms of working bee with their short hours of work but pleasant concomitants of food and drink, and the work for wages introduced by Christians in imitation of Europeans and called ho-hira. I know no more stimulating account of the contrast between the competitive individual economy of the European, known and despised as a biana transaction, and the Bantu system of reciprocal cooperation. The book shows how clearly the Christian way of life is identified with individualistic economy in Loveva eyes. The Christian church, with its fees and collections, falls to the Loveva manner of thinking into the biana scheme; one buys baptism and confirmation; at confirmation one pays for the flesh and blood of Christ. The book gives interesting statistics of the total volume of goods and services exchanged by a typical family over a whole year according to the Loveva system, and compares pagan and Christian villages as regards the organization of service. The marriage gift exchanges follow naturally the same reciprocal pattern, and there is an interesting account of the preferential marriages made available to kinship groups, and of the relationships so determined within the kinship group.

The chapters on social structure make a determined effort to clarify that confusing aspect of Sotho sociology, the mutupu system, whereby totemic names are used by small dispersed groups split off from original nuclear communities and afterwards amalgamated to form larger divisions or tribes. The Kigges introduce some new terms such as the cluster, division, group, sub-group, and lineage, and give some numerical analyses of the frequency of each in an area. It must be confessed that the forces unifying these groups are not fully clear from this account, but the value of the terminology will have been appreciated by readers who work with other districts. The political system as a whole is described as a loose aggregation of semi-autonomous villages united by the belief in the magic
powers of the Queen and by her dominating influence, and by the marriage system by which incorporated groups of strangers give way to the marriage of their heads. The balance of powers between these different political groups is not perhaps clear from this short account and it would be difficult without further material to use the account in comparative work, although it seems that the Lovedu system would make an interesting new sub-type of the Bantu systems. The special aspects of the_Queen's life in African Political Systems, edited by Evans-Pritchard and Fortes.

The book ends with some exceedingly useful material on Lovedu concepts of health and disease, and their knowledge of physiology and methods of treatment, magical and otherwise. The numerical analysis of the number of witchcraft charges brought by the Lovedu, and relatives respectively, and the subdivision of the relative's category into co-wives, husband and wife, etc., suggests a very valuable new method of approach to the study of the causes of witchcraft.

The whole work is in fact a mine of information on a little known area to which students of Bantu sociology will return again and again. The descriptive chapters are pleasantly and vividly written with a sense of intimate participation in Lovedu life. The passages on social structure and law are not so concisely written but raise a number of suggestive points. For instance, it is to be congratulated that the area was a hard one in which to work owing to the hostility and suspicion of many of the Lovedu, and the curious tribal admixture in the district, which meant that the authors had to describe the diversity of culture to be found in scattered groups or concentrate on one small community. They chose the latter, and the Lovedu community centred in the Queen's village, but occasionally broaden their sweep by statistical information described as referring to over 2,000 families, a method on which further explanation would be welcome.

The theoretical interest of the book lies in its effort to present "the shape and structure" of Lovedu culture and its "tribal traits and attitudes"; in other words in its effort to write a monograph in a new form. Writers of earlier monographs were able to present outline accounts of tribal cultures, chiefly because they had so much less detailed material to deal with, and also because they did not attempt such a deep analysis of the functions of different institutions or of their interrelationship. Most modern field-workers by comparison are wrestling with the sheer mass of their own factual material gathered often in a two- or three-year visit to one area. For this reason many, in order to limit their books to a reasonable size, particularize aspects of society for description. It has been pointed out that even Malinowski who advocated so strongly the study of whole cultures never in fact published a description of one. He, and most recent field-workers, limited themselves to studies of such aspects as marriage, agriculture, economic life, or witchcraft, or often maintained that the day of the single monograph is over.

