

Transcription, January 2015:

The Times (London) No. 29363 (18 Sept. 1878): 4d-4e (anon.).

[p. 4d]

‘Tropical Nature.’¹

Although Mr. Wallace has been accused of having a powerful imagination, so powerful as to be misleading, we do not think that he himself would lay any claim to that form of the representative faculty essential to the poet. The reader need not take up this volume in the expectation of finding in it any gorgeous and vague descriptions of tropical scenery and life, any of those characteristic reproductions in which Kingsley revels in his “At Last.” Mr. Wallace possesses, however, in an eminent degree the power of clear and instructive description, and in the volume before us he gives us the elements which we may combine for ourselves into a thousand pictures, none of which are likely to surpass reality. About one-half of Mr. Wallace’s new work is occupied with a systematic account of the varieties of vegetable and animal life to be met with in the tropics, from the primæval giant of the forest down to the insect that finds a home in a crevice of its bark.

Some timorous persons dread that the spread of scientific knowledge will wither up all the beauty with which the face of the universe has been clad; that it will take all the soul out of poetry, and scare away sentiment and religion to some Edenic world where the tree of knowledge has not yet been plucked. Let such persons read this volume by Mr. Wallace. Here they have a plain and unadorned, but full and bold, statement of the results of scientific research with regard to some of the most beautiful and grandest features of this beautiful world, which, we are sure, will leave most readers fuller of wonder and of a sense of the mysterious and unseen than ever. What Mr. Wallace says with regard to the emotions excited by colour and by music may be applied to nearly all the varied phenomena with which his work deals; they “seem to rise above the level of a world developed on purely utilitarian principles.”

Mr. Wallace in his first chapter deals with the climate and physical aspects of the equatorial zone, which he limits to 12 deg. on each side of the equator. For although tropical conditions exist up to and even beyond the limits of the tropics, they are neither so constant nor so universal as between the narrower limits. He shows with great clearness and force the various causes which contribute to the intense heat of the tropics—causes which are not so very patent as at first they appear to be. If, for example, the summer temperature of London is compared with the temperature of Batavia of the same month, when the sun is at a greater altitude as regards the former place than the latter, and remains much longer above the horizon, we find a difference of 20 deg. in favour of Batavia. But even with a heat of 80 deg. at Batavia, it is dangerous for a stranger to expose himself to the sun, while in London such a temperature can be borne with something approaching to delight. Mr. Wallace shows the various conditions which contribute to this difference in what may be called the quality of the heat of the tropical and temperate zones. There is, of course, the constant direct action of the sun itself; then there are the heat of the soil, which never wholly escapes; aqueous vapour, an ever-present storehouse of heat; winds which are almost invariably warm. And yet this zone Mr. Wallace speaks of as a favoured one, where the heat is never oppressive as it so often becomes on the borders of the tropics, this congenial condition being caused by the large amount of aqueous vapour always present in the atmosphere. The uniformity of this equatorial climate in all parts of the globe is a feature worthy of remark. The only exceptions to the rule

are where there is a scanty vegetation—as in Central India, where the scanty and intermittent rainfall, with its fearful accompaniment of famine, are, no doubt, in great part due to the absence of a sufficient proportion of forest-covering to the earth's surface; “and it is,” Mr. Wallace states, “to a systematic planting of all the hill-tops, elevated ridges, and higher slopes that we can alone look for a radical cure of the evil.” This would almost certainly produce, not only increased rainfall, but check evaporation from the soil and give birth to perennial springs.

Mr. Wallace disabuses the reader of many delusions which have been spread by inaccurate observers and sensational writers. Darkness, for example, though it comes on much more rapidly than in temperate countries, is not nearly so sudden as it is frequently stated to be, nor, generally speaking, is the excessive violence of meteorological phenomena generally supposed to be characteristic of the tropics by any means remarkable in the equatorial zone.

