## Art. VI.-THE MALAY ARCHIPELAGO.\*

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RENEWED attention will doubtless be drawn to this book because of the more recent and elaborate work by the same distinguished author, the title of which we give in full below, † and which is an attempt to collect and summarize the existing information on the distribution of land animals, and to explain the more remarkable and interesting of the facts, by means of established laws of physical and organic change; in other words, to show the important bearing of researches into the natural history of every part of the world upon the study of its past history. The main idea, which is here worked out in such fulness of detail for the whole earth, was embodied some years since in a paper on the "Zoölogical Geography of the Malay Archipelago," which appeared in the Fournal of Proceedings of the Linnean Society for 1860; and again in a paper read before the Royal Geographical Society in 1863. (Preface.)

We shall have occasion to refer again to this more recent work, which in its department, and for those specially interested in geology or natural history, must prove an exceedingly valuable addition to our stores of knowledge. Yet, as better suited to the general reader, and because of the special interest attaching to a portion of the globe so little known, and because of some questions not touched upon in the larger and more elaborate work, we turn to this former publication of Mr. Wallace, which, though given to the world some years ago, remains the best authority upon the natural history of those islands, giving at the same time many pleasant pictures of life and travel in scenes so unlike our temperate zone and our civilized habits.

Mr. Wallace dedicates his book on the Malay Archipelago

<sup>\*</sup>The Malay Archipelago: The Land of the Orang-utan and the Bird of Paradise. A Narrative of Travel, with Studies of Man and Nature. By Alfred Russell Wallace. Illustrated, pp. 638. New York: Harper & Brothers, 1869.

<sup>†</sup> The Geographical Distribution of Animals. With a study of the Relations of Living and Extinct Fauna, as Elucidating the Past Changes of the Earth's Surface. By Alfred Russell Wallace author of the "Malay Archipelago," etc. In two Volumes. With Maps and Illustrations, pp. 503, 607. New York: Harper & Brothers, 1876.

to Mr. Darwin, and in his more recent work he says that they were undertaken through his and Prof. Newton's encouragement, so that though he does not often place himself in direct antagonism to Scripture statement, he yet pursues a line of investigation which he doubtless thinks is opposed to traditional forms of belief. We welcome, however, thorough investigation in all lines of study, believing, as Dr. Wm. M. Taylor has well said, that the workers in Revelation and Science, as on each side of the Mount Cenis Tunnel, will not meet in opposition but to remove barriers in the inquirer's way. Light will shine through what now appears darkness.

There are two points which we assume will be of special interest to the readers of this REVIEW in connection with the Malay Archipelago. First, the bearing of researches into their natural history upon revealed truth; and, secondly, the condition of man, morally, in those islands, which are so rich in material resources.

Doubtless few whose attention has not been especially directed to this region, realize the extent of these islands. The Archipelgao is 4,000 miles in length from east to west, and 13,000 in breadth from north to south. In Borneo the whole of the British Isles might be set down and have a margin for one or two islands of the size of Ireland. New Guinea is still larger, being 1,400 miles long, and in the widest part 400 broad, or, if we except Australia, the largest island in the world. The whole amount of land in this Archipelago is supposed to be about the same as in Western Europe, or Germany, Holland, France, Italy, Switzerland, Spain and Portugal. The variety in size and formation is almost endless, from the small coral lagoon to the high volcanic summit, with its extinct fires, or as, in many cases, smoking and heaving at intervals still. Situated within the tropics, the vegetation on most of these islands is luxuriant-extending from the water's edge high up the craggy sides of its mountains, and including most of the famed woods and fruits of tropical climes-sandal-wood, bamboo, rattan, palms of all descriptions, fruits and spices. Borneo is the home of the orang-utan, which is only equaled by the gorilla, and, next to that monster of the West-African forests, is the largest of the monkey tribe. Du Chaillu found gorillas five feet nine inches in height, while the largest orang is only four feet two inches high. Monkeys of all kinds, and nearly all of the larger animals, disappear as you go east. But New Guinea and the adjacent islands can lay claim to being the home of that most beautiful of all birds—the bird of Paradise.

