My dear Frante,

On the enclosed two sheets I have attempted classifications, first of types of publication commonly used in joint work and secondly of types of cooperation.

I suppose any recommendations which we should like the A. R. C. to make to editors or to research directors should be in the form that certain classes of one category are appropriate to certain classes of the other. Anyway, this seems to be the kind of classification which may help us to clear our heads if we are to give useful advice.

On another point, it occurred to me that the British Association is probably in low water and that objections to the establishment of a new section which it is the duty of their officers to think up may well take a financial form, s.g. it is probably customary for the Association to pay the expenses of the sectional officers. The right answer to this, I fancy, is that the group of societies concerned to sponsor the new section would be prepared for a limited period e.g. three years to place a reasonable sum, such as £40, in the hands of the sectional committee to meet such expenses. I think myself that this would be better than to ask fare outside help on this item, though I know we could easily get it. Any societies which did not feel like putting up, say \$10 a year for three years, could quite properly drop out

at this stage. The others would presumable be represented on the sectional committee. I had a word with Bradford Hill yesterday about this and he entirely agrees. I am not sure, however, what other snage we ought to foresee.

Yours sincerels,

The various types of outcome of participating in scientific work which is later to be published can be classified as follows:

- a) Joint authorship with indistinguishable responsibility.
- b) Joint authorship in which the authors are prepared to make a joint statement, dividing their responsibility either in respect of the techniques employed, e.g. a physicist looks after the electron microscope, or specifically by sections or paragraphs of the paper. In this case, (b) editors should ask the authors to make their statement at the time of publication for the benefit of committees awarding higher, degrees, increases of pay, changes of status, tec., who want to higher make.
- c) A technical appendix for which one writer or group of writers is specifically responsible, and for which the other author or authors have no responsibility, even though it is published with and distributed in separates with the main paper.
- d) The author or authors of the paper acknowledge specific aid from another. E.g. we are indebted to Professor Einstein for developing the relativity corrections of our formulation.
- e) Acknowledgement of a general character is usually given to the Head of Department or Professor for his kindness, encouragement, advice of an unspecific

## Classification of types of co-operation,

- 1. B has been associated with A throughout the research period, perhaps doing work of a different, yet influencing the course of the research during its progress.
- 2. B, as a scientific employee in the same institution has done certain work e.g. chemical analyses required in A's research.
- 3. B has been consulted on A's initiative on a specific point which he has examined at his request, and the result of which is incorporated in the publication.

The intrinsic importance of the work done by B in these situations may very very greatly, and 1/2/1ts intrinsic importance may not be clearly and justly apprehended by the persons concerned.