

The Study of Man.¹

By H. J. E. PEAKE.

A CHANGE has been creeping over our science. Twelve years ago anthropologists were devoting their energies to the tracing out of the evolution of customs and material culture, assuming that, where similarities were found in different parts of the world, they were due to independent origins. It was assumed that the workings of the human mind were everywhere similar, and that, given similar conditions, similar customs would originate. The evolution of civilisation was looked upon as a single line of advance, conditioned by the unalterable nature of the human mind, and that barbarian and savage cultures were but forms of arrested development, and indicated very closely past stages of civilised communities.

But a fresh school of thought has come into prominence. According to this new view discoveries are made but once, and when resemblances are found between the cultures of different communities, even though widely separated, this is due to some connexion between them. According to the new school, the development of civilisation has been proceeding by many different paths, in response to as many types of environment, but these various advances have frequently met, and from the clash of two cultures has arisen another, often different, more complex, and usually more highly developed than either of its parents.

The old school looked upon the advance of culture as a single highway, along which different groups had been wandering at varying paces, so that, while some had traversed long distances, others had progressed but a short way. The new school, on the other hand, conceives of each group as traversing its own particular way, but that the paths frequently meet, cross, or coalesce, and that where the greatest number of paths have joined, there the pace has been quickest.

The older school, basing its views of the development of civilisation upon the doctrine of Evolution, has called itself the Evolutionary School. The newer, while believing no less in Evolution, feels it a duty to trace the various stages through which each type of civilisation has passed, rather than to assume that these stages have followed the succession observable elsewhere; thus, as historical factors form a large part of its inquiry, it has been termed the Historical School.²

The first note announcing the coming change was sounded from this chair eleven years ago,³ and during the interval which has elapsed the new school has gained many adherents. All will not subscribe to the dictum that no discovery has been made twice; nevertheless there is a tendency not to assume an independent origin for any custom until it has been proved that such could not have been introduced from some other area.

These tendencies have led the anthropologist to inquire into the history of the peoples whose civilisation he is studying, and to note, too, minute points in their environment. At the same time geography began to take special note of man and his doings. This anthropo-geography concerned itself with inquiring into the re-

actions between man and his environment, and though at first the environment was the main object of the geographer's attention, he is now inclined to pay more attention to its effect upon man. Thus anthropology and geography have been drawing closer, and as the latter is a recognised subject in our schools, no small amount of anthropological knowledge has been instilled into the minds of our boys and girls.

It might have been expected that the historians before the geographers would have been attracted to the anthropological approach, but recent events have up to now engrossed their attention. Signs have not been lacking, however, that the study of peoples and their customs, rather than of kings and politicians, is gaining ground, and we may look with confidence towards closer relations between the studies of history and anthropology.

Again, we may notice an increasing interest in our subject among sociologists and economists. These have focussed their attention upon the social organisation and economic well-being of civilised communities, with the view of presenting an orderly array of facts and principles before the political leaders. There has, however, been a tendency to trace these modern conditions back into the past, and to use for comparison examples drawn from the social organisation or economic conditions of communities living under simpler conditions. While these studies overlap those of the anthropologist, the methods used are different. We are working from the simple to the complex; they begin with highly developed conditions and thence work back to the primitive.

Lastly, we must not forget the students of the classical languages. In spite of many advantages which they possess at schools and universities, they have been losing in popularity, and the reason is not far to seek. So long as there were fresh works to be studied and imperfect texts to be emended, there was no lack of devotees to classical literature. Later, comparative philology gave fresh life to such studies, and certain views current among mid-nineteenth-century philologists gave also an impetus to the re-study of Greek mythology. But about 1890 such studies became unfashionable, and many classical scholars turned to anthropology with great advantage both to themselves and to us.

It is doubtless as a result of these converging movements that the general public is taking an interest in anthropological studies, and that works of a general nature, summing up the state of knowledge in its different branches, are in great request. The educated public wish to know more of the science of man, yet I fear they are too often perplexed by the discordant utterances of anthropologists, many of whom seem to be far from certain as to the message they have to deliver.