The difficulty is a real one. The separate-aspect study enables the author to give sufficient detail to do justice to his material. On the other hand it has considerable disadvantages. A series of separate studies of different aspects of one culture necessitates a good deal of repetition of background information if each book is to be complete in itself. A more serious drawback is the fact that the special study abandons one of the assets of the anthropologist as against the student of modern society, that is to say his claim that he can describe his small society as a working whole. The tendency to specialization may lead in the future to the same type of sectarianism that has proved rather sterile in some modern sociological works. Lastly, studies of particular institutions or problems made it impossible to use the material as a basis of comparison of one culture with another, either in the form of crude comparisons between a society in one cultural region with one in another, or more detailed contrasts between two peoples belonging to a more homogenous group. For all these reasons I personally believe that anthropologists have got to solve the problem of the outline monograph whether they can do so at once, or whether they will have to wait until further comparative work on different aspects of society has been done.

It is obvious that the problem of presentation can only be solved by a process of rigid selection, and the importance of this kind have already been made. It is possible to give an account of a tribe which picks out certain cultural peculiarities which distinguish it from its neighbours. The drum cult or the magic Queen of the Lovedu would be examples of this kind. Such accounts have certain limited uses, but do not provide a basis for the kind of comparative studies that are our aim.

Some field-workers, and particularly Evans-Pritchard, have tried to achieve the necessary limitation of material by concentrating on one aspect of human culture — social grouping. In his recent works on the Nuer and the Amuk, for instance, Evans-Pritchard describes the forces uniting the tribal community in the sub-groups composing it, and the balance of power between these different forces. This is evidently one possible basis of comparison and a very fundamental one which every outline monograph should contain. Benedict and Mead on the other hand attempt comparison by describing the impressions made on the observer by a pattern of behaviour in daily life and ceremonial as compared with similar impressions in the case of other cultural groups. They add accounts of the educational mechanisms used in each society to produce conformity to the desired type and the expression of common values and ideals. Linton's use of the term 'characteristics' to describe the common interests and values of different tribes is work of a similar type.

The Kriges have evidently been deeply concerned with the problem of describing the salient characteristics of Lovedu culture as compared with that of the surrounding peoples. On the whole they lean to the Mead point of view. Though they give a description of the social organization of any tribe they do not use this material for comparative purposes or nor work out a terminology that would make this possible. They characterize Lovedu society as 'co-operative' and not competitive, as Mead has done in at least one study, and emphasize Lovedu admiration of joint activity, easy social relationships, and avoidance of strain.

But the Kriges also add the suggestion that societies can be compared by means of the cultural mechanisms by which they obtain three essential desiderata, security, a sense of achievement, and recreation. The Lovedu, they say, need to feel secure as to their rain supply. Rain is assured, according to their belief, through magic prescribed by the Queen. The Queen is thus the foundation of the cultural structure and districts are kept together by the need for rain. Their sense of achievement is obtained by success in attaining maturity, self-sufficiency, continuity, and a place in the khor or tribal family and not through competition in addition. Enjoyment of beer-drinking and social gatherings as forms of recreation make them prefer these pleasures to economic gain.

These are interesting suggestions, but these three 'fundamentals' are not, to my mind, very satisfying. The last two suggest that the characteristic forms of social organization are distinct from European equality, but even then they are hardly diagnostic since many of the features described are characteristic of primitive societies which have not yet adopted a money economy. In any case the characterization hardly fits present-day conditions in the Union. There are surely many other sources of security and needs for security besides rain. Nor do the criteria of security, achievement, and recreation subsume the material given in the bulk of the book, that on social organization for instance. However interesting the attempt, it seems tacked, like an afterthought, to the end of the book.

It may be that we are not yet ready to tackle the outline comparative monograph. Radcliffe-Brown maintains that it is in any case an impossible task. But it seems to me a task which should be achievable if rigid, and perhaps rather arbitrary exclisions are practised, and by means of more exact terminology to make it possible to classify institutions into different types.

