

ROTHAMSTED EXPERIMENTAL STATION
HARPENDEN, HERTSDirector:
SIR JOHN RUSSELL, D.Sc., F.R.S.STATISTICAL DEPT.
R. A. FISHER, Sc.D.
J. WISHART, D.Sc.

13 Nov 1928

Dear Major Darwin,

very many thanks for the care you have given to reading my Chapter, I wish I could believe it was worth the trouble. I have decided to write on, sometimes ahead of my conviction, with a view to subsequent careful revision which I hope may be less difficult than making a fresh start. I should like first to thank you generally for many smaller hints which I probably shall not mention separately.

I had expected you to draw to my version of your father's reasoning, because I am concerned to reconstruct the earlier and possibly subconscious elements of an argument, which possibly he himself might reproduce in later years, yet the effects of which can I believe be traced in quite late opinions. My belief is that your father was more careful than most men of retaining long logical trains of theoretical reasoning, but that he utterly disliked his power of giving them expression, and later tried even as well to delete his reasons in favour of his evidence. Myself I ^{most} admire the reasoning (I have quotation (2)). Ultimately I should like, if you would permit it, to incorporate your testimony as to your father's views in footnotes or otherwise, in cases you consider important.

Instead of saying that your father accepted the theory of blending inheritance, I might have said that he accepted its logical consequences which as we all know he has perceived. I take the phrase "our ignorance of the laws of variation is profound" to mean an ignorance of the nature and particular causes of the variation produced by the environment, though perhaps he also felt the same about inheritance. I should be very glad if any reference to supplement the letter to Huxley, which ends to me as though the idea of mixture or fusion seemed then new and unexpected. I had noticed the term "mixture blending" and it will show

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the kind of way in which he was trying to reconcile the statements there with the facts difficulties he felt in connection with it.

Did he go by facts rather than theories? May I suggest that he takes in life, especially, felt it his duty too, but even for the great a man that to anticipate many facts before they are observed.

You have then my point about the last quotation. The point of conclusion is a great point. A man is an expert in knowing the last sentence from the facts available there is knowing the right sentence, if it is not the last in the book. But I do not know about the "faulted words".

Did he say the nature of organisms is for me inflected than the surroundings, in causing variation? I should have expected him to say in determining what variations are caused.

As to my previous point your point held my point is that they all spring from a possibility for which he was not responsible, and that he was more right in knowing the logical sequence of the events than was those who failed to see them.

I must make one point. I do not agree that mechanisms for causing variation, by selection, are all do not exist, but that if they do exist they are inefficient in causing evolutionary change. On this point I can afford to deal very slightly with the arguments for and against such mechanisms. I agree that the force of Darwinian argument might have been altered by other selection, in which case it could not be finished. I do not mind one & would thank you, only that Darwin has to deal with in this is hard.

Most probably agree I had thought of having (i) work of selection (ii) work of man in a world of selection, (iii) disease, but decided not to, because the special ability of several organs & disease is possibly secondary via selection.

Johannsen's selection seemed to me a bit equivocal, but he believes in them. Jennings has some better

was.
I may have something to the point & my last point appears. What are inheritance species?

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You will guess to hear that I am going the whole hog about dominance; any example to the contrary is therefore badly needed. Has the homozygous dominant in blood groups ever been found? And, anyway, have not our Red Indians found themselves free many forms of selection which apply to apex? Is the finite number of many like flowers analogous to alleles which is many, normally, and I will not admit that we have adopted enough about needed superiority to apply the principle of evolution.

I have finished drafts of letters II & III, but not yet started III. They are at your disposal but I do not want to pass a lot of heavy reading on you. II is heavy. I want you to read III when you form an opinion on whole-hoggerism.

Yours sincerely

R. A. Fisher

Thanks you ever so much for most encouragement.

I have finished drafts of Chapters II and III, but not yet started IV. They are at your disposal but I do not want to press a lot of heavy reading on you. Chapter II is heavy. I want you to read III when you form an opinion on whole-hogging.

Yours sincerely,

(Sgd.) L. A. Fisher

Thank you ever so much for real encouragement.