In their turn not a few anthropologists feel a like uncertainty as to the ultimate purpose of their studies, and are not clear as to how the results of their investigations can be of any benefit to humanity. These are points well worthy of consideration; for, as we were reminded from this chair two years ago,⁴ anthropology, if it is to do its duty, must be useful to the State,

¹ From the presidential address delivered to Section H (Anthropology) of the British Association at Hull on September 7.

² Rivers, W. H. R., "History and Ethnology," *History*, v. 65-7, London (1920).

³ Rivers, W. H. R., "The Ethnological Analysis of Culture," Report of Brit. Assoc., 1911, 490-2.

⁴ Karl Pearson: Address to the Anthropological Section, Brit. Assoc. Report, 1920, 140-1.

or to humanity in general. Even the scope of the science is by no means clear to all, and would be differently defined by various students. It may not be out of place, therefore, to consider in detail the scope and content of anthropology, then its aims and the services it may render to mankind.

To the outside world anthropology seems to consist of the study of flint implements, skeletons, and the ways of savage men, and to many students of the subject its boundaries are scarcely more extensive. Yet civilised people also are men, and anthropology should include these within its survey. That other scientific workers, historians, geographers, sociologists, and economists, study civilised man is no reason why the anthropologist should fail to take him into account, for his point of view differs in many respects from theirs. I would suggest, therefore, that all types of men, from the most civilised to the most primitive, in all times and in all places, come within the scope of anthropology.

Anthropology is the study of man, but we need a more accurate definition. A former occupant of this chair has declared that "anthropology is the whole history of man as fired by the idea of evolution. Man in evolution—that is the subject in its full reach." He adds: "Anthropology studies man as he occurs at all known times. It studies him as he occurs in all known parts of the world. It studies him body and soul together."⁵

Anthropology may, therefore, be defined as the study of the origin and evolution of man and his works. What, then, separates anthropology from the other studies which are concerned with man is, that the anthropologist studies him from all points of view—that his is a synthetic study; above all, that evolution is his watchword; that his study is, in fact, not static but dynamic.

If, then, we grant that anthropology is the synthetic study of the evolution of man and his manifold activities, we are dealing with a subject so vast that some subdivision becomes necessary if we are to realise what the study involves. Such divisions or classification must be arbitrary, but we may consider the subject as divided primarily into two main categories: "man" and "his works."

But man himself cannot be considered from one aspect only, and it seems fitting that the anthropologist should consider that man consists of body and mind; the study of these is the special province of the anatomist, the physical anthropologist, and the psychologist. Here, again, it may be asserted that anatomy and psychology are distinct sciences, but anatomy, in so far as it helps us to understand the evolution of man, and again as it helps us to trace the variations in the human frame, is and always has been reckoned a branch of anthropology. Again, in the case of psychology, there is much which is not, strictly speaking, anthropological. On the other hand, in so far as psychology enables us to trace the development of the human mind from that of the animal, and in so far, too, as it can interpret the causes which have led to various forms of human activity, it is a branch of our science. If, too, it can help us to ascertain whether certain fundamental mental traits are normally associated with certain physical types, psychology will provide anthro-

⁵ Marett, R. R., "Anthropology," p. 1.

pologists with a means of interpreting many of the phenomena which they have noted but cannot fully explain.

The works of man are so varied that it is no easy task to classify them. We may, however, first distinguish the work of man's hands, his material culture, from his other activities. Under this heading we should include his tools, weapons, pottery, and textiles; his dwellings, tombs, and temples; his architecture and his art.

Next, we have the problems concerned with language, which we may consider as dealing with the means whereby men hold intercourse with one another. This heading might well include gesture at one end and writing at the other. Hitherto anthropologists have confined their attention too exclusively to the tongues of backward tribes, and left the speech of more advanced peoples to the philologists. I would plead, however, that language is such an essential element in human culture that comparative philologists might well consider themselves as anthropologists.

Lastly, we have social organisation and all that may be included under the terms "customs" and "institutions," a varied group, leading to the study of law and religion. Here, again, we come in contact with other studies—those of the lawyer, political economist, and theologian; but though the anthropologist is studying the same facts, his range is wider and his outlook more dynamic.

