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ETHNOS
OR
THE PROBLEM OF RACE
CONSIDERED FROM A NEW POINT OF VIEW

TO-DAY AND TO-MORROW

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of this Book*

ETHNOS

OR

THE PROBLEM OF RACE CONSIDERED FROM A NEW POINT OF VIEW

BY

SIR ARTHUR KEITH, F.R.S., etc.

*Conservator of the Museum and Hunterian Professor
Royal College of Surgeons of England*

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PREFACE

In writing this little book I fear I have sinned in the eyes of my fellow-anthropologists. For we have a tacit understanding that we must not in any way trespass on politics. Here I have trespassed with my eyes open. It is impossible to write about Human Races without touching on matters which concern Statesmen just as much as Anthropologists. Nay, I have a hope that I may induce politically-minded people to study the problems of race from an anthropological point of view. The unrest which now disturbs the world arises from qualities inherent in human races. If the world is to have peace, the problems engendered by diversity of race must first be understood. If they are to be solved, Statesmen and Politicians must approach them from an

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anthropological or evolutionary point of view. It is from an evolutionary point of view they are discussed in this book.

The substance of my pages was given in the form of two lectures: (1) the Huxley Lecture to the Royal Anthropological Institute in 1928, (2) a public lecture given under the auspices of the same Institute in 1929. To the ideas contained in these two lectures I have added others belonging to the present year, 1930.

ARTHUR KEITH.

ROYAL COLLEGE OF SURGEONS,
W.C.2
October, 1930

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Evils which Result from the Division of Mankind into Races

The differentiation of humanity into races is a source of continuous trouble to mankind. Every morning, as you open your newspaper, you find that the peace of some part of the world is being disturbed by the friction which is engendered where race meets race. One day it is Palestine ; the Jew and the Arab find it hard to live in harmony. Another day it is South Africa ; the Boer and Briton who have everything to gain by working together, find themselves thrust apart by some impulse which is stronger than their individual wills. The heading which first caught my eye in this morning's "*Times*" runs thus : RACIAL OUTBURST IN TEXAS ; NEGRO BURNT TO DEATH. WHITE MOB'S

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FURY. Yesterday, in the corresponding column I read : **ALIEN IMMIGRANTS IN AUSTRALIA ; FEELING AGAINST ITALIANS.** If men in all parts of the world had been cast in the same mould, if Nature had dressed every human being in the same racial livery, the task of establishing new and harmonious settlements in East Africa would have been easy. As it is, the problem of planting in the same country peoples wearing three different liveries—white, brown and black—is taxing the resources of our statesmen to the utmost. The vast population of India suffers constantly from the disorders of racialism ; racialism keeps the Balkans in a state of perpetual ferment. From the first settlement of North America down to the present day our kith and kin have been dogged by the problems of race—the problem of the Red Indian, the problem of the Negro, the problem of Asiatic races. Racial divergence gives rise to the most distracting of issues—to disturbances not only of social and political peace, but also of the human

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conscience—for when men of one race occupy territory previously in possession of another, they find it impossible to frame laws which satisfy man's sense of justice. If we had all been of one race, if Nature had dressed our bodies in one common fleshy uniform, we would have been free from our ever-present racial difficulties; the world would have been exempt from its most potent cause of war; the task of the League of Nations would have been rendered much less difficult. Why then has Nature introduced this ever-disturbing factor into human life—the differentiation of Mankind into Races?

The Scheme of Man's Advancement has been organized on a Racial Basis

The ancient philosophers of the East, whose ideas have come down to us in the Book of Genesis, felt as we do, that an explanation must be given of the division of mankind into races. They launched the theory that descendants of

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the three sons of Noah—Shem, Ham, and Japeth spread abroad into the various continents of the earth and there underwent racial transformation. No suggestion is made as to how the transformation was effected nor of any advantage or drawback which resulted therefrom. We now know that all the continents of the Old World have been inhabited from times so remote that we have to reckon the antiquity of their first settlements by the geologist's calendar; that of the historian is useless for this purpose. The further back we go the greater do we find the degree of racial divergence to have been. These ancient types were more pronounced in their characteristics, and apparently more restricted in their areas of distribution. So far, we have discovered less than a dozen ancient human types; there were probably hundreds of them. They were organized on a racial basis—each with its peculiar livery of flesh and feature.

What is the meaning of this ancient organization of mankind into many and

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diverse types? The explanation which I offer is this : It was, and still is, Nature's way of evolving higher types ; for success there must be rivalry and competition. I use the word "higher" merely to indicate that the races which replaced others, whether by evolution or substitution, were the better adapted for the needs of the time and the locality ; in this sense only were they higher ; they need not have been larger brained. The general trend of evolution has been to give man a better knowledge of his surroundings, and to so endow him that from being the slave of circumstances he has become their master to a greater or less degree. Nature had hundreds of these experiments in human production on foot throughout the latest geological period of the earth's history—the pleistocene period. Out of the medley of types which inhabited the earth in remote times have evolved, under conditions of unconscious competition, the races which were found in possession of the world at the dawn of the historical period.

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The Racial Types of To-day

At the dawn of the historical period we find going forward four vast and successful experiments in race production—each assigned to a different quarter of the Old World. In Asia, north of the Himalayas, had come into being the most markedly differentiated examples of the Mongolian type—represented to-day in the facial features of the natives of Tibet, China, and Japan. Variants of this type, however, extend right across the world from the North Cape in Europe to Cape Horn in South America. So long has this experiment been on foot that hundreds of local divergencies have come into being, many of which claim a separate racial status.

South of the Himalayas was another great evolutionary cradle in which the Brown type of Man was evolved—the type which has given us the swarming millions of India, long since broken up into a great but uncertain number of races. Africa south of the Sahara was devoted

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to Nature's third great experiment—the production of men of Black type—represented in its most differentiated form by the Negro of the Congo. In this same African area was also evolved that most peculiar and most highly specialized of ancient types—the Bushman.

The fourth and most remarkable of the four major centres of human evolution extended across the Old World. This centre or region of distribution begins in the East with Afghanistan and the Arabian Peninsula, and ends in the West with Ireland and the Shetlands. This is the area in which the White type with its innumerable racial differentiations came first into being. No doubt there had been an immense racial disturbance in the White area long before the historian appeared on the scene ; nevertheless, so far as Europe is concerned the darker races still prevail in the South and the fairer races in the North, with no sharp line of division to separate them.

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Man as a Pawn on the Chessboard of Evolution

Although it will break the thread of my argument, I must explain to my reader here that my aim in this essay is to bring a knowledge gained from the study of prehistoric man to bear upon the racial problems of to-day. Until now there have been only two chapters in man's evolutionary history. The first chapter covered a very long period and was very important. It began with the emergence of humanity from a semi-simian or pithecanthropoid stage, and ended with the full-blown types of humanity found in Europe, in South Africa, and other parts of the world towards the end of the last ice-age. In that first phase the progress of man was effected in natural surroundings ; we have no reason to believe it was made by any conscious effort on man's part. Then some 10,000 years ago, when Europe was beginning to enjoy a more moderate climate, a new phase of human evolution was initiated. The art of Agriculture was discovered,

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mass populations became possible, and man's evolution proceeded under new conditions—the conditions found in cities—modern and ancient : These conditions were no longer made by nature, but made by man. Communities succeeded and multiplied if they could adapt themselves to the economic necessities of modern civilization ; they failed and disappeared if wild nature was strong within them. In the first or natural phase the production of race was everything ; in the second phase the production of race was sacrificed for the accumulation of wealth. If labour was wanted in the economic world it was sought for in the cheapest market—no matter what the race might be. The dawn of the economic period brought the first great phase of human evolution—the production of new races of mankind—to an end. Race production became sacrificed to economic necessity. Now in both of these phases—the natural and the economic—humanity walked towards its fate with closed eyes ; it silently submitted to its destiny ; it was

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but grist in the mill of evolution. If Eugenists have their way, and ultimately I have no doubt they will obtain the ear of statesmen, then a new phase—a conscious phase—in the evolution of mankind will be initiated. If we find that the way we are living is leading us straight to physical and mental bankruptcy then we can no longer afford to be mere pawns on the chessboard of Evolution; we must somehow take a hand in the game. If Eugenists have their way, human history will enter on a new or Eugenic phase of Evolution.

