

2nd. April. 1929.
Despatched 3rd April.

Major Leonard Darwin,
Gripps's Corner,
Forest Row,
Sussex.

Dear Major Darwin,

I have the chapters back and wrote a reply which I find is still waiting to be typed, so this will go with it. My estimate certainly does not include normal age promotion through life, unless the Registrar General has confused the issue by allowing older men, 40-60, who reproduce little to get into different categories from the younger men who reproduce much. I cannot think this is so in the broad classification actually used, but I have suspected in some of the very early Dutch comparisons of children born to tax-paying and non-taxpaying persons. I believe it would not be too late to get a note in the April number.

Of course some ^{real} ~~such~~ promotion takes place at all ages, and if this is frequent may come to be regarded as normal. If it is ^{entirely} ~~equally~~ an age promotion ~~only~~ the children stand ^{at} ~~stand~~ where their fathers did, and the estimate does not include this.

I have considered but not written about selection of mutation rates, and I am convinced that they are too small

to make any difference. The only exception I should make is that deleterious mutations which have perhaps been occurring for millions of generations might in the course of time become very frequent, and this could be checked by Natural Selection. It is interesting that actually they do not seem to get beyond about 1 in 10^5 , which seems to me a marvellously high level for Natural Selection to check them at. This is in Drosophila, plants are certainly different and we need to know more about them.

If I am right beneficial mutations where [~]they are being selected must have rates about 10^{-9} or 10^{-12} , and a strain with double the average mutation rate would have no time to increase before the whole population has adopted the new mutation.

Do you not think Lancaster's suggestions about cave animals a good one? I do, and have included a paragraph in Chapter VI to emphasise it.

Yours sincerely,

I enclose the chapter so that you can see the context.