

[REDACTED]
Southampton
[REDACTED]

9th January 1969

Dear Tom,

Thank you for your note and for the cutting. In fact we had found the ad. in the Sunday Times, and I have sent for one of the rails. We had a comfortable drive down except that the car got more and more noisy. The timing chain always was noisy, but I was assured that there could be no more than a looseness to the chain. Now that they have traced back the noise they have found it to be a faulty distributor drive. The worm gear is almost worn away, and so is the corresponding worm gear on the cam shaft. Now the engine sounds smooth at last - and we have to start trying to persuade Morris' that the trouble was there from the start and so should be put right under warranty.

I've just made a nice mathematical observation which should lead to some very good results. Let T be a ^{topological} group and Φ is character group (i.e. the group of cont. maps $T \rightarrow \mathbb{R}$). Then T acts as by left translation as a transformation group of Φ . If T is compact then Φ gives a lot of information about T . Now if T acts a transformation group on a space X , it can also be made to act on X^2 , and if X is metric then the actions of T on Φ and on X^2

correspond to each star under the mapping $X^2 \rightarrow \mathbb{F}$,
 $(x, y) \rightarrow f(xt, yt)$. I hope to get some nice results
 on the joint behaviors of pairs of points of X under T
 from information about the transformation group
 (\mathbb{F}, T) . We shall see.

You will recall my having spoken of Madge Hint,
 who used to live in the vicarage at The Brook, and
 who now lives in Kilburn (York - the place where the
 mouse furniture works). I am now sitting in a lovely
 old Carver which she sent me down as a wedding present
 in front of one of the types of dining tables which you have
 (special purchase from Denmark for the sales - £19-10!).
 As you may well imagine, the table is piled with letters and
 papers which have to be dealt with. I rather think that I
 shall not spend too long working on them this evening
 since I'm pretty tired after being woken in the middle
 of the night by a telephone call. Our telephone number was
 that of a local taxi service, so Janet and I tend to ignore
 late night calls. We ignored calls after we went to bed
 until at last I got up - only to have them ring off. At
 2am I did reach the phone to be greeted cheerily by
 Bob Rosenbaum, the academic vice-president of Wesleyan
 University, who offered me \$16,000 plus \$1,000 travel
 for next academic year there as a full Prof. And here
 I am hoping that I shall be promoted to Senior Lecturer!
 Now I'm waiting for the offer to arrive in writing. In the
 meanwhile I have discovered that no one else has
 shown any interest in leave for next year, so my
 chances are probably fair. I shall enjoy being

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back there, and shall particularly enjoy being there with Janet. I don't suppose that you have any plans for another year away yet. Goodness knows what Brian Griffiths will say when I tell him. He has quite a regard for money - and I'm pretty sure that he has never managed to get anyone to offer him so much in the States.

We did enjoy visiting you and look forward to the next time that we can meet. We are looking round for some suitable occasion on which to use your spoon for the first time. I hope that the occasion presents itself soon because the spoon is such a lovely thing. Now that we have a dining table it is likely to present itself the sooner.

Your suggestion of a shrub or tree for the garden should now I think be kept in abeyance to see whether or not we do go to the States this year. Perhaps you might like to get us a dwarf cecropia and grow it on in a pot for us. Moreover, if we are to go then you might like to dine down here and collect some plants from my garden in Glen Eyre Hall which I shall not transfer here before I go to the States.

I'll let you know how things go with my application for another year's leave of absence. In the meantime - thank you again for the spoon.

Best wishes

Frank