Some of the Factors concerned in the Evolution of Races

The previous paragraph reveals to the reader that I approach the problems of race from the point of view of a student of evolution, and that from this point of view mankind has reached or is reaching a critical point in its history. Meantime I have to resume the thread of my argument and touch upon the factors which

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have led to the differentiation of mankind into races. Now if early men and women had been world-wandering nomads, shifting here and there as the spirit moved them, mixing their blood in all lands with that of the races encountered, no local differentiation of races and racial types could have come about ; in every continent there would have been the same monotony of humanity brought about by indiscriminate hybridization. To have brought about the concentration of racial types in particular areas, man in early times must have been subject to strong influences which bound him to the homeland of his community. He must have been compelled to live so that his homeland and his community were kept intact over long periods of time ; only under such conditions could a racial type be preserved and advanced.

What were the influences which tied early man to the soil on which he was born ? They were mostly inside himself, not outside. First and chief there were all those emotional reactions which to-day

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are known as patriotism. This influence must have worked so strongly within the breasts of early man that it compelled him to lay down his life, if need be, in defence of his homeland and of his community. Not that such an endowment would have kept him, if opportunity offered, from extending his territory at the expense of his neighbour. Secondly, to obtain co-ordination of action in a primitive community its members must have been richly endowed with that complex of emotional reactions which are grouped under the name "herd instinct"—reactions which cause members of a community to move together when the safety or welfare of the community is threatened from without or within. What we call susceptibility to public opinion is a survival of this ancient outfit used by nature in the evolution of races. The Third influence which bound early man to his homeland was an instinctive preference for beings who wore his own livery of flesh, spoke and acted as he did. Early man had not to ask the stranger he

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encountered whether he was or was not of the same race ; Nature safeguarded her experiment by dressing each racial community in a distinctive garb of flesh—the more distant the race the more distinctive the racial uniform. Unless we presume that all of those racial reactions are inherent in man's nature and have been in action from the dawn of humanity we can give no reasonable explanation of how the races of mankind have been evolved, and why each has been given a distinctive racial uniform.

Patriotism as a Factor in Race Building.

My argument in the previous paragraphs is so condensed that I may have failed to convince my hearers that patriotism is an essential part of Nature's machinery for the improvement of man. Let me produce evidence from an unexpected source. Mr. H. G. Wells is an acute observer and deep thinker. In all his recent plans for bringing about a universal peace he realizes that the first

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thing that must be done is to eradicate the spirit of patriotism root and branch ; until this is done there can be no racial peace. He also sees that all the old instincts concerning recognition of kind—race-prejudice—must be eliminated. A boy or a girl must not be allowed to think, as they are only too apt to do, that their country and countrymen are the very best to be found in the world. Such prejudices must be eradicated in early childhood if the consummation which Mr. Wells desires is to come to pass—namely the obliteration of all racial barriers by the complete fusion of races. Presently I shall discuss the possibilities of putting Mr. Wells' scheme into practice and how much man would have to pay for peace at such a price. Meantime I merely cite Mr. Wells as a valuable witness ; he recognizes very clearly that patriotism and race-prejudice work towards the isolation of races. Without isolation evolution is powerless to work out new types.

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Capital and Economics have "upset" Nature's Plan of Evolution

Towards the end of the period of palæolithic culture—some 10,000 years ago or more—a change was introduced into human life—one which now threatens Nature's scheme of human evolution. Men about that time discovered how to sow and reap. It is probable that this discovery was made somewhere in South Western Asia—in the territory of "white" races. Miss Dorothy Garrod has shown me an implement from an upper palæolithic level of a cave in Palestine which exhibits signs of having served as a reaping tool. It may have been used on a natural grass, not corn. However this may be, the discovery of agriculture led to a gradual break-up—a disintegration—of the racial areas. The discovery brought about a revolution in this way. The command of a steady food-supply permitted peoples, formerly hunters, to build villages and live in them. The villages, in course of time, became cities,

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and city-states. With the rise of cities came commerce. In this way the old tribal territories—the cradles of evolution—were broken down. Then came the most momentous change of all—a change in man's outlook on the world. A primitive tribal people, in considering any change in policy, asks this question first : Will the proposed change enhance the prestige, unity, and freedom of our tribe ? Whether the proposed change be good for business or not, is a matter of secondary importance ; the welfare of the tribe always comes first. With the rise of the city state the primary question became : Will the proposed change be good for business ? If it were, it was adopted. The outlook became economic. Tribal boundaries were found by such states to be bad for trade ; they should therefore be broken down.

Then came Empire buildings ; a prosperous city state established a dominancy over surrounding states and thus brought within the bounds of a single realm a conglomeration of peoples—many

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of them still in a tribal state. I am quite sure that the Mesopotamian Kings and statesmen who instituted these conquests never dreamt that they were breaking an old and successful piece of Nature's machinery; I can hear a statesman of Ancient Babylonia assure his audience, when a successful expedition returned, that the object they had had in view had been accomplished; they had introduced the blessings of civilization to distant benighted peoples. The economic development of the world became the undoing of its evolutionary machinery. You may think from the way I am putting my case that my heart bleeds at the thought of the vandalism which destroyed those ancient tribal cradles and peoples living in a primitive state. Not a bit of it. The man of science has no business to allow sentiment to come between him and truth. The inevitable must happen. But I do think it important to recognize that with the discovery of agriculture and the accumulation of wealth the human world entered on a new and very

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difficult period of human evolution. A complete change took place in man's ideals; the earth was no longer a home to be hunted over; it no longer served as a breeding ground of races. Race-breeding became a secondary matter. Man's chief aim became the exploitation of the economic possibilities of the earth. If a country is not used for the best advantage of civilization then it is counted right and proper, under the present dispensation, that some enlightened people should step in and manage such a country for its inhabitants. Hitherto this has been an accepted principle; I do not commend or condemn it. The path has been entered and we have to follow it to the end.

To dissipate any misconception as to my own attitude towards race feeling or prejudice please suppose for the nonce that I was born soon enough to become a member of the tribal people who lived round St Albans in the year A.D. 49. I think when the Romans came I would have tried to kill as many of them as I

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could before they killed me. Tribal feelings were then strong in England and in free action. Of course it is easy to be brave off the battlefield. Yet I hardly think I would have run away and left my wife and children to face the wicked victors from overseas. But suppose I had made my appearance in Britain sometime in the third century when life went smoothly under Roman rule. I should then have blessed the Roman peace and been angry with those who wanted to throw off the yoke. I suppose that by then tribal instincts would have become dormant in me, but of course still in being. Suppose, however, it was when the Roman legions had sailed away that I was serving as a hind to some owner of a Roman villa. I would have been a tame sheep by that time and would not have cared, I suspect, in which flock I was driven. I would have had lost the pride inherent in tribalism. Now I know that such a result—the utter domestication of every man, woman and child in the world—is the aim which some of our

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philosophers advise us to strive for. For my part I think the races which retain their ancient tribal instincts, and resolve to modify them so as to suit modern conditions, are the races which are best—perhaps not for the economic prosperity of the world—but certainly for the ultimate advancement of humanity.