The products of these islands are so valuable and peculiar that there is no little reason for supposing that Solomon's ships touched at some of them in their three years' voyage to Ophir. Gold and diamonds are to be had in Borneo. Apes and elephants' teeth are there, or on the Malay Peninsula, while the peacocks we fancy were this more rare, and most beautiful bird of the world.\*

Without following Mr. Wallace in detail as he traveled from island to island, now living in European towns, now in native huts, now traveling in a steamer, and then in a native prau, we wish to state some of the results of his researches; and—

<sup>\*</sup> The word translated peacocks in I Kings x: 22 and 2 Chron. ix: 21 is, חַפַּרָּרַם -toucayim, which Gesenius fancies to have been the domestic name of the peacock in India, of which country it is a native. A bird very similar to the peacock of India is found in Java, and it is easily domesticated in almost any country. That India was not the Ophir or Tarshish of Solomon's three years' voyages seems likely, not merely because it was so near, but also because it was in all probability reached by an overland trade, of which we have an indication in the building of Tadmor, 120 miles N.E. of Damascus, and more than half the distance to the Euphrates. While the peacock can be easily domesticated, and thus introduced without difficulty into neighboring countries, it is almost impossible to tame the Bird of Paradise or make it live in confinement, and thus transport it to other countries. Mr. Wallace tried caging several varieties, but though feeding well, and lively for a day or two, they all died by the third or fourth day. He finally found a pair alive at Singapore, and purchased them for £100, and brought them to England, where they lived for a year or two. It is doubtful whether any light can be thrown upon the question of the right interpretation of toucayim from the present names of these birds. Gesenius says the Sanscrit name for peacock is sikhi. Mr. Wallace says one variety of the birds of Paradise (for there are eighteen different kinds) is called by the natives "goby goby," and its cry is wawk-wawkwawk, wok-wok, which resounds in early morning through the woods. The nearest resemblance that we know in sound is the Toucan of South America. But neither the beauty of the bird, nor the direction from Ezion-geber, would point to South America as the Ophir. Besides beauty of plumage, another idea may possibly have been the attraction when apes were brought in those ships, and that is the power of imitation which belongs to the parrot tribe. The distance across oceans is not such an obstacle as we might suppose. The Asiatics of Solomon's time, and a few centuries later, when Babylon was built, and when Lautoz, the Chinese philosopher, visited Greece, and Brahminism spread to Java, where its solid brick and stone ruins are now seen among bamboo huts, and Buddhism sent its missionaries to Ceylon, Siam and Japan, and across the Himalayas to Thibet and China, were a race whose intellectual activity and enterprise are in striking contrast with the apathy and sluggishness of their descendants.

1. As to the distribution of animal life. The impression with most would be that in islands located as these are, within the tropics, and in near proximity, and with a flora very similar, that the fauna should be very much alike. But instead of that, the variations are distinct and marked. The larger animals, as the elephant, the rhinoceros, wild cattle, and also monkeys, are to a great extent the same in Sumatra, Borneo and Java, as in the Malay Peninsula. But eastward all the larger animals disappear. In New Guinea none are to be found; and instead are pigs, bats, opossums and kangaroos. The birds differ as widely as the animals. Thus, out of three hundred and fifty varieties of land birds inhabiting Java, not more than ten have passed eastward into Celebes. Of the one hundred and eight land birds of New Guinea and adjacent islands, twenty-nine are exclusively characteristic of it. Thirty-five belong to that limited area which includes the Moluccas and North Australia. Onehalf of the New Guinea genera are found also in Australia and about one-third in India and the Indo-Malay Islands (p. 578). It is in New Guinea and adjacent islands alone that the different varieties of the Paradise bird are found.

According to our author, the different races of men vary almost as much as the lower orders of the animal creation. In the west, or in Sumatra, Borneo, Java, Celebes, etc., the islanders belong to a race allied to the Malay. In the coast regions of Borneo and Sumatra are what may be called the true Malay race, who are Mohammedans in religion, speak the Malay, and use the Arabic character in writing. Besides these Mohammedans there are the savage Dyaks of Borneo, who are not Mohammedans. In Java a similar race exists, though their language differs from the Malay. Their religion is, however, Mohammedan. The Malays are smaller than Europeans, their complexion brown, hair straight and black, and no beard.