Thus it will be seen that in the three divisions of man's work, as well as in the two aspects of man himself, the anthropologist finds other workers in the field. But whereas these other sciences are concerned only with some part of man and his works, and are limited frequently to recent times and civilised communities, it is the province of the anthropologist to review them as a whole, in all times and in all places, and to trace their evolution from the simplest to the most complex.

If we accept the views of the historical school, anthropology becomes a new method of treating historical material. It is, in fact, the history of man and his civilisation, drawn not so much from written documents as from actual remains, whether of material objects or of customs and beliefs. It is concerned with wars only so far as these have produced a change in the population or language of a region. It is interested in kings only when these functionaries have retained customs indicative either of priesthood or divinity. It is interested less in legal enactments than in customary institutions, less in official theology than in the beliefs of the people; the acts of politicians concern it not so much as do the habits of humbler folk.

From some points of view anthropology may be considered as a department of zoology. A century ago zoologists were engaged in studying the higher animals, and for a time neglected the "radiate mob." Then all interest was focussed upon lowly forms, and the protozoa occupied a disproportionate part of their attention. Lately, again, their work has been more evenly distributed over the whole field. This choice of groups for special study was not due to mere caprice. The more obvious forms of life were first studied; then attention was focussed upon the simpler organisms; for, from the study of these, the zoologist was able to grasp

the underlying principles of life. These lessons learnt, he was able to attack the problems affecting the welfare of mankind.

So with the student of man. For many centuries historians, philosophers, and theologians have been studying the ways of civilised humanity, though not by the methods of the anthropologist. For, just as they were attracted by the higher groups of men, so were they fascinated by the more conspicuous individuals. During the nineteenth century, students were attracted towards the backward types of humanity, partly because of their very unlikeness to ourselves, and of recent years because they felt that the customs of these peoples were fast disappearing. But from a scientific point of view, the paramount reason was because it was felt that in such simple societies we should find the germ from which human civilisation had begun.

Much of the force of this last argument is disappearing as the evolutionary school gives place to the historical. We are becoming aware that the civilisation of backward peoples is more complex than was at first believed. We are giving up the belief that such people have preserved our ancestral types alive to the present day, for we are realising that they represent not so much our ancestors as our poor relations.

Though we must abandon the ancestral view, and cease to believe that these backward communities represent to-day the conditions under which we dwelt in the past, the institutions of these folk are in many respects less complex than our own, and it is possible to study them from every aspect with far greater ease than we could do in the case of one of the higher civilisations. Since it is the function of anthropology to study man synthetically, this is a great advantage. When dealing with these simpler problems we can evolve a method and a discipline to be applied in more complicated cases. Again, the backward peoples have no written history, and we are forced in this case to restore their past by other means. This has led to the development of fresh methods of attacking the problems of the past, which may prove of value in the case of more advanced communities.

For these reasons the study of backward peoples still has great value for the anthropologist. He has not yet solved all the problems concerned with the dawn of civilisation, nor has he yet perfected his methods and discipline. More workers and expert workers are needed in this field, and so it is that our universities devote the greater part of their energies to training students for this purpose. There are many students, however, who cannot visit wild lands to study the ways of their inhabitants. Some of these, it is true, may sift the material collected by their colleagues, though they will be at considerable disadvantage if they have had no personal experience of the people with which their material deals.

The time seems to have arrived when anthropologists should not concentrate so exclusively upon these lowly cultures, but might carry on their researches into those civilisations which have advanced further in their evolution. Not that I wish to deprecate in any way the study of backward peoples, or to discourage students from researches in that direction; but I would suggest that some anthropologists might initiate a closer

inquiry into the conditions of more civilised peoples, in addition to the studies already described.

We have in the Old World three great centres of culture, each of which has been in the van of progress, and each of which has contributed to the advance of the others. These are the civilisations of China, Hindustan, and what I will call the European Region.

Though our relations with China and Japan have been intimate for several generations, and many of our compatriots are familiar with both countries, it is surprising how little we know of either of these people from the anthropological point of view. This is the more to be regretted since for more than half a century Japan has been adopting features from Western civilisation, while there are signs that the same movement is beginning in China. So far those who have made themselves familiar with the languages of the Far East have studied the art, literature, philosophy, and religion of these regions, rather than those aspects which more properly belong to our subject.