Nation and Race are the same thing

I have dallied so long over these minor introductory matters pertaining to race that I am running myself short of space to lay before my readers what I consider to be the most important part of my message. What is the relation of nation to race? Huxley said there was none. He regarded a nation as an artificial production, and this is the view which is still held and taught by most anthropologists. Huxley laid down as an axiom that the only scientific method of studying races is to apply the Zoological method: if a people could be distinguished from other peoples or nations by physical markings

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then it was a race in the right sense of the term. He applied this method to the nationalities of Britain and came to the conclusion all four were compounded out of the same three races, the national differences lying in the proportions of the blend. Now, if Huxley had practised his method in the world as it was eight or ten thousand years ago, it would have answered admirably. The racial conditions he had to study in the nineteenth century had become very different from what they had been in pre-economic times. Where Huxley went wrong was in believing that when Europeans belonging to separate racial stocks and guided by different traditions were planted together in the same land they became, if I may coin a term, deracialized and remained permanently so. They were no longer races but merely mongrel breeds. It never occurred to him that there still remained deeply implanted in their natures those "instincts" which are concerned in race-building. What actually happens when a land is peopled

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with a mixture of old races is that a new effort at race building is initiated sooner or later—just as a wren's nesting instincts are re-awakened as soon as the first nest and clutch are destroyed. So it is among strange peoples who settle in a foreign land ; they begin again at the bottom of the racial ladder and work at first towards a complete racial fusion and then towards the differentiation of a new race. A nation, be it ever so young, is in reality an incipient race. Politicians have been wiser than anthropologists ; variation in the shape of heads has no terror for them ; they recognize that the essential potency of race lies not in outward characters, but in the manifestation of these inward feelings known as "national spirit". Give the inhabitants of any land a national spirit, let that land be preserved intact over many generations, and a race which answers Huxley's definition will certainly appear under the working of the law of evolution. A nation always represents an attempt to become a race ; nation and race are but different degrees of the same evolutionary movement.

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The Characteristic Behaviour of Young Nationalities

I am sure that a sparrow in selecting the first straw for its nest has no clear idea of the objective in view—the rearing of young. I am also certain that a young nationality is unconscious of its final objective—the establishment of a separate race. That the process of race-building should be an unconscious one is to be expected if what I have said is true concerning the separation of early man into races. After the Great War we had many opportunities of studying the process of race-building as seen in our modern world. The process received the euphemistic name of “self-determination”; every small nationality in Europe claimed to exercise this right—the right of self-determination. The result was that the states of Europe—areas of Europe claiming the right of self-determination—were increased from 18 to 26. Let us look for a moment at the policy which was adopted and pursued by those young nationalities. Let us

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take Finland as an example—set free by the break-up of the Czar's Empire. The Finns are a fair and fine people— one of the fairest in Europe, first cousins to the Swedes. Indeed every tenth man is a Swede speaking the Swedish language. The Finnish language on the other hand is Asiatic in origin and tends to separate its speakers from intercourse with the other peoples of Europe. We should have expected that the modern Finnish statesman, making the economic welfare of his country his first consideration, would have taken the opportunity of the political upheaval to change the national tongue so that his country might share in a confederation of North European States. Exactly the opposite policy was adopted ; every measure was taken that would isolate and ring off Finland from the rest of the world. Particularly was this principle applied to everything that savoured of Sweden. Towns, railway stations, libraries, post-offices which had long been known by Swedish names had to be renamed in Finnish. A policy of isolation

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is bad for trade but absolutely necessary if there is to be race-building. Another sign of young nationality is its touchiness. In every deliberation the first consideration is—How will the proposed change effect our status in our own eyes and in the eyes of the world? A young nation will sacrifice every economical consideration to enhance its status and independence. These are the signs by which you can recognize the incipient stage in race-building.

Nationality and Race in Ireland

Anyone who compares the policy pursued by the founders of the Irish Free State with that adopted by the modern leaders of the Finns will be struck by the extraordinary degree of resemblance. The business Irishman recognized that close union and co-operation were desirable between Ireland and the rest of Britain. Nor were the Irish political leaders moved by any belief that separation would bring their country an economic gain. The

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material prosperity of their country did not weigh with them ; they reverted to the pre-economic phase of the world's history, race-building taking preference to all other considerations. For this purpose Ireland had to be ringed off as completely as possible—for isolation is just as necessary for the raising of a new race of men as for a new breed of cattle. To secure this ideal degree of isolation the Irish Free State has a harder task than Finland. English has become the speech of Ireland ; Erse is dying—almost dead. Part of the national policy is to make Erse again the national tongue, thus cutting off its readers and writers from free commerce with the English-speaking world. The change involves the people and their children in a turmoil of confusion and in a long period of strenuous application. And when the change in tongue has been ultimately completed what will have been the gain ? No Irishman will pretend that any material gain has resulted ; material motives do not appeal to him when Nationality stands

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at issue. The objective in view in all such cases is never a material gain ; such a suggestion is rejected with scorn. The search is always for an ideal—the ideal of a Free Ireland set at full liberty to work out her own destiny among the rocks and shallows of the Racial Seas of the World.

Odds and Ends of Race Craft.

I am dealing with the great subject of Race-Craft in a somewhat desultory manner. I laid before my readers isolated incidents concerning divers countries and periods in the hope of proving that the manifestations of a young nationality are not wilful perversions of human Nature but have a deep and permanent significance. From the way I have stated the case for Ireland it may be thought that her resolution to adopt the policy of self-determination has the approval of anthropologists—or rather that an anthropological vindication can be given of Ireland's course of action. I shall make my personal

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position clear by asking a question : Should a man allow his national impulses to guide him or should he guide them ? My emphatic answer is : He should guide them. My answer is not theoretical ; it is an outcome of experience in many countries and among diverse peoples and over a very considerable number of years. At heart I am still a " Scots wha hae " Scotsman, but when I was invited to join a movement to obtain for Scotland the rights of self-determination I refused. Now there is no country in the world that can equal Scotland in the fierceness of her patriotism ; she has in her heart the materials for a great racial conflagration, but she has also in her head that which controls and directs her wildest impulses. Scotland, at many a point of her long history, has heard the call of race, nor do I believe her union with England has in any way diminished her sense of nationality—which is the same to my way of thinking as a sense of race. But fortunately she has also realized that in the modern state of the world her

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national spirit can be developed more fully and more completely as a member of a great confederation of peoples of like kin than as a separate people cut off from her neighbours to face the world alone. When I add that the process of self-determination is the most costly, the most dangerous and the most hazardous of all movements on which a young nation can embark, you may think I have not overcome the influences of my birth-place. I have not, and I trust my patriotism will continue to abide with me. But I am quite sure that if Scotland's head were to capitulate to her heart, being thereby convinced that her national well-being could only be realized if she ploughed a lonely furrow, she would plough that furrow to the end, whatever the cost. I consider that it is just as impossible to stop a movement of self-determination in a strong self-reliant people once it is fairly started, as to arrest a great migratory movement of lemmings. Nor are the movements altogether unlike.

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The Spirit of Wales

In dealing with the distinctive nationality of Scotland I have said nothing about the diverse races that are incorporated in her population and have inherited the common spirit of her nationality. I have spoken as if the population could be moved in its entirety by a national wave of enthusiasm. If the lowlanders would adopt the garb and tongue of the Highlands then a united movement might result; but if they refused, as I fear they would, then I am afraid the "Western fringe" would have to make its independent way as best it could. Nor when I now touch on the nationality of Wales do I propose to consider the racial ingredients that have gone to make up her population. I hope my readers will not permit this omission to mislead them as to the value I attach to anthropological measurements; they may think I have not realized the high scientific worth of the anthropological survey made of the people of Wales by my friend Professor

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Fleure. I attach to it the very highest scientific value ; it is the best survey made of any people of Europe—not even excepting Norway and Sweden. What I wish to impress upon my readers now is that no matter what racial mixtures have entered into the composition of the Welsh people in the past—that mixture is being welded into a new race under the working of a common national spirit. I am of the impression that the national spirit of Wales grows in strength ; never before have so many and so earnest measures been taken to secure the teaching of Welsh in her schools ; her universities have thrown themselves into the study of her language, her ancient traditions and her history. National festivals lose nothing of their fervour and popularity. It may be asked—Is there not some danger in such a movement ? There would be if the heart of Wales ran away with her head ; Welsh reason is sufficiently strongly entrenched to resist every inducement that does not lead ultimately towards what is best for Wales, best for the Empire and best for the world.