The race which is strongly contrasted to this is the Papuan or New Guinean. Between the two there has, however, been more or less of mixture, and in many places a commingling of other races, especially the Chinese, who are found among these islands as on the Malay Peninsula, wherever there is any opening for trade. The Malays are so nearly allied to the East Asiatic population, that in Bali the Chinese who had adopted the native costume could hardly be distinguished from the Malay. The typical Papuan, however, is unlike the Malay. The color

of the body is a deep sooty-brown or black, approaching in color the true negro. The hair is peculiar, being harsh, dry and frizzly, and standing up from the head like a mop. The nose is large, arched and high, the lips thick and protuberant, and the face covered with beard. In stature they nearly equal the average European. In character the Papuan is bold, impetuous, excitable and noisy. The Malay is bashful, cold, undemonstrative and quiet. From this description it will be seen that the Papuan bears a close resemblance to the negro of Africa, and also to the inhabitants of Polynesia.

We come now to the question, How is this peculiar distribution of animal life to be accounted for? So far as man is concerned, he has the means of passing from island to island. But here are two strongly marked races in close proximity, and what is the cause of the wide divergence? This question with respect to man we will take up after looking at the lower order of animal life.

Two facts are to be considered—one of similarity to the productions of the main-land, and the other of divergence. first, are we to account for the similarity, or how did the products of the animal and vegetable kingdoms cross these seas and straits, and propagate themselves in their island homes? Mr. Wallace adopts the theory, first suggested by Mr. Earle in a paper read before the Royal Geographical Society in 1845, that these islands, in some former geologic period, were connected with two great continents-Asia on the one hand, and Australia on the other. And that as evidence of this a shallow sea, less than forty fathoms deep, now connects them with these continents, while a sea of over one hundred fathoms in depth to the eastward of Celebes separates them from one another. That there have been great geological changes in this region, and not necessarily at a very remote period, is evident from the existence of so many extinct and active volcanoes, some of which are elevated six to eight thousand feet. A corresponding subsidence in the same general region would be expected after any great elevation of land.

It might be thought that the seeds of plants could be borne by winds and currents to neighboring islands; and that birds and animals could pass from one to the other. While this is true of the vegetable creation to some extent, and is also true of some birds, yet to many land animals and many varieties of birds, even a narrow channel of the sea forms an impassable To illustrate what would be the case, supposing the causes which are now in existence only to operate, let us take Celebes, the strange-shaped island near the center of the Archipelago. From its position, separated only by a narrow intervening strait from Borneo, and surounded by other islands, and with large indentations of the sea, and having comparatively only a narrow breadth of land, it is admirably fitted to receive the forms of life which exist in at least the neighboring islands. But Mr. Wallace says it is the poorest of them all in the number of its species, and the most isolated in the character of its productions (p. 277). Of the land birds there are one hundred and twenty-eight different species. Of these twenty roam over the whole Archipelago, leaving one hundred and eight species more especially characteristic of the island. Of these only nine extend to the islands westward, and nineteen to the islands eastward, while no less than eighty are confined to Celebes. these there are many which have no affinity with birds on the nearer islands, but bear a close resemblance to those in such distant regions as New Guinea, Australia, India or Africa.

The peculiar isolation of the fauna of this island Mr. Wallace is disposed to account for by supposing that it is older land, or was elevated above the surrounding ocean before the other islands.

Whether this theory of subsidence of sea and elevation of land, will answer all the necessities of the case, seems doubtful. It might, if the types of animal and vegetable life were in all respects similar to the mainland; but as they differ so radically in many particulars, there is the necessity of accounting for the isolated and peculiar forms of life.

In glancing at the questions here involved, we cannot adopt the statements and conclusions of our author. As, for instance, Mr. Wallace says: "Naturalists have now arrived at the conclusion that by some slow process of development or transmutation all animals have been produced from those which preceded them; and the old notion that every species was specially created as they now exist, at a particular time, and in a particular spot, is abandoned as opposed to many striking facts, and unsupported by any evidence."\*

Geographical Distribution of Animals, Vol. I., p. 6

This modification of animal life, he acknowledges, has taken place very slowly, so that the historic period of three or four thousand years has hardly produced a perceptible change in a Even to the last glacial epoch, 50,000 or single species. 100,000 years, modification has taken place only in a "few of the higher animals into very slightly different species."\* will be seen that this theory takes for granted what even Mr. Wallace admits has never taken place in historic times, a single clear instance of transmutation of species. 2. If there has been transmutation, it does not do away with the necessity of Modification, development, evolution, from lower to higher forms, which all recognize, is not creation or calling things that are out of those that are not.\* 3. All the facts adduced by Mr. Wallace point to an entirely different conclusion than that of transmutation. No one has demonstrated better than he that the habitat of very many animals is exceedingly limited. There are a few that are somewhat cosmopolitan, but every continent, and almost every island, especially in this Malay Archipelago, has its distinct fauna. Even those continents which are connected, as Europe, Asia and Africa, have, in different parts, their own special forms of animal life. These differences are more marked when wide seas intervene. Australia there are no elephants or tigers, no apes or monkeys, no deer or oxen, none of the familiar types of quadrupeds existing in other parts of the globe, but kangaroos and opossums. So, also, its birds differ from those of other regions.

