

“Medical Geography Instructions for the Malay Archipelago”

by **Doctor Arthur Bordier**

(Professor of Medical Geography at the School of Anthropology)

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Robert K. Stevenson: Translator and Editor



Mixed Malay-Papuan type natives of Livuliri
(near Larantuka, Flores Island)

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Doctor Rück, presently a physician in Sumatra, has honored the Anthropology Society by requesting it to guide his studies on the Malay Archipelago, specifically from the medical point of view.

Charged with responding to his request to the Society, I am not afraid to state that the situation of Doctor Rück enables us to await from him more than he will receive from us. I shall nevertheless, by means of an outline that can be of service to the original researches of our confrère, provide a summary of the current state of our knowledge on this question.

The Malay Archipelago, commonly called *Malaysia*, is comprised of the islands of Sumatra, Java, Borneo, Timor, Flores Island, the Moluccas, the Celebes, and the Philippines; these islands extend from 10° S. latitude to 19° N. latitude and 90° E. longitude to 128° E. longitude.

One therefore ought to expect to find in Malaysia the principal marks of the *intertropical pathology: heat* and *humidity*, each contributing to assure the sudden appearance of various maladies. It is important, however, to make allowance for three conditions:

1. The insular topography;
2. Variations in altitude;
3. The seasons.

Insular topography. – Thanks to the topography of the constituent parts of Malaysia, the average temperature, although hot, does not exceed 30° C., whereas much farther from the equator in continental India it rises up to 40° C.

Variations in *altitude.* – One needs to know not to mix within the same medical geography study the different parts of the Malay territory without taking into account differences in altitude.

Accordingly, and rightly so, Dutch researchers have divided Malaysia into many zones with respect to altitude:

A *torrid* zone, comprising land between sea level and an altitude of 2,000 feet, presents in its lower part a temperature of 27° C. and in its upper part a temperature of 23° C.; the quantity of water vapor is 20.25 grams per cubic meter.

A *temperate* zone, from 2,000 to 4,500 feet, possesses an average temperature of 23° C. at its base and 18° C. at its top; its humidity level is 15.7 grams water vapor per cubic meter.

A *cool* zone, ranging from 4,500 to 7,500 feet, averaging 13° C. at its highest part, has a humidity level of 11 grams water vapor per cubic meter.

A *cold* zone, existing from 7,500 feet to 10,000 feet, is characterized by both a low average temperature of 8° C. and a low humidity level of .76 grams of water vapor per cubic meter.

Lastly, the *seasons* supply an important element of variability to the intertropical pathology. When the sun is in the southern hemisphere, the wind blows from the northwest, bringing about the *wet monsoon* (or *bad monsoon*). When the sun is in the northern hemisphere, the wind blows from the east, producing the *dry monsoon* (or *good monsoon*).

It is nonetheless true that the *torrid* zone is the most extensive and that the hygrometer reads .80 to .81 in the dry season, and .91 to .92 in the rainy season.

Heat and humidity make Malaysia a land of *fever*, *hepatitis*, and *dysentery*. Many writers, Armond among others, think that people have very much exaggerated the insalubrity of Sumatra and Java. In Sumatra notably, if the west coast is extremely unhealthy and has been justly named the *coast of pestilence*, the east coast will frequently present examples of great longevity.

Nevertheless, torrential rains, frequently overflowing streams, luxuriant vegetation that furnishes an abundance of detritus, and lastly constant warm weather—all these contribute to supporting homes for and sources of malaria.

But these malarious homes only become homes of intermittent fever for man. Enormous pachyderms seem to find in these insalubrious surroundings particularly favorable conditions of development. Man does not have this privilege, or at least, if he has it, he has it more unequally; in other words, if the study of the climate of Malaysia must precede any methodical study of the pathology of this region, one can say as much for the study of another milieu, or the *study of races*.

Doctor Rück, in the studies that he intends to make, ought therefore to not just strive to construct a geographical map of maladies that allows for climatic or seasonal variations, which would also be very useful to the science of colonization and acclimatization; but, above all, he could render a great service to *anthropology*

by sending us what can be called *ethnologic* maps of pathology.

What is the pathology of Malaysia, and what is, throughout the Malay Archipelago, the pathology of each race? Well, the races are numerous. One finds here a veritable jumble of races that are today difficult for one to make a distinction between, given that they are mixtures, confoundedly so up to a certain point.

The black, yellow and white races of varying purity that are met with in Malaysia are more or less complex mélanges of the following: *Negritos*, *Papuans*, *Dravidians* and *Mundas*, *Allophyles* and *Aryans*, *Malays*, *Malayo-Polynesians*, and *Indo-Chinese*, all of whom have come into collision with the *European*, *Arab*, and *Chinese*.

Black race. – The black race, perhaps the most ancient of Malaysia, has been in all respects displaced, and has largely disappeared by either amalgamation or extinction.

This race, which is quite different from the black African race, is derived most likely from the Southern Mundas, and belongs to what we call the *Negritos*. It only exists in the interior of the Philippines, where it is represented by the *Aetas*; in the interior of Halmahera; and perhaps, it is said (but this fact needs to be verified), in the interior of Borneo and Sumatra.

The hair of Negritos is woolly, but the forehead is more bare than it is among the Negroes of Africa. The nose, though flattened, is turned up at its tip; the lower jaw is narrow.

According to Bernardo de la Fuente, one needs to distinguish between two black races in Malaysia, and especially in the Philippines. One race will be short, woolly-haired, and little civilized; these people are the *Aetas*—Negritos. The other race will be taller, with smooth hair, and is named the *Endamens*; these people turn out to be cross-breeds of the yellow race and Negritos. Unfortunately, the word *Endamen* lacks precision, it having been used by Lesson to name blacks with smooth hair inhabiting New Guinea; but there do not exist in New Guinea any blacks with smooth hair.

