

Zagreb, November 11, 1969

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Room 9N-119, Bldg. 10

Dear Maxine and Dan,

If I were to rank my debts to the Singer's family in a chronological order I should first address my apologies to you Dan, but I hope you will not mind if I address the lady first.

Maxine, thank you so much for your letter and comments on our manuscript. I agree with your opinions and evaluation of the work. There is a lot to be done to make it a completed entity. Of course, further characterisation of the hands displaying the most interesting developmental behaviour is basic, but I am not sure, whether the other two points merit the priority instead. First: analysis of the dynamic aspects of the synthesis of the proteins separated in our electropherograms by use of labeled precursors. In this way one will get better understanding on the immediacy of the events pictured in changing electrophoretic patterns. Second: would not it be reasonable before attempting elaborate characterization to see how do the protein patterns in human organogenesis change, and select the most interesting one among them for subsequent work. You recall our talk about that possibility on Spetsai.

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As far as protein characterization goes we hope to be able to do the subcellular localization of the protein by differential centrifugation, or by autoradiography; protein separation by gel filtration, ion exchange chromatography, disc electrophoresis, and gel electrofocusing; and at the most the approximate molecular weight determination by Sephadex gel filtration. Characterization beyond that level is completely out of our reach. Even the outline of the techniques mentioned will be realized with appreciable efforts.

Of course all that work is on my program only after I finish writing my Ph. D. thesis. So in the present phase of exhausting but unproductive work, I was really discouraged with the cited criticism /J.Embryol. exp. Morph./ and I am thankful to you for the encouragement. I appreciate your effort so much more since you were also in the period of writing. By the way, I would be greatly honoured by being included in your mailing list for reprints of your works.

Now, Dan I am awfully sorry for mixing your letter of August 8, containing the information on optical prescription mounting in masks, among some of my papers, and finding it only very recently. Thank you for it so much and please forgive my neglecting it so far. I am forwarding the information to the cousin of mine who was doing so far his own home made improvisations.

Thank you also for the lovely photographs which revive pleasant memories of the good old times. Garnaio and guitars, ouzo and octopodi, all that sun and the sea of the Spetsai. By the way, Maxine, do you recall our evening ouzo and octopus at the water front / it was the first evening together upon Dan's arrival/ when we discussed

dr. Crick's rough time answer on my question concerning dr. Orgel's statement that proteins might have influenced information content of DNA in geologic past? You were not happy with it and neither was I. But I have come accross a nice little paragraph titled "Inactivity of new genetic material in Britten and Davidson's paper /Science 165: 356/ which says in another words exactly the content of my question. I feel a little bit happier now, the question after all was not that stupid ! The very same theory might provide a plausible answer to my second question answered at the time by dr. Orgel, that definitely and neatly eliminates need for architectural and particularly temporal genes.

Well to finish recollection of the pleasant and the less pleasant memories, in my private life we are busy furnishing the new flat we were given by the pharmaceutical works where my wife works. After six years of living with my father and mother in law we are making final arrangements to move away.

How is my friend Ellen doing these days? Ellen are you busy taking care of all the members of your little comunity ? I have only two to look after and it keeps me fairly busy. You recall mentioning my daughter Karin /5 years/ and son Alan /3 years/ and they are extending to you their very best greetings. I shall send you a photograph of them, and I hope you will remind your parents to find one of all of you, for us. Thank you Ellen, you know we would like to have one very much.

With our very best regards,

Yours,

Inaldo

Woese
Jan 1968
PNAS