

26th. June 1950.

Dear Professor Hofsten,

I think I should understand Recursion formula as an English word, indicating a relationship of the form

$$u_{n+1} = su_n + bu_{n-1} + \dots$$

or, more loosely for relations analogous to this.

There is, thanks be to God, no authority claiming to lay down what is correct and what is not in the English language, for though the individual sometimes appeals to a dictionary, the dictionaries modestly disclaim that they merely record usage by individuals. Consequently, we who speak English have no excuse for not recognising the great truth that words mean no more nor less than we require^d them.

As to your second question, I suppose the difference between your "actual curve" and your "mixing curve" is that between two populations having the same gene ratio though different proportions of heterozygotes. This is a distinction which if I were rewriting The Genetical Theory I should certainly stress more heavily than I did there. For though the principal evolutionary agency is undoubtedly change of gene frequency, changes in the mating system with important

secondary consequences can be brought about by changes in population frequency without change of gene ratio.

I did not know about your paper, which is, I gather, of eugenic purport, though a trifle pessimistic. I do not see ground for pessimism in the genetic situation presented by Man, but I think it is quite inconceivable that any existing national state should have the courage to ^{use} ~~use~~ it as it ~~deserves~~. *requires*

Yours sincerely,