

12-11-57
M.B.T. Woods Hole, Mass.

12 September 1957

Dear Josh and Esther,

To keep the bonds of Commonwealth from weakening, I thought I'd drop you a line this evening, while Joyce fiddles with the short-wave set. The world seems a small and homely place: London, Hilversum, Moscow, Brussels, throng at our threshold for a hearing.

Kitty, whose maiden name I forget and whose married name you got wrong (unless she upped and married somebody you didn't expect her to), and Bruce, or Ben, or whoever he was, turned up, and were given the Grand Tour. The Sussmans had already left, so they didn't have a chance to meet them. We look forward to Maurice and Raquel returning next year. Just now the lab. is pretty empty, reminding one of that poem by de la Mare - "The Traveller", I think it's called. The Gaffrons are here for a short visit, on their way back from Naples, and we may be able to persuade them to come over for coffee tomorrow evening. We were at "Oro di Napoli" last night, a film I can heartily recommend, concerned with four unconnected episodes in the life of a great city. We even had neighbours who kindly provided the olfactory atmosphere of the place. Well, I'm told it's antibiotic, anyway.

A couple of papers which interested me today were in the P.N.A.S. ("which country?" the Canadian editor pencilled against a reference I'd made to Dick Starr's work on spore germination) and the Annales de l'institut Pasteur, bzw. The former was by a chap who'd found phage shockate from E. coli to be capable of multiplying not only on protoplasts of E. coli but also on those of A. aerogenes, etc., though I don't think he said whether the final crop had any changed host-range. The other man had followed through cell lineages of E. coli zygotes, and picked up all sorts of hybrid genotypes during the first few divisions. I'm not quite clear why these weren't detected earlier.

The mystery of cell-division in diatoms becomes more profound when one considers those genera in which one valve has a raphe - a groove in the silica, through which it can secrete mucilage and slip along thereby - and the other hasn't. So at each cell-division (sorry, I mean cell division) the have-not produces a have valve, and the have produces a have-not.

Thanks very much for your account of Heron Island; it sounds fascinating. If that's where Stephenson is normally, it has already fascinated us, since (a) he showed some really wonderful coloured slides of its fauna when he visited the Fish & Wildflower Lab. here a few weeks ago, and (b) gave us some most entertaining information on the Barrier Reef animals, not only at that lecture, but also when we met him again at Stanford, and on the trip to Pacific Grove at the end of the A.I.B.S. meetings. He seems to be a most stimulating person, with a very wide coverage of interests, and an excellent sense of dry humour.

J. suggests that the reason coral coasts seem to have so few algae is that, after all, corals are 90% alga anyway, on a protein-N basis (or so the Odums have asserted). Water passing over a reef becomes oxygenated during the daylight hours. Perhaps competition for CO₂ is so intense that only the little endozoic Zooxanthellae can get enough to live on.

She's finished the manuscript on Phaeodactylum, and proposes to form a new suborder for it, the Monocraticulineae. The describing of new subclasses is a rare event these days. This afternoon I turned up my first paralyzed Platymonas mutant (a marine cousin of Chlamydomonas), so I'm feeling pretty pleased with myself, too.

We had two meetings here last week, the Limnologists and Oceanographers, and the General Physiologists, and by wearing the same badge I leaped nimbly from one to the other without paying a second \$2 fee. A session on regulative mechanisms in micro-organisms was most amazing; I had no idea that Maas and Magasanik ^{et} al. had bacteria so trained that they could turn on and off complicated synthetic and degrading - degradative? - pathways

at will. They evidently have souls after all - the bacteria, I mean.

Talking of ... well, following free association ... we heard a most interesting debate on the B.B.C. last night about prostitution, which is technically not a legal offense in Britain, but which they hope to drive off the streets and, so to speak, into the telephone system (at least for the more determined customers). It made me realise all the more forcefully what a Puritanical land I live in now; I've not heard such free speech on the wireless for years and years.

I hope that those huge distances and all the lecturing are not precluding you from having a wonderful time.

With warmest vernal greetings.

Ralph