

New Boston, NH 03070  
October 23, 1977

Dear Joshua:

Your good letter deserved a far prompter response from me. My apologies. Most of my time has been spent back in good old Brooklyn, giving what comfort I can to my aging Mother. Her condition is deteriorating fairly rapidly at this point, a difficult time for her and for us. Fortunately, a sister and a brother live on Long Island and both do their full share so that we all get some days and weekends at our various homes. Not enough, however, for me to keep up with the mail.

First, I did not intend to trouble your conscience with my observations about your "civilization". I recall no personal affront; if I had, I probably would not have been so frank. Rather, the whole phenomenon intrigued me. In my view, yours was a rare triumph. You and Ben Franklin, who speaks very freely in his autobiography of his late discovery of the unfortunate effect he had on others and the steps he took to change his approach. In my experience such transformations are indeed rare. Your very sensitive memoir on Ed provides beautiful evidence of your perceptiveness and appreciation of him as a person and a scientist. I've learned a lot about both of you from it and am grateful.

I left Wisconsin in 1934 and did not see Ed until he came to Yale in 1945. I can't help on when he first turned to Neurospora or produced the first mutants. (produced = captured) In about 1933 he and I had a running debate about the importance of environment as compared with heredity in "causing" microbial variation. Fred finally ordered us to debate the issue in a seminar. I believe he got the votes. I know he spoke for the environment, and that he found it difficult to believe that I actually thought that a case could be made for genetic mechanisms.

The notion of Beadle seeing the advantages of working with Neurospora while sitting in Ed's class at Stanford is new to me and very appealing. The organism's special features called the shots for those first experiments. It was a lovely conjunction. Just one more example of Ed creating the environment in which someone else moves forward. This, however, was the time when it was Ed who then picked up the idea and ran with it. Or so it seems to one who was not there. For the most part, Ed was the facilitator. What I particularly admire in your memoir is the way in which you have helped me to see what Ed did contribute, without ever pretending it was more than it was. I am sure that many readers will be helped to understand the way in which the field developed as well as Ed's particular contributions.

What was Ed's attitude toward the "one gene, one enzyme" concept that was so vital to Dave Bonner? I remember Dave scolding off at Yale and Ed just smiling but

not bothering to argue yea or nay. My own feeling was that Dave had become more rigid about it than nature was apt to be. Ed wouldnt even agree with that. He would just smile.

I cant remember that Ed ever did anything mean. He took genuine pleasure in other people's success. He delighted in the development of the field of microbial genetics. The combination of his interest in the field and his pleasure in any advances that were made created the environment in which so many became productive, particularly those who had ideas of their own and pursued them. One thinks first of those in his own laboratory but ~~there~~ that was never a closed shop. I dont know whether that is helpful or not. The phenomenon at Rockefeller was familiar wherever Ed had worked. Perhaps it was not the rule at Rockefeller.

The reference to Ed's health sounds OK to me. I think he would have approved. To think otherwise would be to impute an ungenerous impulse and that is unlikely. He couldnt kick the habit himself, but that is something else.

Unless there is a crisis in Brooklyn, I'll be in Oakland on November 16 and 17 and will try to give you a ring. Dont bother to respond to this effort. I wish I could be more specific with respect to scientific developments but I cant. It has been a privelege to read the draft. Thanks very much.

Sincerely,

A handwritten signature in cursive script, appearing to read "Pally", with a long horizontal stroke extending to the right.