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The Patriotism of England

I often meet Englishmen who assure me they are completely destitute of all those emotional disturbances and incentives to action that I am grouping under the term "national spirit"—or sense of race. All I can say is that I have seen the national heart of England give a very good imitation of what may be called a soul-shaking manifestation of National Spirit. I would say after a deliberate study extending over many years that in no people are race instincts, race prejudices, race determination, so strongly entrenched as in the hearts of the natives of England. I think my French colleagues would agree with this verdict. But, then, in no people are these instincts so disciplined and controlled by reason. In the Englishman such feelings are difficult to rouse—but once aroused the effect can be truly cyclonic. I suspect that many of the emotional disturbances which are worked off in other peoples in the form of national animosities find an

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outlet in the Englishman's love of sport. I regard the exercise of sportsmanlike qualities in the Englishman as the safety-valve of his spirit of race.

Instances from France

That many racial elements have gone to the making of modern France, types so extreme as the fair Norseman and the dark bullet-headed Alpine man, is a truth of universal acceptance. Do I count it legitimate, then, to speak of a French race? I would say that in no country is a national spirit more vigorously developed and more actively at work than in France. The same spirit has been permeating her people—whatever their racial origin—for centuries. If you ask me how far a real physical fusion has been effected, I reply—only to a very limited degree. Nevertheless all constituent elements of the French Nation behave as if they were a racial entity—with one exception. This particular and partial exception is Brittany, where the Breton

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tongue persists. Among the Bretons a movement for self-determination has made some headway. Such a movement cannot be upheld from the point of view of the orthodox any more than it can be from the point of view of the political economist and anthropologist. Physically the Bretons are the same Alpine folk as occupy the greater part of Southern France. It is the spirit which counts when such claims are considered not the head index.

Huxley's Conception of Race

In the previous pages I have sought to give my explanation of many familiar manifestations of Race and of Nationality—Race Pride, Race Prejudice, Race Competition, Race Antagonism, Patriotism, Self-determination, etc. I regard all of these manifestations as part of the machinery which Nature has employed for the evolution of new and higher races

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of mankind. Before, however, we accept such an interpretation it will be well to review Huxley's clear-cut ideas concerning race and nationality. He began his inquiries into "Man's Place in Nature", and his differentiation into Racial Types at a critical point in the history of Biology. His anthropological investigation began just after the *Origin of Species* appeared (1859), and having applied himself to such problems with the utmost vigour for over a decade abandoned them when Darwin's *Descent of Man* appeared in 1871. I mention these facts to remind my readers that Huxley's opinions regarding Race and Nationality were formulated at a time when the full consequences of Darwin's teaching were not fully realized.

To ascertain Professor Huxley's views on Race there could be no better opportunity than that provided by a lecture given on the afternoon of Sunday, January 9th, 1870. On that day he made his way to St. George's Hall, Langham Place, to address an audience on "The Forefathers and Forerunners of the English

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People". The subject had been forced upon him by the unhappy state of affairs in Ireland; they were then going from bad to worse; demands for separation were becoming ever more clamorous and violent. Claims for separation were based on a difference in race. Huxley had given these claims his serious consideration and proceeded to lay his conclusions before the audience assembled in St. George's Hall. Not any of the four nationalities of Britain, he declared, could claim separation on the score of a difference in race; in each and all of them the same two racial elements were to be observed—the Xanthochroi or fair element and the Melanochroi or dark element; the difference between the population of Ireland, Scotland, Wales and England was only one of proportion—the proportion in which these two races were blended. In his peroration he declared: "If what I have to say in a matter of Science weighs with any man who has political power, I ask him to believe that the arguments about the difference between Anglo-

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Saxons and Celts are a mere sham and delusion ”.

The Ethnology of Britain

It was a revolutionary conception of the racial constitution of the British people which Huxley expounded on this Sunday evening; before taking it to a learned society he “tried it out” on a lay audience. Ten years previously, in 1860, when gathering evidence bearing on “Man’s Place in Nature” he submitted his case to working men in St Martin’s Hall before carrying it before a Scientific tribunal and ultimately publishing it in book-form. He adopted the same practice on the present occasion; he stripped away the foliage of scientific terminology from his case and presented its bare boughs in all their nakedness to his audience. Then, four months later, May 10th, 1870, he laid the evidence he had gathered and the conclusions he had reached “On the Ethnology of the

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British Isles" before the Ethnological Society of which he was then President. Finally, in 1871, he published his completed case in the *Contemporary Review* under the title, "Some Fixed Points in British Ethnology". This latter contribution to anthropology is memorable not only because it contains Huxley's matured conception of the racial stocks of Britain, but because it marks the end of his activity as an anthropologist. He was then in his forty-sixth year and at the height of his wonderful career.

Let us look at what Huxley considered "fixed points" in British Ethnology, because as we examine them there will emerge his conception of what is, and what is not, a true race. Huxley approached the problem of human races with the eye of a zoologist; he applied to men and women the methods which guided him in the case of dogs and pheasants. He held that men and women, who claim to be of a separate race, must be so marked in feature of body that each and all of them can be distinguished

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at a glance when seen in a composite crowd. Applying this zoological method to the people of the British Islands, Huxley found evidence of only two recognizable races ; the Melanochroi—the Iberian or Mediterranean race, and the Xanthochroi—the fair, or as we would now say, the Nordic race. As our four nationalities—English, Welsh, Scottish, and Irish—were blends or compounds of these two races, nationality, he held, had no place in any zoological system. A nation, in his opinion, was a congeries of people held together by territory, speech, politics and tradition and could not, on scientific grounds, claim the status of a race.

The Implications of Evolution

Was Huxley right? Must every man, woman and child of a nation resemble each other so closely, and differ to a recognizable degree from all neighbours before that nation can rank as a race?

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Or after all is the old political or popular conception of a race based upon a biological truth which escaped Huxley's sharp eye? If evolution is true and is working out its effects in the world's population of to-day, then we ought to find human races in all stages of differentiation—from the least degree—where only a small percentage carries the essential racial tracts, unto the highest degree where every member is recognizable at sight. Further, if we are right in supposing that mankind throughout the geological periods of its separate existence has been the subject of continuous evolutionary change, then we ought to find not only such completely differentiated races as Huxley had in mind, but also forms which have passed far beyond the state to which zoologists apply the name, race, breed, stock or variety and have reached the stage of structural differentiation to which they give the ascending term—species, genus, family. The fossil remains of such distantly separated types are now known to us. The question I propose to discuss

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then is this : What do we know concerning the evolution of human races ?

An Evolutionary Conception of Race

The conception of race I am to place before you is more elastic, more evolutionary, than that formulated by Huxley in 1871. Let us apply this newer conception to the interpretation of the continental populations of the world. For this purpose we shall have to encompass the earth and note the number and distribution of its races—or “persistent modification” into which mankind has become divided. We cannot do better than follow in the footsteps of Huxley for, to my way of thinking, the racial survey he made in the “sixties” of last century has never been surpassed in clearness and accuracy. Let us trace the chain of circumstances which led up to this survey. In 1862 Huxley was preparing the text of *Man's Place in Nature* and had to determine the racial affinities of the only

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two skulls which were then acknowledged to be ancient in a geological sense—the Engis skull found in Belgium (1833) and the Neanderthal skull which had been discovered in Germany (1857). He had to search amongst the living races of the world to see if he could find amongst them counterparts of these ancient types. Thus in 1862, at the age of thirty-seven, Huxley began a systematic study of human races ; he thus became an ethnologist. How quickly and completely he seized the salient features of man's racial distribution will be seen from the following extract published in 1863 (*Man's Place in Nature*, chap. iii.) :

“ Draw a line on the globe, from the Gold Coast in West Africa to the Steppes of Tartary. At the African end there live the most dolichocephalic, prognathous, curly-haired, dark-skinned of men—the true Negroes. At the other end there live the most brachycephalic, orthognathous, straight-haired, yellow-skinned of men—the Tartars and Calmucks. The two ends of this imaginary line are indeed,

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so to speak, Ethnological antipodes." Having brought these two 'ethnological antipodes' into the foreground of his picture, Huxley then proceeded to draw another imaginary line—one which crossed the globe from Britain to Australia, passing through India and thus crossing his first imaginary line. This second line had a strange fascination for Huxley; at one end was his fair or Xanthochroic type, and at the other the primitive Australian aborigine. We find him in the following year, when preparing his account of the Muskhams (Trent) skull, tracing the prevalence of its type along this line, finding cranial forms in Egypt and India which linked, by a graded series, the "River-bed" type of England with that of the Australian aborigine. Huxley's outlook on the world of mankind was new; to us it may seem orthodox, but to his contemporaries it was revolutionary. It was at this time too, when investigating the Neanderthal and Engis skulls, that Huxley devised a new and precise system of cranial measurements for the detection

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of racial likenesses and differences—a system which has never been given a rightful trial.