Relying upon various pieces of information, Professor de Quatrefages and Doctor Hamy have proceeded to point out that the *Vandemenes* are a Papuan tribe in New Guinea, and that they are very distinct from the Negritos.

Does the Papuan area, which is near that of the Negritos, extend beyond just one part of Malaysia? This remains to be determined. I can ask as much about the *Alfurus* of the Celebes who, although this name has been given to different tribes, are only, in reality, Papuan tribes from western New Guinea whose extent includes the Celebes and the Moluccas. To the Negritos one must also attach the Orang Sakai of Belitung and Bangka, the Dagangs of Borneo and the Daras of Sumatra.

The *yellow race* is represented in the Philippines by the Igorots; additionally, in the Philippines the rather vaguely named *Indo-Chinese* race—more commonly known as the *Tagals*—has driven the Aetas back into the country's center.

To the *Malayo-Polynesian* race belong other groups inhabiting the Malay Archipelago. These are:

The *Bataks* of Sumatra, who are dolichocephalic and who possess a thinner nose and less prominent cheekbones than the Malays; the men have thick beards, while the breasts of the women are voluminous and globulous. A close correspondence has been signalized between their type and the purest Polynesian type.

Living in the forests as nomads, they engage in a rather peculiar commerce at Palembang: one deposits at a convenient drop-off spot certain commodities (rice, fabrics, and so on), sounds the gong and withdraws from the place; the Bataks then arrive, carry away the objects and leave behind at the drop-off ivory, after which they retire back into the forest.

Also inhabiting Sumatra and belonging to the Malayo-Polynesian race are the *Passumahs*, who are a mixture of Bataks and Javanese.

Looking at Borneo, we see that the *Dayaks* play the same role there as the Bataks do in Sumatra. These celebrated head-hunters maintain with great care vases of enameled pottery, which they say had been brought from India a long time ago.

In the Celebes the *Buginese* belong to the same race; however, according to Rochas, they are much superior to the Bataks and Dayaks, and are distinguished for being a completely energetic, sportive people. Very fit for civilization, it is the Buginese who perhaps one day will be capable of struggling unaided against the Malay tyranny.

Meanwhile, the *Rottinese* seem to form a type apart from others inhabiting the

archipelago. Their flat, slender nose, not very prominent cheekbones, thin lips, and flowing, if not often curly, hair go with a very dark color of the skin.

The *Malay element* dominates in all the previously-mentioned groups, I should add.

Now, it is only with great difficulty that one sees how to disentangle the Malay element in an investigation of the chronology of races; moreover, this element above all appears to be the result of a complex *mélange* rather than as one of the primordial composing elements. Variable on such-and-such a point according as to how the *mélange* has been effectuated in differing proportions with other races, the Malay unity only definitively rests on the union of the yellow race and black race, as well as on the community of fanaticism that Islam has given to these people—people who Professor de Quatrefages has justly named the *Arabs of the Orient*.

It was about 1160 A.D. that these people appeared for the first time in history; shortly afterwards, proceeding westwards from Palembang in Sumatra, they went on to establish Singapore in the Malay Peninsula. But, this east to west movement had itself been preceded by a contrary movement of people emanating from the valley of the Irrawaddy in Burma, had dispersed themselves through the Malay Peninsula into the Sunda Islands, and who in the process had come into collision with those islands' three races—the Negritos, Papuans, and Polynesians.

One finds them nowadays a little everywhere throughout the archipelago, but mainly in the southwest part of Sumatra, Borneo, Bangka and Riouw.

The physical qualities of the Malays are as follows: the height is not very tall, the skin is light brown and copper-colored, the nose is short, flat, and broad, with the nostrils being dilated; the jaw is prominent as are the cheekbones, and the face is as wide as it is long; the mouth is large, the lips thick, the beard thin, and the hair is black, straight, thick, hard, and rarely curly.

On the whole their type approximates that of the Chinese; the Malays are Mohammedans, fond chewers of the betel leaf, intelligent but tyrannical, lazy and perfidious, buccaneers and pirates, and above all cosmopolitans.

Besides these well-established types one meets with in Malaysia, additional types, living in a more or less isolated state, are encountered. These include:

The Hindu type, which persists near the famous ruins of Borobudur in Java; in the Tengah mountains one still beholds a tribe called the *pagans of the Tengah*



30-year-old Sundanese of Java. Note the prominent cheekbones and jaw, dilated nostrils, and other physical qualities characteristic of Malays.

mountains, which is directly descended from the Hindus. Kindly, open-hearted, and hospitable, they have nothing to do with opium or strong liquor.

A population named the *Telingas* from the coast of Malabar in southwest India make their way to the Sunda Islands with the west monsoon and go back with the east monsoon.

The *Arabs* have been in Malaysia since the third century. They have interbred less with the other races than have the Chinese.

The *Chinese* have been dispersed throughout the Malay Archipelago since the fifth century, but it has only been since the sixteenth century that they have established durable colonies on the west coast of Borneo. Working mainly in the mines, they have formed societies—sort of small federative republics—for the exploitation of the mines, and have pushed out of their way the Dayaks, just as the Malays have done.

Finally, one finds in Malaysia the European element, brought over from Europe in great numbers by the Dutch and French overseers after the revocation of the Edict of Nantes, and their very beautiful (it is said) hybrid offspring, who are known under the name of *Lip-Lap*.

It is therefore over this quite varied terrain that Doctor Rück will have to conduct his research.

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