The present distribution of animal life, therefore, would indicate not a transmutation of species from one common centre or origin, but a creation of many species in their particular locality. The distinction between man and the other animals in this respect is quite plain in the record. According to the Bible, all mankind were descended from one pair, and were spread abroad over the face of the whole earth. But with both animals and vegetables, the method was different. The waters, not in one place, but everywhere and in all directions, were to bring forth moving creatures, and the earth living creatures. For the locality, for the food provided, for all the circumstances in which the creature was to be placed, the crea-

<sup>\*</sup> Geographical Distribution of Animals, Vol. I., p. 7

ture made was adapted—opossums and kangaroos in Australia, elephants, tigers, and the domestic animals on the larger continents, and beautiful and strange birds on nearly every island of the sea.

But the objection will readily occur, If this distribution of animals agrees with the Mosaic account of creation, how about the deluge? Were all the animals gathered into the ark, and if so, whence the wide difference of species from those at present existing in Asia, and how did the animals cross barriers which they are never known to cross now? Transmutation of species, if we believed in it, would be a convenient theory to help us out of this difficulty, or the subsidence and elevation of continents, or the survival of the fittest. We must concede that in the present state of our knowledge it is not easy to reconcile the geographical distribution of animals with the theory of a universal deluge. Theologians must look at all the difficulties of the case, and in due time the solution will come. Hugh Miller thought he had found a solution in a limited deluge, brought about in part by the subsidence of the earth in that locality where man existed, and which by its depression would bring in the fountains of the great deep. Another solution which Prichard advocates, is the recreation on those distant lands and islands of forms of life that had previously existed. But it might be asked, (1) why not recreate all the forms of life, and not attempt to preserve some of them in the ark? And (2), the account of creation seems to imply that when God finished it, he rested not to take it up again. With man, the last and highest type, the work was complete, and its completion was emphasized by the Sabbath or period of rest. When man sinned, God did not destroy them all and recreate a new human race, but preserved one family. And so with the animals. There is no record of recreation. Is the only conclusion, then, that the deluge was limited? To this we must say, that from the side of natural history there are facts on both sides which render the question, for the present at least, not easy of solution. On the one hand there are all the physical difficulties of collecting birds, insects and animals over seas which they never cross, and supplying this vast concourse with appropriate food. And on the other, we find this equally remarkable fact, which Mr. Wallace emphasizes, " of the recent

and almost universal change that has taken place in the character of the fauna over the entire globe.\* In Europe, in North America, and in South America, we have evidence that a very similar change occurred about the same time." The remains of mastodons, huge armadillos, large horses and tapirs, cave-lions, etc., are found in peat-bogs, gravels and cave-earths, and since the deposition of the most recent of the fossil-bearing strata, we can certify to the correctness of this, so far as the mastodons of this country are concerned. Again, in Australia there is a similar appearance of extinct fauna, some of gigantic size, belonging to the same geologic period-kangaroos as large as an elephant. His theory of accounting for this simultaneous change over large portions of the earth's surface, is the great change wrought at the time of the glacial epoch, some 50,000 or 100,000 years ago. "We live," he says, "in a zoölogically impoverished world, from which all the largest and fairest and strongest forms have recently disappeared, and it is no doubt a much better world for us now they have gone."1 How. then, are remains found in the very last of the tertiary deposits in the pliocene and post-pliocene periods? Mr. Wallace would say. We are to weigh the evidence whether this recent disappearance of strange fauna is not more likely to have been caused by the deluge than by the glacial epoch. The fact that it was the deluge is strengthened in our minds by the remains of human bones found in the same cave-earths with those of the ancient fossils of the Old World, though this is not mentioned by our author, as he leaves man out of his geographical distribution of animals. We would not be too positive in our assertions, where as yet the data have not been perhaps sufficiently examined, but the acknowledged change requires a recent cause, and this recent and sufficient cause seems to be met by the deluge. Mr. Wallace is justly severe on "those who would create a continent to account for the migrations of a beetle;" so we question the propriety of dodging an adequate cause of three or four thousand years ago, for a questionable solution of 50,000 or 100,000 years previous. To those who look for a wise and kind Providence, even in the midst of judgment, we have it in the sweeping away of so many fierce

<sup>\*</sup> Distribution of Animals, vol. i., p. 149., et seq.