Huxley's Classification of Races

Having become immersed in the study of Human races, Huxley pursued his usual plan ; we find him, in 1864, laying his matured knowledge before working men in St. Martin's Hall, and then in 1865 publishing his final conclusion in the *Fortnightly Review* under the title "Methods and Results of Ethnology". In his final scheme of 1865 he divided living humanity into eleven races—or, as he preferred to name such divisions, "easily distinguishable persistent modifications of mankind". Further, each of his races was restricted to a definite part of the earth—or had been so restricted until recent centuries and had been confined to their respective areas from a remote date. Let us run over the list of Huxley's primary divisions : (1) Australian, (2) Tasmanian,

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(3) Negrito—for which we may substitute the term “Pacific Negroids”—as “Negrito” has come to have a significance Huxley had not in mind, (4) Amphinesian—a maritime people occupying the islands of the Pacific, Malay Archipelago and part of Madagascar, (5) Native peoples of America, extending from Cape Horn to Labrador, (6) The Eskimo, (7) the Mongolian stock—stretching from Thibet to Japan, and from Tonquin to Lapland—a vast assemblage, (8) the Negro, (9) the Bushman. Finally came the peoples who occupy western Asia and the whole continent of Europe; these he boldly divided into—(10) Xanthochroi or fair stock in the northern zone, and (11) the dark or Melanochroi of the southern or Mediterranean zone. The peoples of Southern India were a source of perplexity to him, but finally he assigned them to his Australian division.

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Huxley's Conception of a Race

Let us look again at the test which Huxley applied when he established these eleven divisions ; it was a zoological test ; every member of a division must carry the traits distinctive of that division or race. If Huxley's eleven racial divisions were as sharply defined as he assumed them to be, then, if a hundred nude individuals were taken from each division and mixed in a crowd, a competent ethnologist, entering that crowd, should be able to assign each individual to his or her proper race and place in the world. Such a race, one in which every member is recognizable at sight, has reached what we may call the 100 per cent. stage in the scale of racial differentiation or, to use an apt term coined by my friend Mr. Morley Roberts, it is a *pandiacritic* race. We should also find, if evolution is true, races in every stage of differentiation, from a zero point—an *adiacritic* state—to the full or *pan-diacritic* state, unless it be true that races are produced, as

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Huxley was inclined to think, at a jump. All the evidence at our disposal at the present time indicates that racial differentiation in mankind is and has been a slow and gradual process.

How are we to explain the facts depicted by Huxley in his ethnological or racial map of the world? By what process or processes have such divergent races as the fair European, the yellow Asiatic, the black African and the brown Australian come into existence? Why are these types native to definite and distant areas of the earth's surface? Before we seek for light on these problems let us first ascertain if Huxley's map reflects a true picture of racial distribution as it was in early historic times. Were his eleven races truly pan-diacritic? Were their boundaries as sharply circumscribed as his description implies? He himself came to the conclusion that his racial boundaries required amendment, for in 1870, when he returned to the subject of racial distribution in an address to the Ethnological Society, he reduced the number of his

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“ chief modifications ” to four—the Xanthochroic or fair type ; the Mongoloid or yellow type, the Negroid or black type, and the Australoid or brown type. We find him going back to his original conception—the existence of four “ ethno-logical antipodes ” or primary centres of racial differentiation.

Huxley amended his conception of racial distribution for several reasons. He began his investigations in the expectation that shape of skull would provide the chief criterion of race. In this he was disappointed ; cranial characters, he found, were of subsidiary or secondary consequence. His Xanthochroic type might have a long skull or a round one ; it was the same with the Mongoloid ; their heads might be round or long. He realized that the primary discrimination between human races must be made on surface traits—colour of skin and texture of hair. To these I would add the significant traits of the face—which are so hard to measure but which are so apparent to all.

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The Existence of Intermediate Types

Huxley also realized that the areas of racial distribution had not the sharp outlines he had originally given to them. His Xanthochroi are to be found in their pure state only in North-West Europe ; his Negro type only in that part of Africa of which the Congo is the centre ; his pure Mongoloid type only in Central and Eastern Asia ; his Australian type in Australia. If we join the Xanthochroic centre in North-West Europe to the Negro centre in Africa by a line which runs across Europe in the direction of Egypt and then along the Nile to Equatorial Africa, this line will cross such a graded series that it will be hard to say where the European type ends and the African type begins. Or if, instead of turning our line towards Africa, we let it run to India and then on to Australia we shall find one or two breaks, yet the intermediate series of races is such as bridges the gap between the fair European and the brown Austral-

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ian. If on the other hand we take our stance in Mongolia, no matter in which direction we go, we shall find that the type changes and becomes less pure as we pass towards the periphery. If we go southwards we shall find the skin darken, the facial features alter, until we reach the pacific, when it fades into Polynesian, Negroid and Australoid. It is only when we leave Mongolia and travel towards India or Russian Turkestan that we meet with anything approaching a sharp racial frontier. Why this should be so I shall seek to explain later.

Do Races arise by Hybridization?

Assume, then, that the sketch just given of man's racial distribution is approximately true, how far does our present knowledge help us to explain it? We have to explain (1) how our four primary types or races have come into existence, (2) how the intermediate or graded types have been produced. Now

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if we assume the existence of four primary types—Australoid, Negroid, Mongoloid and Xanthochroid, settled in the four parts of the world where they now attain their greatest degree of differentiation, it becomes possible to explain all the intermediate types, which occupy intervening zones, as hybrids of varying degrees, produced by intermingling of the four primary types. Huxley, himself, was drawn towards hybridity as an explanation of intermediate types. For instance, in his final classification he excluded the Melanchroi as a primary division—the Melanchroi, which includes the peoples which extend from India to Ireland and occupy Northern Africa and Southern Europe. Now we have historical evidence that there has been an intermingling of peoples and the majority of anthropologists still explain intermediate racial types as hybrids produced by degrees of crossing. Before we accept this explanation let us turn to the much more important problem of the primary types: how were they produced?

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The Machinery of Racial Evolution

In the present century light began to dawn on the manner in which new racial types of mankind arise. We have now convincing evidence that the growth of the body and the differentiation of its racial traits are controlled, to a greater or less extent, by a material mechanism centred in certain glands—the glands of internal secretion.¹ These glands produce substances—hormones—which have growth-controlling properties. The wonder is that we did not recognize the existence of a growth-regulating mechanism long ago, for from remote times it has been known that the removal of the male sexual glands

¹Those who wish for more information concerning the part played by hormones in the differentiation of human races may care to consult the following articles by the author: "The Differentiation of Mankind Into Racial Types." *Nature*, 1919, vol. 104, p. 301. "The Evolution of Human Races in Light of the Hormone Theory," *Johns Hopkin's Hospital Bulletin*, 1922, vol. 33, pp. 155, 195.

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in youth profoundly alters the growth of a man's body. This operation produces a being having all the appearance of a new racial type. We have the advantage over Huxley in possessing definite proof that the testis not only serves as a laboratory for spermatozoa, but also secretes and sets in circulation a substance—or substances—which alter stature, length of limb, contour of bone, strength of muscles, size of neck, size of jaws, shape of nose, modelling of forehead, growth of hair and texture of skin. Now these are, in the main, just the characters wherein one race of mankind differs from another. The Eunuch's body gives us a glimpse into the depth, power and complexity of the growth-controlling mechanism which shapes the human frame. Clearly, if we are to understand the production of racial types we must first master the system of growth-control.

