## Preface

In a day when it is hard enough in most fields of science to keep abreast of new and non-redundant literature, the publication of collected papers, like the estate of holy matrimony, is something not to be undertaken 'unadvisedly, lightly or wantonly'. In the present case it would not have been considered at all but for the kindly initiative of my respected friend Professor Roman Jakobson, whose persistent encouragement alone overcame that distaste which most of us feel for our ten- to twenty-year-old productions and brought this first volume to the point of no return. It is true that these exploratory papers were scattered among an unconscionably awkward selection of publications for anyone wanting to follow them up. On the other hand, as most of them were written for specific occasions, each of which demanded some rehearsal of points covered in earlier essays, the resulting repetitiveness presented a special problem. With occasional exceptions, redundancy could have been eliminated only at the cost of mutilating individual papers. The solution adopted has been to leave almost all repetitive passages intact, offsetting in small print those that can be skipped without loss by readers of the earlier chapters. Where some comment has seemed necessary, by way of foreword or postscript to the original papers, the passages added have been italicized.

With the exception of Chapter 1 (written especially to sketch in the background of the present collection) all the main text has already been published or broadcast over the past twenty years, and I am grateful to the following for permission to reprint:

British Broadcasting Corporation (Chapters 2, 3 and 4) Josiah Macy Jr. Foundation (Chapter 5 and Appendix) D. Reidel (Chapter 6) Butterworths (Chapters 7, 8 and 12) Harper and Row (Chapter 9) The RAND Corporation (Chapters 10 and 11) Verlag Friedr. Vieweg & Son (Chapter 13) Academic Press (Appendix) Taylor and Francis (Appendix)

The collection proper falls into two parts, Part I consisting of three introductory broadcast talks and Part II a series of more technical papers. An explanatory survey of the terminology of information theory, prepared for the 1950 London Symposium on Information Theory, has been added as an Appendix. The author's first exploratory paper on 'Quantal Aspects of Scientific Information' (1950) has not been included, partly because its main points are covered in other papers reproduced here but also because I am now less satisfied with it than with any of the rest. Some extracts from this paper appear as part of a postscript to the Appendix, dealing in more detail with the logon-capacity of optical instruments.

It is a pleasure to express my thanks to a number of colleagues whose comments have helped to shape the present collection, to Miss Margaret Steele for tireless secretarial assistance, and to my wife for the considerable labour of compiling the index.

> D. M. MACKAY Keele, Staffordshire December 1968