What concerns us more nearly in this country is the Indian Region. Here we have a well-defined province, peopled by successive waves of different races, speaking different languages, and with different customs and beliefs—an apparently inextricable tangle of diverse elements in various stages of cultural evolution. A vast amount of material has been gathered in the past, though such collecting has not been proceeding so fast during the last generation; but basic problems are still unsolved, and seem at times well-nigh insoluble. Perhaps it is this superabundance of material, or it may be the apparent hopelessness of the task, which has diminished the interest taken in these studies during the past few years. This attitude is regrettable, and the only redeeming feature is the extremely active and intelligent interest in these problems now taken by various groups of Indian students, especially in the University of Calcutta.

I have suggested that perhaps the lack of interest in such matters among Anglo-Indians, and especially among members of the Indian Civil Service, may be due to the apparent hopelessness of reaching a solution of any of the problems involved. It may also be due to the fact that they are sent out from this country to govern a population with different cultures and beliefs, and traditions wholly unlike those of this continent, without having received in most cases any preparation which will enable them to study, appreciate, or understand an alien civilisation. Thus they misunderstand those among whom they are sent, and are in turn misunderstood. Guiltless of any evil intent, they offend the susceptibilities of those among whom their lot is cast, and acts are put down to indifference which are only the product of ignorance. After making their initial mistakes the more intelligent set to work to study the people committed to their charge, but faced with problems of extreme intricacy, and without any previous training, more often than not they give up the attempt as hopeless.

That candidates for the Indian Civil Service should receive a full training in anthropology before leaving this country has been pleaded time after time by this Section and by the Anthropological Institute, and though I repeat the plea, which will probably be as useless as its predecessors, I would add more. The problems con-

fronting the anthropologist and the administrator in India are of such extreme complexity that it needs a very considerable amount of combined action and research even to lay down the method and the lines along which future inquiries should be made. Such a school of thought, such a nucleus around which further research may be grouped, does not yet exist; the materials out of which it can be formed can scarcely yet be found. Yet until such a nucleus has been created, and has gathered around it a devoted band of researchers, no true understanding will be found of the problems which daily confront both peoples, and the East and the West will remain apart, subject to mutual recriminations, the natural outcome of mutual misunderstanding.

One solution only do I see to this dilemma. For many years past there have been institutions at Athens and Rome, where carefully chosen students have spent several years studying the ancient and modern conditions of those cities and their people. By this means a group of Englishmen have returned to this country well informed, not only as to the ancient but the modern conditions of Greece and Italy. Besides this we have had in each of the capitals of those two States an institution which has acted as a centre or focus of research into the civilisation of those countries. Although the main objects in both cases have been the true understanding of the cultures of the distant past, the constant intercourse of students of both nationalities working for a common end has resulted in a better understanding on the part of each of the aims and ideals of the other. I have no hesitation in saying that the existence of the British Schools at Athens and Rome has been of enormous value in bringing about and preserving friendly relations between the people of this country and those of Greece and Italy.

I cannot help feeling that a similar institution in India, served by a sympathetic and well-trained staff, to which carefully selected university men might go for a few years of post-graduate study, would go far towards removing many of the misunderstandings which are causing friction between the British and Indian peoples. Such a British School in India, if it is to be a success, should not be a Government institution, but should be founded and endowed by private benefactors of both nationalities. It would be a centre around which would gather all anthropological work in the peninsula, while it would enable the British students to arrive at a truer understanding of Indian ideals and help Indians to grasp more fully the relations subsisting between the Indian and European civilisations.

Lastly, we come to the European Region, extending southward to the Sahara, and eastwards to Mesopotamia. Throughout this region the racial basis of the population is similar, though the proportion of the elements varies. Also throughout the region there has been, from the earliest days, free communication and no great barriers to trade and migration.

