

2 November 1931.

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My dear Huxley:

I mentioned some time back that I had put together some stuff about objections to selection theory. It is at present quite incomplete and glancing at it some other examples might occur to you of the kind of thing I am combatting.

I have thrown the thing into the form it would take if I used it to replace the present preface to my book, which preface has entirely failed in the purpose for which I wrote it; for it was specially written in the hope that no reviewer could possibly review the book on it, and the majority have done so nevertheless, three sexes seem to be irresistible to them! So when a German edition was proposed I thought I'd have a shot at discussing some of the difficulties. The extraordinary thing, interesting too and half discouraging, is that in the history of each difficulty one can usually find a perfectly rational statement of it

right at the beginning, while its later appearances become less and less rational, until it is twisted into some form which is logically almost unrecognisable. However you will see what I am driving at if you look through the paper. Darwin has seen part of it and wants me to publish the stuff in some journal or review whether I pitch it into my book ultimately or not. Do you know any Editor that would care for it?

Harland the cotton man came in while I was at the Nursing Home to tell me of the later generations of his experiments with that cotton mutant "crinkled dwarf", which seemed to be such an excellent case for demonstrating the evolution of dominance; for the mutant, while perfectly recessive in the species in which it occurs, seemed to be an incomplete dominant, i.e. in its hypothetical pristine condition, when introduced by crossing into other species. Harland seems to have entirely cleared up his original doubts and difficulties by repeatedly crossing back the mutant form into an upland species where it does not occur naturally, and where he finds the heterozygote is regularly crinkled, or even super-crinkled, while the homozygote is so dwarfed as to be nearly lethal. This confirms the guess that the process of modification of the heterozygote should also modify the homozygote somewhat in the same direction, while his observation that the degree of crinkling becomes

steadily more uniform after the first back-cross shows that it is a multiple factor mechanism by which the modification has been brought about, and not multiple allelomorphs as Haldane had suggested as more probable.

Unluckily I had not the new facts in time for the longish paper which, at Fox's suggestion I had written for Biological Reviews. I should be able to send you a copy of this soon, and it may be useful as drawing together the various groups of facts which the progressive modification of dominance seems to make sense of. Still the cotton case is so perfect now that I regret not being able to say more about it than I could in 1928.

Let me know when your book is out.

Yours sincerely,