The exclusion must be done, I think, by omitting all general comparison of primitive and civilized societies which formed the bulk of many of the first functional studies, and by leaving out accounts of daily life and any such descriptive matter. The outline account should concentrate on the background
material necessary for future detailed studies of special aspects or theoretical discussions, and as a basis for comparative work. A short account of the affinities of the tribe in question will save some needless repetition of material already published elsewhere. The environment should be described only as it affects social structure and activities. Fundamental aspects can then be concentrated on. I would include among these the means of subsistence, that is to say, the type of economy in the anthropologist’s usual sense of economic activities, but also an analysis of the whole economic structure of the area and of the place of the tribal economy in the regional and world system. Firth has attempted to apply the classical concepts of economics to the study of a primitive people and I believe that anthropologists as a whole will have to learn to use economic concepts, or to work with economists, in order to be able to classify types of peasant economies in the way required, and to describe them in relation to present-day situations, an attempt which the Kriges do not make.

The second set of fundamental facts which I would include is the social structure, and here again much preliminary detailed work is required. Fortes and Evans-Pritchard have suggested the need for classifying African political systems into different types, and the work is one which urgently needs doing. Little attention has so far been paid to classify systems of local grouping, say in Africa, or the Pacific areas. The kinship terminology is more exact, and Radeliffe-Brown and others have shown the importance of detailed comparative work in classifying kinship types in this way. Age groups, legal groups, and others suggest themselves. I would emphasize too the need in an outline monograph for describing the tribal social structure in relation to the European, where the two cultures exist side by side, as has been done recently by Schapera, Gluckman, and Kuper but not in any detail in the book under review. I believe that the cultural difference between one Bantu chieftainship and another are smaller at present than those produced by the different systems of European government superimposed. The Lovudo chieftainship differs from the Ganda in some measure because of different cultural affinities, but more largely because of difference in the Uganda and Union attitude to native political organization. The modern outline monograph must make

1 Cf. Introduction to African Political Systems, edited by Evans-Pritchard and Fortes.
2 Cf. Primitive Polynesian Economics, by R. Firth.

CORRESPONDENCE

Nomad House-Sites in the Western Himalayas. Illus-
trated.

Sir,—The following notes are the result of a recent opportunity of examining, in a restricted area of the Western Himalayas, the camping sites and semi-permanent dwellings of the nomad herdsmen and traders along an important route leading from Western Tibet into India. Apart from their intrinsic anthropological interest, these camp sites and the trade with which they are connected form an instructive commentary for British prehistorians on primitive house-founding and trade routes in our own mountains.

The natural setting is briefly as follows. The state of Lahoul, though politically part of British India, is a Tibetan borderland, which by geography, human culture, flora and fauna belongs completely to the palaarctic uplands to the north than to the sub-tropical Himalayan foothills lying to the south, from which it is separated by the mountains of the Pir Panjal range. From Kye,lang, the capital, itself a converging point of routes across the mountain passes to north and north-west), runs an important trade route eastwards up the valley of the Chandra (Upper Chenab) river until, turning south, it crosses the Rohtang Pass over the Pir Panjal into the Punjab by the valley of the Upper Beas and the trade marts of Manali and to (a lesser extent) Kulu further south. The staple of trade is wool, with rock-salt as a subsidiary item, and the pack animals comprise not only ponies and mules, but the sheep and goats themselves are frequently herded over the pass carrying small packs on their backs.

Human settlement in the Chandra valley is very sparse, cultivation in the barren valley, itself 10,000 feet above sea-level, and flanked by mountains rising nearly as high again into permanent snow-peaks and ice-fields, being confined to the small alluvial fans at the mouths of the tributary streams feeding the Chandra from the main Himalayan range to the north. These deltas, on the sunny side of the east-west valley, have each a patch of barley fields and a small village, or several scattered hamlets on this level ground, and support a small settled population of farmers. But over against this agricultural community with its permanent villages, the traders and herdsmen moving along the valley constitute a second, nomadic, element, which apart from trading with the villagers for e.g. millet (barley-meal), lives independently and has its own regular camping-sites situated, not with reference to the villages, but wherever level ground, grazing, and a good spring occur conveniently together beside the track. On these camping-sites are constructed foundations of dry-stone walling over which tents can be erected when the site is occupied; when the camp is struck the tents are removed and packed away with the other baggage and the foundations remain to serve the next caravan which may use the site. The house-type represented here is extremely simple and primitive.