Our knowledge is only beginning ; so far we have been dependent on experiments produced by accident and by disease. Disease has revealed how potent

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is the action which the small pituitary gland exerts on growth. In that particular disorder known as acromegaly the pituitary gland is always found to have undergone an irregular overgrowth. Men and women who become the subject of acromegaly have their bodily features so transformed in a year or two that their acquaintances fail to recognize them ; in such cases we see a new physical type being produced under our eyes. The features which become altered—hair, skin, chin, nose, forehead, chest, hands and feet—are those which undergo racial differentiation. Giantism is a disease of growth ; always we find in these monstrous beings clear evidence of a disordered condition of the pituitary gland. The more we know of this small gland the more complex do we find its rôle in growth. Under certain conditions the disordered pituitary produces a eunuchoid type of body—one reminiscent of certain tall races such as the Nilotic negroes. Compression of the pituitary leads to dwarfism. The pituitary is only a part of the bodily

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machinery concerned in racial differentiation.

The thyroid gland has also an influence on growth; its secretion is known to hasten metamorphosis; it exerts an action, direct or indirect, on the growth of skin and hair. If the thyroid fails in its action then there results a characteristic type of individual—a distinctive physical type—that of the cretin. The cortex of the suprarenal gland is also concerned in the regulation of growth. Sometimes a male infant develops all the characters we associate with sexual maturity; in such children there is always found a tumour-like enlargement of the cortex of the suprarenal gland. The same kind of tumour, when developed in a young woman, causes her to undergo a physical and mental change towards the male; when such a tumour is excised, the patient regains her proper sexual markings and feelings.

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Differentiation of Race is effected Physiologically

I have said enough to prove that we may yet hope to understand the machinery which is concerned in the production of new racial types. Let us, in a passing way, test our knowledge on a few concrete examples. What light can we throw on the origin of Huxley's Xanthochroi—the fair people of Northern Europe? We presume, as John Hunter did, that primitive man was pigmented. We are justified in making this presumption by the fact that the most primitive type of man now living—the Australian aborigine—is dark-brown, and because the anthropoid apes, which have the nearest structural kinship to man, are pigmented. We seek to explain fairness—the absence of pigment as a recently acquired character. We know that the suprarenal body is concerned in the formation of pigment, but we have no evidence as yet of any structural difference between the supra-

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renal of a Negro and that of a Scandinavian. We are just beginning to realize that light can produce certain physiological effects when it penetrates the skin ; the amount of pigment must help to screen the nude bodies of those exposed to a tropical sun. Our present knowledge justifies us in supposing that a fair race, if evolved, could have an advantage only under temperate conditions, such as Northern Europe now provides. Another line of investigation helps us to understand the developmental processes concerned in the elaboration of a fair race of human beings. The first nine months of human existence are spent in the womb, where light does not penetrate and pigment is not required. The Negro baby has only reached a brown stage at birth ; two months earlier, its skin is not darker than that of a Southern European ; still earlier in foetal life its skin is as little pigmented as that of the Northern European. The Negro child passes through all the stages which lead from the lowest to the highest degree in the scale of

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pigmentation—as do the young of the gorilla and chimpanzee. In the fair European the process of pigmentation is arrested at one of the earlier foetal stages ; in other races we find arrest at deeper and deeper stages of pigmentation. The fairness of Nordic man is an inheritance from the womb ; he retains in adult life a stage which is transitory in the development of other races. Many human characters have been acquired by the operation of this law—the tendency for developmental stages to be delayed until childhood or adult life is reached.

Racial Traits may be of foetal origin

Although several biologists of last century were aware of the law just mentioned, its present importance owes very much to the investigations of the late Professor Bolk of Amsterdam that we may justly speak of it as “ Bolk’s law ”. It provides us with guidance when we proceed to study the racial traits of the

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Negro in that region of Africa where the type is purest. The Negro tends to retain the hairless body and beardless face of youth ; in his skull and brain we find many examples of the same kind. On the other hand we see in the Negro's body certain new characters which owe nothing to Bolk's law. Woolly hair is peculiar to the race, whereas other races have retained the older and more primitive straight hair-forms. Huxley believed, as did the late Dr Bateson, that new races or species might come into being suddenly—by a jump. Certainly characters may, and I regard the woolly hair of the Negro as a case in point. The thick everted lips of the negro are not ape-like, but new characters ; possibly the depth of his pigmentation is also recent. The typical Negro is not an old but a relatively new form of humanity.

How far does modern physiology help us to explain Huxley's third evolutionary centre—the Mongolian—which finds its focus in Mongolia and Northern China ? Not very far ; it supplies suggestions

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rather than proofs. Under aberrant action of the thyroid gland we find men and women assuming a resemblance to the Mongoloid type. There is another condition which occurs in children and is known as Mongolism. Its exact cause we do not yet know, but it has all the signs of being due to an unbalanced state of the endocrine or hormone system. The victims of this disorder represent a distinctive physical type which is recognizable at sight, its diagnostic traits recalling features seen in the Mongolian type. A third disorder of growth, known to medical men as Achondroplasia, but which may be called "bull-dogism", for dogs as well as human beings are subject to it, also reproduce some features of the Mongolian type. From all these observations we infer that the typical Mongol is the result of an evolutionary process in which certain factors of the hormone mechanism have assumed a preponderating influence.

Another series of circumstances leads us to believe that the pure Mongol type is of

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comparatively recent origin. When we leave the area of its sharpest characterization and pass southwards into the Malay Archipelago, or if we cross to continental America, we observe that pure Mongolian traits, as seen in the nose, eyelids, cheeks and colouring, gradually disappear and are replaced by features of less specialized kinds such as are to be found in faces of the Red Indian and Polynesian types. If, on the other hand, we pass northwards from Mongolia into Northern Siberia and enter Eskimo territory, we find an exaggeration of all the Mongolian traits. If we pass westwards from our centre of greatest purity, we soon reach a zone where the nose, eyes, cheeks, chin and skin assume the Aryan type. I see only one way of explaining these facts; we must presume that the pure Mongolian type is a recent modification of an old one which is still preserved among American Indian and Polynesian peoples. Further, we must presume that the pure Mongolian type has been evolved in Eastern Central Asia, and that the

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characterization of this type is the result of the predominance of certain factors concerned in the physiology of growth. Amongst Caucasoids an opposite endocrine balance tends to prevail—one which emphasizes the nose, the eyebrow ridges, the form of jaws and growth of beard. For this reason the racial frontier between the two types is usually sharply marked. We must cast a passing glance on Huxley's fourth centre—the Australian. We are all agreed that the aboriginal people of Australia have retained more than any other now living the features of primitive man. Evolutionary change has left the native peoples of Australia but little affected while it has wrought a transformation in the three other centres of the world—the Xanthochroic, the Mongolian and Negroid.

The Distribution of Races at the Dawn of History

I have been seeking to lay before you the explanation which modern anthro-

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pologists have to offer for the existence in our world of Huxley's four chief modifications of Mankind. We have now to ascertain why these types are massed in certain definite and continuous areas of the world. If in prehistoric times man had wandered and mingled everywhere on the face of the earth we should find the population of the earth, arranged not as a great patchwork, but as a more or less uniform mosaic. It may be moving now towards that state but it was not so in olden times. Each main type had then a definite area of distribution or homeland. There must have been in operation, therefore, some set of circumstances or conditions which induced human beings to cling to that part of the world of which they were natives, and to remain in the proximity of people of like origin.¹

¹ Those seeking further information on the isolation of peoples and of animals into sharply defined territories will find it in the following papers by the Author: "Factors Concerned in the Evolution of Human Races," *Journal, Roy. Anthropol. Instit.*, 1916, vol. 46, p. 10, "Race and Nationality from an Anthropological Point of View," *Robert Boyle Lecture*, Oxford, 1919

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No matter how potent may be the physiological machinery which is at work within a group of people it cannot work out its full effects unless there is also in operation some system of segregation which causes the members of a group to cling to each other, and which also at the same time serves to isolate its members from all surrounding or competing groups. For the evolution of new human types or races we must postulate a double set of factors—one set physiological in nature—to mould the body ; another set, to isolate, and preserve the “ cradle ” in which the physiological forces are in operation. It is to those isolating factors I now wish to direct your attention.