Probably to many readers the chapters on equatorial vegetation and animal life in the tropical forests will be the most interesting in the book. After describing some of the general features of equatorial forest life, Mr. Wallace speaks of some of the more remarkable specimens of this vegetation—trees, shrubs, and flowers. He shows how the equatorial forest belt is an inevitable result of the climatic conditions, and that, notwithstanding the many uses which the vegetable productions of the tropics are put to, both by the natives and in the countries to which they are exported, there is here a field affording the widest scope for future enterprise. Mr. Wallace has some remarkably interesting and ingenious statements concerning the great variety of creeping plants which entangle the equatorial forest trees, often forming a canopy which quite shuts out the light of day. Really interesting are the pages devoted to palms, which seem capable of being put to as many uses as the bamboo, and as a sugar-yielding plant might be made much more productive and profitable than the sugar-cane itself. Then we are told of ferns, bananas, arums, screw pines, orchids, and bamboos. We often hear of the multitude of purposes which the bamboo is made to serve, but we think Mr. Wallace's list has added to the catalogue. A chair of artistic and substantial make can be had for 6d., and a sofa of equally good quality for 2s. One delusion which Mr. Wallace dispenses is as to the prevalence and richness of colour among tropical flowers. The truth is that, while patches of gorgeous colour are here and there met with, there is much greater abundance, variety, and beauty of colour among the flowers of temperate and sub-Arctic regions; while even in respect to the colours of insects and the colouring of birds, Mr. Wallace has some corrections to make in popular belief. Colour itself, he shows, is not the evanescent and accidental feature it is commonly thought to be, but is intimately connected with the organization of animal and plant. A most interesting chapter is devoted to humming birds, of which there are something like 400 species, and which are by no means confined to the tropical zone. It is a very common delusion that these most ethereal, and probably most combative, of created things feed upon the nectar of flowers—a delusion which has often led to the death of the tiny creatures in captivity; the fact being that it has been proved beyond a shadow of doubt that their main food is tiny insects such as are often found imbedded in the nectar of flowers. The humming-birds, Mr. Wallace shows, are radically different from the sun-birds of the Eastern Hemisphere, and, indeed, are essentially modified swifts.

To the biologist and all who take an interest in modern scientific speculation, the chapters on the colours of animals and plants will be specially attractive, all the more so that in the chapter on the former subject. Mr. Wallace criticizes, and we venture to think invalidates, to a considerable extent, the theories of sexual selection put forward by Mr. Darwin to explain the conspicuous colours and other adornments

which are found on most male animals, while they are mostly absent from the female. This is a subject which we cannot discuss here. Let us only remind the reader that, according to Mr. Darwin's theory, these conspicuous differences between male and female have been gradually developed from the fact that the latter in her selection of a mate always gives preference to males which, in one direction or another, are adorned the most. No, says Mr. Wallace; the real state of the case is that the female has little or no choice in the matter; the superabundance of ornament in the male arises simply from his superior vitality and energy, the most vigorous and lively males naturally having the choice of the finest specimens of the other sex, who, poor things, probably do not dream of having any choice in the matter. Thus, according to Mr. Wallace, sexual selection plays but a subordinate part, if, indeed, it plays any part, in development of animal life, and the main, if not the only factor to be taken into account, is natural selection. We do not pronounce in favour of one or the other; we simply state the case as between these two eminent exponents of the theory of development, and we have no doubt it will give rise to some lively controversy among the disciples of the two theories. Those, however, who know Mr. Wallace in connexion with certain "other-worldly" manifestations, know that he is not an extreme evolutionist; and, although he makes continual reference to the theory as explaining many of the phenomena of the tropics, still it is abundantly evident that he regards it only as applying to a method action adopted by an unseen intelligent power to carry out the system of the universe of which He is the Author; that while science can explain the *raison d'être* of many of the phenomena in the universe, still the old-fashioned methods of explaining the purpose subserved by these may also be quite consistent with truth. Because we know by what means the flowers are tinted and the birds bedecked, can tell how the Alps have been sculptured and show the moon, not as a pale-faced goddess, but a withered planet, must, therefore, the face of the universe lose all beauty for us—must poetry become impossible, and atheism inevitable?

What Mr. Wallace says with respect to the colours of flowers and of the colour-sense and its origin in man and animals is extremely interesting. Speaking of the historical development of the colour-sense in man, he refers to the recent controversy as to the sense of colour among the Greeks, and to the colour-terms in ancient literature generally, and concludes that the only deficiency was one of nomenclature.

The two concluding chapters are on, "by-paths in the domain of biology," the author's address at the Glasgow meeting of the British Association, and "the distribution of animals as indicating geographical changes," a lecture given last autumn at the Geographical Society, and of which we gave an abstract at the time.

Altogether Mr. Wallace has done well to gather into this form the results of his own long-continued observations, as well as those of others, on tropical animal and vegetable life. The book is evidently meant to be a "popular" one, and there is nothing in it that the intelligent general reader will not understand. Mr. Wallace makes no attempt to minister to the prevailing desire to have instruction seasoned with sensation. He tells a plain, unvarnished tale, intrinsically interesting, thoroughly trustworthy, free from all technicalities, and likely to prove attractive to all with a healthy appetite for information.

¹ "Tropical Nature, and other Essays." By Alfred R. Wallace. London: Macmillan and Co. 1878.

[\[Return\]](#)

The Alfred Russel Wallace Page, Charles H. Smith, 2015.