Until the last fifteen hundred years the civilisation of this area was fairly uniform, though its highest and earliest developments were in the south-east, while the northern zones lagged behind and were on the outer fringe. Nevertheless it formed from palæolithic times one cultural region, and this became more marked and

homogeneous during the days of the Roman Empire. Two forces from without destroyed that mighty empire and divided the region into two halves; and as each of these forces adopted different religious views, the European cultural region became divided into two. We have, therefore, to treat the European cultural region as two, the civilisations of Islam and Christendom.

Though the separation of these two halves is relatively recent, their ideals have grown divergent, while the inhabitants of both zones are no nearer to a true understanding of one another. Political difficulties in the Near East are the natural result of such misunderstandings, and the remedy here is to achieve a truer appreciation of other points of view. A more thorough knowledge of the anthropological factors of the case seems to be a necessary preliminary to such mutual understanding, and since the League of Nations and the Versailles Treaty have seen fit to add to our responsibilities in this area, it is an urgent necessity that some of our anthropologists should pay closer attention to the problems of the Near East.

And now with regard to Christendom. Are we to consider that our duties as anthropologists end with alien cultures? Is Christendom so united that misunderstandings cannot arise within its borders? At the close of a great war we can scarcely claim that there is no room for our studies.

There has been a tendency hitherto to regard anthropology as a science dealing with backward peoples, and it has been felt that to apply its principles to neighbouring peoples might be looked upon as an insult. If, however, we agree that all mankind are fit material for the anthropologist's investigations, we need have no hesitation in studying their material culture, social organisation, and religious beliefs, just as already, for practical purposes, we study their languages. There is not a country in Europe in which we may not find features of an anthropological nature which separate its population from the inhabitants of other areas. It is these differences which come to the front when trouble is brewing, and these are the factors which we need to understand if we are to avoid giving offence in moments of national irritation. Constant travel by people alive to the importance of such inquiries will in time so influence the public opinion of many of the nations of Europe that misunderstandings will be less frequent, and national sensitiveness less prone to take offence at words and actions which are not intended to provoke.

But it is not only foreign countries and their inhabitants which the anthropologist needs to study. In every country there are different strata in the population which have different customs and a different outlook. The British Isles are no exception to this rule; history records the successive arrivals of Romans, Saxons, Danes, and Normans, and the study of prehistoric remains shows us that these invasions have been preceded by a greater number in earlier days. Just as the physical type of the Briton is far from uniform, so are his mental outlook and his ideals and beliefs. Quite apart from the differences observable in the different countries which compose our group of islands, we find also that the population insensibly divides itself into classes, differing but slightly except in name from what we know in India as castes. These classes in the British

Isles have had their origin in the successive waves of conquest which these islands have suffered. Individuals have freely passed from one class to another, but though the individuals have changed the classes have remained. Owing to the constant interchange in blood the physical characters of the different classes are much alike, as are their fundamental mental traits, but in material culture, language, social organisation, and to some extent religious beliefs, they differ widely. Here then again, in our own country, there is work for the anthropologist who never leaves these shores.

Turning now to the aims of anthropology and to the means whereby it may become of service to the State and to mankind in general, we see that it is of the utmost importance that those who are sent to govern or administer areas and districts mainly occupied by backward peoples should have received sufficient training in the science to enable them, in the shortest possible space of time, and consequently with the fewest possible initial mistakes, to govern a people whose customs, traditions, and beliefs are very different from their own, without offending the susceptibilities of their subjects.

We are an Imperial people, and during the last few centuries we have taken upon ourselves a lion's share of the white man's self-imposed burden, and the lives and well-being of millions of our backward brethren have been entrusted to our charge. Recent events have, by means of mandates, added largely to our responsibilities in this respect. We, of all nations, cannot disregard this fundamental duty of despatching our proconsuls fitted to undertake these great responsibilities.

But the burden we have undertaken extends not only to backward peoples; we have been called upon to govern or to advise the governments of peoples who have a civilisation little, if at all, inferior to our own, and to whom at one time we have been indebted for much of the culture that we now enjoy. The civilisations of these regions are infinitely more complex, and the people are not homogeneous, but are divided into numerous sections, differing in language, religion, and social customs. In these regions we meet with anthropological problems of infinite difficulty and complexity, on the solution of which depend the peace and well-being of the population. Yet our representatives go to take up their duties in these lands with little or no previous training, and it is only a marvel that errors of tact, due to ignorance, are not more common.