The Machinery of Racial Segregation

We may presume that the chief racial types of to-day were evolved under such conditions as those which may still be studied among the aborigines of Australia. The aborigines are arranged on a tribal

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basis ; each tribe is confined to a sharply demarcated hunting territory ; if it passes beyond this tribal frontier then it encroaches on the hunting rights of neighbouring tribes and will have to fight or retreat. Intertribal opposition or jealousy isolates a tribe, but still stronger forces bind it to its native territory. Its members are bound together by a community of speech, of customs, of beliefs, of kinship and of interests. Every member of the tribe is bound to their native territory by a deep emotional attachment ; if driven from it they long to return. If their territory is threatened there is roused that potent mental reaction, so deeply tinged with feeling, which is known as patriotism. Tribal organization provides the machinery of isolation or segregation which is necessary if physiological processes are to work towards a new racial type. Traces of a former tribal organization are to be found in all parts of the world ; it survived in the clans of Scotland until a recent date. For unmeasured ages it was universal.

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The brain of man was evolved under tribal conditions ; its faculties, its feelings, emotions and reactions are adapted to serve the needs of tribal organization. Incidentally they serve the cause of evolutionary progress by producing the effects of isolation or segregation.

Physical barriers have also served to isolate races—mountain chains such as the Himalayas, extensive tracts of desert such as the Sahara, and wide seas such as the Atlantic. While I am discussing the factors which help to isolate a race and thereby maintain its purity let me acknowledge the valuable help I have received from my friend—the late Dr Walter Heape, F.R.S. He devoted thirty years to the study of the territorial rights of animals and to the important bearing these rights have on the process of evolution. He found that partition of territory holds not only for mankind but also prevails among all the higher mammals. It was he who pointed out to me that under certain conditions home-loving instincts may be suddenly transformed into

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wandering or migrating impulses. The one set of instincts nurses the type in its home ; the other compels the race to extend its distribution. Historical records leave us in no doubt that man, too, has this double instinctive mechanism within him. Yet migration must have been always a subsidiary factor in human evolution ; had it been otherwise racial types would not have remained confined to their respective parts of the earth.

There is another important isolating factor which I must mention here—that inborn reaction or prejudice known as race-prejudice. As Professor Giddings has pointed out—all animals instinctively recognize their kind ; they also recognize what is not their kind, and this recognition may be accompanied by a feeling of intense antipathy. Race feeling lies latent in men and women as long as they move among their own kind ; but when they move outside the frontiers of their tribe or country, deep instinctive feelings of race-prejudice are awakened and under certain circumstances may become in-

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flamed and uncontrollable. I regard race-feeling as part of the evolutionary machinery which safeguards the purity of a race. Human prejudices have usually a biological significance.

Summary of the Factors concerned on Race-Evolution

Let me remind my readers at this point, for the course of my argument may not be very apparent, of the three main questions I am seeking to answer. These are: (1) How have the chief races of mankind arisen? ; (2) Why are these, in their greatest purity, confined to certain areas of the world? ; (3) Why do we find intermediate types in intervening areas? My answers or explanations are of an evolutionary nature. I hold that the chief modifications of mankind have been produced and their locality determined under the action of a twofold machinery: (1) a physiological machinery—mainly endocrine in nature—which determines the

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growth and characterization of the body ; (2) a psychological machinery which lies at the very root of human mentality. The machinery I am postulating is not remote in time and place ; it is here and now, recognizable and demonstrable in the body and brain of every one of us. To these two, we must add a third—the selective machinery of environment. Changing environment is part of the selective machinery. In changing environment are to be reckoned gradual submergence of occupied lands, extension of desert zones and the spread and retreat of Arctic conditions. The theory of racial evolution I am placing before you is that of Darwin merely restated in the light of modern knowledge.

We have seen that Huxley was inclined to regard races which were intermediate in character to his main types, as having arisen by interbreeding. If, however, the machinery of evolution has been in operation since the dawn of humanity and is still working in the human body and brain, we ought to find such intermediate

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racés. There ought to be and there are races in every stage of the evolutionary scale—from a zero point where only a small percentage of individuals possess distinctive markings to the full or complete stage which is represented by pan-diacritic (fully-differentiated) races. In this final stage every individual has undergone racial characterization. This is what we actually do find in the world's population of to-day; races are in all stages of differentiation. Hence has arisen a clash of opinion among anthropologists as to the number of existing human races. Huxley, at first, counted eleven and subsequently reduced the number to four. Hæckel began with twelve in 1873; six years later he enumerated thirty-four. In 1889 Deniker divided mankind into thirteen main races with thirty sub-races; finally he deemed it necessary to recognize seventeen races and twenty-nine sub-races. The number of races depends on the standard of differentiation we adopt.

I do not say that inter-breeding has not taken place along racial frontiers; in

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certain cases and places it has taken place, and to a considerable extent. Hybrid races have arisen in lands originally settled by Portuguese; many instances could be cited from Africa and from South America of the production of new races by hybridization. At the most hybridity is a minor factor in the production of new races; its action cannot explain the racial state of the world. On the other hand the theory of evolution does. It is now high time to recognize that any attempt made to classify the races of mankind must be founded on an evolutionary basis. Races must be grouped according to their scale of physical differentiation. There are the fully differentiated races—pan-diacritic races—in which every member is recognizable at sight by an expert; these are 100 per cent. races. There are races where we can distinguish about 90 per cent. of members and so on down the scale, through macro-diacritic stages, mesodiacritic, micro-diacritic until we reach the zero or adiacritic stage. All are races in a strictly bio-

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logical sense ; all are stages of an evolutionary scale.

I now return to seek an answer to the question I asked at the beginning of this section of my argument : Was Huxley right when he refused to recognize a nation as a race because it was patently of mixed origin ? Before an answer was possible it was necessary to review what we know concerning the evolution of human races ; on the facts elicited we must admit that a human race may be at any stage of differentiation ; a nation may be an incipient race, however mixed its original population may have been.

The Races of Europe

Before a final answer is possible we must return to Huxley's racial map. The part of the world which gave him the greatest trouble was the region which lies between the British Isles in the West and India and Chinese Turkestan in the East. He found the peoples of this great area

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in a state of racial confusion, and unfortunately discarded the term Caucasian—the only name we have to indicate the generalized type which is represented by the many racial variants of the vast population of Europe and Western Asia.

Why should this area of the world be so confused in a racial sense? Almost everywhere tribal boundaries have been swept away and national frontiers have taken their place. When we search for the force which has destroyed the tribal organization of ancient Europe we have to dive into the past of the prehistoric East. Somewhere in this part of the world was made the discovery on which our modern civilization is based—the art of agriculture. The tribe or tribes who made this discovery had gained an advantage over all their hunting neighbours; their numbers must have multiplied as their food-supply increased; sooner or later their tribal territory could not contain them and they had to spread. It is in keeping with all we know to regard the Caucasoid East as the cradle of civiliza-

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tion and to suppose that from this centre wave after wave spread westwards across Europe, finally breaking on the British Isles. Tribal territories were broken down, and the ancient tribal organization employed by Nature in the evolution of human beings was brought into a state of disorder. And yet not utter confusion, for we still recognize some order in the racial pattern of Europe—a zone of long-headed swarthy peoples in the south, long-headed more or less fair people in the north, while the intervening areas are occupied by peoples with various types of round heads and intermediate degrees of colouring. In the Caucasoid area civilization has everywhere queered Nature's plan of Evolution.