<sup>†</sup> Ibid., p. 157.

and strange animals, which made the world after the flood a better habitation for man. As we said, however, we put this fact of the recent disappearance of strange and huge fauna, which favors the belief in a universal deluge, over against the other of the isolated distribution of different forms of animal life, which seems to make it impossible; and wait for further investigation and research to tunnel through this difficulty.

We pass now to the question about the two races, so dissimilar, which occupy different portions of this Archipelago. author considers them so entirely different, that they belong to two distinct races, rather than modifications of one and the same race.\* To this we may assent so far as they present distinct peculiarities, and show an origin which for centuries has been separate, but not if he means, as we suppose he does, that they did not descend from one common pair. If man was only an animal, there would have been a chance for transmutation of species; but as he is man, he must forsooth have come from another race. However, we accept the fact of difference in many peculiarities. The Papuan or New Guinean resembles first the Polynesian; and second, has certain clearly marked affinities which connect him with the negro of Africa, rather than with any of the nations of Asia. Supposing the ancestors of the Papuan to have come from Africa rather than Asia, the difficult question is, how did they get across the Indian Ocean to Polynesia? It seems a big distance to pass by sea for any methods of navigation now known to these races. Possibly there has been a decadence in knowledge, as exhibited by the native races on our own continent and in other parts of the world, when the descendants of former generations could not rebuild the cities and temples among the ruins of which they dwell. Europeans and Americans are always thinking of the progress of the race; Asiatics of its decadence. When we find the savage, we hope our idea is true of his future, that of the Asiatic may be correct of his past history, rather than that he has always stood in the same position. Mr. Wallace himself states that in Java there are ruins of elaborate and well constructed temples, where solid mason-work has in a measure resisted the ravages of time in a tropical climate, which are

<sup>\*</sup> Malay Archipelago, p. 532.

surrounded by bamboo huts—the highest style of architecture of the descendants of these old temple builders. It may be that, as nations, which in Solomon's time could make long voyages, and the descendants of which could not make them now, so the Africans may have had the enterprise then to leave their native shores and find homes in Polynesia.

Still another conjecture is open without being obliged to resort to any such theory as that Polynesia and Africa have been peopled by more than one race. There are some animals allied to apes, which go on all fours, called lemurs, which are common to some of these islands, and also to Madagascar. The baribossa of Celebes and Bouru resembles the wart-hog of Africa, and there are other striking resemblances in birds. Dr. Sclater has suggested that a continent even existed in the Indian Ocean which formed a link between Africa and Polynesia, and has given to this hypothetical land the name of Lemuria, from the animal which first suggested the connection of those now widely separated regions (p. 290).

This subsidence of continents is a convenient escape from many difficulties. And of the fact in the general there is no doubt, just as there are rocks all about us which have been elevated from their ocean beds; but yet subsidence may be assumed in directions where it never existed, and may be placed at periods which cannot be definitely determined by any indications which we now have. Mr. Wallace, rightly we think, hopes for light in the study of extinct fauna and flora in connection with living types; but there is need of great caution in the way of inferences. In his later work he seems to think the line of connection between continents has been north and south, rather than east and west, and so is inclined to give up the hypothetical continent of Lemuria.

Leaving these questions of physical and scientific interest, let us look briefly at the present condition of these Islanders, and see what has been done toward their moral and spiritual elevation.

The Papuans are heathen, and have been left more undisturbed in their heathenism than any other large island on the face of the globe. Until recently, though long the resort of traders, and constantly passed by vessels going to Australia, and frequently by those going to China, yet the only attempts at