In these civilised regions race consciousness has been growing fast during the last half-century, and errors of tact and manners, which were submitted to in former times, though not with a good grace, are now actively resented, and the old methods of government are discredited. It may not yet be too late to remedy this evil, if no time is lost in giving a full anthropological training to those who are sent to administer these regions.

But we are not only an Imperial people, governing and administering regions with alien populations; we are also a wandering and adventurous people. The nomadic spirit of our ancestors is still alive within us; our ships, like those of the Vikings of old, are to be seen in every sea. So it comes that our people will be found in all lands and all climates from the Arctic circle to the Equator.

All these wandering Britons come in contact with the inhabitants of the lands they visit, creating various impressions, sometimes good, more often bad. Had they a fuller knowledge of the customs and opinions of the people they visit, or even a truer appreciation of the fact that diverse customs and opinions exist and should be respected, we should not have to record the creation of so many bad impressions. Luckily our people, as a rule, have much common sense, and often a desire to please, so this trouble is thus to some extent mitigated; but the difficulties that have arisen from ignorance of the ways of others, from too insular an outlook, in fact, from a lack of appreciation of the anthropological standpoint, are making us and our government heartily disliked in nearly every quarter of the globe. It is to remedy these difficulties, and the danger to the peace of the world which is threatened thereby, that I would advocate an increased study of anthropology by all sections of the community. Herein lies one of the chief means by which our science may become of service to mankind.

It is not my business to draft a scheme for the furtherance of anthropological studies. Two of our universities offer degrees in this subject, and others a diploma; courses of instruction on some sections of the subject are given there and elsewhere. Many teachers of geography are introducing much anthropological matter into their curricula, and there are signs that some historical teachers may follow suit, so that the subject-matter, if not the name, is not unknown in some of our schools. But we have much lost time to make up and the matter is urgent.

We cannot, of course, expect all our people to be trained anthropologists and to understand fully all the ways of the people they may chance to meet in their wanderings. What matters far more is that they should appreciate the fact that different peoples have had different pasts and so act differently in response to the same stimuli. Further, that all this diversity has its value; that we cannot be sure that one culture is in all respects superior to another, still less that ours is the best and the only one which is of consequence. It is not so much the facts that matter as the spirit of anthropology; we need not so much that our people should have anthropological knowledge as that they should learn to think anthropologically.

It is needless for me to remind you that the world is in a state of very unstable equilibrium—that the crust is, so to speak, cracked in many places, and that the fissures are becoming wider and deeper, and that fresh fissures are constantly appearing, not only in distant lands but nearer home. Again, this crust, if I may continue the geological metaphor, is stratified, and there are horizontal as well as vertical cleavages, which are daily becoming more marked. It is to the interest of humanity that these breaches should be healed and the cracks stopped, or we may find the civilisation of the world, which has grown up through long millennia at the cost of enormous struggles, break up into a thousand fragments. Such a break in the culture of the European Region followed the dissolution of the Roman Empire, and more than a thousand years were needed to heal it; nay, some of the cracks then made have never yet been closed.

Anything that may help to avert such a disaster is

important to the human race, and there is no greater danger at present than the alienation of the peoples of Asia and the Near East. Much of the ill-feeling engendered in India, Egypt, and elsewhere is the product of misunderstandings, due to a lack of appreciation on

both sides of the opinions and views of the other party, and there seems to be no better method of removing such misunderstandings than a sympathetic study of one another's culture; to this end anthropology offers the most hopeful approach.

Obituary.

DR. DAVID SHARP, F.R.S.

DR. DAVID SHARP, whose name, it has been well said, is a household word wherever the science of entomology is pursued, died on August 27 at his home at Brockenhurst. His love of entomology, the great and continuing enthusiasm of his life, dated from his early childhood. Born in 1840 at Towcester, Northamptonshire, his early years were passed at Whittlebury, Northants, and at Stony Stratford. His parents later moved to London, and it was at Loudoun Road, St. John's Wood, that Herbert Spencer was an inmate of Sharp's father's house, as Spencer himself has related in his autobiography. Sharp himself said that his youthful intimacy with Spencer had influenced him considerably, and throughout his life he retained in Spencer's work an interest which found expression in the publication in 1904 of an article on "the place of Herbert Spencer in biology."

