

A.J. vi 27

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Gropp's Corner. Forest Row
Sussex.

Dear Fisher.

Here with confidence, which I have found very interesting. I am hastily got down my thoughts, for what they are worth.

Galtin said to me that Pearson can understand Bateson, but Bateson cannot understand Pearson. This seems to me somewhat the same case.

You say that abnormalities in vertebral number are correlated with other abnormalities. (It might be with advantageous differences) He seems to imply that this indicates that when the Vertebral number is normal, these other abnormalities cannot, therefore, exist, and natural selection cannot apply. Of course your argument does not imply this at all. The harmful or beneficial differential might be insufficient to bring about the correlated change in vertebral number. That is how I understand you.

I told you I thought of writing something to correct a blunder I think I made in my paper on natural selection. I have scribbled it out already. It is somewhat on the lines of your remarks on P.S. I should say that conservatism is the rule in any quality which is ~~not~~ looked by a

physiological link or limited magnitude to any other independently variable quality. Hence species are differentiated by qualities not so linked.

I did not know my father used the word 'particulate'. I thought that was Galton's origination. I guess he would have said that his knowledge only enabled him to look at things more vaguely. It is difficult to get back to that frame of mind. I believe Huxley once said to me that use might produce effects of a hereditary kind only after it had been in operation for many generations, though we could not see how. My father saw contractions and could only build his theories on generations. I doubt if he saw distinctions quite as clearly as we can now see them. This is all very hastily written.

A mental doctor wrote recently that in interviewing a patient, surprise should never be inhibited by the least ~~thing~~^{with}, because it might produce a damaging loss of self-confidence in the patient. Please note this in regards that follows. You talk of 100 factors. What I mean by factors is the part played by a pair of genes in the organism.

You may have a hundred factors, AA, BB, CC, with no allelomorphs, and no variation possible without mutation. You may have 100 factors AA AA', each with one allelomorph, and a certain calculable number of variations. Or you may have one factor, AA, AA', ~~AA"~~, with 100 allelomorphs, and a certain number of variations. Or any intermediate number of factors, in my view, and allelomorph. For my Botanican mind you want to make the meaning of factor more clear.

Page 7 of your first letter is not quite
clear to me. In the lecture from you struck
of "no genetical variability", and

You know that I hold that we have not yet explained the cause of the uniformity of melon structures. Hence to me the argument of the central paragraph of page 7. is not quite conclusive. I feel that there must be some check on the accumulation of mutations not yet discovered. But this is very vague.

No more, & no answer

Yours truly

D. Dawson