

LETTERS TO THE EDITOR.

Pre-Existence.

SIR,—A long spell of exhausting work must be my excuse for allowing Mr. A. R. Wallace's courteous letter to remain so long unnoticed. But that delay has had its advantages, for your able correspondent, "C. C. M.," among others, has meanwhile thrown on the consideration of the subject the light of his eminent critical power.

Mr. Wallace, speaking of the various natures with which we are born, says :—

I look on these diverse natures as the necessary result of the mode of increase of all but the lowest organisms, through the agency of male and female. This mode of increase has been the means of supplying the variations which have led to the continuous development of the organic world with all its myriad forms of use and beauty; in mankind they lead to that infinite diversity of intellectual and moral nature, of tastes, habits, faculties, and inspirations, which are in all probability, by their action and reaction on each other, equally essential for the full development of the highest nature of man.

Now, sir, Mr. Wallace published last year a work of a very high order, of so high an order that I feel some trepidation even in referring to it. That work *Darwinism* was reviewed in "LIGHT" on August 24th, 1889. Among the points noticed in the review were the striking remarks of Mr. Wallace as to the development of the mathematical faculty, and I should like to put it to Mr. Wallace whether the review does or does not represent the meaning he intended to convey. I quote from "LIGHT":—

After referring to the introduction of Algebra, Mr. Wallace goes on :—

It is, however, during the last three centuries only that the civilised world appears to have become conscious of the possession of a marvellous faculty which . . . has developed to an extent, the full grandeur of which can be appreciated only by those who have devoted some time (even if unsuccessfully) to the study.

Now, says Mr. Wallace, the savage either did or did not possess this faculty in a rudimentary state; if he did, then,

We have to ask by what means has this faculty been so rapidly developed in all civilised races, many of which a few centuries back were, in this respect, almost savages themselves; while in the latter case the difficulty is still greater, for we have to assume the existence of a faculty which had never been used either by the supposed possessors of it or by their ancestors.

Mr. Wallace takes the least difficult of these suppositions, namely, that the savage had the rudiments of the faculty. How then, he asks, has it become developed so as to produce a Newton, a La Place, a Gauss, or a Cayley? Admitting all gradations between the two extremes, the savage and Newton, what motive power caused its development? Now the process of natural selection and of the survival of the fittest depends entirely on struggle of some kind, and Mr. Wallace shows how in "the struggles of savage man with the elements, and with wild beasts, or of tribe with tribe" this faculty could have had no influence, and he points out with great emphasis that the Hindoos, the Arabs, the Greeks, and the Romans, all of whom had some amount of mathematical talent, have been supplanted by the Celts, the Teutons, and the Slavs, the fittest for survival—these last-mentioned races not having depended for "their steadily growing success during past centuries either on the possession of any exceptionally mathematical faculty or on its exercise." Mr. Wallace concludes, then, that we must look elsewhere for the development of the mathematical faculty.

Mr. Wallace again looks at this same faculty from another point of view. He shows that :—

The characters developed by means of natural selection will be present in all the individuals of a species, and, though varying, will not vary widely from a common standard. . . . In accordance with this law, we find that all those characters which were certainly essential to him during his early stages of development exist in all savages with some approach to equality. In the speed of running, in bodily strength, in skill with weapons, in acuteness of vision, or in power of following, all are fairly proficient. . . . So, every wren makes a fairly good nest, &c.

Now as to this mathematical faculty, probably fewer than one in a hundred really possesses it, the great bulk of the population having no natural ability for the study, or feeling the slightest interest in it. And if we attempt to measure the amount of variation in the faculty itself between a first-class mathematician and the ordinary run of people, who find any kind of calculation confusing and altogether devoid of interest, it is probable that the former could not be estimated at less than a hundred times the latter, and perhaps a thousand times would more nearly measure the difference between them.

If this be a true representation of Mr. Wallace's argument, an argument which I gladly made use of in my address, how does he reconcile it with the assertion in his letter that the "ordinary mode of increase" is sufficient to explain the infinite diversity of intellectual and moral nature that exists among mankind? Has not Mr. Wallace, in his dislike for the notion of pre-existence, attributed the whole of the phenomena of man's diversity to that very process of natural selection which, as he himself says, "appears not to be supported by adequate evidence, and to be directly opposed to many well-ascertained facts"?

If there be one faculty, no matter of what kind, if there be one faculty which can be shown to be the outcome of something which is not due to the ordinary mode of increase, and I submit that Mr. Wallace has shown that there is at least one such

faculty, then I say all that part of the argument contained in his letter falls to the ground.

Mr. Wallace is right in supposing that I admit development, thereby meaning the immediate effects of immediate causes as presented in the sequences that we are able to appreciate in one dimensional time, but I submit that though we call this "development" we have no right to assume that the same thing is development under conditions which are totally different from those we know of at present. Mr. Wallace, like others who have satisfied themselves of the existence of continued existence after death to this life, seems, nevertheless, to be unable to realise states of being which are not at all necessarily in any way like this, and this has led him in this particular instance so far astray as to say that Re-incarnation, which personally I do not defend, is "unsupported by any facts or analogies in the material or the spiritual universe." This is surely going rather far, even if the material and spiritual universes are supposed to be identical.

Mr. Wallace, moreover, urges as an argument against infinite pre-existence that presupposing continuous growth, "that however slow that growth may have been, yet in an infinite past it must have reached infinite development." Must it? Surely the facts of mathematical science are against this assumption, Does the asymptote of the hyperbola ever touch the hyperbola to which it continually approaches, to say nothing of the curves which pass through infinity and then come back again? This is, of course, argument from analogy, but as lines and time are the only things I know of which are of one dimension, and as Mr. Wallace has referred to the analogy of the general facts of the universe, I use the argument for what it is worth.

It may certainly be as your correspondent, "V. de F.", points out, that I have erred with others in using the word infinite with too little care, and that I should have used the word "pre-existence" preferably without its attributes. But I think this is covered by some of the concluding observations of my address: "I have spoken of anterior and lower states, and of posterior and higher states, but I would not for a moment have it thought that either of these states, or that any still farther back or still farther on, are necessarily at all like this. What is higher and better is but the presentation in this state and to our capacities of what may have, will most likely have, a different meaning when interpreted by faculties changed in quality and increased in number. What is lower and worse would be differently appreciated by faculties diminished in number or less extended than our own." I use the word "infinite" as meaning extension in duration along the line of sequences which at present alone I am able to discern.

I still hold that there is at least considerable presumption in favour of my view of the case, and that I have not been convinced that I am wrong by Mr. Wallace's letter in no way detracts from the respect that I, and all thinking men, owe to himself and to his work.

W. PAICE.