Sharp was destined by his father for a business career, but, finding this uncongenial, he studied medicine in London and afterwards at Edinburgh University, where he graduated in 1866 with the degrees M.B. and C.M. Specialising in the treatment of mental illnesses, he resided for some years at Thornhill in Dumfriesshire. He left Scotland in 1884 and lived at Shirley Warren, Southampton, and afterwards at Wilmington, near Dartford, Kent. Early in 1890 he was appointed curator of the insect collections of the University Museum of Zoology, Cambridge, a post which he resigned early in 1909. He then retired to Brockenhurst, where he passed the rest of his days.

Most of his multitudinous writings are systematic works on the Coleoptera, to which he devoted the greater part of his life, but many deal with other insects or with life-histories, or have a still wider bearing, for his learning extended to a wonderful degree over the whole field of entomology. He had an unrivalled knowledge of the British Coleoptera, and already in 1869 had published a monograph of nearly 200 pages on the obscure genus *Homalota*. His list of the Coleoptera of Scotland appeared in the early volumes of the *Scottish Naturalist*, and he published two catalogues of the Coleopterous fauna of Britain, the second in collaboration with Canon W. W. Fowler. His numerous other studies of British beetles form a series of papers continuing to the last years of his life.

Sharp's biggest works on foreign Coleoptera are the monograph of water-beetles (*Dytiscidae*) published by the Royal Dublin Society in 1882, and his contributions to the "Biologia Centrali-Americana." In the latter he wrote the whole of the volume on Adepaga and Staphylinidae, more than 800 pages, the greater part of the volume on Clavicorns, and three other important sections. He also published in 1876 a paper of nearly 400 pages on the Staphylinidae of the Amazons. On

New Zealand beetles, a fauna in which he was specially interested, he produced a long series of memoirs. One can barely allude to his papers on the beetles of Japan, an important series, and to others on those of Ceylon, Southern India, the White Nile, etc., with many more, far too numerous to mention. Systematists, knowing the work required for the production of a single careful description, will appreciate the immense amount of toil needed to achieve these results. Special mention must be made of Sharp's work on the faunas of islands. A series of earlier papers on Hawaiian beetles was but the prelude to his labours as secretary of the committee appointed in 1890 to investigate that fauna, and as editor of the three large volumes of the "Fauna Hawaiiensis," of which he himself wrote several considerable parts. He was moreover a member of the committee appointed in 1888 to examine the flora and fauna of the West Indies.

Of his more general writings undoubtedly the best known are the two volumes on insects in the "Cambridge Natural History," published in 1895 and 1899 respectively, which at once became standard works. His memoir (1912) written in collaboration with Mr. F. Muir on "the comparative anatomy of the male genital tube in Coleoptera" is a masterly treatise, on the production of which the breadth of his learning was brought to bear. In 1873 appeared his pamphlet on "the object and method of zoological nomenclature," in which he elaborated the view that nomenclature requires, for the maintenance of continuity of knowledge, fixed names for the species of animals, while changing ideas as to classification need shifting names for their expression. He advocated that the two names, generic and trivial, originally given to an animal should always be preserved intact, even though it may subsequently be placed in several different genera at different periods. He held also that the analytic system of Linnaeus, in which species are treated as fractions of genera, broke down almost at once, and that only by a synthetic system could progress be made; that species must first be rightly understood, and then grouped into genera. These ideas he carried into practice in his monograph of the water-beetles, but in his later works he did not adhere strictly to the system of naming there used. In the introduction to that monograph he also expressed some of his views on the origin of species, an example of his cautiousness with regard to accepted ideas. He also discussed the phylogeny of insects in the proceedings of the Congress of Zoology held at Cambridge in 1898; and the senses, especially the sight, of insects in his retiring presidential address to the Entomological Society (1888). To him are due the articles on "Termites" and "Insects" in the volumes of the "Encyclopædia Britannica" issued in 1902, as is also (in part) that on "Hexapoda" in the later edition (1910).