evangelization, so far as we know, are those to which we will presently refer. The inhabitants of this island have had a character for violence to which they do not seem entitled. They are fierce looking, and cut up into hostile tribes: but Mr. Wallace lived among them without difficulty. They are noisy, boisterous, but no worse than other savages, and assimilating in many respects to the natives of Madagascar; there may be as great triumphs of the Gospel in store for them as have been shown on that island. Under a tropical sun they have but few wants, and those easily supplied. They have but little occasion to resort even to agriculture. A sago palm cut down, and the whole inside of the tree washed and dried and made into cakes, will produce something like 600 pounds of sago, or enough to last a year, and requiring only about ten days' labor of one man, or more usually woman, to get it ready (p. 385). The easier the means of subsistence and the plenty which might be had, results, in the savage state, in the greatest poverty and scarcity. Where the sago tree abounds the Papuans live almost entirely on that, and a little fish, raising scarcely any vegetables or fruit. In one of his excursions Mr. Wallace lived for a time on the Aru Islands, a little south of New Guinea, and acknowledges that the monotony and uniformity of every-day savage life revealed a more miserable kind of existence than when it had the charm of novelty. Their food, when they had no fish, was mostly vegetable, imperfectly cooked, and these in varying and often insufficient quantities. To this did he attribute the prevalence of skin diseases, and ulcers on the legs and joints.

"The chief luxury of these Aru people is arrack (Java rum), which the traders bring in great quantities and sell cheap. A day's fishing or rattan cutting will purchase at least a half gallon bottle, and when the trepang or birds' nests collected during a season are sold, they get whole boxes containing fifteen such bottles, which the inmates of a house will sit round day and night till they have finished. They themselves tell me that at such bouts they often tear to pieces the houses they are in, break and destroy everything they can lay their hands on, and make such a riot as is alarming to behold" (p. 453).

He says they seem to enjoy pure idleness, often sitting for days in their houses, their women bringing the vegetables or sago which form their food.

On these islands there were three or four villages on the

coast where schoolmasters from Amboyna reside, and the people were nominally Christian, and to some extent educated and civilized. Their intercourse with Mohammedan traders had also some effect, as they would often bury their dead, though their national custom was to expose the body on a raised stage until it decomposed.

On New Guinea itself there was no Dutch colony at the time of Mr. Wallace's visit, though explorations were going on for the purpose of planting one. Trading vessels pass along the coast, and at the fine harbor of Dorey, which was the only point where Mr. Wallace made any tarry, he found two German missionaries. At that time they were the only ones on the island; one of them had been there for two years and had learned something of the language, and was attempting to translate portions of the Bible, and had also started a small school. These missionaries were accustomed to labor and trade, and were obliged to eke out the small salary granted from Europe by trading with the natives-buying their rice when it was cheap, and selling it back when they were in need, at an advanced price. The effect of this on the natives was the impression that the missionaries, like other traders, came among them for their own personal advantage, and not for the good of those among whom they labored.

From a recent work\* we learn that these two German missionaries are dead, and that their places have not been supplied. "The London Missionary Society" directed Mr. Murray to commence a mission on New Guinea. This he did in 1871, on the southeastern extremity of the island, opposite to Australia, landing some native missionaries from the Loyalty Islands at two different points. One party of these was murdered by the natives; what was the reason for the act Mr. Murray could not discover. He testifies, however, that he found no difficulty in going among them unarmed at all points where he landed. At the other point the mission was successfully established, and to the native missionaries was added a missionary from England.

The islands to the westward, where the Malay race predomi-

<sup>\*</sup>Forty Years' Missionary Work in Polynesia and New Guinea, 1835 to 1875, published by the Carters.

nates, have been brought more under the influence of civilization than those to the east. Amboyna, Java, and some other points have been visited, and occupied for the purposes of trade for three hundred years. On the large island of Aram, near Amboyna, there are schools and native school-masters, and many of the inhabitants are nominal Christians. In the larger villages are European missionaries. Mr. Wallace's estimate of the so-called Christians on this island was not very favorable. He says they were spoken of as thieves, liars, drunkards and incorrigibly lazy (p. 357). One cause of this, he thinks, is that with Mohammedanism, temperance is a part of their religion, and has become such a habit that practically the rule is never transgressed. One fertile source of want and crime is thus present to one class which is not to another.\* Doubtless, in coming out of one system, which is made up of ceremonies and particular observances and with greater freedom from restraint, and yet imperfectly comprehending the doctrines of Christianity, and imperfectly brought under its morality, there is some cause for this statement. Christianity, with a race naturally indolent and in a low state of civilization, has a struggle which it is not to be expected will transform at once such a people into the high standard toward which civilized nations have been struggling for hundreds of years.