Typical lay-outs of these tent-foundations drawn from
temporarily unoccupied sites are given in figs. 3-5. The oval plan with flattened sides is more or less dictated by the tent shape—the cheap canvas tents of Indian manufacture, now used, have replaced skin or felt structures in relatively recent times. The wall around the back and sides is seldom more than a few courses—about a foot—in height, and in some
instances stones set on edge are used. But in front the walls are built up to two or three feet high at both sides of the entrance, at one side of which is a well-built fireplace over which the protecting wall is often corbelled to a considerable degree. The fuel is dried dung, which is stored by the fireplace to aid its rapid drying. The remaining feature is a paved bed-area at the back, and sometimes this is prolonged on the fireplace side of the tent, to afford a warm seat. On unoccupied sites there is nothing to indicate the method of roofing, since the tent supports are thin light sticks which would leave no trace in the ground, nor, apart from the ashes of the fire, is there anything to show human occupation—no ‘small finds’ or potsherds, since the cooking vessels are all copper or brass, and everything is carefully packed up when the camp is struck and the caravan moves on.

The main purpose of these stone-built foundations is of course to minimize the draughts in a region where the winds may be violent and persistent: the elaboration of the walls at the entrance and protecting the fire are particularly necessary, and the distribution of the type brings out this function in a very interesting manner. Such camping-sites occur following the wool trade-route over the pass to Manali and beyond, and it is immediately noticeable that once one leaves the bleak and treeless Chandra Valley and crosses into the sheltered and well wooded Upper Beas, the tent foundations become more and more slight and finally almost disappear as permanent structures (except for a simple fireplace without any protecting wall) in the region south of Manali. Their ‘degeneration’ is in fact a function of the ameliorating climatic conditions as the route runs south.

Were the culture that produced these characteristic house-sites extinct, the wool-route might be mapped from their distribution along its course, and in this connexion is another interesting feature. The religion of Lahouli is Lamaist Buddhism; of the Upper Beas, Hindu. In the Chandra Valley the formal centres of religion, the monasteries, are augmented along the route by shrines comprising shortens, mendongs (short lengths of wall with the magical Om Mane Padme Hum formula carved in endless repetition on them) and the same formula carved on prominent rocks, everywhere in the Tibetan culture area. But significantly enough evidence of the wool-traders’ religion as well as their domestic arrangements is seen along the trade route continuing into the Hindu area, for the Tibetan inscriptions continue until a point south of Manali, and there is even one mendong on the south side of the Rohtang Pass. Here then we have a most interesting example of the spiritual as well as the material content of a people’s culture being manifested in permanent form along a trade route.

For comparison with primitive house-foundations of prehistoric or early historic date in the British ‘Highland Zone,’ these tent sites of the Lahouli traders have some importance, for though geographically remote, the economic conditions and natural settings are not so dissimilar that we cannot observe the manifestations of a living culture in one area and with profit apply our observations to the interpretation of the extinct culture in the other. It is amusing to reflect that the lack of finds on a site need not always mean poverty—the itinerant wool traders of the Chandra Valley are certainly a far richer community than the settled agriculturists in the same region.

Stuart Piggott.
CENTENARY NUMBER

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Candidates are requested to address any enquiries, and to send their application with such evidence of their qualifications as they think fit, to the Secretary of the Appointments Committee of the Faculty of Archaeology and Anthropology at the Museum of Archaeology and of Ethnology, Cambridge, on or before 15 April, 1944.

Queens' College Lodge.

24 June, 1943.
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