A Nation is a Potential Race

Huxley recognized that the population of the British Isles, like that of Europe, was from a zoologist's point of view, in a state of racial confusion. It was patent

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to him that our four British nationalities were in the main varying degrees of mixture of the dark and fair racial stocks of Europe. He denounced all claims for national separation made on the score of race as mere shams. Since Huxley expressed himself thus the Great War has swept Europe, uncovering primitive traits and impulses which are deeply buried in human nature. As a sequel to the war came the demands of small nationalities for separation and independence. The statesmen who had to consider and satisfy these demands believed they had to deal with political not with biological problems. Yet if what I have said concerning the evolution of races is right, these problems must be considered from a biological and evolutionary point of view. The small nation movement is due to a recrudescence of the old machinery of racial evolution; in the atmosphere of war submerged human impulses came surging into activity.

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Another Glance at the Racial Problems of Britain

Let us look at the national problems of Britain with the eye of an evolutionary biologist. The diverse racial strains which have settled in Britain from time to time have met each other on a common territory—a circumstance which tends to their final amalgamation. All brought with them the automatic machinery of racial evolution ; every group of invaders or settlers had in their bodies a random sample of the physiological machinery concerned in the evolution of racial types ; all had in their brains the attributes of mind which make for tribal organization—a necessary condition for racial evolution. By conscious effort on the part of statesmen and by force of circumstances tribal frontiers have been broken down in Britain, and out of the welter have emerged four countries, each the home of a nationality—a potential race. The old machinery of evolution has been confused—particularly

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by industry—but not eradicated. National spirit and patriotism are its modern manifestations. When races meet and mingle in strange lands or when they are thrown together by economic necessity, Nature's efforts at race production are thwarted thereby, but she at once sets to work to repair the mischief and to build up by fusion a new race. Nation-building is the first step in race-building.

From long experience I have learned that it is dangerous to disagree with any of Huxley's verdicts. He was nearly always right; very few of his judgments have been reversed. Yet I am convinced, and I hope my readers will be convinced on the evidence I have laid before them, that the zoological method he applied to the discrimination of human races was too crude for the purpose he had in view. He sought only for fully differentiated races; the races with which the politicians have to deal are usually imperfectly differentiated races, but they are none the less biological races in the full sense of that term. Often the less differentiated

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a people is in the racial scale, the more tribal is its outlook and the more jealously does it strive for isolation and separation. In an evolutionary sense every nation is an adiacritic or potential race. The nationalities of Britain I regard as partly differentiated races. I believe, but I have never put my belief to the test of actual proof, that in a mixed crowd composed of individuals drawn from our four nationalities, I could identify, from physical appearances, 15 per cent. of the men of Wales, about the same percentage from the Irish Free State and about 10 per cent. of Scotch and English. Our nationalities are real races in a microdiacritic stage of evolution.

Reason and Instinct are at war in the Modern World

In the later stages of man's evolution we see that a constant strife has been going on between man's reason and his inherited instincts. Man's unconscious

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urge to race-building is still dominant within him. Tribal instincts are in all of us and tend to cloud reason. To understand the nature of the strife is the first step towards its abatement. It seems to me that man's body and brain have been fashioned to serve in the execution of a great scheme of progress by evolutionary means; that scheme is being foiled by civilization—man's greatest discovery. We were evolved under the rigours of the law of evolution. Human races are the result of experiments which have gone on for untold eons of time. They have been, on the whole, successful experiments; man has gone on improving. They were carried out, until man discovered the arts of sowing and reaping, in an environment of Nature's making. And now, man is awakening to the fact that Nature's primary end—race-building—is incompatible with the necessities of the modern economic world and is asking himself: What must I do? Bring race-building as practised hitherto by Nature to an end and have eternal Peace? Or permit

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Nature to pursue her old course and have, as a necessary consequence—war? Man has to choose the one course or the other. There is no intermediate course possible.

Tribal Man is both Good and Bad

Before we decide on our choice let us glance at some aspects of Human Nature. My friend Professor Elliot Smith believes that man was originally good and lived in a "golden age" until the economics of the modern world corrupted his nature. There are many who believe just the opposite—that primitive man was essentially wicked and bad, and that his good qualities came into being with the dawn of civilization. The truth is that original man, like modern man, was both good and bad. Tribal life—which was universal—is possible only if man can hate as well as love. Every member of a tribe must have a double nature—one to be exercised on his tribesmen, the other to be exercised on all who are outside the tribe. In every breast there is the power

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to hate as well as to love, to be cruel as well as to be kind, to help as well as to hinder, to save as well as to kill. A tribesman had no option; one side of his nature prevailed within the tribe; the other without it. We are all tribal in origin; our mental nature is so constituted as to fit into the scheme for the evolution of races. There is only one escape for man if he wishes to bring Nature's scheme of evolution to an end. His nature must be transformed, so that the whole population of the world may become members of one tribe. To bring about such a consummation Mankind would have to be deracialized, and every man and woman be bred down by hybridization until all wore the same livery of living flesh. We have to choose between that consummation and the parlous state in which we live.

Peace, War and Race

In every way that is open to me I work for peace—a world peace—a peace by

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mutual understanding. Such is the ultimate aim of all who labour in the field of Anthropology. After the war, poor Europe, broken and suffering, required a strong anodyne. She was given it; the League of Nations was just the balm she longed for. It held out the promise of a perpetual peace. The sovereign states of the world gave up what every nation, struggling towards a racial status, has counted its most precious right—the right to determine its place and destiny in the world. Most of the great nations and all the small ones have given their allegiance to the League and promise to obey its dictates. Nation building is to be carried out under license issued by the League. The racial claws of the nations—their military, naval and flying forces—are to be pared, but no attempt is to be made to eradicate them. While the peace-statesmen were trying to effectively curtail the racial ambitions of the larger powers they were at the same time setting afoot a number of innocent-looking experiments. Many of the smaller nation-

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alities were encouraged to embark on the task of self-determination. The principle is important; there are many peoples in Europe who have the right to claim that this principle should be applied to their individual cases. Every small nationality is a possible race and the probable source of an infinity of trouble to the world. Such is the strength to which a national spirit can raise a people that I cannot conceive any highly strung nation, finding that its development and future are blocked by an adverse combination of circumstances, will abjectly submit to such a fate without making a fight for its fuller life. No matter how strong the League of Nations may be or how complete the world may become policed—so long as mankind is divided into a diversity of races there can be no real peace.

Is Deracialization of the World Possible?

We have to consider now what is best for the ultimate destiny of mankind.

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Would it be best for each race to protect and strengthen the heritage Nature has bestowed on it? Or would it be best to obliterate racial boundaries by universal intermarriage? Let us look at the latter alternative first.

I am convinced that deracialization is possible; some human races are already domesticated in the same sense as our sheep and cattle are. I am sure that a skilled Eugenist, if he took the task in hand, could succeed in reducing our wildest and strongest races to a satisfactory state of domesticity in the course of time—how long I cannot guess. Fifty generations of breeding should take him a considerable way towards the desired goal. He would eliminate the undesirables. Any individual showing a trace of preference for his homeland, for his own people, for his own country, who displays any degree of independence of spirit or any manifestation of valour, must of course be resolutely exterminated. A tendency to run away from danger would have to be encouraged and com-

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mended. In short, Eugenists would have to exert their strength and ingenuity in destroying what has taken Nature at least a quarter of a million years to build up—the present races of the world.

The Only Way

Is there a better way of solving the more acute difficulties of race and thus obtaining, if not a profound, yet a partial peace? I think there is only one way. Men must be convinced that evolution is true in practice—as well as in theory. They must realize, recognize and bring all their inborn tribal instincts and racial prejudices under the rule of reason. It is only thus that the diverse races of mankind can live in the same world and yet preserve their respective heritages. I am convinced that the problems of race can be understood and solved only by men who approach them with a knowledge of the past. Evolution of man is a theory

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which must be constantly applied in the affairs of every-day life ; without it we have no clue to the perplexities of racial animosity which ever disturbs the peace of the world.

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