

[Redacted]

Wakefield

24th December 1964

Dear Tom,

You may like to see a small fairly typical dancing teachers guide. You can get in an inter-library loan from West Riding County Library, Barn Lane, Wakefield. It is Mrs Ash, The New Guide to Dancing, catalogued under Y WAK 793.33 W. No date, but stated to be c 1900. It is published by the West Riding Printing Co which only came into being in 1880. I am in touch with a young man in Wakefield who has a tremendous amount of information about the place including plenty about dancing. He is not going to make use of the dance information so I can collect it all in the winter vacation. There appears to be nothing starting - just notices of dancing masters in the West Riding from 1750 onwards and some allusions to dancing in Wakefield. Now all the assistants in the W.R. library and archives office are on the look out for me.

There was a point about the book which I was going to mention but forgot. At the beginning of the chapter on continuity you say that the idea of an uninterrupted arc is not the right idea -

one needs to consider continuity at a point. This usage of right and wrong is a peculiar one which I try to avoid. There is incidentally a nice account of some of the 19th century attempts to define continuity in a new book *The genesis of point-set topology* by Henleman published by Pergamon.

• Shall be going down to Southampton on Sunday + Monday. It will be good to settle down to work again. I have decided how to generalise the idea of the mapping cylinder of a homeomorphism of a space to that of a group of transformations of a space, and how to define the extension of a group by another group. The original notions are related through homotopy and I needed the extensions to cope with homotopy for the category of simply transitive transformation groups. I hope that the results will enable me to say quite a lot about at least the special case of the action of the reals as a transitive group.

Thank you for the weekend.

Hope Mrs Ash proves helpful in pushing the borders of the North southwards. Frank