Partly as an offset to the above unfavorable view, and also as giving more fully the Dutch method of colonization and christianization, we will abridge his favorable report of the change wrought within fifty years on the northeast extremity of Celebes. Before 1822 this was a savage community, cut up into small, isolated tribes and villages, with houses built on lofty posts to defend themselves from their enemies. Strips of bark were their only dress; and human skulls were the chief ornaments of the houses of their chiefs. The country was a pathless wilderness, with small, cultivated patches of rice and vegetables. In the year 1822 the coffee plant was introduced

<sup>\*</sup>Notwithstanding what he says here about the temperance principles of Mohammedanism, we find that on another island he was asked by Mohammedans for spirits, "the people," he says, "being merely nominal Mohammedans, who confine their religion almost entirely to a disgust at pork and a few other forbidden articles of food."

into this region, and it was found to be admirably adapted to its cultivation. The country rises quite rapidly from the sea into a high, volcanic region with a rich soil. Arrangements were made with the village chiefs, who were to receive a certain per cent. of the produce. The country was divided into districts, and a "controlleur" appointed, who was the general superintendent of the cultivation of the district. He was obliged to visit every village in succession once a month, and send in a report of their condition to the resident. Under the direction of the Dutch, roads were made, houses built, missionaries were settled in the more populous districts, and schools were opened. Mr. Wallace describes one of the villages in this region through which he passed. The main road, he says, along which the coffee is brought from the interior in carts drawn by buffaloes, is turned aside at the entrance of the village and passes behind it, and so allows the village street to be kept neat and clean. In this village the street was bordered by a neat hedge formed of rose trees, which were perpetually in bloom. There was a broad central path kept clean, and a border of fine turf, which was neatly cut. The houses were all of wood, raised on posts about six feet from the ground, with a broad veranda and balustrade, and the walls neatly whitewashed and surrounded by orange trees and flowering shrubs. He stopped with a native chief, now a major under the Dutch. His house was large, airy, substantially built, and furnished in European style, with chairs, tables and lamps. Meals were served on good china, while his host sat at the head of the table, dressed in black, with patent leather shoes. This man's father was one of those whose dress was a strip of bark, and whose house was ornamented with human heads. In this village there was a school-house, its teacher a native, who had been educated by the missionary at one of the larger places. School was held every morning for about three hours, and twice a week there was catechising and preaching. There was also a service Sunday morning. The language used was the Malay.

Near the villages were the coffee plantations. The trees are planted in rows, and kept topped to about seven feet high. Each tree produced from 10 to 20 pounds of cleaned coffee an nually. The plantations are formed by Government, and cul-

tivated by the villagers under the direction of the chief. Certain days are appointed for weeding and gathering, and the whole working population are summoned by the sound of a gong. An account is kept of the day's work of each family, and the produce is divided accordingly. The price is fixed by Government. This system has been called a "paternal despotism," and has features which seem strict, and wanting in that freedom which we imagine is essential. But for a people just emerging from a savage state, it has its advantages. The people were well cared for, better fed, housed, educated, and apparently making more progress than in any other place in the Archipelago. There seems to have been a combination of causes-the natives falling in with the system, and the officers of Government and the missionaries doing their work wellwhich made this place one of the most favorable examples of the Dutch system. It is worth studying in sceking to provide a system which shall reach the wants and elevate the condition of savage races.

These islands—even those forming the west portion of the Archipelago—though largely occupied by the Dutch, are not all held by them. Part of Borneo was for a time governed by an Englishman, Sir James Brooke. Other portions are held by native chiefs. There are also Dutch settlements on the island. Sumatra, until within a few years, was governed almost entirely by native chiefs. Some European government would be favorable to missionary work, but it undoubtedly might be pushed into regions not yet occupied by the Dutch Government, or by German missionaries. Without attempting at all to interfere with their work, some contact with other methods of evangelization would, we are assured, lead to healthier results.

Because two men were killed on Sumatra years ago, and because the mission among the Dyaks of Borneo was attended with difficulty and little success, or even because China offers a larger field for missionary labor, we see no reason why islands, some of which are the largest in the world, and which are capable of sustaining a dense population, and which produce almost spontaneously every variety of tropical fruit and vegetation, should be left without any effort to evangelize them except by the missionaries from Holland, or the few who may

go from Germany. The Chinese are there with opium, and the Dutch, Portuguese, English and Malay with rum, seeking spices, beautiful birds, gold dust, diamonds. Why not hasten with the glad tidings, and elevate regions where savages roam, and where the wilderness is tangled, and seek to make it the garden of the Lord?